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LA STORIA DELL'AZIENDA

Una storia d'amore per l'Elettromeccanica lunga 40 anni...

Nel 1981, Ezio Anelli, brillante imprenditore nel mondo del tessile, con uno spiccato senso degli affari, decide di cambiare settore, e di affacciarsi al mondo dell'Elettromeccanica. Il mondo del tessile, in quegli anni, stava imboccando la via del tramonto, a causa anche di una fortissima delocalizzazione.

Nasce così Technoelectric, che inizia la sua storia in un piccolissimo capannone nel paese di Camairago(LO).

Fin dalle sue origini, **si specializza nella produzione di sezionatori BT**, con la consapevolezza di poter guadagnare il suo spazio in quella nicchia di mercato dell'elettromeccanica sensibile ai prodotti di alta qualità.

Il giro d'affari, in crescita esponenziale, costringe l'azienda a spostarsi in una sede più grande, a Castiglione D'Adda, dopo solo 1 anno.

Matteo Anelli

È il 1982. Il Maggiore dei due figli di Ezio, Matteo, inizia a lavorare in azienda.

I prodotti iniziano da subito a farsi conoscere per la robustezza e la qualità produttiva.

Nel **1983 Technoelectric chiude un accordo con la C.G.E.** (Compagnia Generale Elettromeccanica, italianissima azienda che venne poi assorbita dalla General Electric).

La scelta manageriale di una relazione di partnership, con una azienda chiave nel settore è vincente, e produce un ulteriore incremento della varietà produttiva sospinta anche dal progressivo profilarsi di un orizzonte di mercato sempre più ampio.

Nel 1986, difatti, viene creato un nuovo capannone, poco distante dalla sede precedente, di più di 1.000m2.

Con la caduta del muro di Berlino (1989) si apre un infinito mondo di opportunità fuori dai confini Italiani, e le aziende italiane incrementano l'Export.

Technoelectric segue questa tendenza, e cresce, ampliando gli stabilimenti produttivi e creando una rete di rivenditori esteri. È il 1990.

Nel 1993 La costante ricerca della qualità e l'affacciarsi di nuove normative **portano l'azienda ad essere una tra le prime aziende della zona a conformarsi e a certificarsi alla norma UNI EN ISO 9001:2000 per prodotti,** processi e servizi relativi a interruttori di manovra, sezionatori ed unità combinate con fusibili BT.

Nel 1995 **L'Azienda firma un accordo di collaborazione con il gruppo Siemens**. Una partnership che dura ancora oggi.

Per soddisfare le richieste della clientela e per risolvere una serie di problemi in ambito elettromeccanico, l'azienda avverte la necessità di ampliare la propria gamma di prodotti.

Nel 1996 nascono i sezionatori modulari della linea GT.

All’affacciarsi del nuovo millennio, la necessità di prodotti sempre più compatti e performanti inizia a farsi sentire.

Nel 2002 viene difatti lanciata la linea SD, ad oggi la più performante e compatta sul mercato dei sezionatori fino a 160A, con la creazione, due anni dopo, della loro variante in cassetta (plastica e metallica).

Nel 2007 Technoelectric decide di ampliare il proprio range di prodotti presentandosi sul mercato della media tensione con un prodotto interamente made in Italy.

Il 2010 produce un ulteriore incremento della varietà produttiva, sospinta anche dal progressivo profilarsi di un orizzonte di mercato sempre più ampio: **Nasce la linea per il fotovoltaico, Techno Solar.**

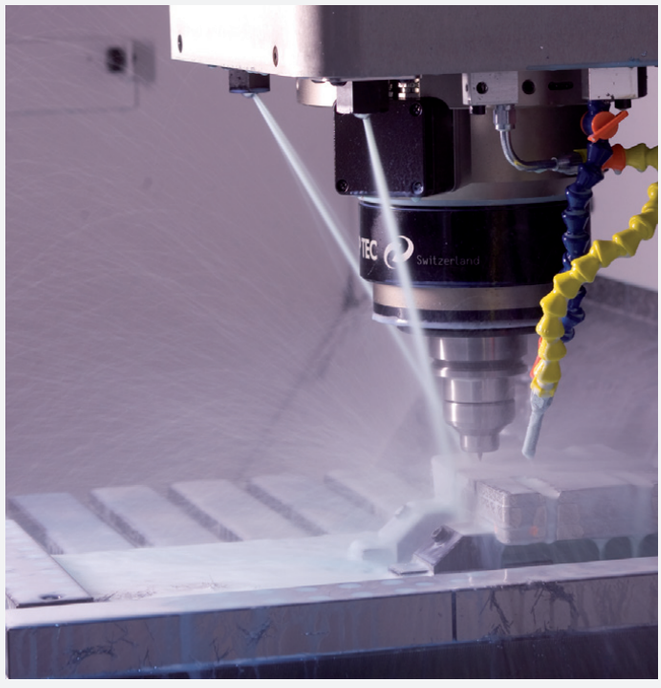
Il triennio 2011-2013 rappresenta la nascita e il perfezionamento dei commutatori manuali della linea SD, dalla taglia 1 fino alla 3.

Technoelectric è inoltre riuscita a raggiungere un obiettivo ambizioso: integrare sapientemente le linee di prodotto standard con la possibilità di produrre pezzi speciali a seconda delle richieste della clientela. Ciò ha fatto nascere collaborazioni dirette con dipartimenti della difesa e aziende di distribuzione elettrica in svariati paesi nel mondo.

Gli ultimi anni sono stati caratterizzati dalla nascita di altre partnership importanti, dall’aggiornamento dei prodotti e da una serrata ricerca e sviluppo, Il tutto senza delocalizzare, mantenendo l’indissolubile **legame dell’azienda con il territorio, e con il MADE IN ITALY.**

Per far fronte alla continua e rapida evoluzione dei prodotti e delle richieste dei clienti, l’azienda ha deciso di organizzarsi con una attrezzeria interna, dove si parte dalla progettazione fino alla realizzazione dei propri stampi.

Oggi, a 40 anni dalla nascita dell’azienda, Technoelectric presenta una gamma rinnovata, con un prodotto nuovo che proietterà l’azienda verso il futuro.



THE HISTORY OF THE COMPANY

A 40-year love story for Electromechanics.

In 1981, Ezio Anelli, a brilliant entrepreneur in the world of textiles, with a keen sense of business, decided to change sector and enter the world of Electromechanics. The world of textiles, in those years, was taking the path of sunset, also due to a very strong delocalization.

Technoelectric begun its story in a very small warehouse in the town of Camairago (LO).

Since its origins, it has specialized in the production of LV disconnectors, with the awareness of being able to earn its space in that electromechanical market niche sensitive to high quality products.

The turnover, which was growing exponentially, forces the company to move to a larger location, in Castiglione D'Adda, after only 1 year. It was 1982. **The eldest of Ezio's two sons, Matteo, started working in the company.**

Matteo Anelli

The products immediately began to make themselves known for their quality and strenght.

In 1983 Ezio Anelli signed an agreement with C.G.E. (Compagnia Generale Elettromeccanica, an Italian company, absorbed several years after by General Electric).

The managerial choice of a partnership relationship with a key company in the field is a winning one, and created a further increase in production variety, also driven by the progressive growth of foreign markets.

In fact, in 1986 a new 1,000m2 warehouse was created, not far from the previous site.

With the fall of the Berlin Wall (1989), an infinite world of opportunities opened up outside the Italian borders, and Italian companies increased exports turnover.

Technoelectric followed this trend, and grown, expanding production plants and creating a network of distributors around the globe. It is 1990.

In 1993, the constant search for quality and the emergence of new regulations led the company to be one of the first companies in the area to comply and certify the UNI EN ISO 9001: 2000 standard for products, processes and services relating to circuit breakers. switch, disconnectors and units combined with LV fuses.

The following year, the evolution of the Italian market leads to the creation of a network of agents, which allows the company to follow up and process all requests from all over Italy.

Technoelectric signed**, in 1995,collaboration agreement with the Siemens group**. A partnership that continues today.

To met customer demands and to solve a series of problems in the electromechanical field, the company felt the need to expand its range of products.

In 1996 the modular disconnectors of the GT line were born.

As the new millennium approaches, the need for increasingly compact and high-performance products began to make itself felt.

In 2002 the SD line was launched, to date the most performing and compact on the market for disconnectors up to 160A, with the creation, two years later, of their variant in enclosures (plastic and metal).

In 2007 Technoelectric decided to expand its range of products by introducing itself to the medium voltage market with a product entirely made in Italy.

2010 produced a further increase in production variety, also driven by the gradual emergence of an ever wider market horizon: **Techno Solar, the photovoltaic line, was born.**

The three-year period 2011-2013 represents the birth and improvement of the SD line Changeover switches.

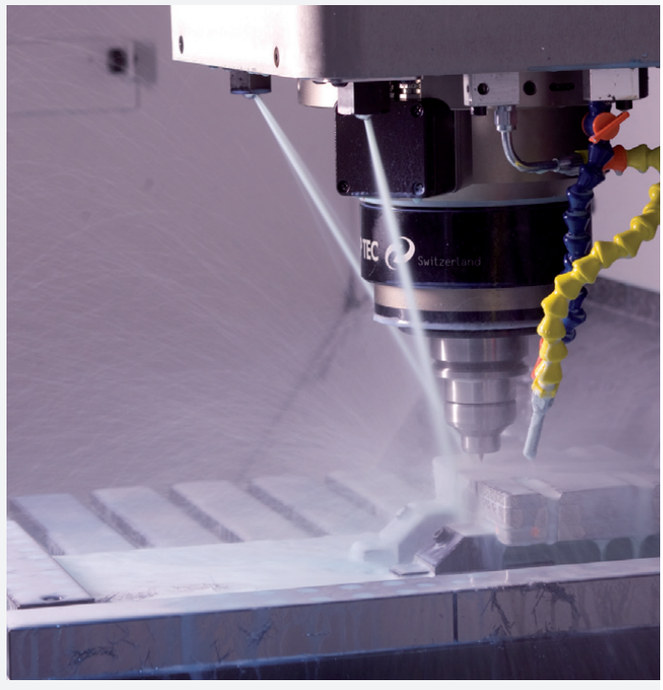
Technoelectric has also managed to achieve an ambitious goal: to wisely integrate the standard product lines with the possibility of producing special pieces according to customer requests. This had led to direct collaborations with defense departments and electrical distribution companies in various countries around the world.

The last few years have been characterized by: the birth of other important partnerships, updating of products and a deep research and development.

This results has been all made without relocating, maintaining **the company's indissoluble bond with the territory, and with the MADE IN ITALY philosophy.**

To cope with the continuous and rapid evolution of products and customer requests, the company had decided to organize itself with an internal tool shop, where it starts from the design to the realization of its molds.

Today, for the 40th anniversary of the company, Technoelectric presents a renewed range and a new product, that will project the company into the future.



CERTIFICATI E OMOLOGAZIONI

_CERTFICATES AND APPROVALS

Member of CISQ Federation

RINA

CERTIFIED MANAGEMENT SYSTEM

ISO 9001

INTERRUTTORI DI MANOVRA SEZIONATORI

_SWITCHES DISCONNECTORS

SD 16 ÷ 200 A

COMMUTATORI MANUALI

_ MANUAL CHANGE OVER SWITCHES

CO-SD 16 ÷ 160 A

GENERALITÀ
Gli interruttori-sezionatori modulari della serie SD, consentono l'interruzione e il sezionamento sotto carico di macchine e linee di bassa tensione con correnti nominali da 16 a 200 A.

IMPIEGO
Gli apparecchi della serie SD sono abitualmente impiegati nelle seguenti funzioni:
interruttore generale
interruttore per partenze motori
interruttore di sicurezza
sezionatore

CARATTERISTICHE GENERALI
Alto potere d'interruzione (AC 22 A - AC 23 A)
Doppia interruzione per ogni polo
Elevata durata meccanica ed elettrica
Adatto per l'utilizzo in climi tropicali
Grado di protezione IP20 (accessori inclusi)
Esecuzione modulare montaggio su profilato DIN 35 mm e a vite, finestra modulare 45 mm.

GAMMA
SD1 corpo tripolare con le portate da 16 - 25 - 32 - 40 - 63 A
SD2 corpo tripolare con le portate da 63 - 80 - 100 - 125 A
SD3 corpo tripolare con le portate da 100 - 125 - 160 - 200 A

POLI AGGIUNTIVI
Quarto polo neutro standard con contatti ad apertura posticipata e chiusura anticipata rispetto ai contatti di fase.
Quarto polo neutro passante.
Polo di terra passante. Polo contemporaneo a richiesta.

COMANDO
Maniglia diretta nera (esecuzione standard), o di emergenza lucchettabile in posizione di zero.
Maniglia con blocco porta, nera, o di emergenza, con possibilità di tre blocchi lucchettabili in posizione di 0.
Grado di protezione IP 65.

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO
temperatura ambiente di immagazzinamento e trasporto - 25°C + 55°C
temperatura ambiente di funzionamento - 20°C + 40°C
in caso di temperatura ambiente (t_a) superiore, applicare la seguente formula di declassamento:

$$I_{The} = k\, I_{Th} \text{ dove } K = 1 - \frac{t - 40}{100}$$

altitudine max 2000 m s.l.m.
grado di inquinamento 3 secondo IEC 60947-1
tipo di servizio (secondo UNI EN 60947-1):
8 ore; ininterrotto: intermittente 60% classe 30
Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3 | UL 508A

CERTIFICATI E OMOLOGAZIONI
IEC | EAC | UL EAC | CSA

_GENERALITIES
The modular switch disconnectors of SD series, allow the breaking and the disconnecting on load of equipment on low voltage at nominal current from 16 to 200 A.

_USE
The switch disconnectors of SD series are commonly used for the following purposes:
main switch
switch for motors
safety switch
disconnector

_GENERAL CHARACTERISTICS
High breaking capacity (AC 22 A - AC 23 A)
Double break contacts on each pole
High electrical and mechanical endurance
Resistant to damp heat
IP20 degree of protection (with accessory)
Modular execution, basic mounting on 35 mm DIN rail and by screws, modular window 45 mm.

_RANGE
SD1 three poles 16 - 25 - 32 - 40 - 63 A
SD2 three poles 63 - 80 - 100 - 125 A
SD3 three poles 100 - 125 - 160 - 200 A

_ADDITIONAL POLES
Fourth neutral pole makes erlier and opens later than the phase contacts.
Fourth pole solid neutral.
Earth pole. Contemporary pole under request.

_OPERATING MECHANISM
Black (standard execution) or emergency direct handle padlockable in 0 position. Handle with door interlock handle, black or emergency handle padlockable with up to three padlocks in 0 position.
IP 65 degree of protection.

_STANDARD SERVICE, MOUNTING AND TRANSPORT CONDITIONS
Transport and storage ambient temperature - 25°C + 55°C
working ambient temperature - 20°C + 40°C
in case of higher ambient temperature (t_a), consider the following derating formula:

$$I_{The} = k\, I_{Th} \text{ where } K = 1 - \frac{t - 40}{100}$$

altitude max 2000 m a.s.l.
pollution degree 3 according IEC 60947-1 duty (UNI EN 60947-1):
8 hours; uninterrupted; intermittent 60% class 30
For other operating conditions please contact the manufacturer.

_CONFORMITY TO STANDARDS
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3 | UL 508A

_CERTIFICATES AND APPROVALS
IEC | EAC | UL EAC | CSA

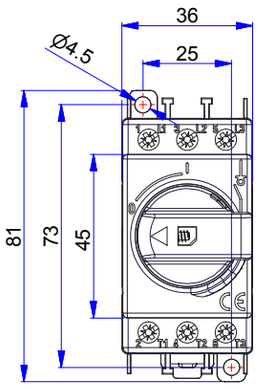
Tipo Type	Corrente nominale Rated current	IEC				UL			
		Maniglia diretta Direct handle		Maniglia emergenza Direct emergency handle		Maniglia diretta Direct handle		Maniglia emergenza Direct emergency handle	
	A	POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
SD1	16	3	19300	3	19310	3	19300UL	3	19310UL
		4	19330	4	19350	4	19330UL	4	19350UL
		6	193006	6	193106	6	193006UL	6	-
		8	193308	8	193508	8	-	8	-
	25	3	19301	3	19311	3	19301UL	3	19311UL
		4	19331	4	19351	4	19331UL	4	19351UL
		6	193016	6	193116	6	193016UL	6	-
		8	193318	8	193518	8	-	8	-
	32	3	19302	3	19312	3	19302UL	3	19312UL
		4	19332	4	19352	4	19332UL	4	19352UL
		6	193026	6	193126	6	193026UL	6	-
		8	193328	8	193528	8	-	8	-
	40	3	19303	3	19313	3	19303UL	3	19313UL
		4	19333	4	19353	4	19333UL	4	19353UL
		6	193036	6	193136	6	193036UL	6	-
		8	193338	8	193538	8	-	8	-
	63	3	19304	3	19314	3	-	3	-
		4	19334	4	19354	4	-	4	-
		6	193046	6	193146	6	-	6	-
		8	193348	8	193548	8	-	8	-
SD2	63	3	-	3	-	3	19205UL	3	19215UL
		4	-	4	-	4	19235UL	4	19255UL
		6	-	6	-	6	192056UL	6	-
		8	-	8	-	8	-	8	-
	80	3	19206	3	19216	3	19206UL	3	19216UL
		4	19236	4	19256	4	19236UL	4	19256UL
		6	192066	6	192166	6	192066UL	6	-
		8	192368	8	192568	8	-	8	-
	100	3	19207	3	19217	3	19207UL	3	19217UL
		4	19237	4	19257	4	19237UL	4	19257UL
		6	192076	6	192176	6	192076UL	6	-
		8	192378	8	192578	8	-	8	-
	125	3	19208	3	19218	3	19208UL	3	19218UL
		4	19238	4	19258	4	19238UL	4	19258UL
		6	192086	6	192186	6	192086UL	6	-
		8	192388	8	192588	8	-	8	-
SD3	100	3	-	3	-	3	19700UL	3	19710UL
		4	-	4	-	4	19730UL	4	19750UL
		6	-	6	-	6	-	6	-
		8	-	8	-	8	-	8	-
	125	3	19701	3	19711	3	19701UL	3	19711UL
		4	19731	4	19751	4	19731UL	4	19751UL
		6	197016	6	197116	6	-	6	-
		8	197318	8	197518	8	-	8	-
	160	3	19702	3	19712	3	19702UL	3	19712UL
		4	19732	4	19752	4	19732UL	4	19752UL
		6	197026	6	197126	6	-	6	-
		8	197328	8	197528	8	-	8	-
	200	3	19703	3	19713	3	-	3	-
		4	19733	4	19753	4	-	4	-
		6	197036	6	197136	6	-	6	-
		8	197338	8	197538	8	-	8	-

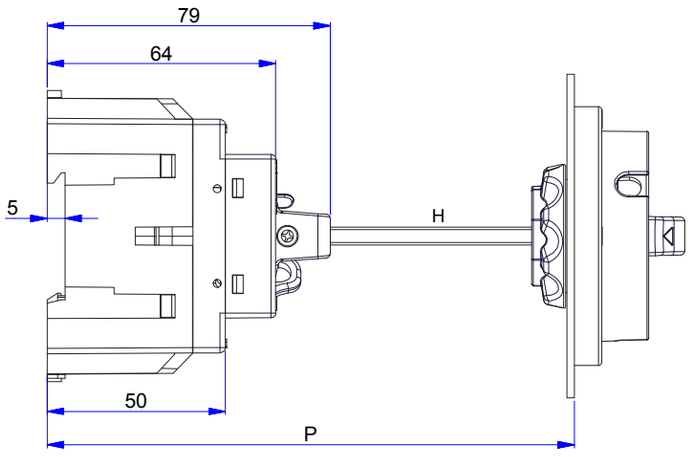
SERIE_SERIES **SD**

Caratteristiche tecniche _technincal features	Tipo _Type		SD1					SD2			SD3		
	In	A	16	25	32	40	63	80	100	125	125	160	200
Tensione nominale d' isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale tenuta impulso _Shock resistance	Uimp	kV	4	4	4	4	4	8	8	8	8	8	8
Corrente nominale termica a 40°C _Thermal current at 40°C	Ith/ Ithe	A	16	25	32	40	63	80	100	125	125	160	200
Corrente nominale d' impiego _Rated operational current													
AC-21A	415V	A	16	25	32	40	63	80	100	125	125	160	200
	500V	A	16	25	32	40	63	80	100	125	125	160	160
	690V	A	16	25	32	40	63	80	100	125	125	160	160
AC-22A	415V	A	16	25	32	40	63	80	100	125	125	160	200
	500V	A	16	25	32	40	63	80	100	125	125	160	160
	690V	A	16	25	32	40	63	80	100	125	125	160	160
AC-23A/B	415V	A	16	25	32	40	63	80	100	100	125	160	160
	500V	A	16	16/25	32	40	63	63	63	63	125	160	160
	690V	A	16	16/25	32	40	63	63	63	63	125	125	125
Potere di chiusura a 415V AC23 _Rated making capacity at 415V AC23		A	160	250	320	400	630	800	1000	1250	1250	1600	1600
Potere di interruzione a 415V AC23 _Breaking capacity at 415V AC23		A	128	200	256	320	504	640	800	1024	1000	1280	1280
Potenza nominale di impiego AC23 _Rated operational power AC23	415V	kW	8	11	14	18	29	37	46	46	55	69	69
	500V	kW	8	14	17	22	35	35	35	35	65	83	83
	690V	kW	12	19	24	31	48	48	48	48	90	90	90
Corrente di breve durata per 1 sec _Short-circuit withstand currente 1 sec	400V	kA	1,1	1,1	1,1	1,1	1,1	1,5	1,5	1,5	3	3	3
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	2,1	2,1	2,1	2,1	2,1	3,5	3,5	3,5	4,5	4,5	4,5
Corrente di corto circuito condizionata da fusibile _fuse protected short-circuit withstand													
Tipo fusibile gG DIN _gG DIN Backup associated fuse rating		A	16	25	32	40	63	80	100	125	125	160	200
Valore efficace/R.M.S. value		kA	10	10	10	10	10	10	10	10	10	10	10
Durata meccanica _Mechanical endurance		n.	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Durata elettrica _Electrical endurance		n.	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Potenza dissipata per polo _Power loss per pole		W	0,1	0,1	0,2	0,3	0,8	1,3	2	3,1	2,5	3	3
Dimensione cavo _Cable section		mm^2	16	16	16	16	16	50	50	50	70	70	70
Max.torsione terminali _Tightening torque		Nm	2	2	2	2	2	2,5	2,5	2,5	6	6	6
Sforzi di manovra _Operating torque		Nm	1,6	1,6	1,6	1,6	1,6	2	2	2	2,6	2,6	2,6
Peso netto _Net weight	3P	Kg.	0,13	0,13	0,13	0,13	0,13	0,25	0,25	0,25	0,4	0,4	0,4
	4P	Kg.	0,16	0,16	0,16	0,16	0,16	0,32	0,32	0,32	0,5	0,5	0,5
	6P	Kg.	0,3	0,3	0,3	0,3	0,3	0,55	0,55	0,55	0,8	0,8	0,8
	8P	Kg.	0,4	0,4	0,4	0,4	0,4	0,62	0,62	0,62	1	1	1

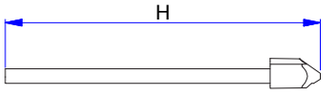
Tipo _Type			SD1				SD2				SD3		
Corrente nominale _Rated current	In	A	16	25	32	40	63	80	100	125	100	125	160
Uso generale _General use		V AC	600	600	600	600	600	600	600	600	600	600	600
Valore di corto circuito _Short circuit rating		kA	5	5	5	5	5	5	5	5	10	10	10
Valore fusibile _Fuse rating		A	40	40	40	40	125	125	125	125	175	175	175
Max potenza impiego_Max horsepower UL 3 fasi _3 phases	120V	Hp	3	3	3	3	5	5	5	5	15	20	20
	240V	Hp	5	7,5	7,5	10	10	15	15	15	30	40	40
	415V	Hp	7,5	10	10	15	20	25	25	25	50	600	60
	480V	Hp	10	15	20	20	25	30	30	30	75	100	100
	600V	Hp	15	20	25	30	30	40	40	40	100	125	125
Max potenza impiego _Max horsepower UL 1 fase _1 phase	120V	Hp	3	3	3	3	3	5	5	5	-	-	-
	240V	Hp	5	5	5	5	8	10	10	10	-	-	-
	480V	Hp	15	15	15	15	20	20	20	20	-	-	-
Max carico avviamento motore _Max full load motor running UL 3 fasi _3 phases	120V	A	19,2	19,2	19,2	19,2	30,4	30,4	30,4	30,4	84	108	108
	240V	A	15,2	22	22	28	42	42	42	42	80	104	104
	415V	A	14	18	18	27	44	44	44	44	83	103	103
	480V	A	14	21	27	27	40	40	40	40	84	104	104
	600V	A	17	22	27	32	41	41	41	41	99	125	125
Max carico avviamento motore _Max full load motor running UL 1 fase _1 phase	120V	A	34	34	34	34	34	56	56	56	-	-	-
	240V	A	28	28	28	28	40	50	50	50	-	-	-
	480V	A	34	34	34	34	44	44	44	44	-	-	-
Potenza nominale di impiego AC23 _Rated operational power AC23	415V	kW	8	11	14	18	29	37	46	46	55	69	69
	500V	kW	8	14	17	22	35	35	35	35	65	83	83
	690V	kW	12	19	24	31	48	48	48	48	90	90	90
Durata meccanica _Mechanical endurance		n.	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000
Durata elettrica _Electrical endurance		n.	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000
Dimensione cavi _Cable section		AWG	6÷16	6÷16	6÷16	6÷16	1÷6	1÷6	1÷6	1÷6	3/0÷6	3/0÷6	3/0÷6
Tipo terminale _Tightening type			Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu
Max.torsione terminali _Tightening torque		Nm	2	2	2	2	3,5	3,5	3,5	3,5	6	6	6
Peso netto _Net weight		Kg	0,13	0,13	0,13	0,13	0,25	0,25	0,25	0,25	0,25	0,25	0,25

SD1 3 - 4 POLI _poles

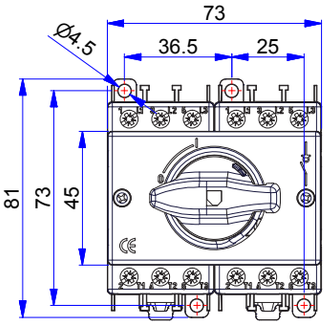


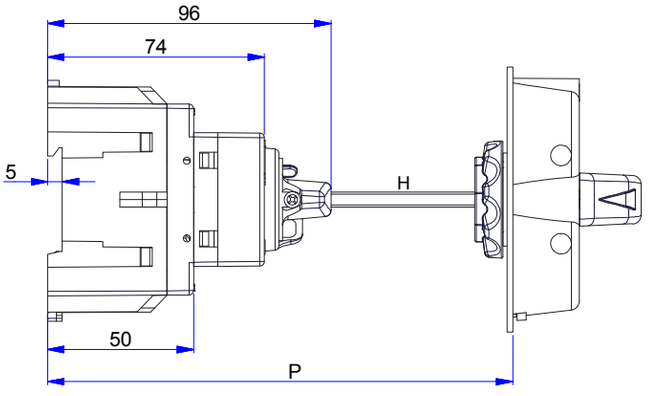


SD1			
HANDLE	P	C	H
19460 - 19461	--	34	P-C
19466 - 19467	--	22	P-C

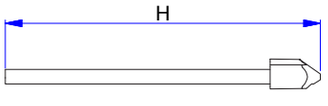


SD1 6 - 8 POLI _poles

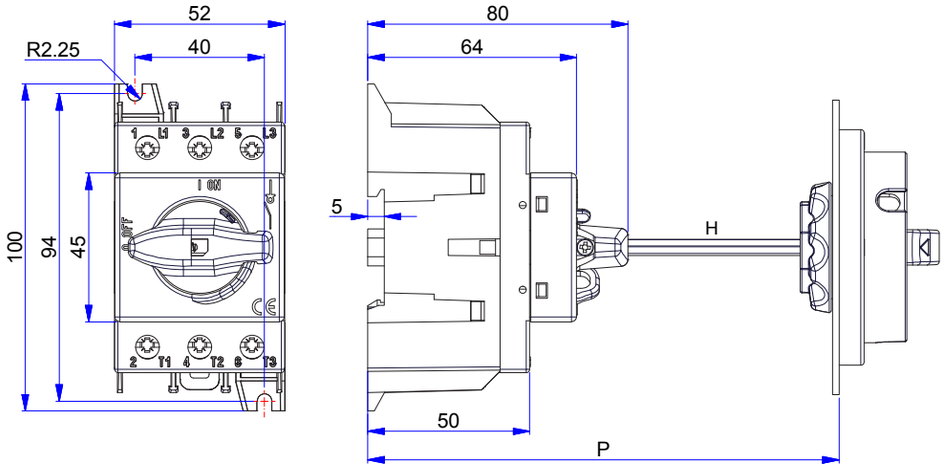




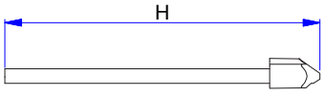
SD1 6 POLI			
HANDLE	P	C	H
19466 - 19467	--	40	P-C



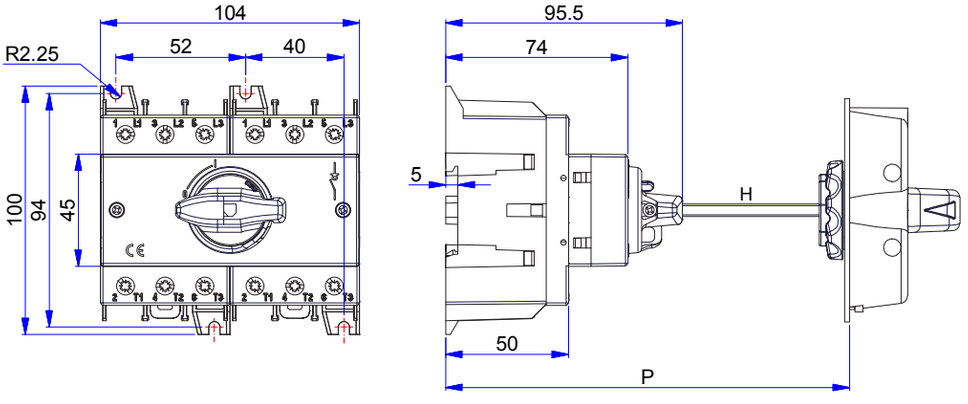
SD2 3 - 4 POLI _poles



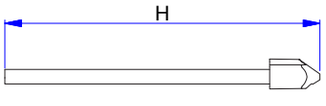
SD2			
HANDLE	P	C	H
19460 - 19461	--	32	P-C
19466 - 19467	--	20	P-C



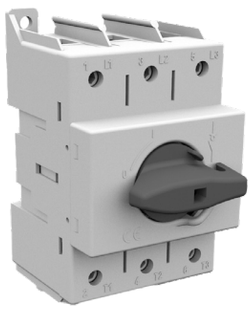
SD2 6 - 8 POLI _poles

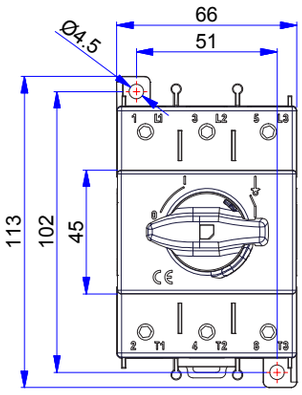


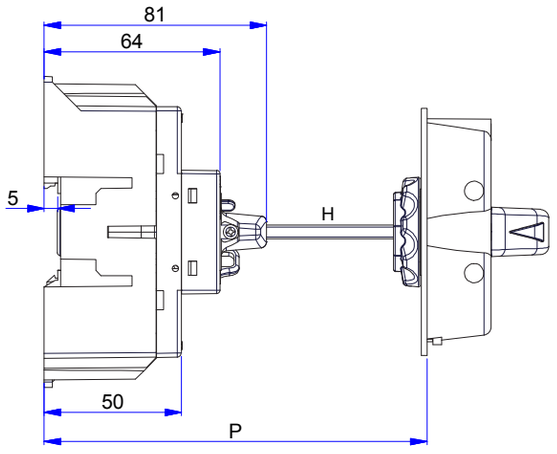
SD2 6 POLI			
HANDLE	P	C	H
19466 - 19467	--	40	P-C



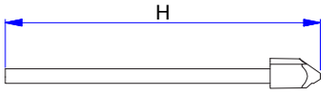
SD3 3 - 4 POLI _poles



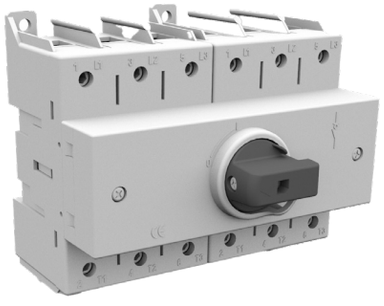


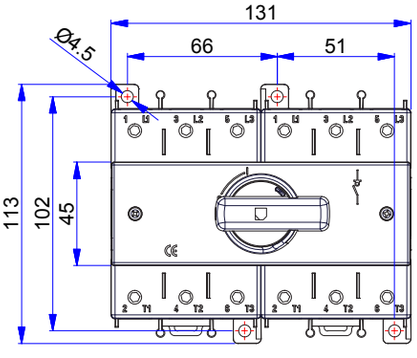


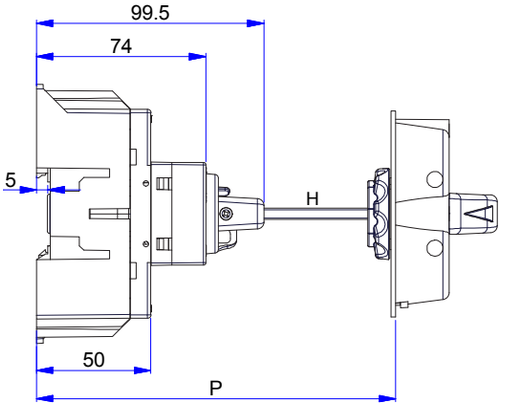
SD3			
HANDLE	P	C	H
19460 - 19461	--	35	P-C
19466 - 19467	--	23	P-C



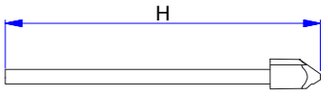
SD3 6 - 8 POLI _poles





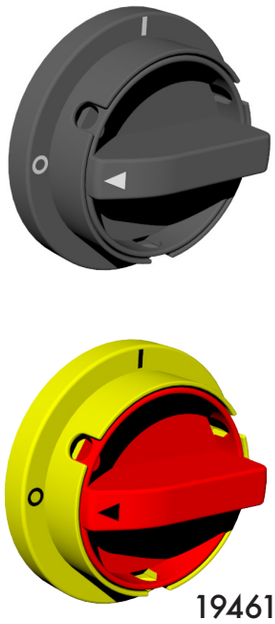


SD3 6 POLI			
HANDLE	P	C	H
19466 - 19467	--	40	P-C

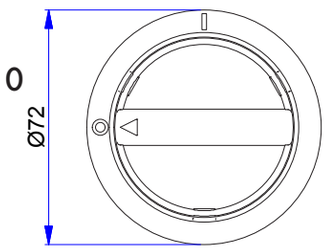


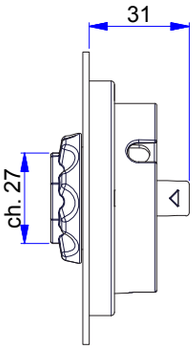
3 - 4 POLI _poles

MANIGLIE BLOCCO PORTA _Door interlock handles

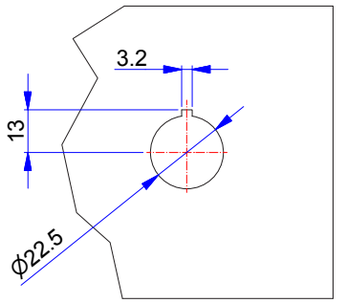


19461



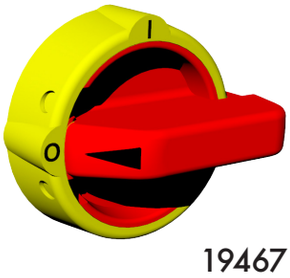


Foratura portella _Door drilling

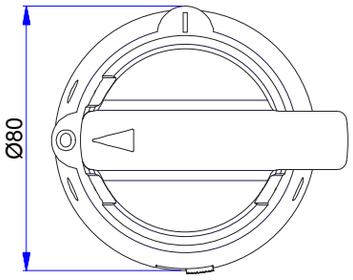


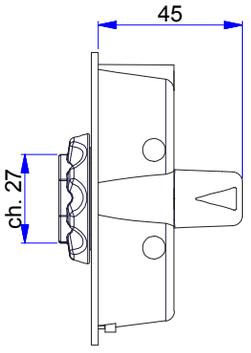
3 - 4 POLI / 6-8 POLI _poles
MANIGLIE CON SBLOCCO PORTA_ handles with defeater mechanism

19466

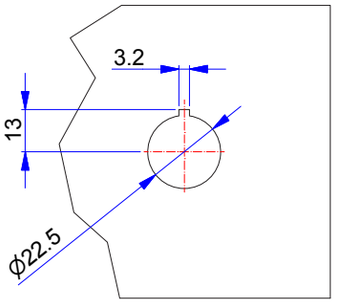


19467





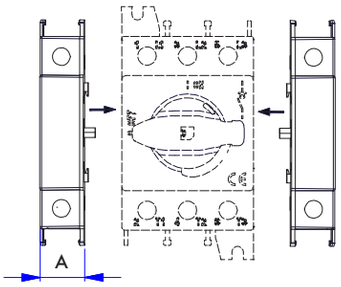
Foratura portella _Door drilling



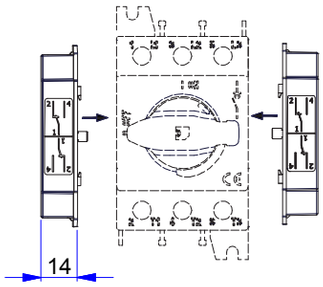
ALBERI DI COMANDO CON PUNTALE
_shaft for external operation with tip

Tipo _type	SD1 - SD2 alluminio _alluminium			SD1 - SD2 - SD3 acciaio _steel		
Poli _poles	3-4			3-4 | 6-8		
mm	100	200	300	100	200	300
Codice _code	19535-100P	19535-200P	19535-300P	19534-100P	19534-200P	19534-300P

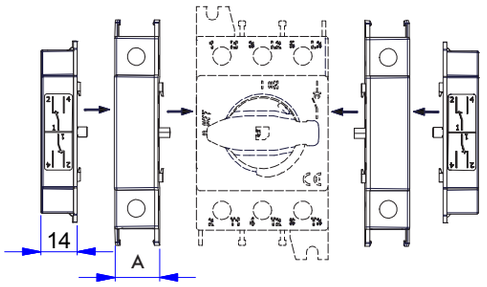
montaggio poli addizionali
_additional poles assembly



montaggio contatti ausiliari
_auxiliary contacts assembly

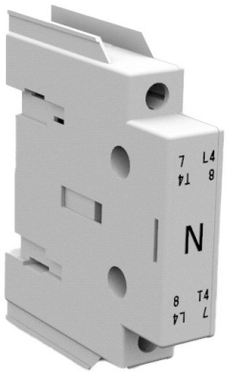


montaggio poli addizionali + contatti ausiliari
_additional poles + auxiliary contacts assembly



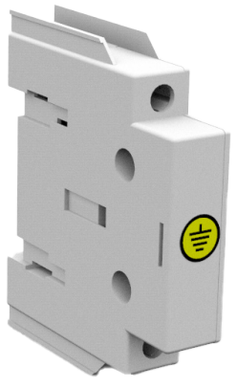
Tipo_Type	SD1	SD2	SD3
A	14	17	22

4° POLO NEUTRO _4th pole neutral



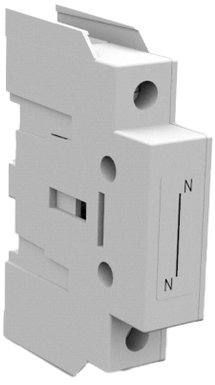
SD1 19320
SD2 19418
SD3 19450

MORSETTO DI TERRA _Earthing neutral



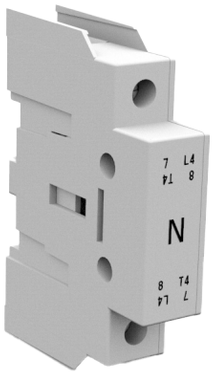
SD1 19322
SD2 19422
SD3 19452

NEUTRO PASSANTE _Solid neutral



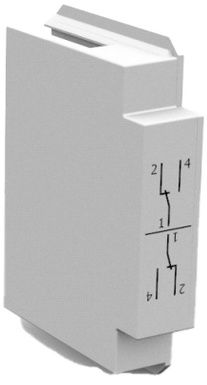
SD1 19321
SD2 19420
SD3 19451

4° POLO CONTEMPORANEO _Contemporary 4th pole



SD1 19442
SD2 19443
SD3 19444

CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC _auxiliary contacts 1NO + 1NC



Contatti ausiliari in scambio terminali a vite
_Auxiliary contacts screw terminals

Tipo _type	SD1	SD2	SD3
Codice _code	19429	19429	19429

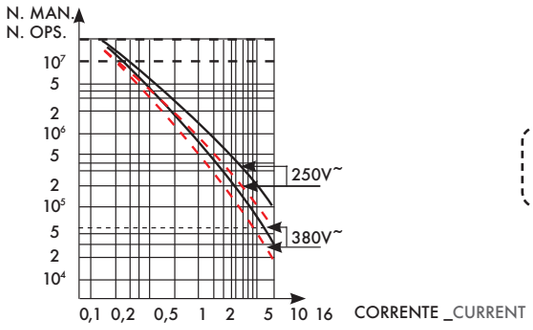
Contatti ausiliari in scambio terminali a Faston
_Auxiliary contacts Faston terminals

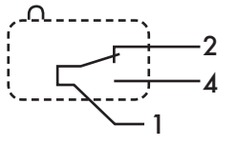
Tipo _type	SD1	SD2	SD3
Codice _code	19430	19430	19430

Per il montaggio dei contatti ausiliari addossati al 4° polo, ordinare la confezione viti cod 11190311
_For the installation of the auxiliary contacts on the 4th pole, please order the screws set with code 11190311

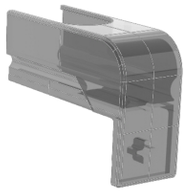
Contatti ausiliari in scambio
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore
Portata nominale 16A
Portata termica 20A

_Auxiliary contacts break before make contacts switches
Rated current 16A
Thermal current 20A

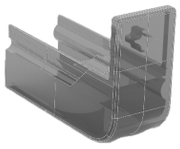




KIT COPRI TERMINALI 4° POLO _4th pole terminals cover kit



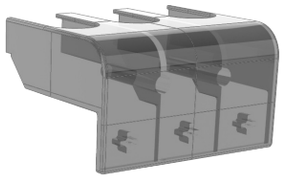
SD1 19426



SD2 19427

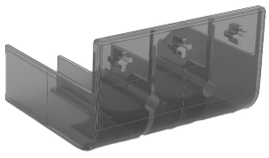
SD3 19454

KIT COPRI TERMINALI 3 POLI _3 poles terminals cover kit



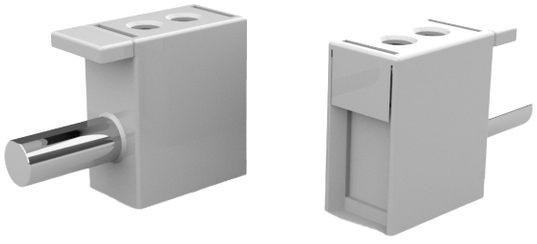
SD1 19424

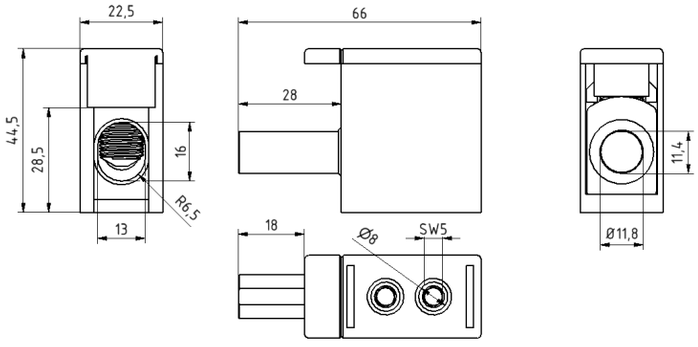
SD2 19425



SD3 19453

MORSETTO ADATTATORE 200A PER CAVI DA 95MM² _Terminal adapter 200A for 95 mm² cables





Il codice include 3 pezzi _3 pcs in each code

Codice _code :19565

Poli _poles	Diametro massimo cavo _Max. Cross section	Corrente Nominale _Nominal current	Tensione Nominale _Nominal voltage
1	120	190A - 200A	690V

Adattatore terminali per cavo da 95 mm². per il collegamento di conduttori in alluminio e rame alle apparecchiature. Il corpo è in alluminio stagnato e l'alloggiamento è in poliammide.

_Terminal Adapter for 95 sqmm cable. for connecting Al-and Cu-conductors to equipment. Body is made of tin-plated aluminium and housing is polyamid.

COMMUTATORI MANUALI
_MANUAL CHANGEOVER SWITCHES
CO-SD 16 ÷ 160 A

GENERALITÀ COMMUTATORE SD

I commutatori manuali SD, consentono la commutazione di 2 linee elettriche separate di bassa tensione.
Sono realizzati interbloccando due normali interruttori della serie SD

Disponibili in versione standard I-0-II (pos 0 entrambi i sezionatori sono aperti) ed in versione "OL" a transizione chiusa I-I+II-II (pos I+II entrambi i sezionatori sono chiusi).

GAMMA

CO-SD1 commutatore con portate da 16 - 25 - 32 - 40 - 63 A
CO-SD2 commutatore con portate da 80 - 100 - 125 A
CO-SD3 commutatore con portate da 125 - 160 A

COMANDO

Maniglia diretta lucchettabile in posizione di zero.
Maniglia con e senza blocco porta.

CONFORMITÀ ALLE NORME

IEC 60947/1-3 | UNI EN 60947/1-3 | UL | EAC | CSA

_SD CHANGE-OVER SWITCHES GENERALITIES

The manual change-over switches SD series, allow the change-over of two low voltage electrical circuits.
They are made by two standard switches of SD series mechanically interlocked

Available in standard version I-0II (pos 0 both switches are OFF) and in close transition "OL" version I-I+II-II (pos I+II both switches are ON).

_RANGE

CO-SD1 change-over switches 16 - 25 - 32 - 40 - 63 A
CO-SD2 change-over switches 80 - 100 - 125 A
CO-SD3 change-over switches 125 - 160 A

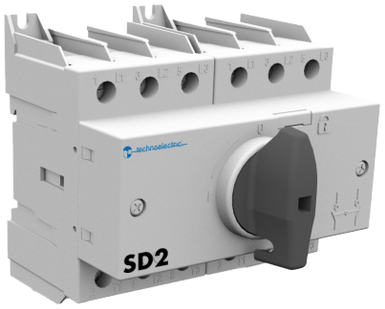
_OPERATING MECHANISM

Direct handle padlockable in 0 position.
Handle with and without door interlock handle.

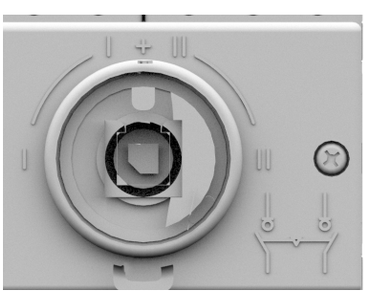
_CONFORMITY TO STANDARDS

IEC 60947/1-3 | UNI EN 60947/1-3 | UL | EAC | CSA

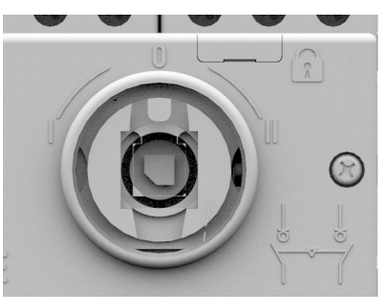
CODICI ORDINAZIONE _ORDER REFERENCES



			IEC		UL	
Tipo _Type	Corrente nominale _Rated current	poli _poles	Versione I-0-II Version I-0-II	Versione I – I+II – II Version I – I+II – II	poli _poles	Versione I-0-II Version I-0-II
CO SD1	16A	3	193003	193003OL	3	193003UL
		4	193303	193303OL	4	-
	25A	3	193013	193013OL	3	193013UL
		4	193313	193313OL	4	-
	32A	3	193023	193023OL	3	193023UL
		4	193323	193323OL	4	-
	40A	3	193033	193033OL	3	193033UL
		4	193333	193333OL	4	-
	63A	3	193043	193043OL	3	-
		4	193343	193343OL	4	-
CO SD2	63A	3	-	-	3	192053UL
		4	-	-	4	-
	80A	3	192063	192063OL	3	192063UL
		4	192363	192363OL	4	-
	100A	3	192073	192073OL	3	192073UL
		4	192373	192373OL	4	-
	125A	3	192083	192083OL	3	192083UL
		4	192383	192383OL	4	-
CO SD3	125A	3	197013	197013OL	3	-
		4	197313	197313OL	4	-
	160A	3	197023	197023OL	3	-
		4	197323	197323OL	4	-

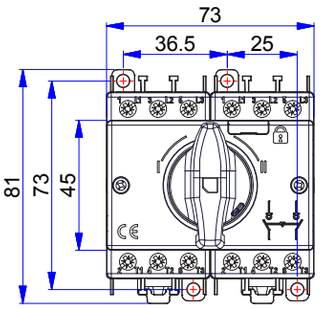


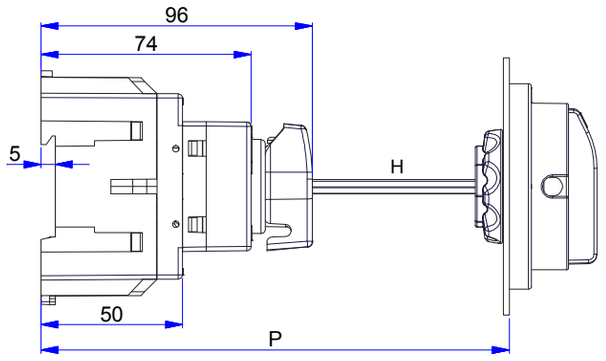
Dettaglio versione Overlapping (OL)
_Close look to Overlapping (OL) version



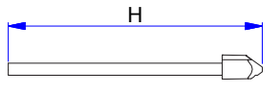
Dettaglio versione Commutatore (CO)
_Close look to Changeover (CO) version

CO SD1

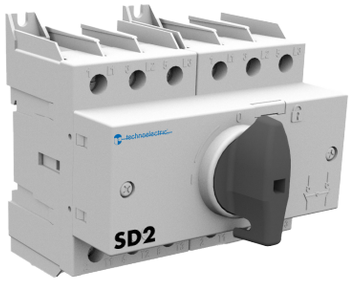


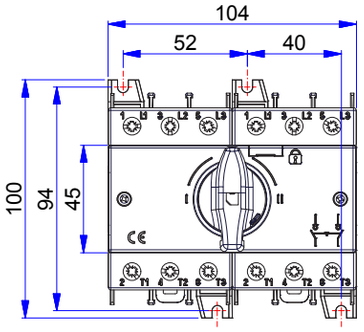


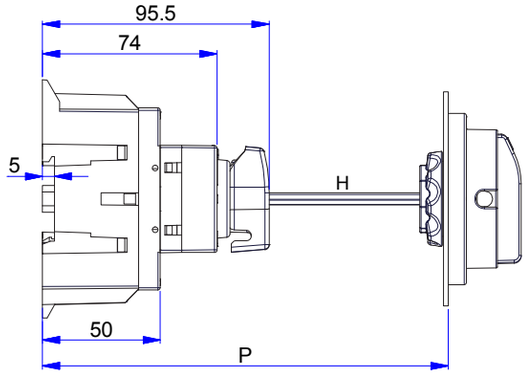
CO SD1			
HANDLE	P	C	H
19462	--	52	P-C
19459	--	40	P-C



CO SD2







CO SD2			
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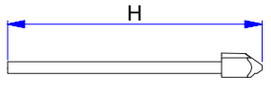
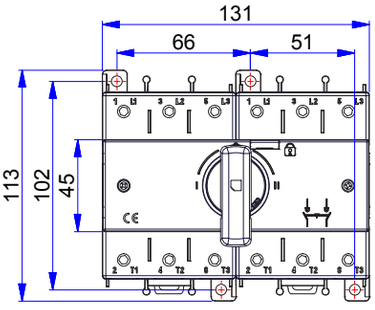
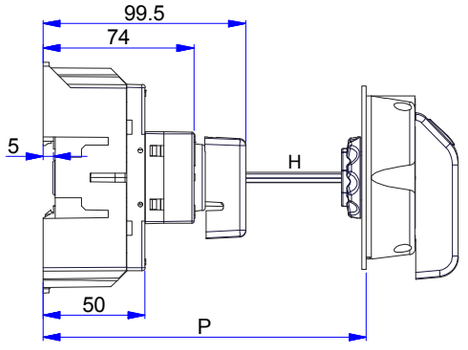
19459	--	40	P-C

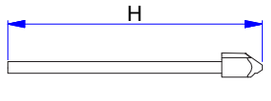


CO SD3

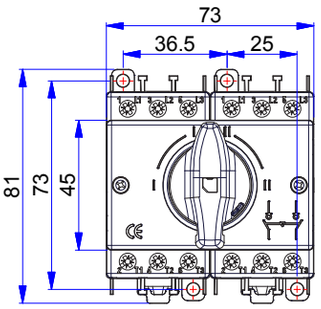


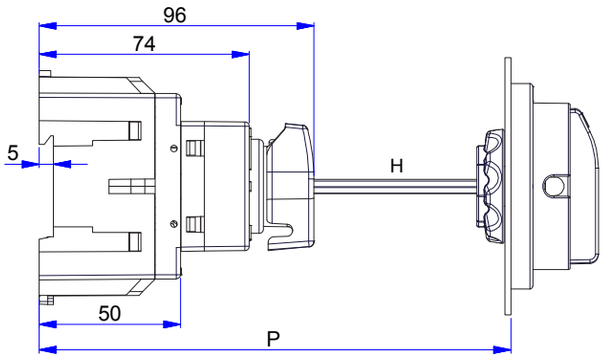


CO SD3			
HANDLE	P	C	H
19462	--	52	P-C
19459	--	40	P-C



CO SD1 OL





CO SD1 OL			
HANDLE	P	C	H
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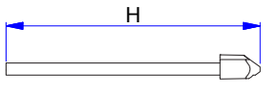
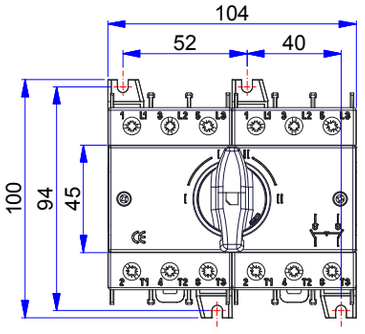
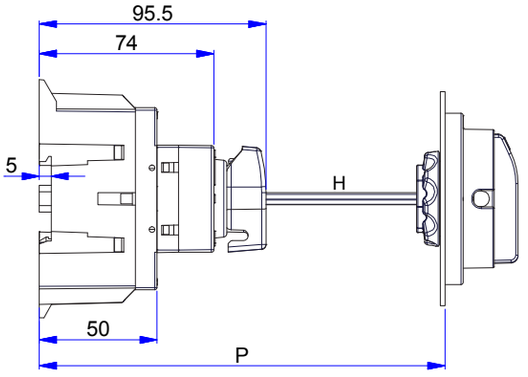
19458	--	40	P-C

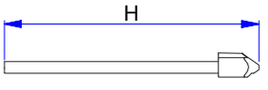


CO SD2 OL

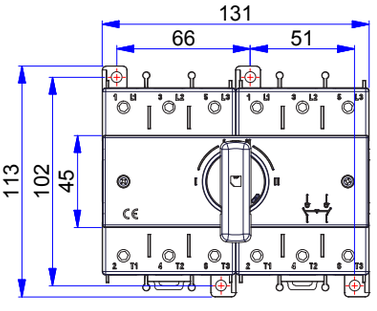


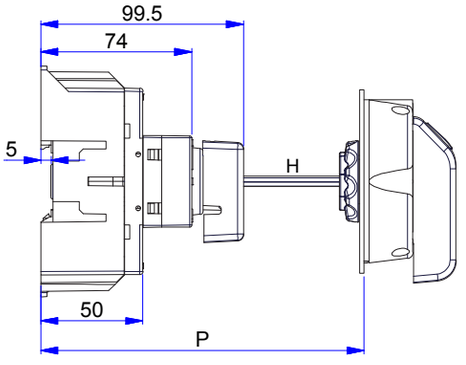


CO SD2 OL			
HANDLE	P	C	H
19457	--	52	P-C
19458	--	40	P-C



CO SD3 OL





CO SD3 OL			
HANDLE	P	C	H
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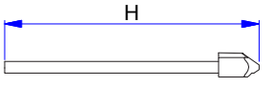
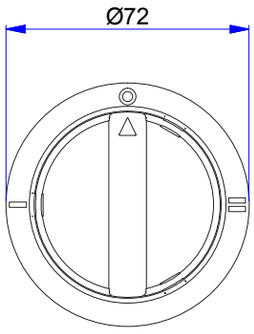
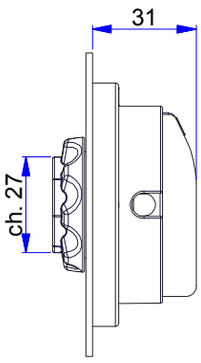
19458	--	40	P-C



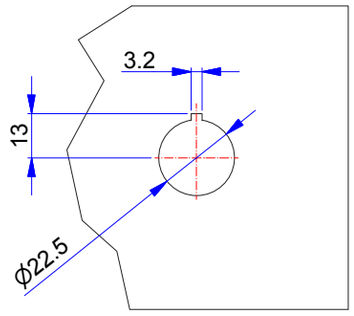
MANIGLIE _Door handles
CO SD1 | CO SD2

19462



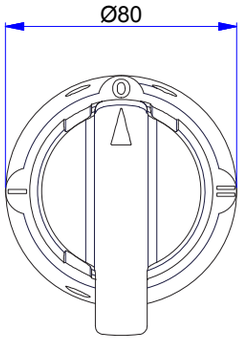


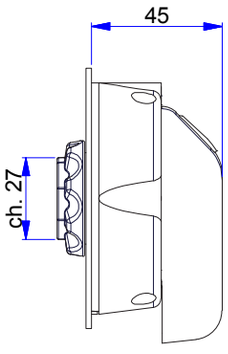
Foratura portella _Door drilling



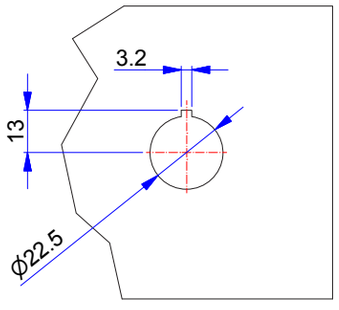
CO SD3

19459



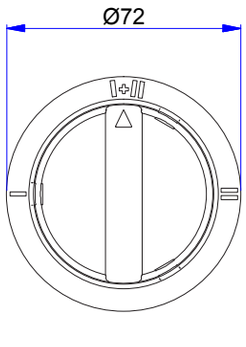


Foratura portella _Door drilling

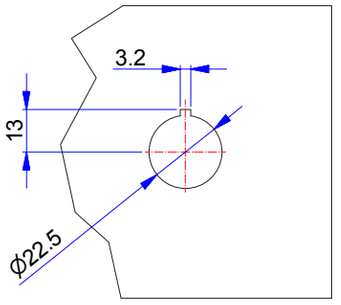


CO SD1 OL | CO SD2 OL

19457

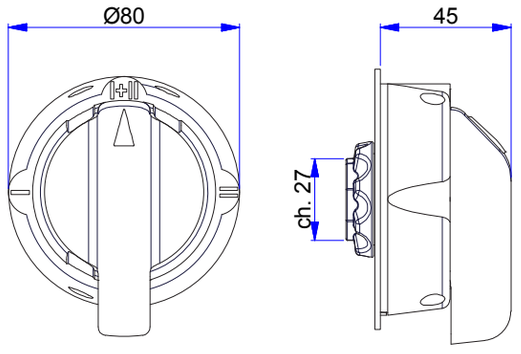


Foratura portella _Door drilling

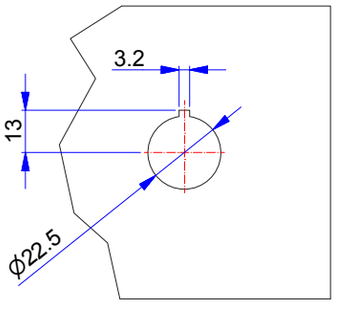


CO SD3 OL

19458



Foratura portella _Door drilling

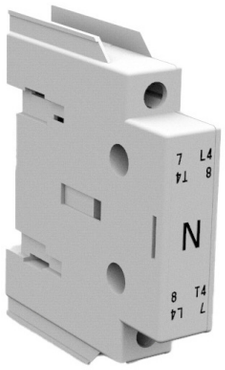


ALBERI DI COMANDO CON PUNTALE
_shaft for external operation with tip

Materiale _Material
Acciaio _steel

mm	100	200	300
Codice_code	19534-100P	19534-200P	19534-300P

4° POLO NEUTRO
_4th pole neutral

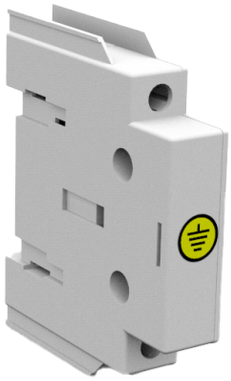


SD1 19320

SD2 19418

SD3 19450

MORSETTO DI TERRA
_Earthing neutral

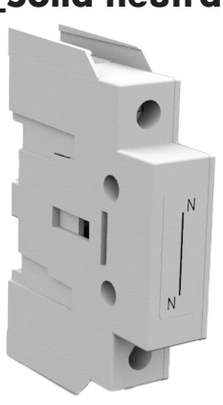


SD1 19322

SD2 19422

SD3 19452

NEUTRO PASSANTE
_Solid neutral

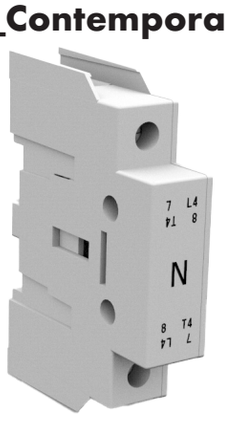


SD1 19321

SD2 19420

SD3 19451

4° POLO CONTEMPORANEO
_Contemporary 4th pole

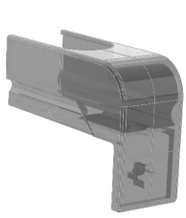


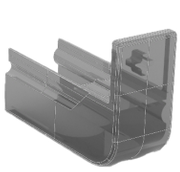
SD1 19442

SD2 19443

SD3 19444

KIT COPRI TERMINALI 4° POLO
_4th pole terminals cover kit



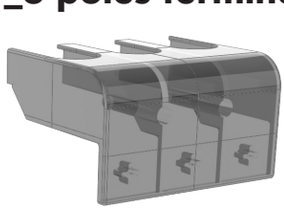


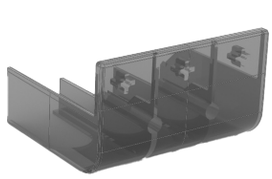
CO-SD1 19426

CO-SD2 19427

CO-SD3 19454

KIT COPRI TERMINALI 3 POLI
_3 poles terminals cover kit



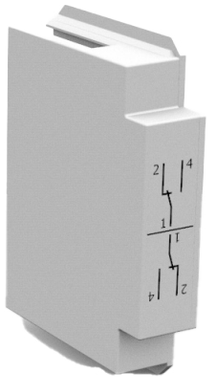


CO-SD1 19424

CO-SD2 19425

CO-SD3 19453

CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC
_auxiliary contacts 1NO + 1NC



Contatti ausiliari in scambio terminali a vite
_Auxiliary contacts screw terminals

Tipo _type	SD1	SD2	SD3
Codice _code	19429	19429	19429

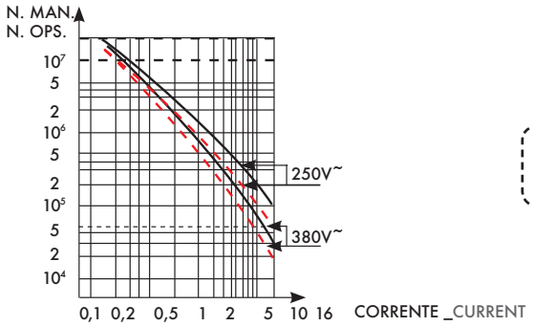
Contatti ausiliari in scambio terminali a Faston
_Auxiliary contacts Faston terminals

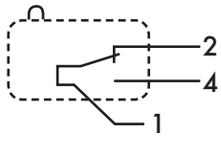
Tipo _type	SD1	SD2	SD3
Codice _code	19430	19430	19430

Per il montaggio dei contatti ausiliari addossati al 4° polo, ordinare la confezione viti cod 11190311
_For the installation of the auxiliary contacts on the 4th pole, please order the screws set with code 11190311

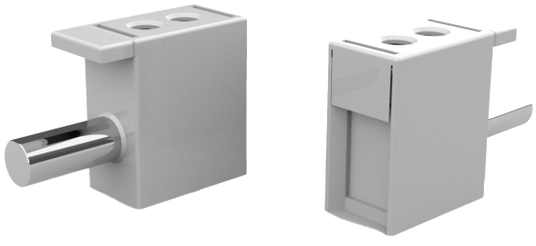
Contatti ausiliari in scambio
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore Portata nominale 16A
Portata termica 20A

_Auxiliary contacts break before make contacts switches
Rated current 16A
Thermal current 20A





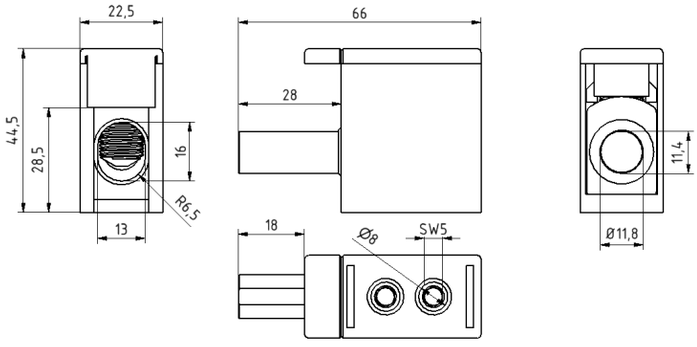
MORSETTO ADATTATORE 200A PER CAVI DA 95MM²
_Terminal adapter 200A for 95 mm² cables



Il codice include 3 pezzi _3 pcs in each code

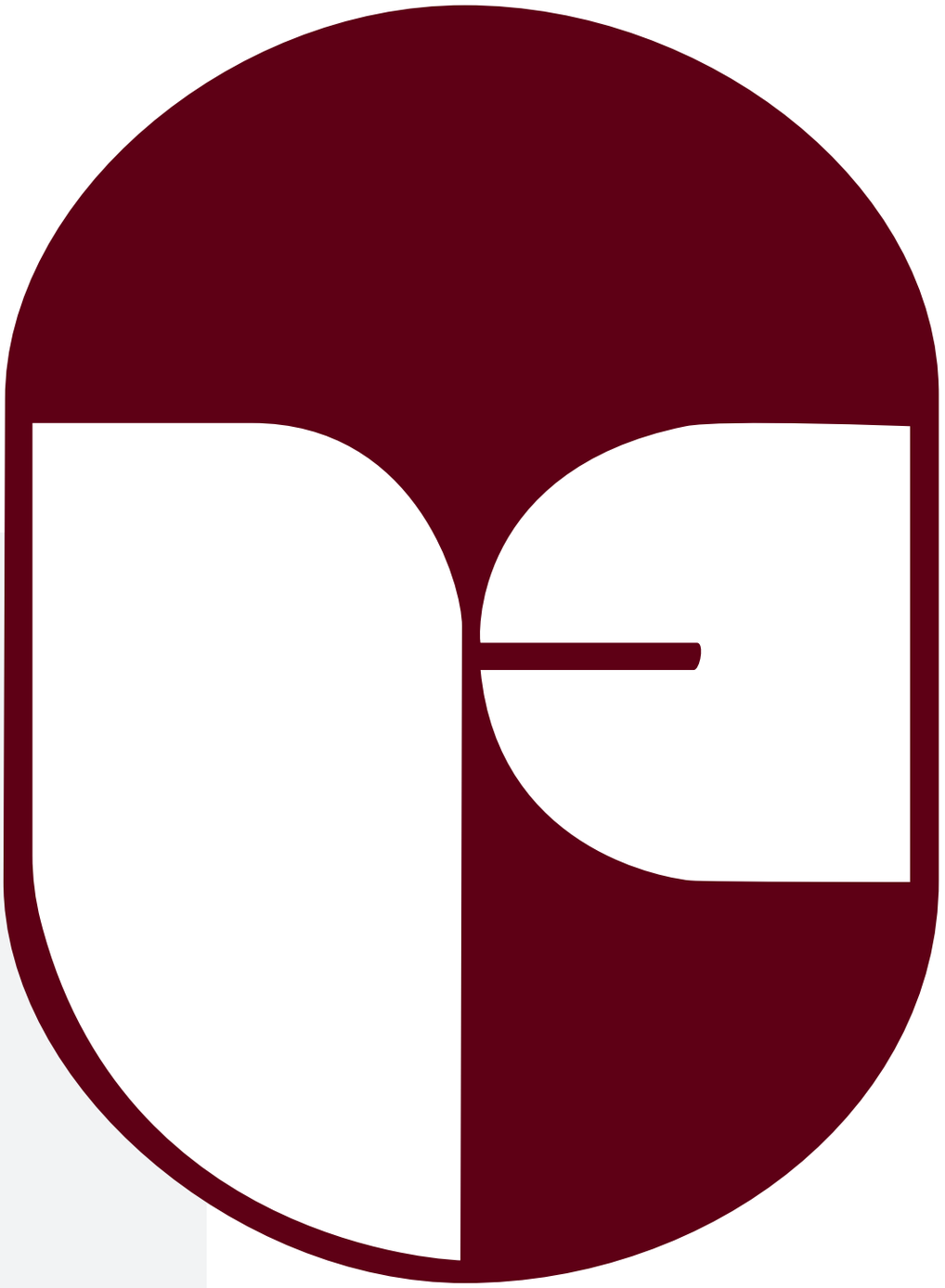
Codice _code :19565

Poli _poles	Diametro massimo cavo _Max. Cross section	Corrente Nominale _Nominal current	Tensione Nominale _Nominal voltage
1	120	190A - 200A	690V



Adattatore terminali per cavo da 95 mm². per il collegamento di conduttori in alluminio e rame alle apparecchiature. Il corpo è in alluminio stagnato e l'alloggiamento è in poliammide.

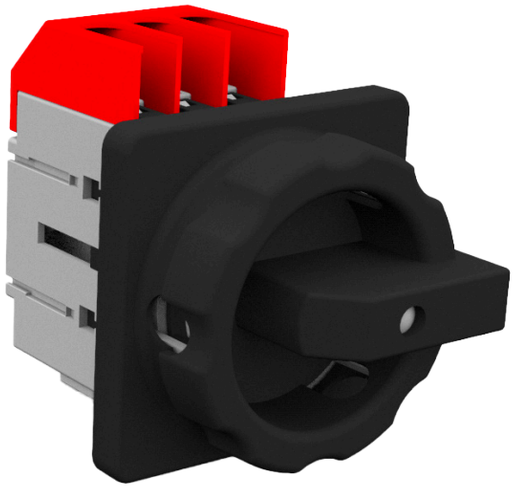
_Terminal Adapter for 95 sqmm cable. for connecting Al-and Cu-conductors to equipment. Body is made of tin-plated aluminium and housing is polyamid.

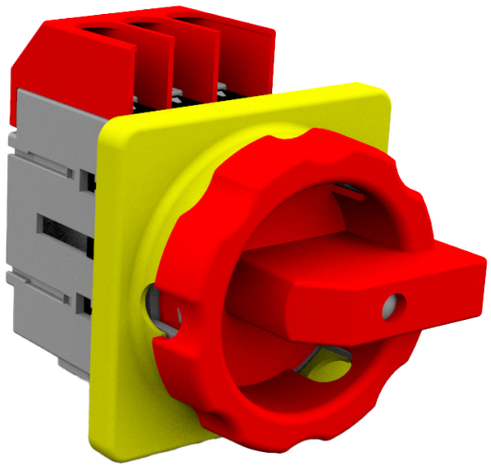


SEZIONATORI RETROPORTELLA

_ DOOR MOUNTING SWITCHES

ST 16A - 250A





GENERALITÀ
Gli interruttori-sezionatori modulari retroportella della serie ST, consentono l'interruzione e il sezionamento sotto carico di macchine e linee di bassa tensione con correnti nominali da 16 a 250 A.

IMPIEGO
Gli apparecchi della serie ST sono abitualmente impiegati nelle seguenti funzioni:
- Interruttori di comando
- Interruttore di EMERGENZA
- Interruttore principale secondo EN 60204-1
- Sezionatore

CARATTERISTICHE GENERALI
Alto potere d'interruzione (AC 22 A - AC 23 A)
Costruzione compatta, ad ingombro minimo
Doppia interruzione per ogni polo
Elevata durata meccanica ed elettrica, contatti argentati, viti imperdibili testa croce/cacciavite
Grado di protezione IP50 (IP65 a richiesta)
Esecuzione modulare montaggio su portella tramite 4 viti, oppure con foro diametro 22mm(solo versione IP65)
A vite, finestra modulare 45 mm.
Calotta coprimorsetti inclusa

GAMMA
ST1 16 - 25 - 32 - 40 - 63 A
ST2 80 A
ST3 100 - 125 A
ST4 180 - 250 A

POLI AGGIUNTIVI
Su ogni lato dell'interruttore possono essere installati il 4° polo N per il sezionamento del neutro, un morsetto passante, e un blocchetto di contatti ausiliari (1NA+1NC).
I contatti ausiliari sono anticipati in apertura rispetto ai contatti di potenza, mentre la chiusura può essere ritardata o contemporanea.

COMANDO
Maniglia con blocco porta, nera, o di emergenza, con possibilità di tre blocchi lucchettabili in posizione di zero

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO
Temperatura ambiente di immagazzinamento e trasporto - 25°C + 55°C
Temperatura ambiente di funzionamento - 20°C + 40°C
Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME
IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3|UL 508A

CERTIFICATI E OMOLOGAZIONI
UL | IEC | CSA | EAC

_GENERALITIES
The modular switch disconnectors of ST series, allow the breaking and the disconnecting on load of equipment on low voltage at nominal current from 16 to 250 A.

_USE
The switch disconnectors of ST series are commonly used for the following purposes:
- Control switches
- Emergency Switches
- Main Switches, following EN 60204-1 rules
- Disconnector

_GENERAL CHARACTERISTICS
High breaking capacity (AC 22 A - AC 23 A)
Double break contacts on each pole, silver plated contacts, captive screws
High electrical and mechanical endurance
Resistant to damp heat
IP50 degree of protection (IP65 under request)
Extremely compact construction,
Modular execution, basic mounting with 4 screws, or with a 22mm diameter hole(IP65 version only)
Contact covers included in each package

_RANGE
ST1 16 - 25 - 32 - 40 - 63 A
ST2 80 A
ST3 100 - 125 A
ST4 180 - 250 A

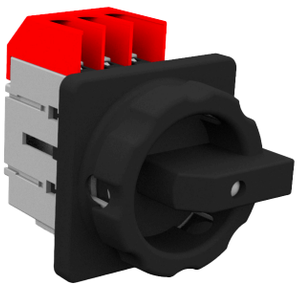
_ADDITIONAL POLES
Fourth neutral pole makes erlier and opens later than the phase contacts. Fourth pole solid neutral.
Earth pole. Contemporary pole under request.
A 4th Pole (or a solid neutral), or Auxiliary contacts can be installed on each side of the switch disconnector.
The auxiliary contacts are advanced in opening with respect to the power contacts, while the closing can be delayed or simultaneous.

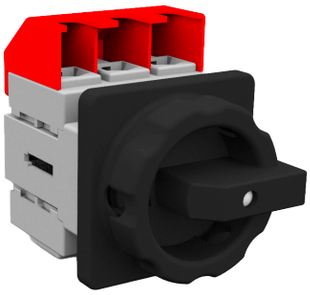
_OPERATING MECHANISM
Door interlock, black or emergency handle padlockable, with up to three padlocks in 0 position.

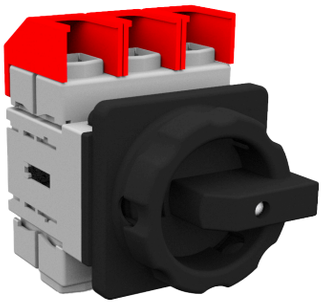
_STANDARD SERVICE, MOUNTING AND TRANSPORT CONDITIONS
Transport and storage ambient temperature - 25°C + 55°C
working ambient temperature - 20°C + 40°C
For other operating conditions please contact the manufacturer.

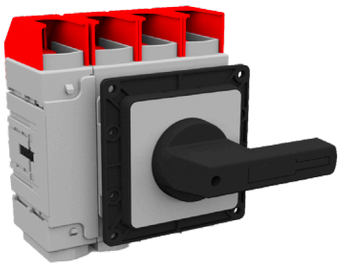
_CONFORMITY TO STANDARDS
IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3|UL 508A

_CERTIFICATES AND APPROVALS
UL | IEC | CSA | EAC





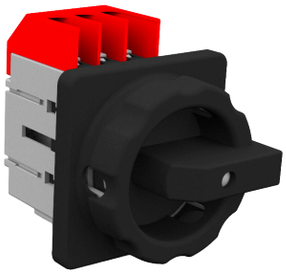


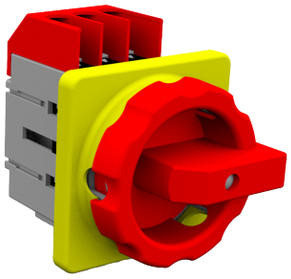


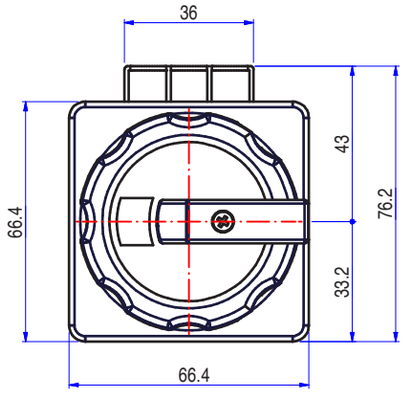
	Corrente nominale Rated current	MANIGLIA NERA _black handle code		MANIGLIA EMERGENZA _emergency handle code		MANIGLIA NERA _black handle code		MANIGLIA EMERGENZA _emergency handle code	
	A	POLI _POLES	CODICE / CODE	POLI _POLES	CODICE / CODE	POLI _POLES	CODICE / CODE	POLI _POLES	CODICE / CODE
ST1	16	3	19300R	3	19310R	4	19330R	4	19350R
	25	3	19301R	3	19311R	4	19331R	4	19351R
	32	3	19302R	3	19312R	4	19332R	4	19352R
	40	3	19303R	3	19313R	4	19333R	4	19353R
	63	3	19304R	3	19314R	4	19334R	4	19354R
ST2	80	3	19206R	3	19216R	4	19236R	4	19256R
ST3	100	3	19207R	3	19217R	4	19237R	4	19257R
	125	3	19701R	3	19711R	4	19731R	4	19751R
ST4	180	3	19704R	3	19714R	4	19734R	4	19754R
	250	3	19705R	3	19715R	4	19735R	4	19755R

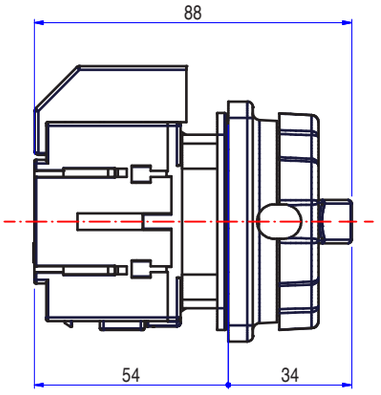
				ST1					ST2	ST3		ST4	
Corrente Nominale _rated operating current	Ie		A	16	25	32	40	63	80	100	125	180	250
Tensione di Esercizio _rated operating voltage	Ue		V	690	690	690	690	690	690	690	690	690	690
Tensione Nominale di isolamento _rated insulation voltage	Ui		V	690	690	690	690	690	690	690	690	690	690
Tensione Nominale Tenuta di Impulso _rated surge withstand capacity	Uimp		kV	6	6	6	6	6	6	6	6	8	8
Corrente nominale Termica a 40°C _conventional free air thermal current at 40°C	Ith		A	16	25	32	40	63	80	100	125	180	250
Corrente Nominale di Impiego _utilization category	AC-21A	415 V	A	16	25	32	40	63		100	125	180	250
		500 V	A	16	25	32	40	63		100	125	–	–
		690 V	A	16	25	32	40	63		100	125	180	250
	AC-22A	415 V	A	16	19	22	29	43		100	125	160	230
		500 V	A	–	–	–	–	–		100	125	–	–
		690 V	A	9	11	13	17	22		100	125	–	–
	AC-23A	415 V	A	16	19	22	36	43		70	80	–	224
		500 V	A	–	–	–	–	–	–	–	–	–	–
		690 V	A	9	11	13	17	22		34	39		55
Potere di Chiusura _rated operating power	AC23	415 V	kW	7.5	9	11.5	15	22		34	45	90	132
		500 V	kW	7.5	9	11.5	15	–		–	–	–	–
		690 V	kW	7.5	9	11.5	15	18.5		30	37	45	55
Corrente di breve durata per 1 sec _Short-circuit withstand currente 1 sec	Icw	400 V	kA	0.5	0.5	0.5	0.5	0.5	1.26	2	2	4	4
Corrente di cortocircuito condizionata da fusibile 690 V _rated conditional short-circuit current at 690 V	Icm	pk	kA	–	–	–	–	–	–	–	–	–	–
Potenza dissipata per polo _power loss per pole	tipo di fusibili	gG	A	25	25	50	50	63	80	100	125	200	250
Contatti Ausiliari _auxiliary contacts	Icc	rms	kA	5	5	5	5	5				–	–
Dimensione cavo _cable size			W	0.5	1.1	1.8	2.2	4.5	5.5	7.5	12	36	36
Interruttore pilota _pilot switch	AC 15	415 V	A	10	10	10	10	10	10	10	10	10	10
Sezione Cavo _cable size	flessibile _flexible		mm^2	2,5 - 16	2,5 - 16	2,5 - 16	2,5 - 16	2,5 - 16	2,5-35	4,0-50	4,5-50	16-185	16-185

ST1 3x16 ÷ 63A | ST1 3x16 ÷ 63A EM

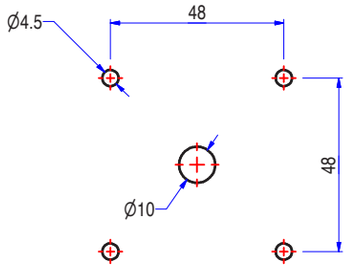




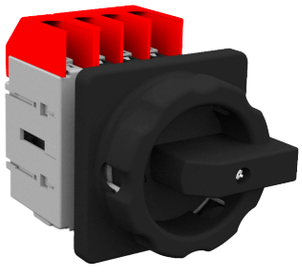


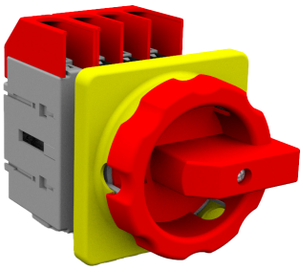


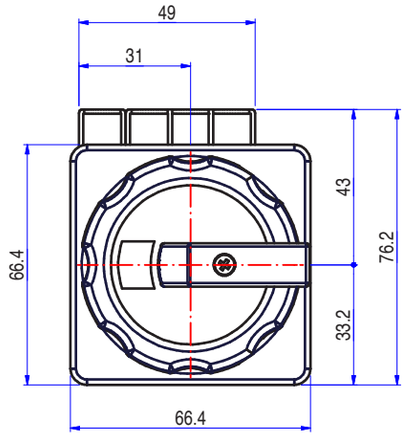
Foratura portella _Door drilling

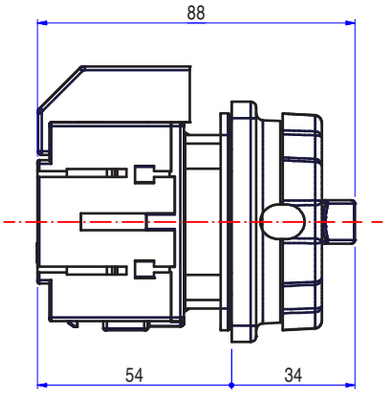


ST1 4x16 ÷ 63A | ST1 4x16 ÷ 63A EM

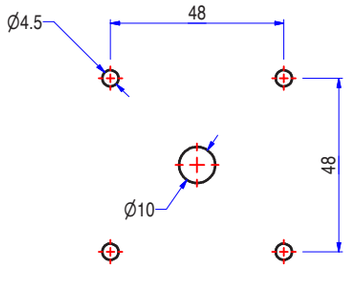




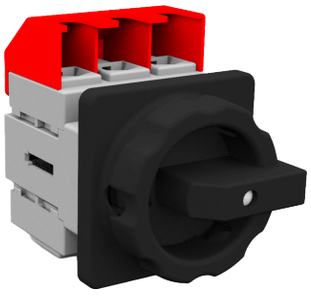


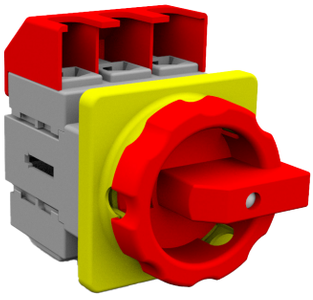


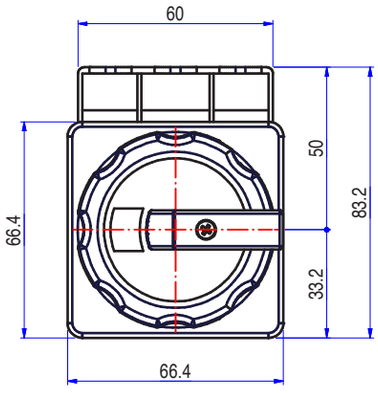
Foratura portella _Door drilling

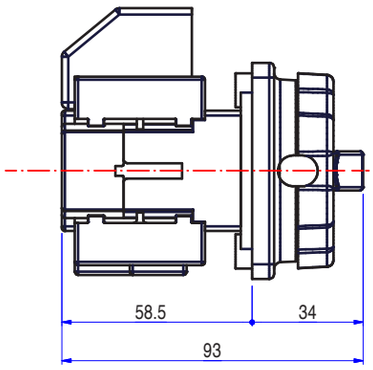


ST2 3x80A | ST2 3x80A EM

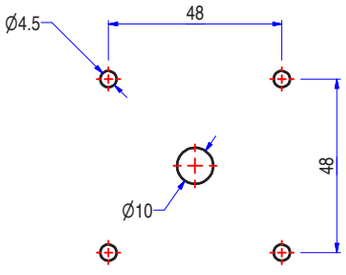




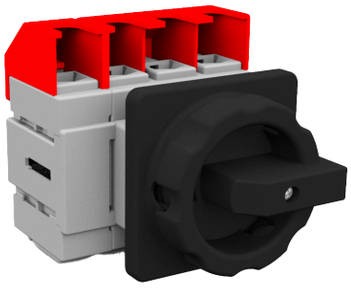


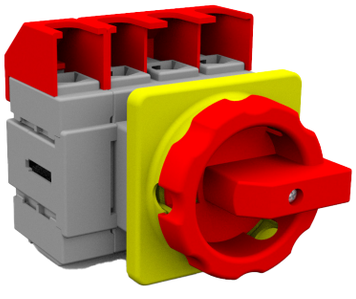


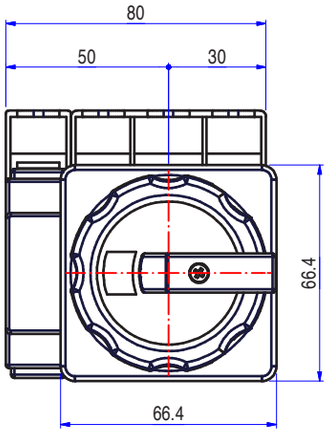
Foratura portella _Door drilling

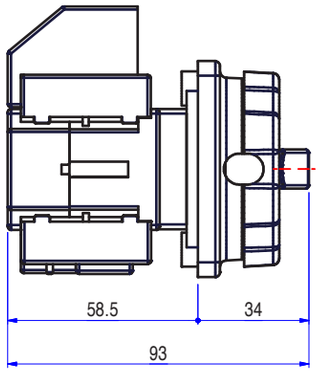


ST2 4x80A | ST2 4x80A EM

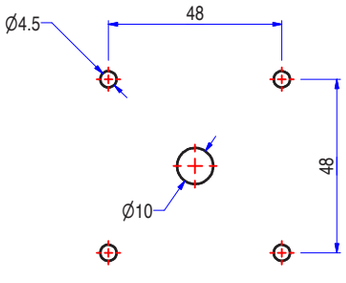




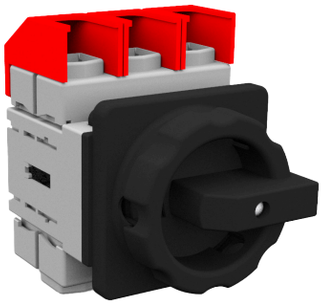


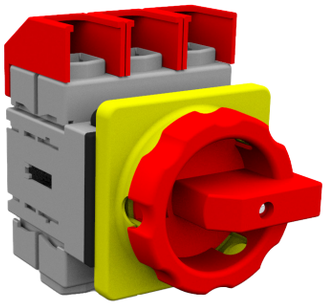


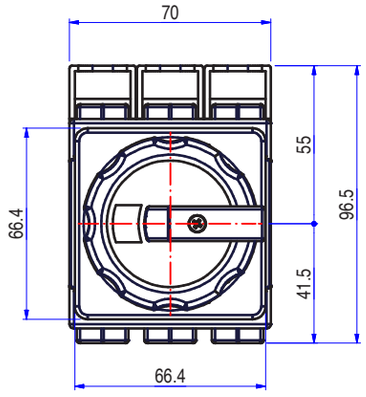
Foratura portella _Door drilling

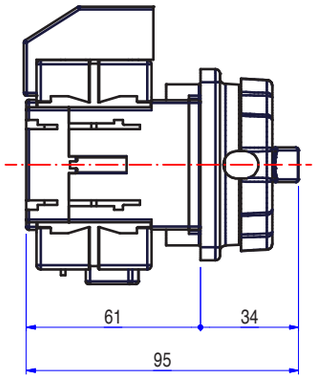


ST3 3x100 ÷ 125A | ST3 3x100 ÷ 125A EM

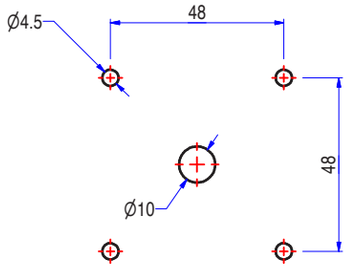




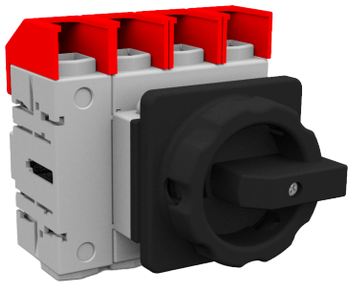


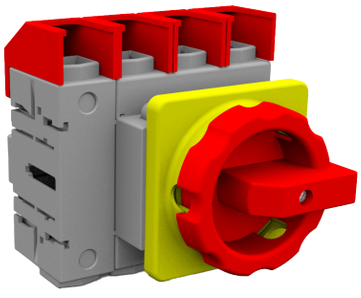


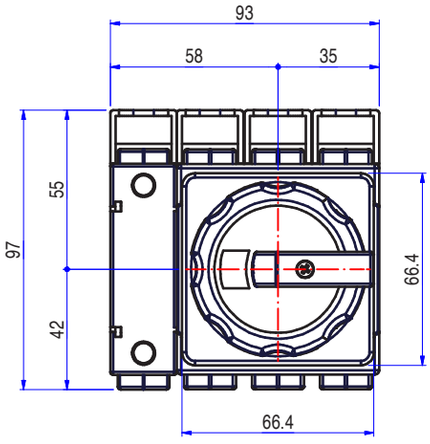
Foratura portella _Door drilling

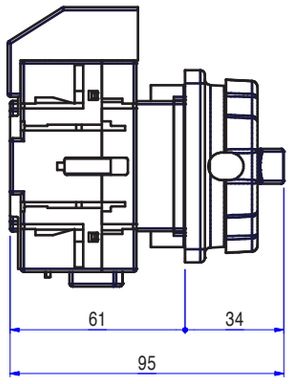


ST3 4x100 ÷ 125A | ST3 4x100 ÷ 125A EM

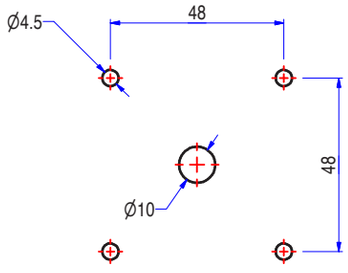




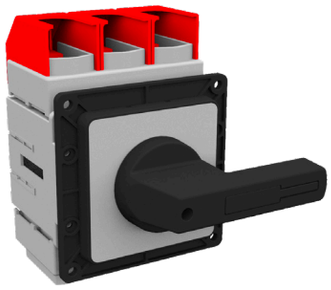


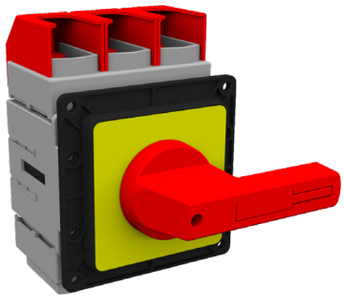


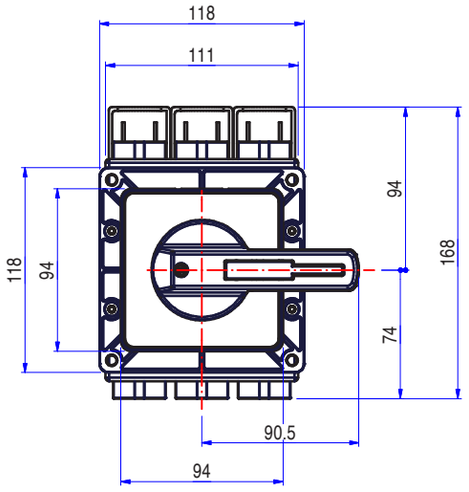
Foratura portella _Door drilling

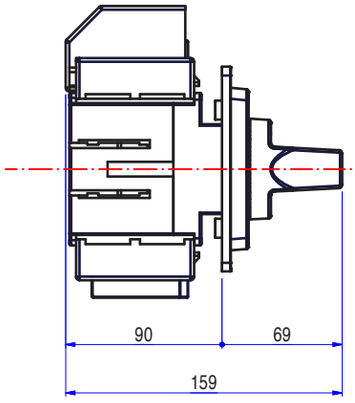


ST4 3x180 ÷ 250A | ST4 3x180 ÷ 250A EM

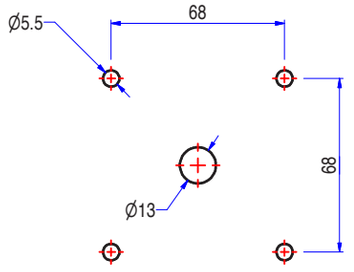




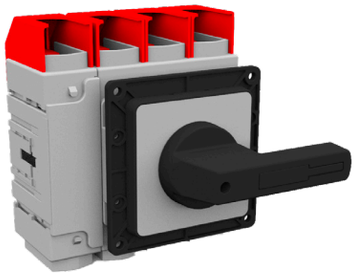


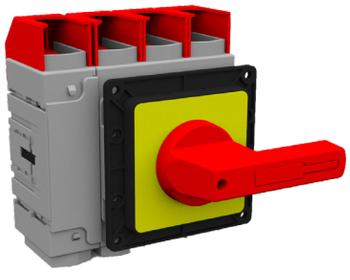


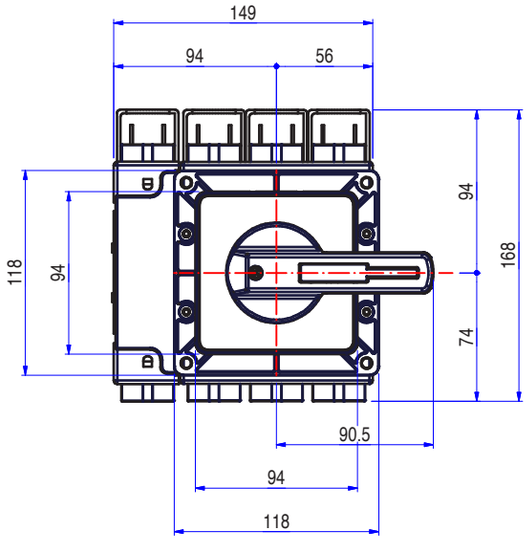
Foratura portella _Door drilling

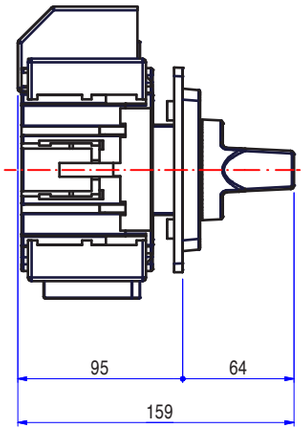


ST4 4x180 ÷ 250A | ST4 4x180 ÷ 250A EM

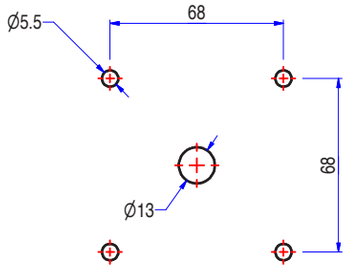




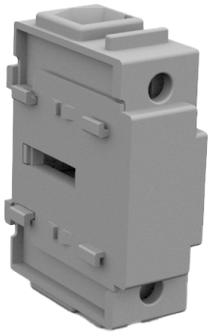


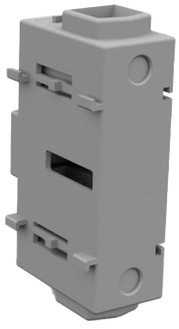


Foratura portella _Door drilling



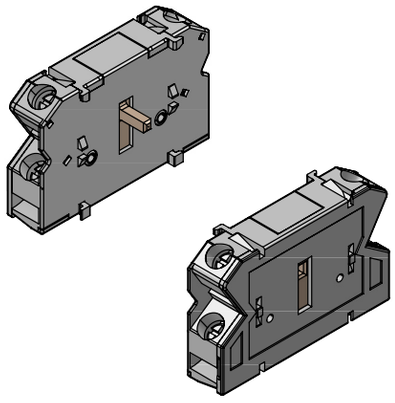
ACCESSORI _ACCESSORIES





Tipo _Type	A	Terra (neutro anticipato) _4th pole (make early, open late)	Terra (neutro contempo-raneo) _Contemporary 4th Pole	Neutro passante _Solid neutral	Contatti ausiliari (1NA+1NA) _Aux Contacts (1NO+1NC)
ST1	16	19320R-NA16	19320R-NC16	19320R-SN16	19429R
	25	19320R-NA25	19320R-NC25	19320R-SN25	19429R
	32	19320R-NA32	19320R-NC32	19320R-SN32	19429R
	40	19320R-NA40	19320R-NC40	19320R-SN40	19429R
	63	19320R-NA63	19320R-NC63	19320R-SN63	19429R
ST2	80	19418R-NA80	19418R-NC80	19418R-SN80	19429R
ST3	100	19450R-NA125	19450R-NC125	19450R-SN125	19429R
					19429R
	125				19429R
					19429R
ST4	180	19450R-NA250	19450R-NC250	19450R-SN250	19429R
	250				19429R

CONTATTI AUSILIARI 1NA+1NC
_aux contacts 1NA+1NC



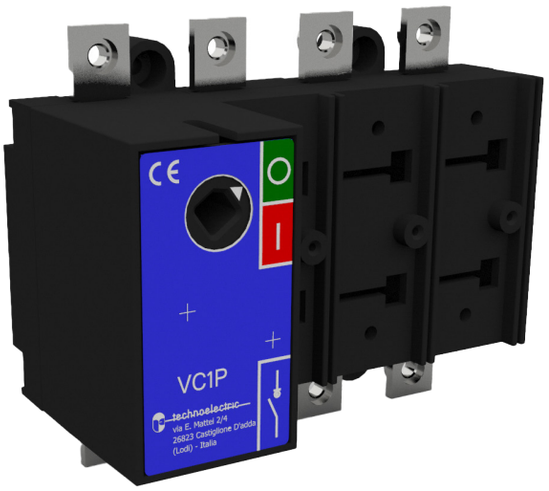
Codice _code: 19429R

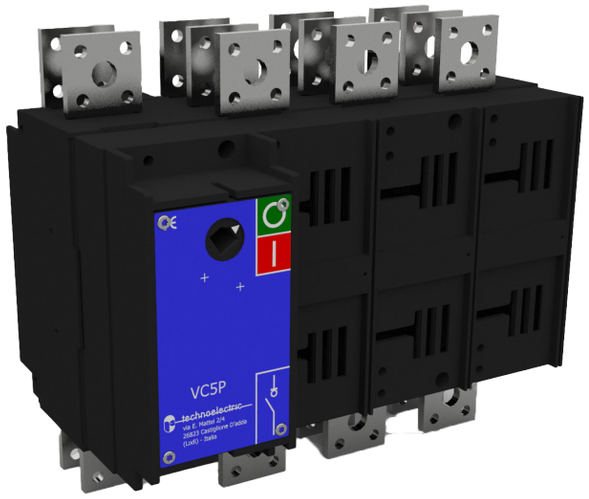
Rated isulation voltage	v	500
Thermal Uninterrupted Current	A	10
120v	A	6
220- 240v	A	3
380-415v	A	1,8
500v	A	1,4
125v	A	1,1
250v	A	0,3
solid wire	mm^2	2 x0,75-4
flexible with. wire end ferrules	mm^2	2 x0,75-4
Tightening torque clamps	Nm	0,8 - 1,1

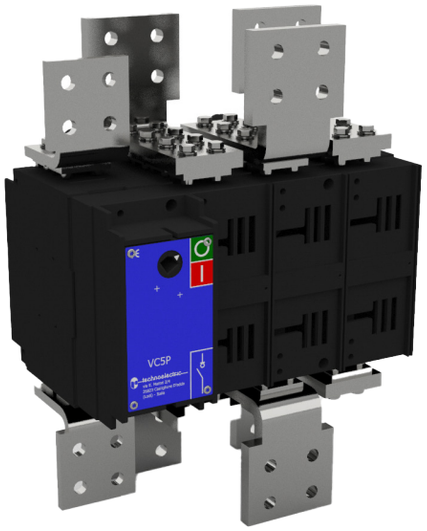
INTERRUTTORI DI MANOVRA SEZIONATORI

_SWITCH DISCONNECTORS

VCP 32 ÷ 3150 A







GENERALITÀ

VISUALCOMPACT P è una serie di interruttori di manovra sezionatori che consentono l'apertura e la chiusura di circuiti elettrici in bassa tensione.
Sono comunemente impiegati per le seguenti funzioni:
Interruttore generale
Interruttore per motori
Sezionatore
Interruttore di sicurezza

Sono disponibili 6 grandezze per 20 diversi valori di corrente nominale.

CARATTERISTICHE GENERALI

Tensione di isolamento nominale 1500 v c.A. E 1500 v c.C.
Disponibili 3 - 4 - 6 - 8 poli
Alto potere di interruzione (AC-22, AC-23, IEC 60947-3)
Elevata durata meccanica ed elettrica
Doppia interruzione per ogni fase
Contatti autopulenti
La posizione della maniglia costituisce una indicazione positiva e affidabile della posizione dei contatti
Visibilità diretta mediante opportune feritoie, dei contatti fissi e mobili
Manovra a scatto rapido indipendente
Polo neutro con contatti ad apertura posticipata e chiusura anticipata rispetto ai contatti di fase
Disponibile versione con polo neutro passante
Neutro a piena corrente fino a 1250 a di serie, a richiesta da 1600 a a 3150 a
Protezione adeguata per prevenire contatti accidentali
Involucro in materiali autoestinguenti (classe v0) a bassa igroscopicità, ad alta resistenza meccanica e alle correnti superficiali
Adatto per utilizzo in climi tropicali
Ampia gamma di accessori
Comando di tipo rotativo frontale a mezzo di: maniglia esterna a doppio isolamento con blocco porta in posizione I, grado di protezione IP65, possibilità di 3 blocchi con lucchetto in posizione 0
Maniglia diretta (a richiesta lucchettabile in posizione 0)

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO

Temperatura ambiente di immagazzinamento e trasporto - 25°c + 55°c
Temperatura ambiente di funzionamento - 20°c + 40°c
In caso di temperatura ambiente (t_a) superiore, applicare la seguente formula di declassamento:

$I_{the} = k\, i_{th}$ dove $\qquad k = 1 - \frac{t_a - 40}{100}$

Umidità relativa max 95%
Frequenza nominale 50 - 60 hz
Altitudine max 2000 m s.L.M.
Grado di inquinamento 3 secondo IEC 60947-1
Possono essere montati in qualsiasi posizione, per posizionamento fare riferimento alla istruzioni di montaggio
Montaggio in custodia: in caso di utilizzo a piena corrente e in mancanza di adeguata ventilazione assicurare un volume pari a circa 5 volte quello dell'apparecchio
Tipo di servizio (secondo IEC 60947-1): 8 ore; ininterrotto: intermittente 60% classe 30; temporaneo; periodico.

Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME

IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3

CERTIFICATI E OMOLOGAZIONI

KEMA | RINA | ENEL codice 13.32.23 | A2A | CESI | IENGF | EAC

_GENERALITIES

VISUALCOMPACT P is a range of switch disconnectors suitable for making and breaking on load and disconnecting low voltage electrical circuits. They are commonly used for the following purposes:
Main switch
Switch for motors
Disconnector
Safety switch

They are available in 6 sizes and 20 current ratings.

_GENERAL CHARACTERISTICS

Rated insulation voltage 1500 v ac and 1500 v dc
3 - 4 - 6 - 8 Poles available
High breaking capacity (AC-22, AC-23, IEC 60947-3)
High electrical and mechanical endurance
Double break contacts
Self cleaning contacts
Contact position positively reliable indicated by the handle
Visibility of fixed and moving contacts by means of windows
Independent manual operation
Neutral contact makes earlier and opens later than the phase contacts
Solid neutral version available
Neutral at full current until 1250 a, standard, 1600 a ÷ 3150 a on request
Suitable protection to prevent accidental touching of live parts
Casing in self-extinguishing (v0), low hygroscopic and high mechanical resistance
Isolating material resistant to damp heat
Wide range of accessories
Rotary front operation by means of: external double insulated handle with door-interlock in ON position, IP65 degree of protection. Padlockable with three padlocks in OFF position
Direct handle (padlockable in off position on request)

_NORMAL SERVICE, MOUNTING AND TRANSPORT CONDITIONS

Storage and transport ambient temperature - 25°c + 55°c
Working ambient temperature - 20°c + 40°c
In case of higher ambient temperature (t_a) consider the following derating formula:

$I_{the} = k\, i_{th}$ where $\qquad k = 1 - \frac{t_a - 40}{100}$

Relative humidity max 95%
Rated frequency 50 - 60 hz
Altitude max 2000 m a.S.L.
Pollution degree 3 according IEC 60947-1
Can be mounted in any position, for what concerns the positioning, please refer to the installation instructions
Mounting in enclosure: in case of utilisation at full load and without adequate ventilation, ensure a volume of about 5 times the volume of the switch
Duty (IEC 60947-1): 8 hours; uninterrupted; intermittent 60% class 30; temporary; periodic.

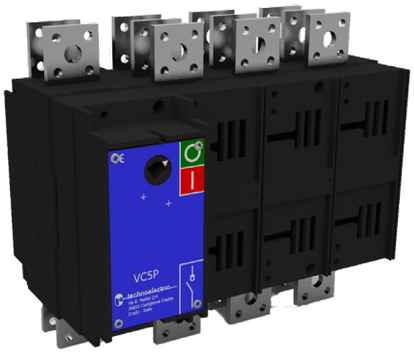
For different operating conditions, please contact the manufacturer.

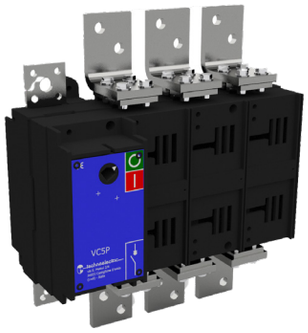
_CONFORMITY TO STANDARDS

IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3

_CERTIFICATES AND APPROVALS

KEMA | RINA | ENEL code 13.32.23 | A2A | CESI | IENGF | EAC





Albero di comando standard lunghezza 200 mm incluso in ogni confezione.
_Standard shaft length 200 mm included in the package.

Per esecuzione quadripolare con neutro passante aggiungere la desinenza “SN” al codice del corrispondente sezionatore quadripolare.
_For solid neutral switches add “SN” to the code of corresponding four pole switch.

Per esecuzione quadripolare con neutro a piena corrente (già di serie fino a 1250A) aggiungere la desinenza “FN” al codice del corrispondente sezionatore quadripolare da
1600 A in poi.
_For full current switches (standard until 1250A) add “FN” to the code of corresponding four pole switch from 1600 A onward up to.

Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
VC1P	32A	3	11000SM	3	11000
		4	11010SM	4	11010
	45A	3	11001SM	3	11001
		4	11011SM	4	11011
	63A	3	11002SM	3	11002
		4	11012SM	4	11012
	80A	3	11003SM	3	11003
		4	11013SM	4	11013
	100A	3	11004SM	3	11004
		4	11014SM	4	11014
	125A	3	11005SM	3	11005
		4	11015SM	4	11015
	160A	3	11006SM	3	11006
		4	11016SM	4	11016
VC2P	160A	3	12001SM	3	12001
		4	12011SM	4	12011
	200A	3	12002SM	3	12002
		4	12012SM	4	12012
	250A	3	12003SM	3	12003
		4	12013SM	4	12013
	315A	3	12004SM	3	12004
		4	12014SM	4	12014
VC3P	315A	3	13001SM	3	13001
		4	13011SM	4	13011
	400A	3	13002SM	3	13002
		4	13012SM	4	13012
	500A	3	13003SM	3	13003
		4	13013SM	4	13013
VC4P	630A	3	14003SM	3	14003
		4	14013SM	4	14013
	800A	3	14004SM	3	14004
		4	14014SM	4	14014
VC5P (35kA)	800A	3	15000SM	3	15000
		4	15010SM	4	15010
	1000A	3	15001SM	3	15001
		4	15011SM	4	15011
	1250A	3	15002SM	3	15002
		4	15012SM	4	15012
VC5P (50kA)	800A	3	15007SM	3	15007
		4	15017SM	4	15017
	1000A	3	15008SM	3	15008
		4	15018SM	4	15018
	1250A	3	15009SM	3	15009
		4	15019SM	4	15019
	1600A	3	15003SM	3	15003
		4	15013SM	4	15013
	2000A	3	15004SM	3	15004
		4	15014SM	4	15014
	2500A	3	15005SM	3	15005
		4	15015SM	4	15015
	3150A	3	15006SM	3	15006
		4	15016SM	4	15016
VC6P	1600A	3	16000SM	3	16000
		4	16010SM	4	16010
	2000A	3	16001SM	3	16001
		4	16011SM	4	16011
	2500A	3	16002SM	3	16002
		4	16012SM	4	16012
	3150A	3	16003SM	3	16003
		4	16013SM	4	16013

SERIE_SERIES **VCP**

Caratteristiche tecniche _Technical Features	Tipo _Type		VC1P							VC2P			
Corrente nominale _Rated current	In	A	32	45	63	80	100	125	160	160	200	250	315
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	8	8	8	8	8	8	8	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	32	45	63	80	100	125	160	160	200	250	315
Corrente nominale d' impiego _Rated operational current													
AC-21A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	690V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
AC-22A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	690V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
AC-23A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	25	35	45	63	80	100	100/100	125	160	200	200/200
	690V	A	20	30	35	45	63	80	80/80	100	125	160	160/160
DC-21A/B*	220V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	420V	A	-	-	-	-	-	-	-	160	200	250	250/315
	560V	A	-	-	-	-	-	-	-	60	60	60	60
DC-22A/B*	220V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	420V	A	-	-	-	-	-	-	-	160	200	250	250/250
	560V	A	-	-	-	-	-	-	-	40/60	40/60	40/60	40/60
DC-23A/B*	220V	A	20	30	35	45	63	80	80/80	160	200	250	250/250
	420V	A	-	-	-	-	-	-	-	160	200	250	250/250
	560V	A	-	-	-	-	-	-	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	320	450	630	800	1000	1250	1250	1600	2000	2500	2500
Potere di interruzione _Breaking capacity	400V AC23	A	256	360	504	640	800	1000	1000	1280	1600	2000	2000
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	5	5	5	5	5	5	5	8	8	8	8
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	10	10	10	10	10	10	10	16	16	16	16
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	7,5	7,5	7,5	7,5	7,5	7,5	7,5	13,5	13,5	13,5	13,5
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	17	23	33	42	52	65	65	85	105	130	130
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current													
Tipo fusibile _Backup fuse		A	32	45	63	80	100	125	160	160	200	250	315
Valore efficace _R.M.S. value		kA	50	50	50	50	50	50	50	50	50	50	50
Valore di picco _Peak value		kA	6	9	10	12	12	15	16	16	20	25	27
Durata meccanica _Mechanical endurance		n.	12000	12000	12000	12000	12000	10000	10000	10000	10000	10000	10000
Durata elettrica _Electrical endurance		n.	3000	3000	3000	3000	3000	2000	2000	2000	2000	2000	2000/200
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	15	20	30	40	45	50	50	70	90	110	110
Potenza dissipata per polo _Power losses for pole		W	0,1	0,2	0,4	0,7	1,1	1,7	2,7	1,6	2,4	3,8	6,0
Dimensione cavo _Cable section		mm^2	10	10	16	25	35	50	70	70	95	120	185
Dimensione barre _Bars dimension		mm	10x2	10x2	12x3	12x3	14x3	16x3	16x4	20x4	20x5	20x6	22x8
Sforzi di manovra _Operating torque		Nm	8	8	8	8	8	8	8	12	12	12	12
Peso netto _Net weight	3P	Kg	0,9	0,9	0,9	0,9	0,9	0,9	0,9	1,5	1,5	1,5	1,5
	4P		1	1	1	1	1	1	1	1,6	1,6	1,6	1,6

*Due poli in serie _Two poles in series

Caratteristiche tecniche _Technical Features	Tipo _Type		VC3P			VC4P	
Corrente nominale _Rated current	In	A	315	400	500	630	800
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	315	400	500	630	800
Corrente nominale d' impiego _Rated operational current							
AC-21A/B	400V	A	315	400	400/500	630	630/800
	500V	A	315	400	400/500	630	630/800
	690V	A	315	400	400/500	630	630/800
AC-22A/B	400V	A	315	400	400/500	630	630/800
	500V	A	315	400	400/400	630	630/630
	690V	A	315	400	400/400	630	630/630
AC-23A/B	400V	A	315	400	400/400	630	630/630
	500V	A	250	315	315/315	630	500/500
	690V	A	200	250	250/250	630	400/400
DC-21A/B*	220V	A	315	400	400/500	630	630/800
	420V	A	315	400	400/500	630	630/800
	560V	A	315	400	400/500	630	630/800
DC-22A/B*	220V	A	315	400	400/500	630	630/800
	420V	A	315	400	400/400	630	630/630
	560V	A	315	400	400/400	630	630/630
DC-23A/B*	220V	A	315	400	400/400	630	630/630
	420V	A	315	400	400/400	630	630/630
	560V	A	315	400	400/400	630	630/630
Potere di chiusura _Rated making capacity	400V AC23	A	3150	4000	4000	6300	6300
Potere di interruzione _Breaking capacity	400V AC23	A	2520	3200	3200	5040	5040
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	13	13	13	26,5	26,5
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	26	26	26	53	53
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	26	26	26	30	30
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	165	210	210	330	330
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current							
Tipo fusibile _Backup fuse		A	315	400	500	630	800
Valore efficace _R.M.S. value		kA	50	50	50	50	50
Valore di picco _Peak value		kA	27	30	37	40	40
Durata meccanica _Mechanical endurance		n.	8000	8000	8000	8000	8000
Durata elettrica _Electrical endurance		n.	1500	1500	1500/200	1500	1500/200
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	140	180	180	300	300
Potenza dissipata per polo _Power losses for pole		W	5,9	9,4	14,8	15,6	25,7
Dimensione cavo _Cable section		mm^2	185	2x120	2x150	2x185	2x240
Dimensione barre _Bars dimension		mm	30x6	2x25x5	2x25x5	2x40x5	2x40x6
Sforzi di manovra _Operating torque		Nm	18	18	18	34	34
Peso netto _Net weight	3P	Kg	3,5	3,5	3,5	5,5	5,5
	4P		3,8	3,8	3,8	6	6

*Due poli in serie _Two poles in series

SERIE_SERIES **VCP**

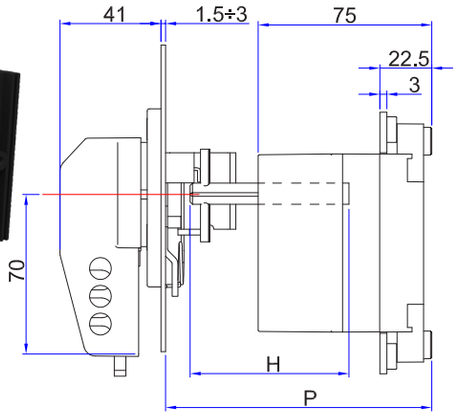
Caratteristiche tecniche _Technical Features	Tipo _Type		VC5P			VC5P 50kA						
Corrente nominale _Rated current	In	A	800	1000	1250	800	1000	1250	1600	2000	2500	3150
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12	12	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	800	1000	1250	800	1000	1250	1600	2000	2500	3150
Corrente nominale d' impiego _Rated operational current												
AC-21A/B	400V	A	800	1000	1250	800	1000	1250	1600	2000	2500	3150
	500V	A	800	1000	1250	800	1000	1250	1600	2000	2500	3150
	690V	A	800	1000	1250	800	1000	1250	1250	1250	1250	1250
AC-22A/B	400V	A	800	1000	1250	800	1000	1250	1250	1250	-	-
	500V	A	800	1000	1250	800	1000	1250	-	-	-	-
	690V	A	800	1000	1250	800	1000	1250	-	-	-	-
AC-23A/B	400V	A	800	1000	1250	800	1000	1250	-	-	-	-
	500V	A	800	800	800	630	800	1000	-	-	-	-
	690V	A	400	400	400	500	630	800	-	-	-	-
DC-21A/B*	220V	A	800	1000	1250	800	1000	1250	1600	2000	-	-
	420V	A	-	-	-	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-	-	-	-
DC-22A/B*	220V	A	800	1000	1250	800	1000	1250	-	-	-	-
	420V	A	-	-	-	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-	-	-	-
DC-23A/B*	220V	A	500	630	800	500	630	800	-	-	-	-
	420V	A	-	-	-	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	8000	10000	12500	8000	10000	12500	-	-	-	-
Potere di interruzione _Breaking capacity	400V AC23	A	6400	8000	10000	6400	8000	10000	-	-	-	-
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	35	35	35	50	50	50	50	50	50	50
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	70	70	70	100	100	100	100	100	100	100
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	73,5	73,5	73,5	105	105	105	105	105	105	105
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	420	525	630	420	525	630	630	630	-	-
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current												
Tipo fusibile _Backup fuse		A	800	1000	1250	800	1000	1250	-	-	-	-
Valore efficace _R.M.S. value		kA	100	100	100	100	100	100	-	-	-	-
Valore di picco _Peak value		kA	50	60	70	50	60	70	-	-	-	-
Durata meccanica _Mechanical endurance		n.	7000	7000	7000	4000	4000	4000	4000	4000	2000	2500
Durata elettrica _Electrical endurance		n.	1000	1000	1000	1000	1000	1000	500	500	500	500
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	380	475	600	380	475	600	-	-	-	-
Potenza dissipata per polo _Power losses for pole		W	17,5	27,3	42	15,6	24,6	38,0	38,3	61,3	91,7	145,5
Dimensione cavo _Cable section		mm^2	2x240	-	-	2x240	-	-	-	-	-	-
Dimensione barre _Bars dimension		mm	2x40x5	2x40x6	2x40x8	2x40x5	2x40x6	2x40x8	3x40x8	3x50x12	4x50x12	6x50x12
Sforzi di manovra _Operating torque		Nm	45	45	45	70	70	70	70	70	70	70
Peso netto _Net weight	3P	Kg	11	11	11	11	11	11	18	18	25	25
	4P		12	12	12	12	12	12	19,2	19,2	26,5	26,5

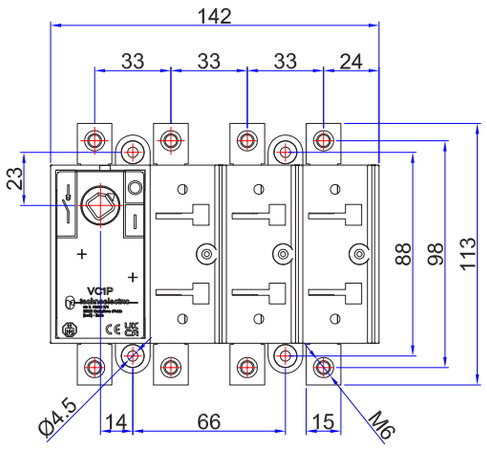
*Due poli in serie _Two poles in series

Caratteristiche tecniche _Technical Features	Tipo _Type		VC6P			
Corrente nominale _Rated current	In	A	1600	2000	2500	3150
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	8	8	8
Corrente nominale termica _Thermal current	Ith	A	1600	2000	2500	3150
Corrente nominale d' impiego _Rated operational current						
AC-21A/B	400V	A	1600	2000	2500	3150
	500V	A	1600	2000	2500	3150
	690V	A	1250	1250	1250	1250
AC-22A/B	400V	A	1600	2000	2500	1600
	500V	A	1250	1250	1250	-
	690V	A	400	400	800	-
AC-23A/B	400V	A	1250	1250	-	-
	500V	A	800	800	-	-
	690V	A	400	400	-	-
DC-21A/B*	220V	A	1600	2000	-	-
	420V	A	-	-	-	-
	560V	A	-	-	-	-
DC-22A/B*	220V	A	-	-	-	-
	420V	A	-	-	-	-
	560V	A	-	-	-	-
DC-23A/B*	220V	A	-	-	-	-
	420V	A	-	-	-	-
	560V	A	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	12500	12500	-	-
Potere di interruzione _Breaking capacity	400V AC23	A	10000	10000	-	-
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	60	60	70	70
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	120	120	140	140
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	105	105	105	105
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	630	630	-	-
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current						
Tipo fusibile _Backup fuse		A	-	-	-	-
Valore efficace _R.M.S. value		kA	-	-	-	-
Valore di picco _Peak value		kA	-	-	-	-
Durata meccanica _Mechanical endurance		n.	2500	2500	2500	2500
Durata elettrica _Electrical endurance		n.	500	500	500	500
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	780	850	1.100	1250
Potenza dissipata per polo _Power losses for pole		W	47,8	74,7	85,4	118,1
Dimensione cavo _Cable section		mm^2	-	-	-	-
Dimensione barre _Bars dimension		mm	2x80x10	2x80x10	3x80x10	32x100x10
Sforzi di manovra _Operating torque		Nm	70	70	70	70
Peso netto _Net weight	3P	Kg	17	19	27	40
	4P		19	20	30	41

*Due poli in serie _Two poles in series

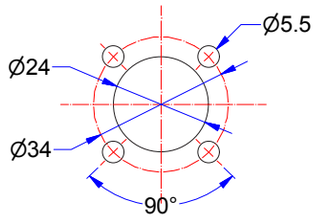
VC1P



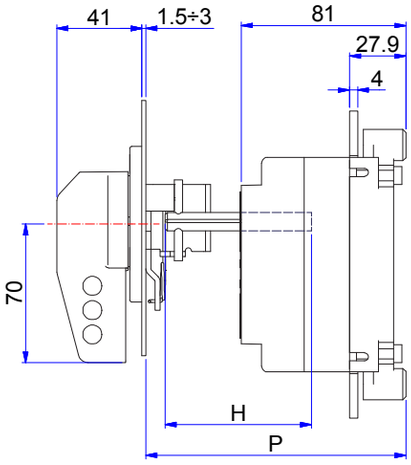


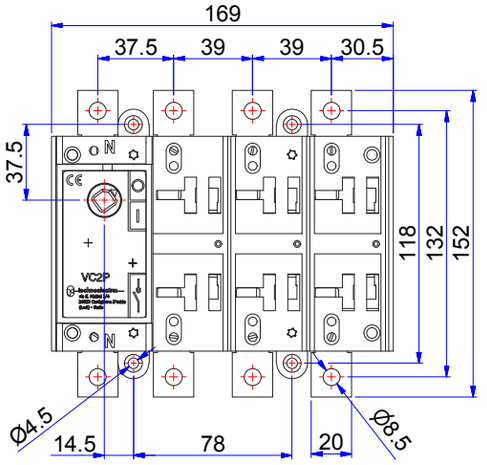
Legenda _caption			
VC1P 32 ÷ 160A			
P		C	H
min	max		
116	247	47	P-C
C= costante _constant			

Foratura portella _Door drilling



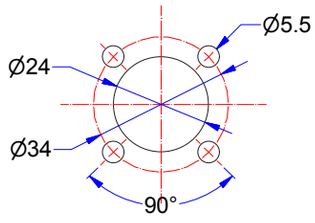
VC2P



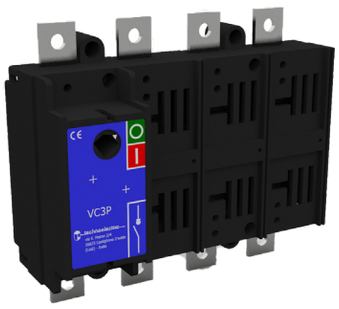


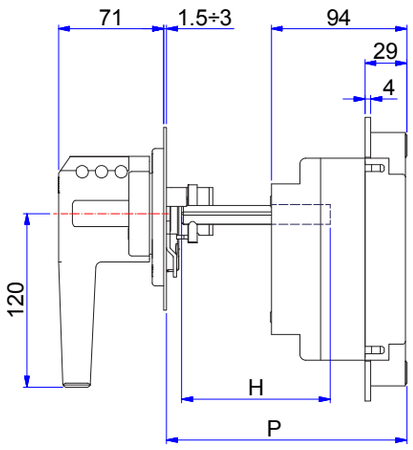
Legenda _caption			
VC2P 160 ÷ 315A			
P		C	H
min	max		
124	255	55	P-C
C= costante _constant			

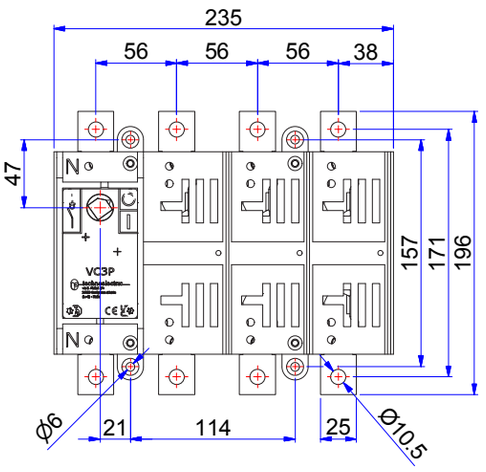
Foratura portella _Door drilling



VC3P

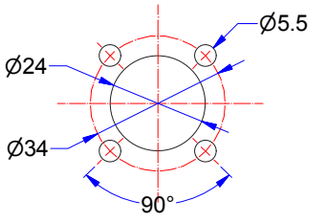




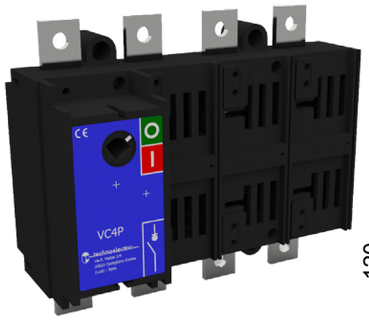


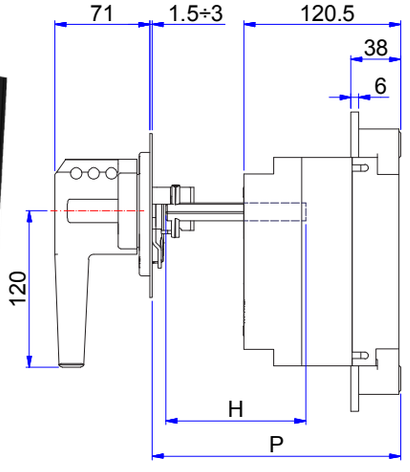
Legenda _caption			
VC3P 315 ÷ 500A			
P		C	H
min	max		
148	261,5	51,5	P-C
C= costante _constant			

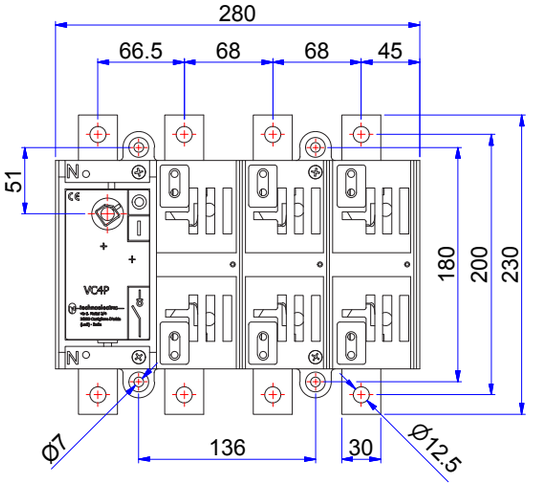
Foratura portella _Door drilling



VC4P

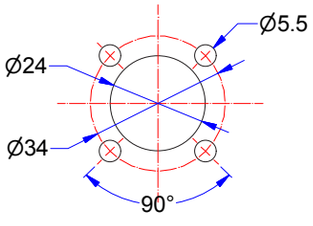




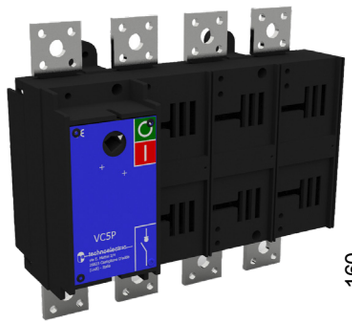


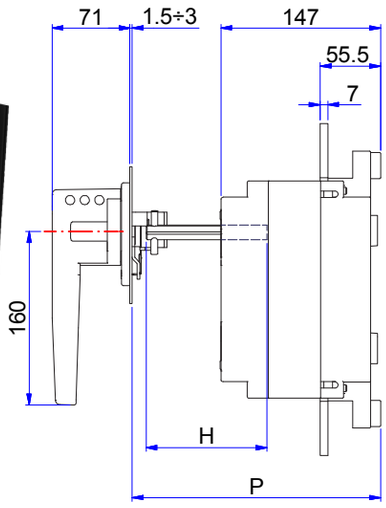
Legenda _caption			
VC4P 630 ÷ 800A			
P		C	H
min	max		
174	276	76	P-C
C= costante _constant			

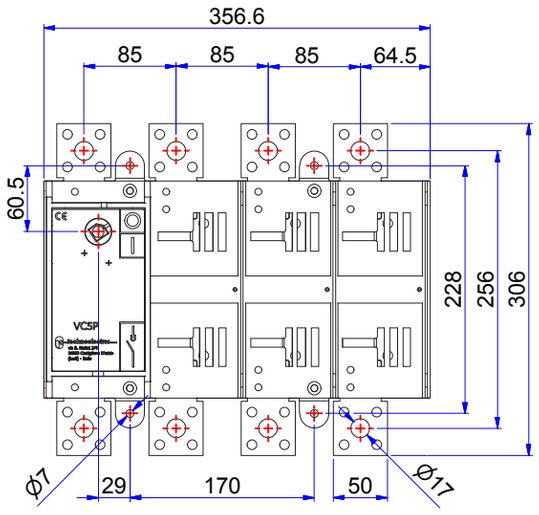
Foratura portella _Door drilling



VC5P

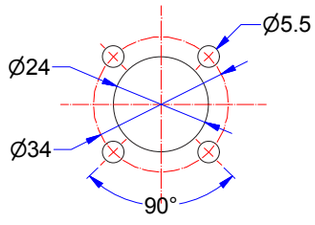




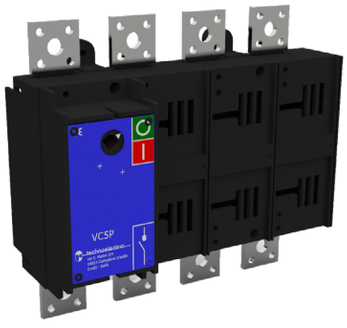


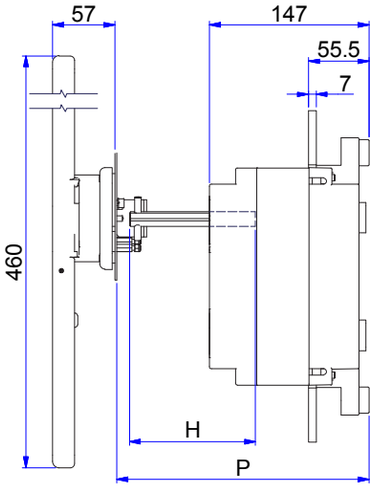
Legenda _caption VC5P 800 ÷ 1250 A 35 kA			
P		C	H
min	max		
215	296	96	P-C
C= costante _constant			

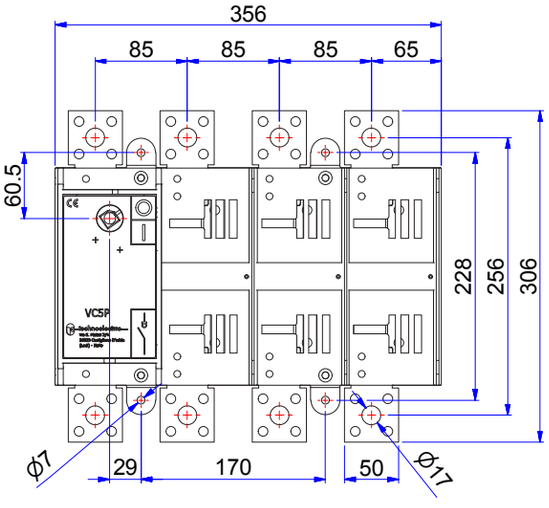
Foratura portella _Door drilling



VC5P 800 ÷ 1250 50 kA

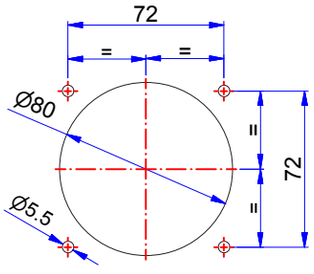




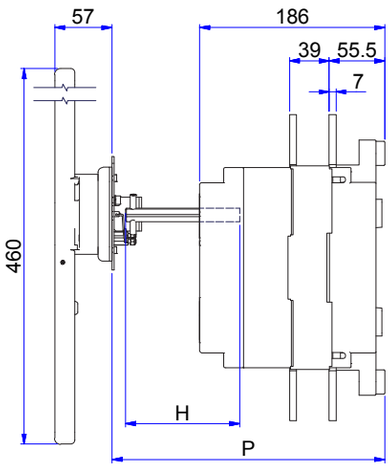


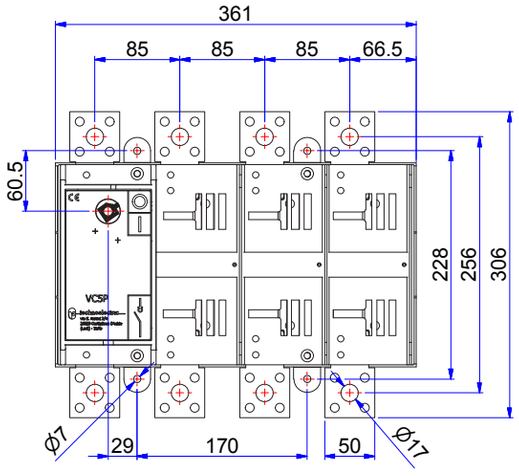
Legenda _caption VC5P 800 ÷ 1250 A 50 kA			
P		C	H
min	max		
213	306	106	P-C
C= costante _constant			

Foratura portella _Door drilling



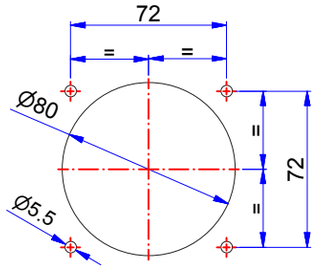
VC5P 1600 ÷ 2000 50 kA



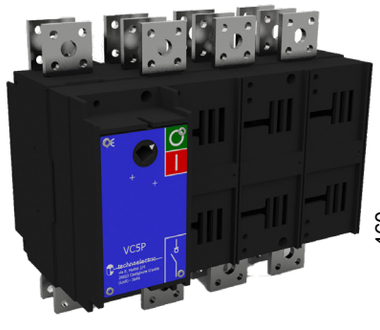


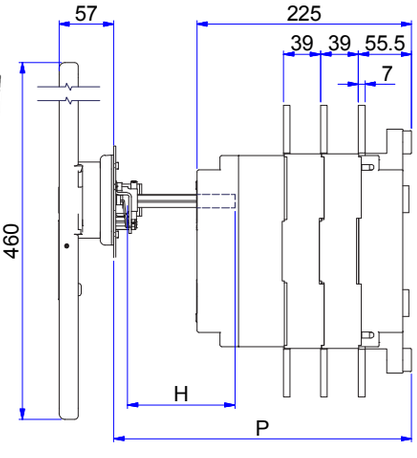
Legenda _caption			
VC5P 1600 ÷ 2000A			
P		C	H
min	max		
252	345	145	P-C
C= costante _constant			

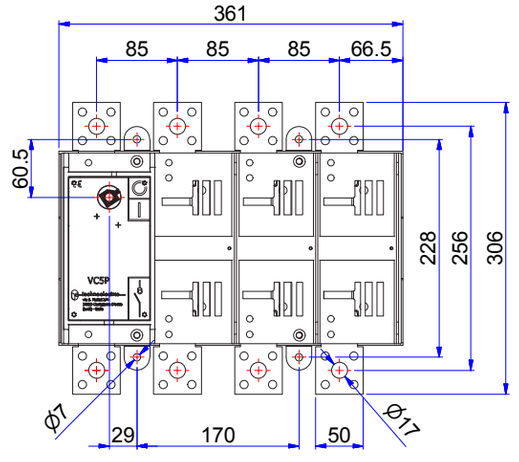
Foratura portella _Door drilling



VC5P 2500 ÷ 3150 50 kA

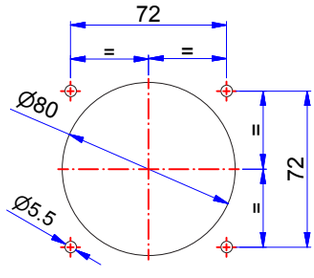




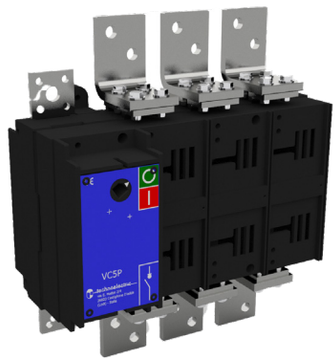


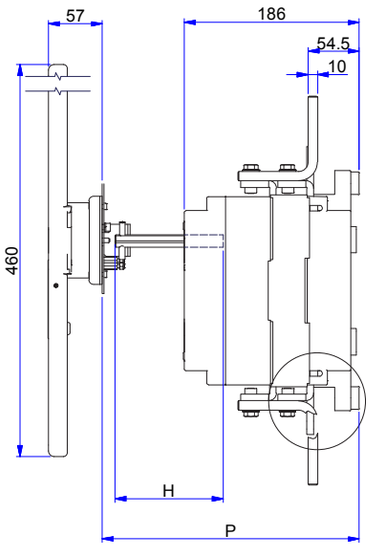
Legenda _caption			
VC5P 2500 ÷ 3150A			
P		C	H
min	max		
291	384	184	P-C
C= costante _constant			

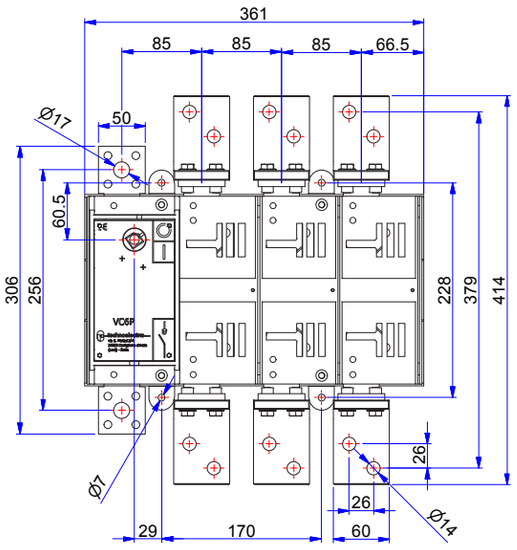
Foratura portella _Door drilling



VC6P

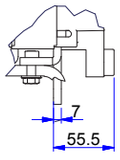




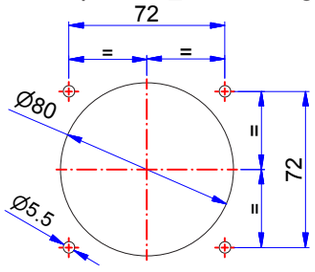


Legenda _caption			
VC6P 1600 A			
P		C	H
min	max		
252	345	145	P-C
C= costante _constant			

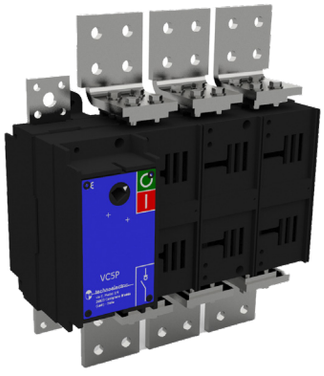
Neutral

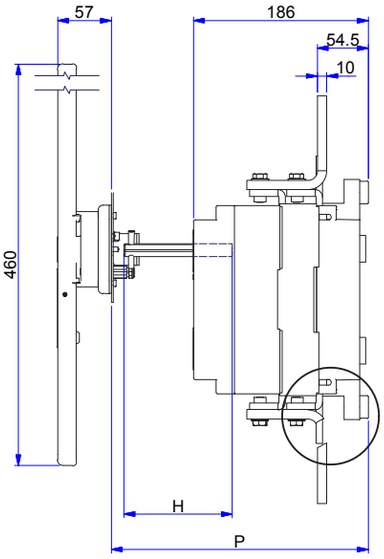


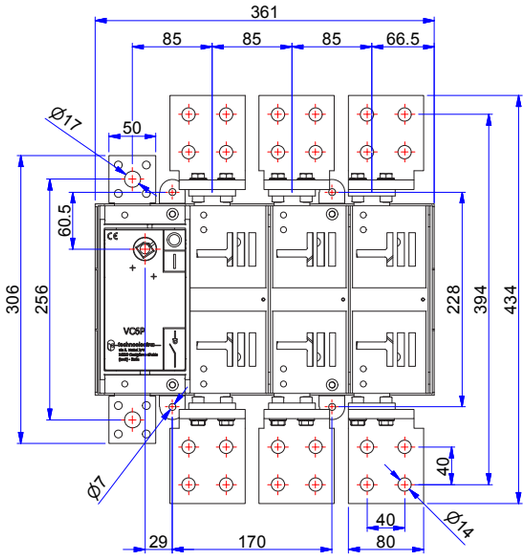
Foratura portella _Door drilling



VC6P

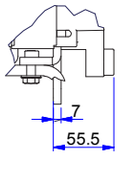




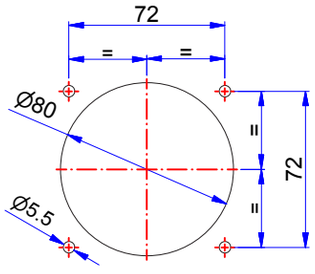


Legenda _caption			
VC6P 2000 A			
P		C	H
min	max		
252	345	145	P-C
C= costante _constant			

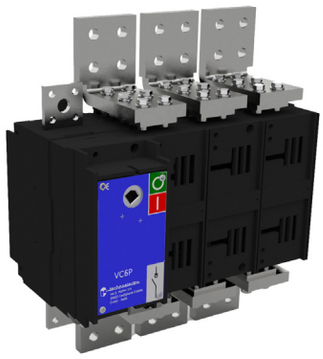
Neutral

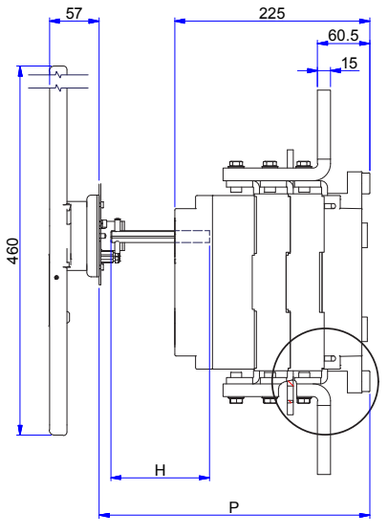


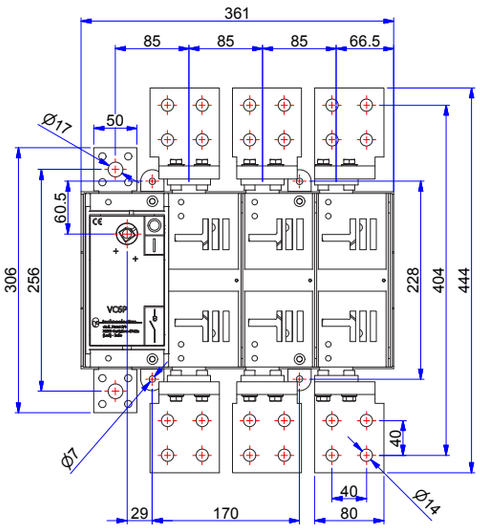
Foratura portella _Door drilling



VC6P

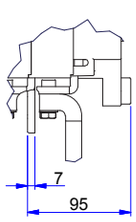




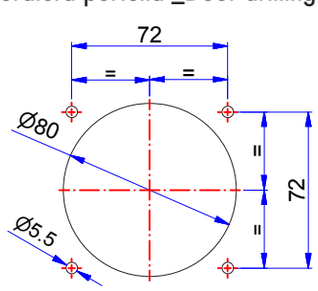


Legenda _caption			
VC6P 2500 A			
P		C	H
min	max		
291	384	184	P-C
C= costante _constant			

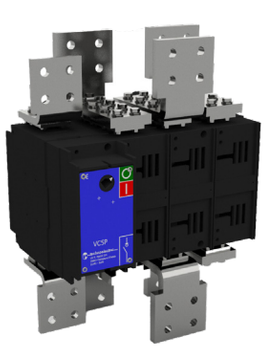
Neutral

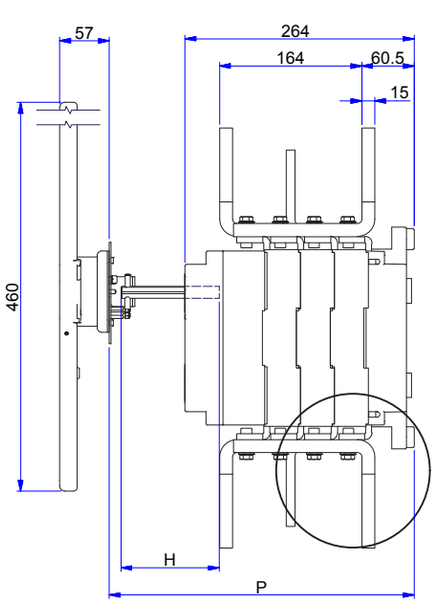


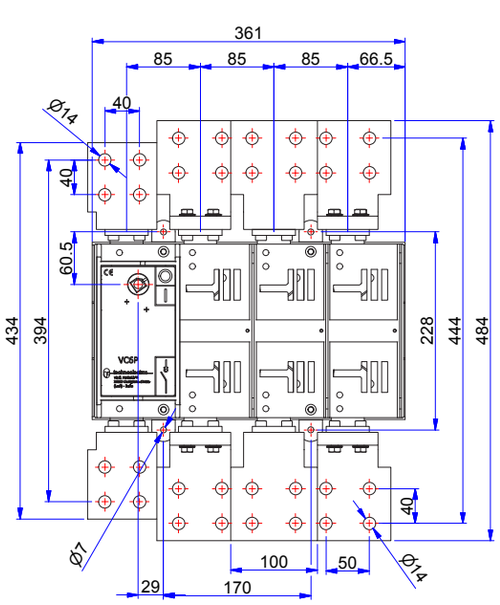
Foratura portella _Door drilling



VC6P

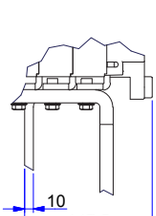




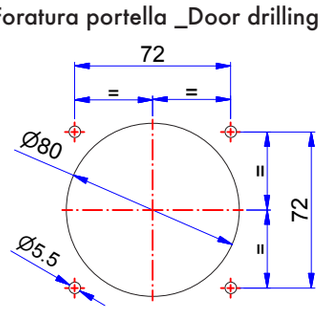


Legenda _caption			
VC6P 3150 A			
P		C	H
min	max		
330	423	223	P-C
C= costante _constant			

Neutral



Foratura portella _Door drilling



EOP

EOP orizzontale | 6 - 8 poli

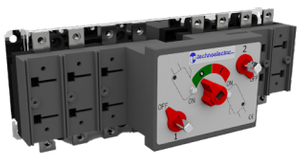
GENERALITÀ

Gli interruttori 6 - 8 poli della serie VISUALCOMPACT P sono realizzati attraverso l'inter blocco meccanico di due selezionatori standard (vedi caratteristiche VCP).
Sono disponibili in 16 valori di corrente nominale
Pronto per l'installazione

EOP horizontal | 6 - 8 poles

GENERALITIES

The range of 6 - 8 poles switches VISUALCOMPACT P are made by two standard switches (see VCP characteristics) Mechanical interlocked.
They are available in 16 current ratings
Delivered already assembled



Possibilità di esecuzione per EO con fusibili.
_Version for EO with fusibles available.

Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
EO1P	32 A	6	110006SM	6	110006
		8	110106SM	8	110106
	45A	6	110016SM	6	110016
		8	110116SM	8	110116
	63A	6	110026SM	6	110026
		8	110126SM	8	110126
	80A	6	110036SM	6	110036
		8	110136SM	8	110136
	100A	6	110046SM	6	110046
		8	110146SM	8	110146
	125A	6	110056SM	6	110056
		8	110156SM	8	110156
	160A	6	110066SM	6	110066
		8	110166SM	8	110166
EO2P	160A	6	120016SM	6	120016
		8	120116SM	8	120116
	200A	6	120026SM	6	120026
		8	120126SM	8	120126
	250A	6	120036SM	6	120036
		8	120136SM	8	120136
	315A	6	120046SM	6	120046
		8	120146SM	8	120146
EO3P	315A	6	130016SM	6	130016
		8	130116SM	8	130116
	400A	6	130026SM	6	130026
		8	130126SM	8	130126
	500A	6	130036SM	6	130036
		8	130136SM	8	130136
EO4P	630A	6	140036SM	6	140036
		8	140136SM	8	140136
	800A	6	140046SM	6	140046
		8	140146SM	8	140146
EO5P (35kA)	800A	6	150006SM	6	150006
		8	150106SM	8	150106
	1000A	6	150016SM	6	150016
		8	150116SM	8	150116
	1250A	6	150026SM	6	150026
		8	150126SM	8	150126

ESP

ESP sovrapposti | 6 - 8 poli

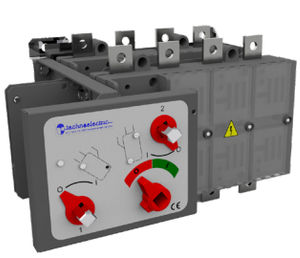
GENERALITÀ

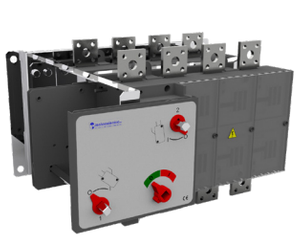
Gli interruttori 6 - 8 poli della serie VISUALCOMPACT P sono ottenuti da due sezionatori standard (vedi caratteristiche VCP) interbloccati meccanicamente.
Sono disponibili in 16 valori di corrente nominale
Pronto per l'installazione

_ESP two layers | 6 - 8 poles

GENERALITIES

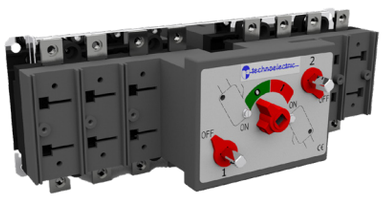
The range of 6 - 8 poles switches VISUALCOMPACT P are made by two standard switches (see VCP characteristics) Mechanical interlocked.
They are available in 16 current ratings
Delivered already assembled

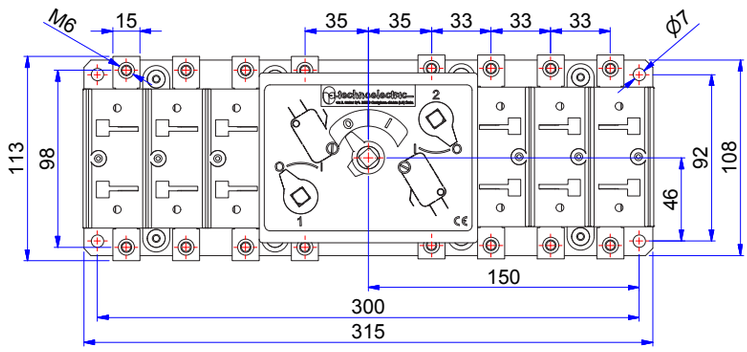


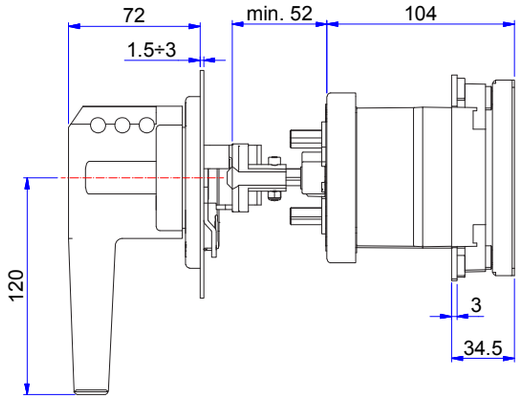


Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
ES1P	32 A	6	110009SM	6	110009
		8	110109SM	8	110109
	45A	6	110019SM	6	110019
		8	110119SM	8	110119
	63A	6	110029SM	6	110029
		8	110129SM	8	110129
	80A	6	110039SM	6	110039
		8	110139SM	8	110139
	100A	6	110049SM	6	110049
		8	110149SM	8	110149
	125A	6	110059SM	6	110059
		8	110159SM	8	110159
	160A	6	110069SM	6	110069
		8	110169SM	8	110169
ES2P	160A	6	120019SM	6	120019
		8	120119SM	8	120119
	200A	6	120029SM	6	120029
		8	120129SM	8	120129
	250A	6	120039SM	6	120039
		8	120139SM	8	120139
	315A	6	120049SM	6	120049
		8	120149SM	8	120149
ES3P	315A	6	130019SM	6	130019
		8	130119SM	8	130119
	400A	6	130029SM	6	130029
		8	130129SM	8	130129
	500A	6	130039SM	6	130039
		8	130139SM	8	130139
ES4P	630A	6	140039SM	6	140039
		8	140139SM	8	140139
	800A	6	140049SM	6	140049
		8	140149SM	8	140149
ES5P (35kA)	800A	6	150009SM	6	150009
		8	150109SM	8	150109
	1000A	6	150019SM	6	150019
		8	150119SM	8	150119
	1250A	6	150029SM	6	150029
		8	150129SM	8	150129

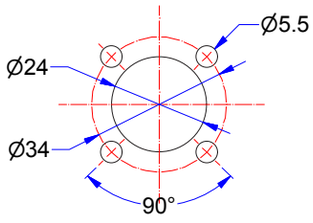
EO1P 32 ÷ 160 A



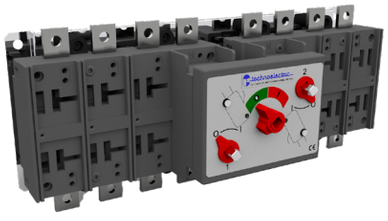


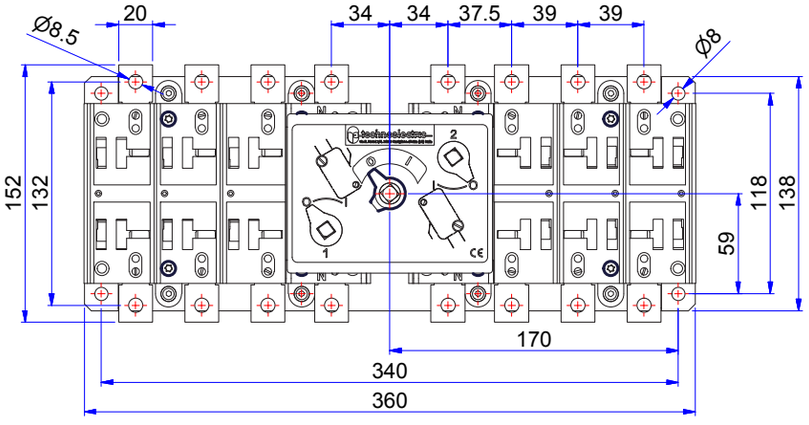


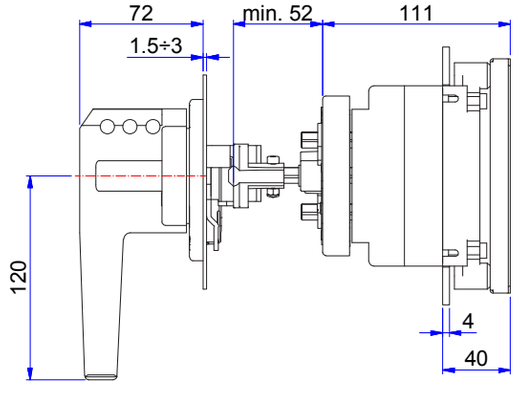
Foratura portella _Door drilling



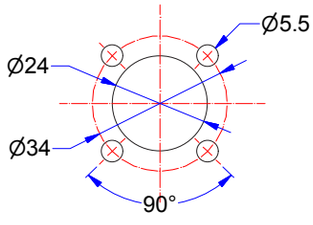
EO2P 160 ÷ 315 A



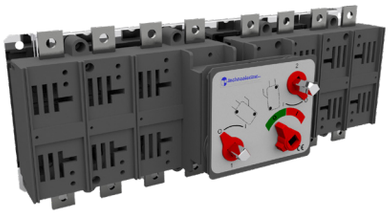


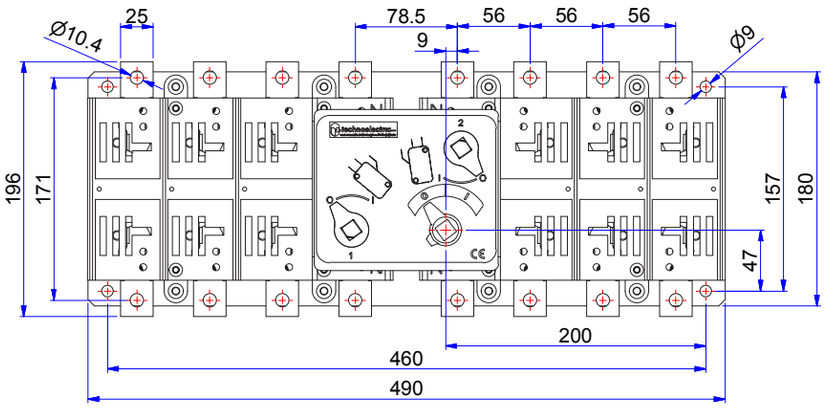


Foratura portella _Door drilling



EO3P 315 ÷ 500 A





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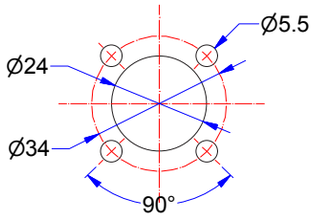
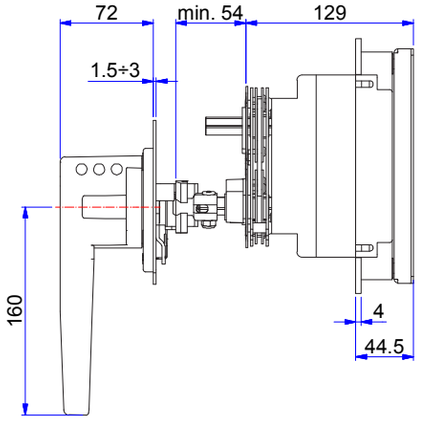
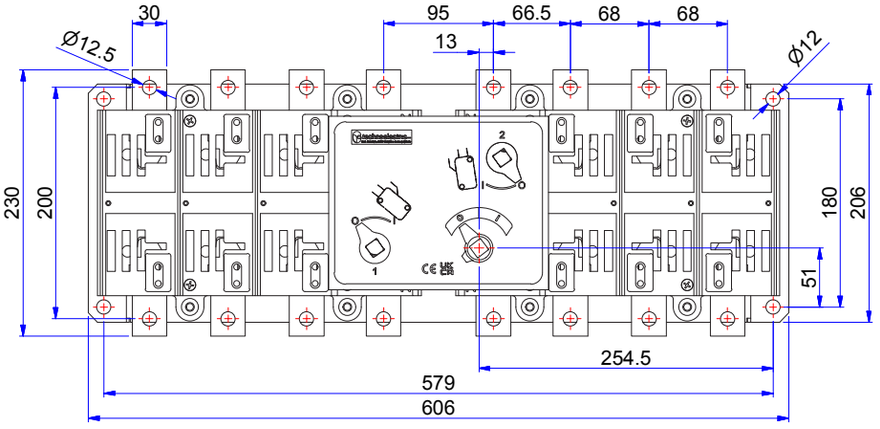
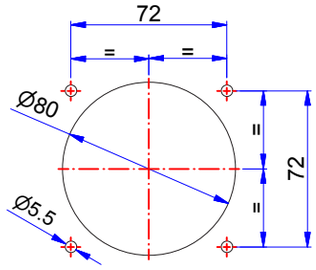


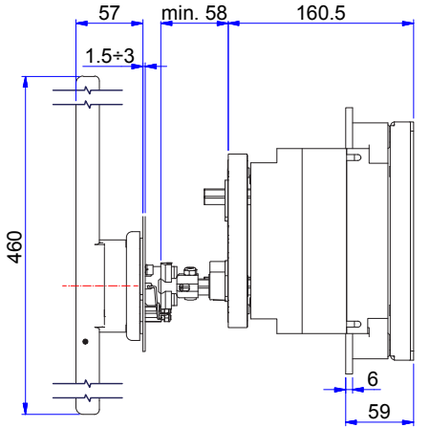


EO4P 630 ÷ 800 A

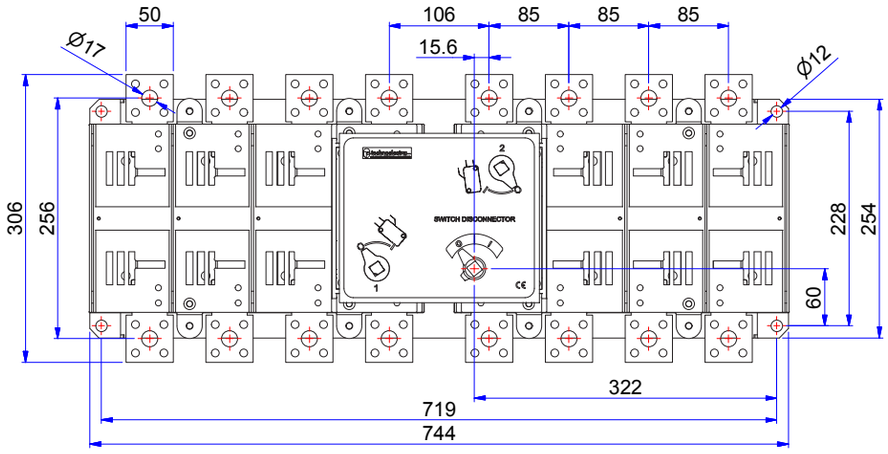


Foratura portella _Door drilling

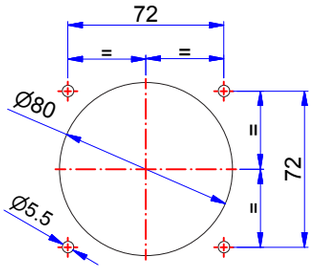


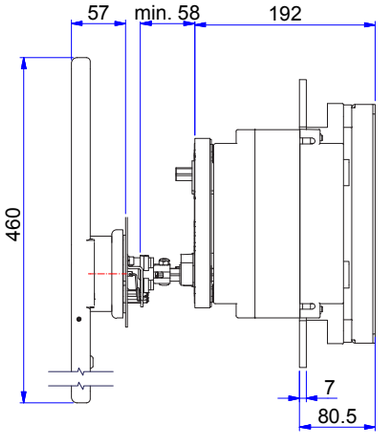


EO5P 800 ÷ 1250 A 35 kA

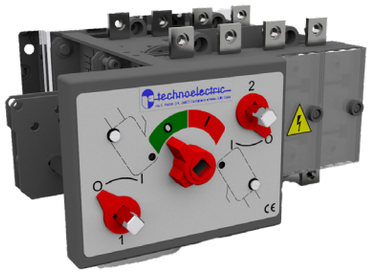


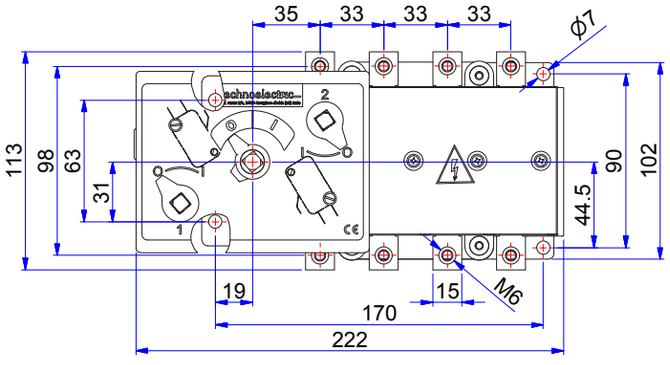
Foratura portella _Door drilling



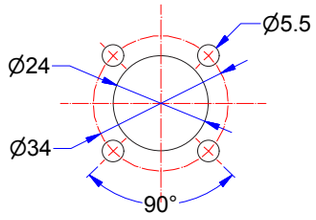


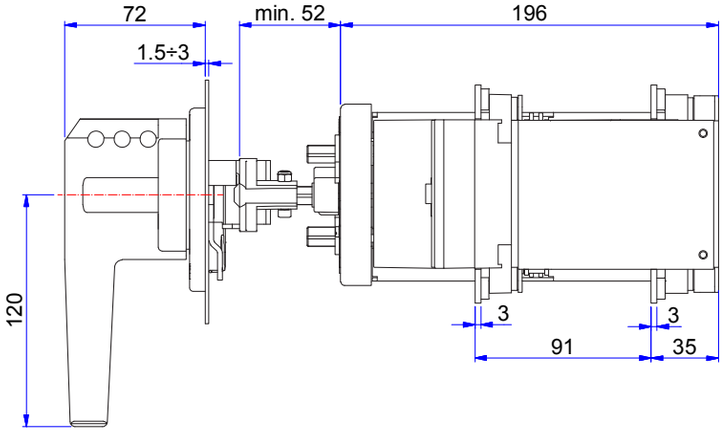
ES1P 32 ÷ 160 A



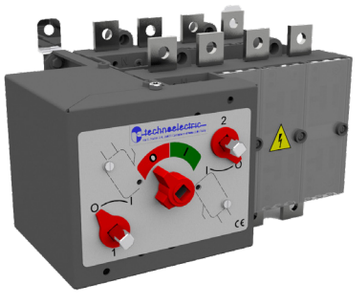


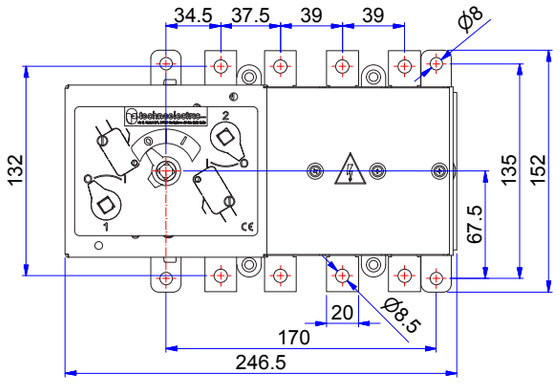
Foratura portella _Door drilling



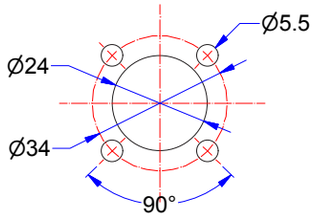


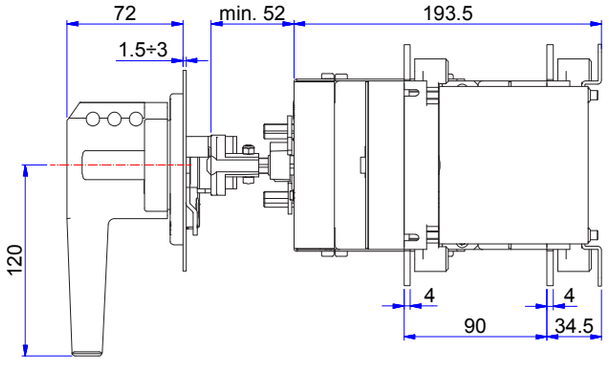
ES2P 160 ÷ 315 A



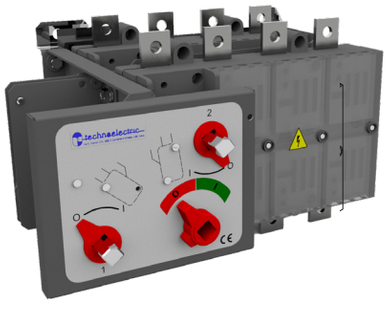


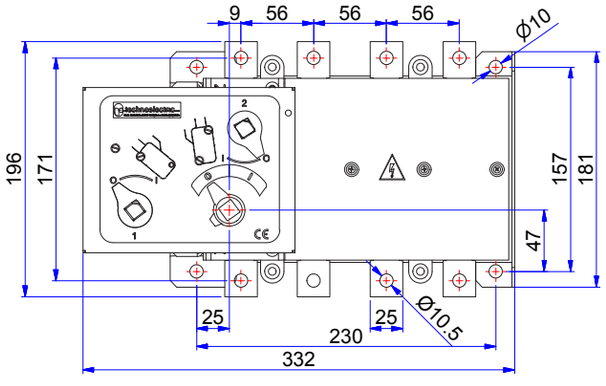
Foratura portella _Door drilling



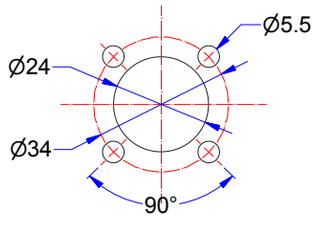


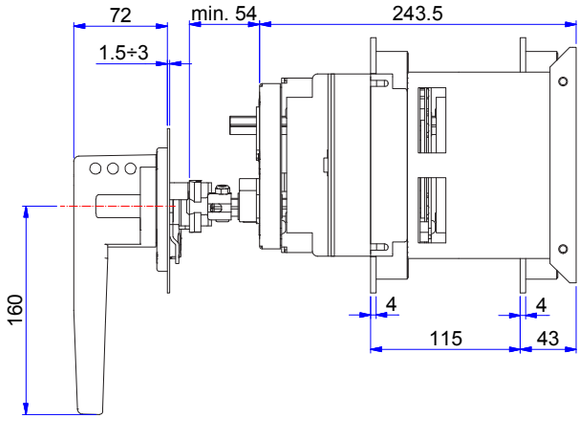
ES3P 315 ÷ 500 A



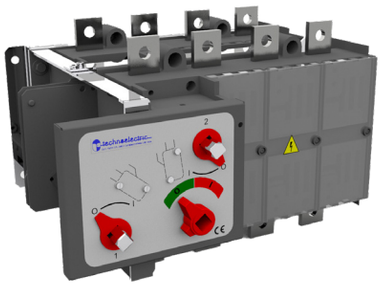


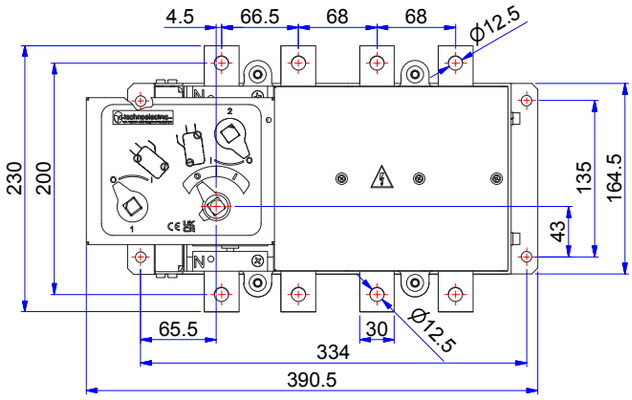
Foratura portella _Door drilling



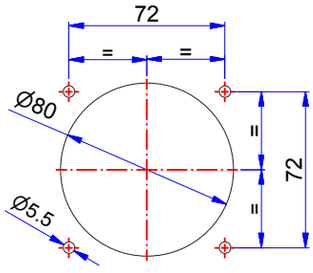


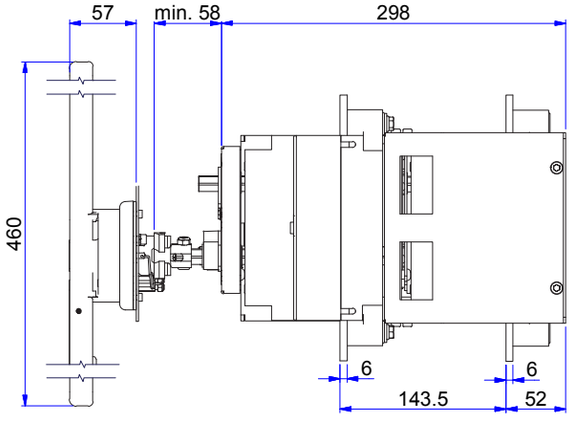
ES4P 630 ÷ 800 A



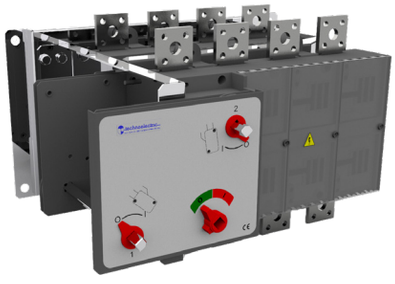


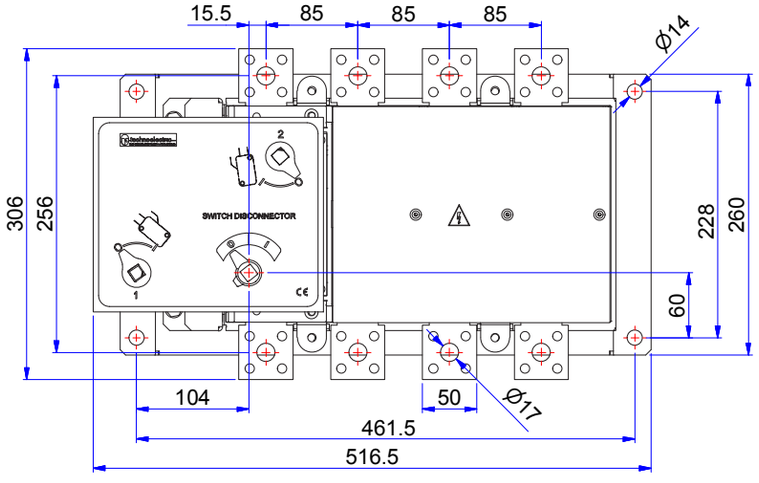
Foratura portella _Door drilling



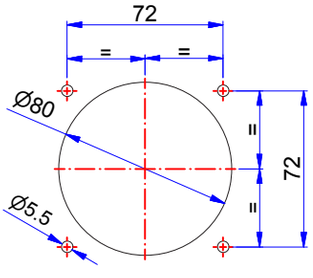


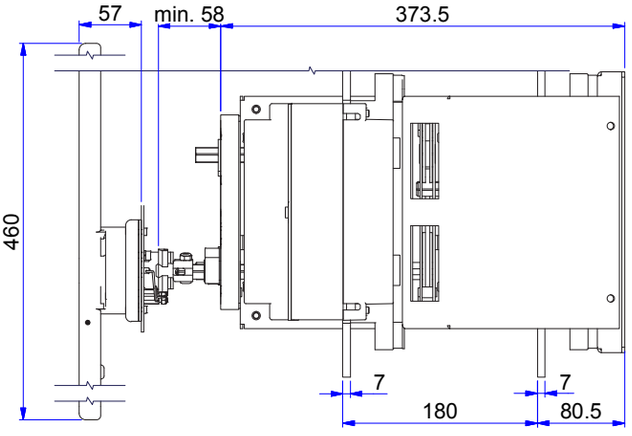
ES5P 800 ÷ 1250 A 35 kA





Foratura portella _Door drilling





PBA

PBA visualcompact con dispositivo di apertura

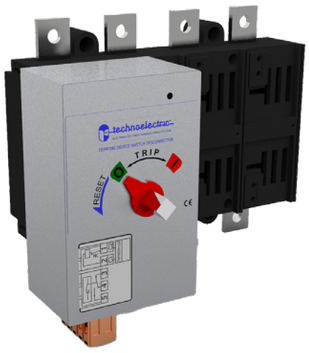
_PBA visualcompact with tripping device

GENERALITÀ

Gli interruttori della serie VISUALCOMPACT PBA 3 - 4 poli con comando manuale, sono corredati di un comando di apertura locale per mezzo di maniglia e a distanza tramite bobina a lancio di corrente alimentata dall'esterno.

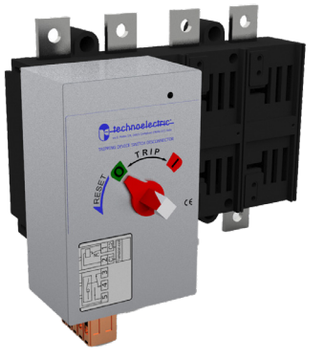
GENERALITIES

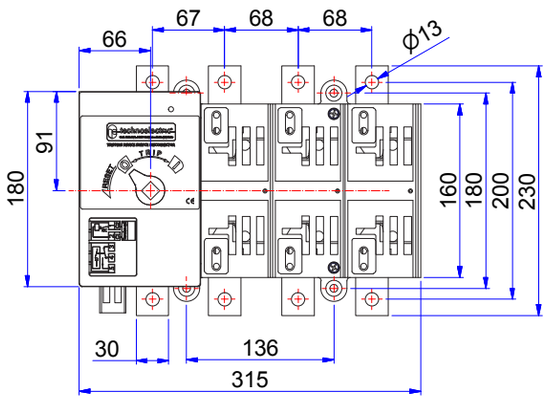
The Visual Compact PBA are 3-4 poles switch disconnectors that can be remotely activated through an externally feeded tripping device.



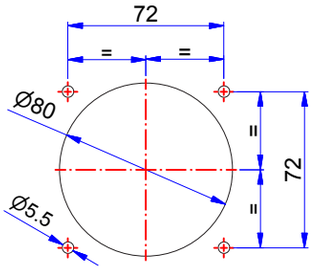
Tipo _type	Corrente nominale _rated current	POLI _POLES	V aux. bobina _V aux coil				
			24 V c.c. \ DC	48 V c.c. \ DC	110 V c.c. \ DC	110 V c.a. \ AC	220 V c.a. \ AC
VC4P BA	400 A	3	14002B	14002B1	14002B2	14002B3	14002B4
		4	14012B	14012B1	14012B2	14012B3	14012B4
	630A	3	14003B	14003B1	14003B2	14003B3	14003B4
		4	14013B	14013B1	14013B2	14013B3	14013B4
	800A	3	14004B	14004B1	14004B2	14004B3	14004B4
		4	14014B	14014B1	14014B2	14014B3	14014B4
VC5P BA 35kA	800A	3	15000B	15000B1	15000B2	15000B3	15000B4
		4	15010B	15010B1	15010B2	15010B3	15010B4
	1000A	3	15001B	15001B1	15001B2	15001B3	15001B4
		4	15011B	15011B1	15011B2	15011B3	15011B4
	1250A	3	15002B	15002B1	15002B2	15002B3	15002B4
		4	15012B	15012B1	15012B2	15012B3	15012B4
VC5P BA 50kA	800A	3	15007B	15007B1	15007B2	15007B3	15007B4
		4	15017B	15017B1	15017B2	15017B3	15017B4
	1000A	3	15008B	15008B1	15008B2	15008B3	15008B4
		4	15018B	15018B1	15018B2	15018B3	15018B4
	1250A	3	15009B	15009B1	15009B2	15009B3	15009B4
		4	15019B	15019B1	15019B2	15019B3	15019B4
	1600A	3	15003B	15003B1	15003B2	15003B3	15003B4
		4	15013B	15013B1	15013B2	15013B3	15013B4
	2000A	3	15004B	15004B1	15004B2	15004B3	15004B4
		4	15014B	15014B1	15014B2	15014B3	15014B4
VC6P BA	1600A	3	16000B	16000B1	16000B2	16000B3	16000B4
		4	16010B	16010B1	16010B2	16010B3	16010B4
	2000A	3	16001B	16001B1	16001B2	16001B3	16001B4
		4	16011B	16011B1	16011B2	16011B3	16011B4

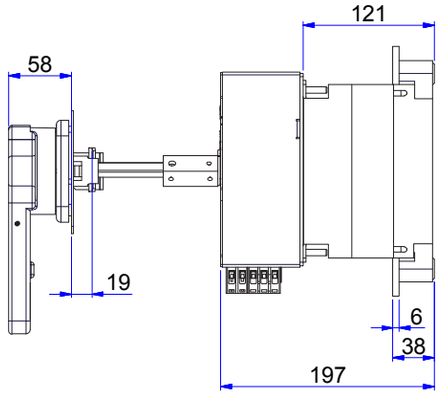
VC4P BA 400 ÷ 800 A



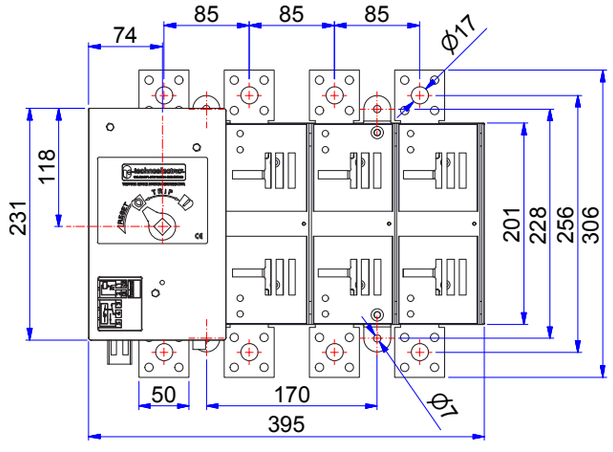


Foratura portella _Door drilling

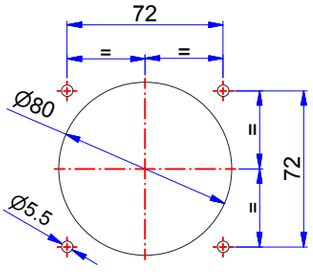


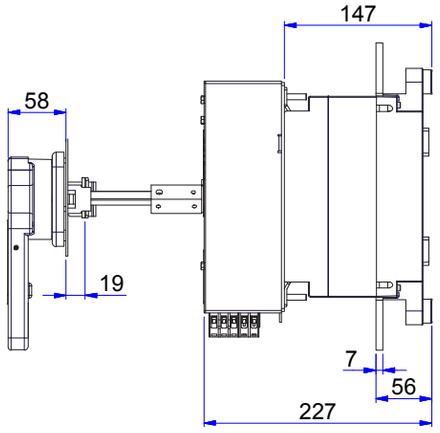


VC5P BA 800 ÷ 1250 A

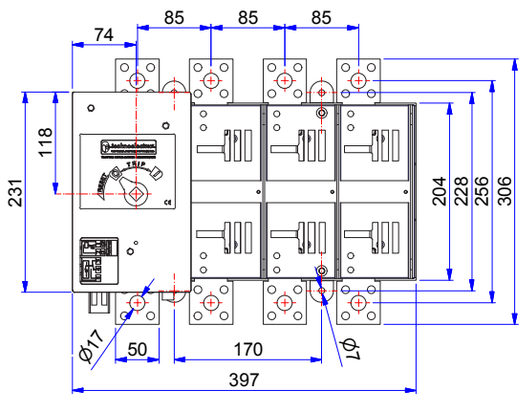


Foratura portella _Door drilling

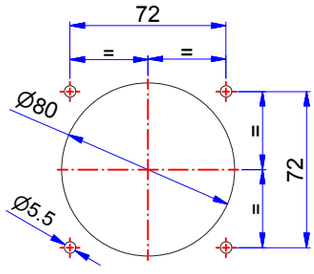


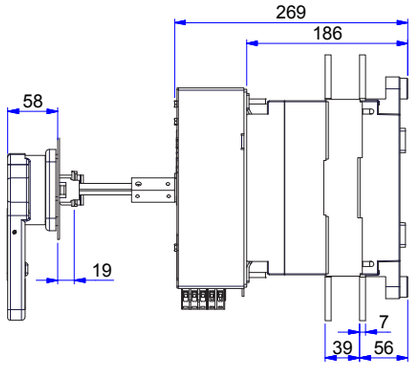


VC5P BA 1600 ÷ 2000 A

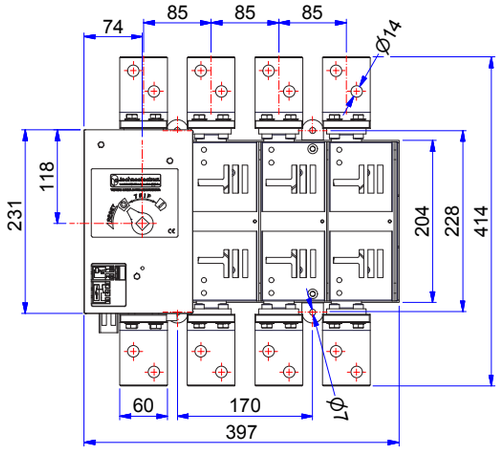


Foratura portella _Door drilling





VC6P BA 1600 A



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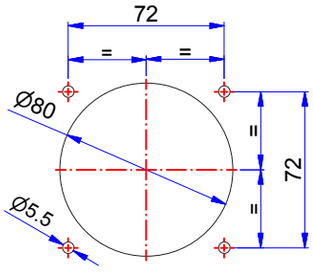
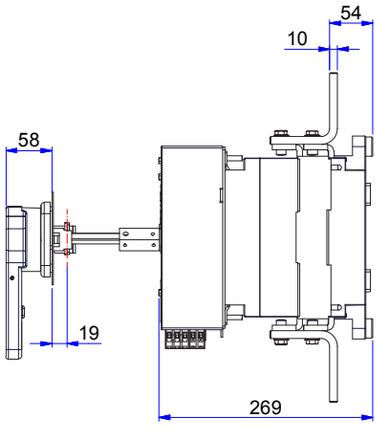
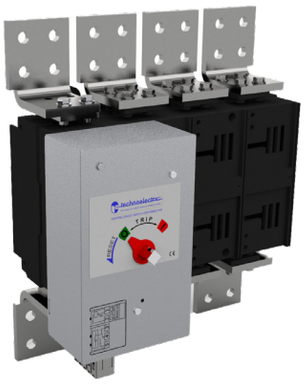
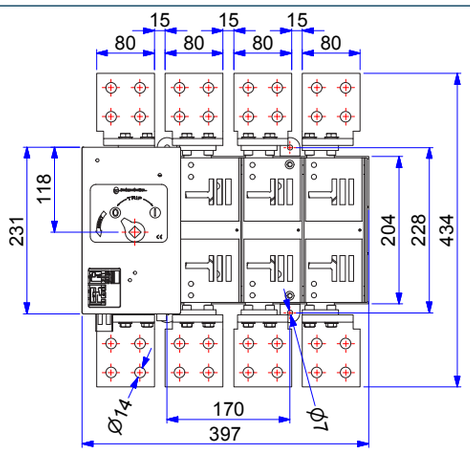




VC6P BA 2000 A





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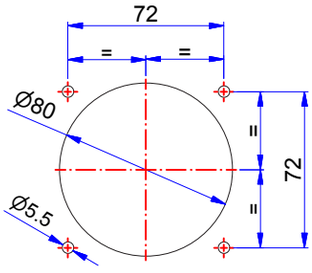
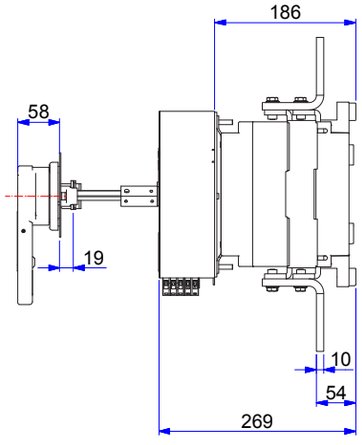
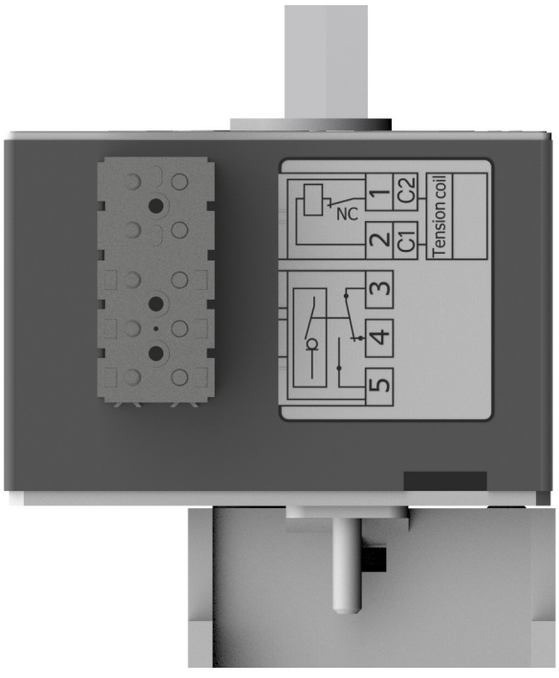




SCHEMA MORSETTIERA BA _terminal board diagram



VISUALCOMPACT VCP MS interruttori di manovra a comando motorizzato

GENERALITÀ

La serie VISUALCOMPACT P MS consta di interruttori-sezionatori motorizzati a 3 - 4 poli con e senza porta fusibili. Assicura, attraverso un comando a distanza, manovre di apertura e chiusura sotto carico in sistemi e impianti di bassa tensione.

CARATTERISTICHE GENERALI

Le caratteristiche tecniche degli interruttori di manovra sezionatori impiegati nei VISUALCOMPACT P MS sono rispondenti a quanto riportato nei capitoli riguardanti la serie VISUALCOMPACT P.
Maniglia diretta per la manovra manuale di emergenza a corredo.
Blocco meccanico di sicurezza lucchettabile che interdice la manovra elettrica e manuale.
Visualizzazione meccanica e luminosa (LED) della pos. 0,1
Segnalazione esterna della posizione tramite contatto AUX. (vedi morsettiera)
Tempo di manovra (0-1 o 1-0) 1,5 sec.
Alimentazione aux. 12/24VCC 110/220/380VCA
Temperatura ambiente di funzionamento - 20°C + 45°C con lucchetto in posizione 0.

CONFORMITÀ ALLE NORME

IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3|IEC 439-1|UNI EN 60439-1|IEC 204-1|UNI EN 60204-1 | EAC

_VISUALCOMPACT VCP MS motorized load break switches

GENERALITIES

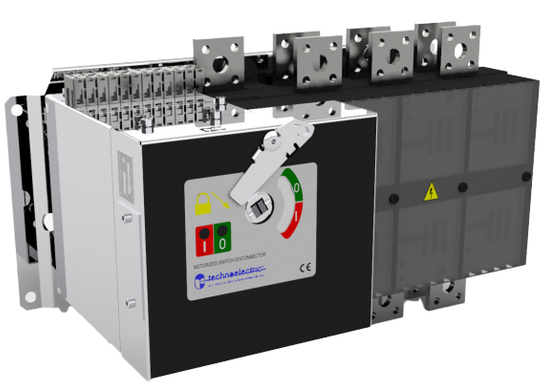
The Visual Compact MS Series are motorized Switch Disconnectors and Fuse switch disconnectors, that can be remotely operated.

GENERAL CHARACTERISTICS

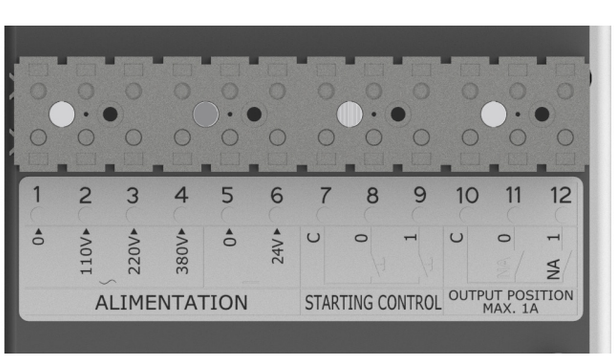
The technical characteristics of the load break switches used in the VISUALCOMPACT P MS are correspondent to as shown in the chapter of VISUALCOMPACT P series.
Direct handle for manual emergency operations
Emergency padlockable mechanical block of electrical and manual operations.
Position 0 and 1 are mechanically and elettronically (LED) indicated
External Imput position through auxiliary contacts (see terminal board diagram)
0-1 or 1-0 operating time 1,5 sec.
Voltages 12/24V DC, 110/220/380V AC
Working ambient temperature from - 20°C + 45°C padlock in 0 position.

CONFORMITY TO STANDARDS

IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3|IEC 439-1|UNI EN 60439-1|IEC 204-1|UNI EN 60204-1 | EAC

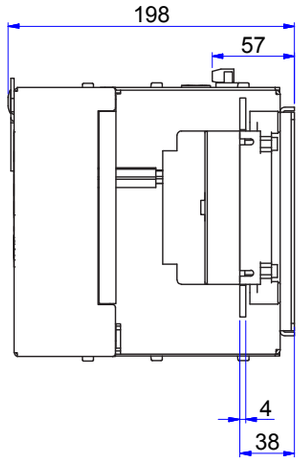


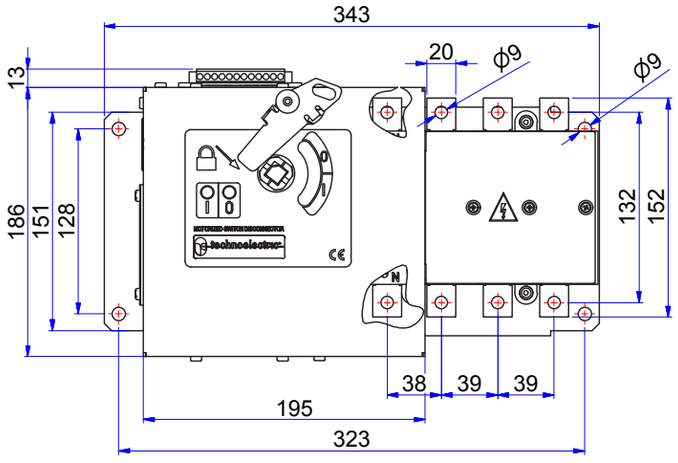
Schema morsettiera MS
_MS terminal block diagram



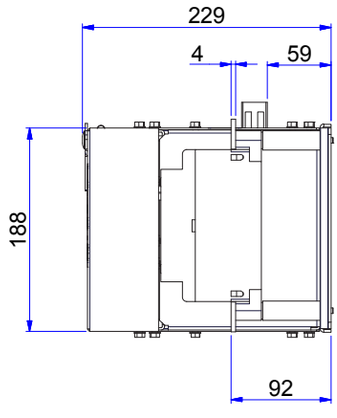
Tipo _type	Corrente nominale _rated current	POLI _POLES	Codice _Code	POLI _POLES	Codice _Code
VC2P MS	160 A	3	12001MS	4	12011MS
	200 A	3	12002MS	4	12012MS
	250 A	3	12003MS	4	12013MS
VC3P MS	315 A	3	13001MS	4	13011MS
	400 A	3	13002MS	4	13012MS
VC4P MS	630 A	3	14003MS	4	14013MS
	800 A	3	14004MS	4	14014MS
VC5P MS 35kA	800 A	3	15000MS	4	15010MS
	1000 A	3	15001MS	4	15011MS
	1250 A	3	15002MS	4	15012MS
VC5P MS 50kA	800 A	3	15007MS	4	15017MS
	1000 A	3	15008MS	4	15018MS
	1250 A	3	15009MS	4	15019MS
	1600 A	3	15003MS	4	15013MS
	2000 A	3	15004MS	4	15014MS
	2500 A	3	15005MS	4	15015MS
	3150 A	3	15006MS	4	15016MS
VC6P MS	1600 A	3	16000MS	4	16010MS
	2000 A	3	16001MS	4	16011MS
	2500 A	3	16002MS	4	16012MS
	3150 A	3	16003MS	4	16013MS

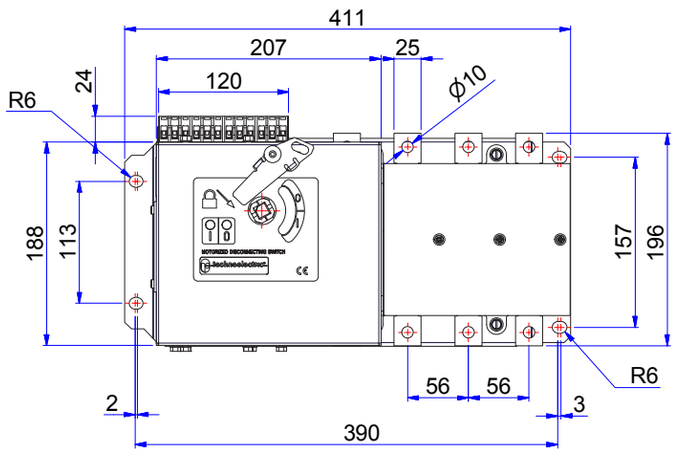
VC2P MS 160 ÷ 250A



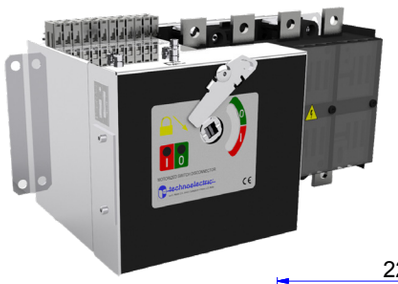


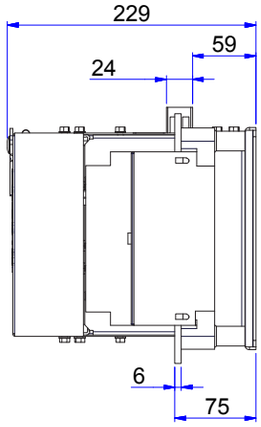
VC3P MS 315 ÷ 400 A

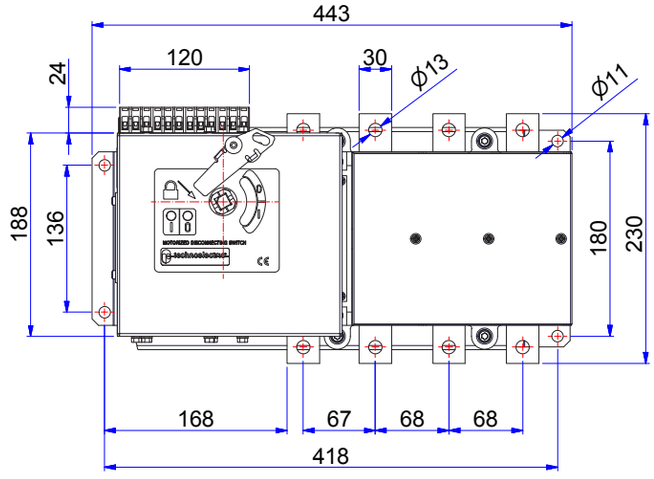




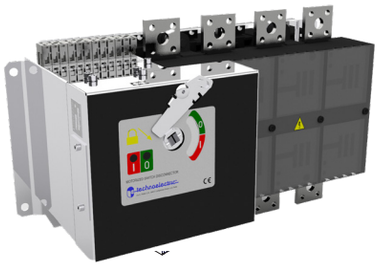
VC4P MS 630 ÷ 800A

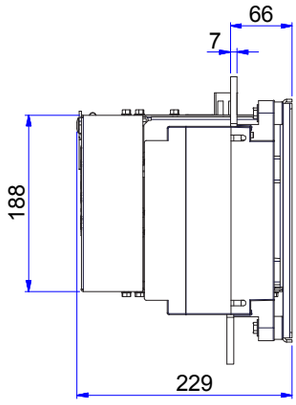


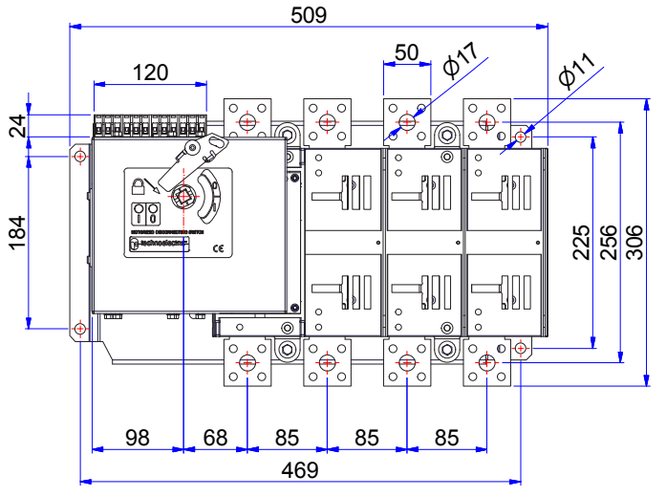




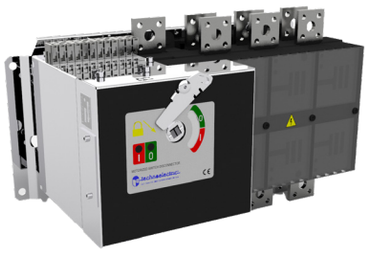
VC5P MS 800 ÷ 1250A

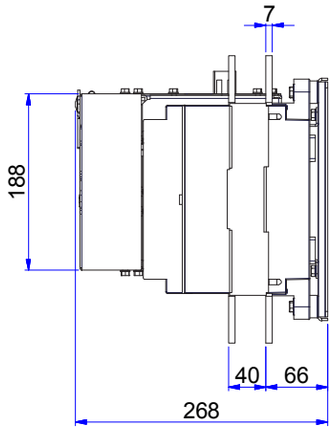


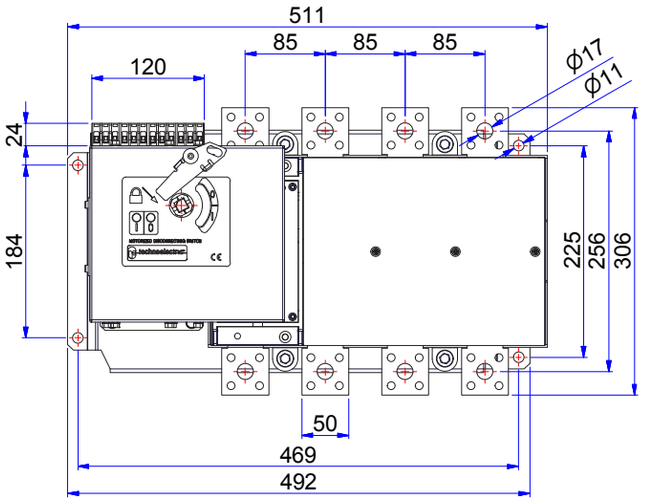




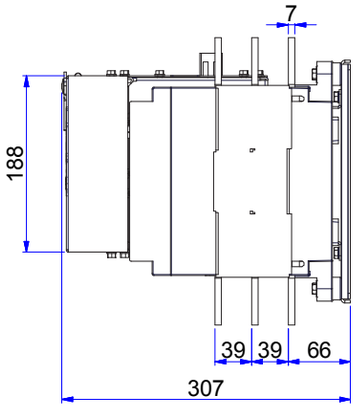
VC5P MS 1600 ÷ 2000A

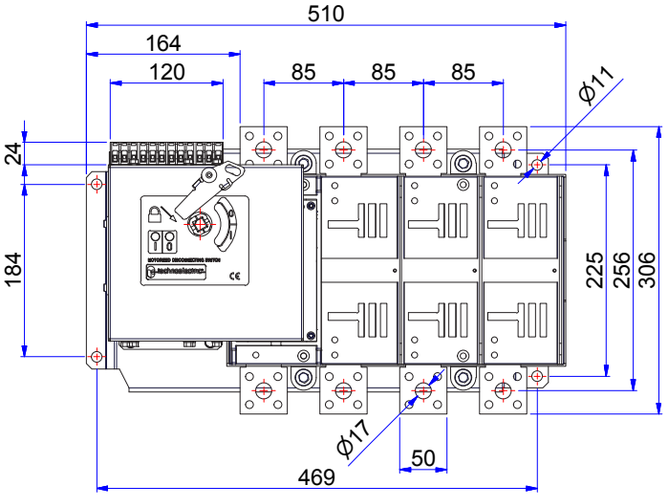




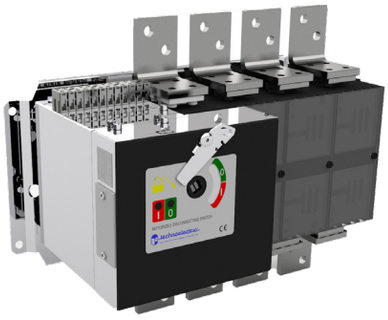


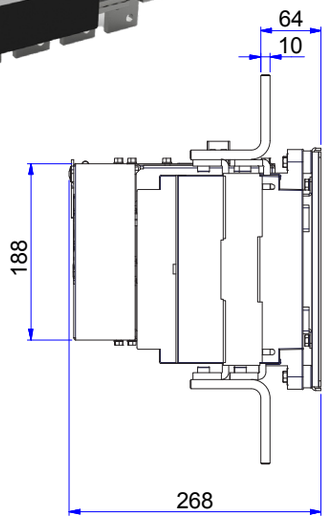
VC5P MS 2500 ÷ 3150A

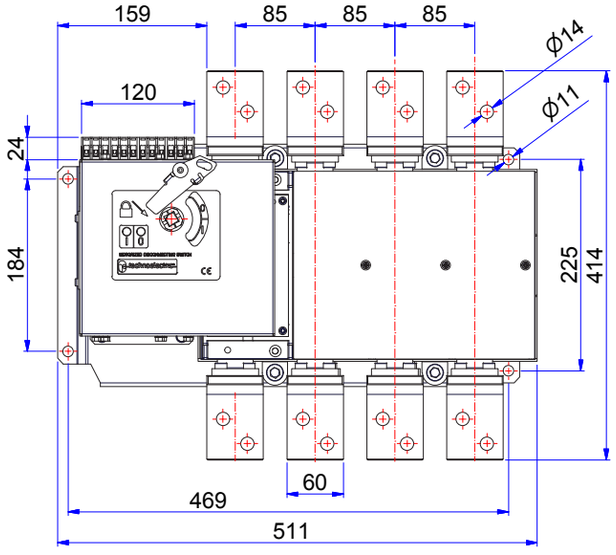




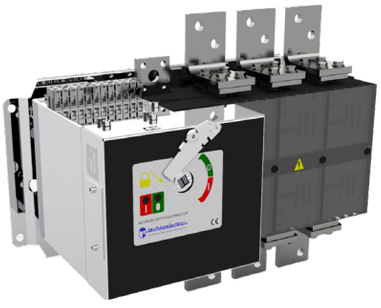
VC6P MS 1600A FN

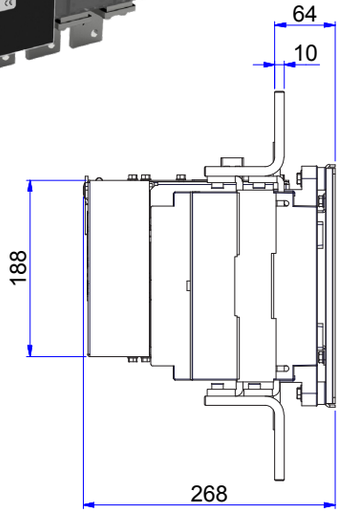


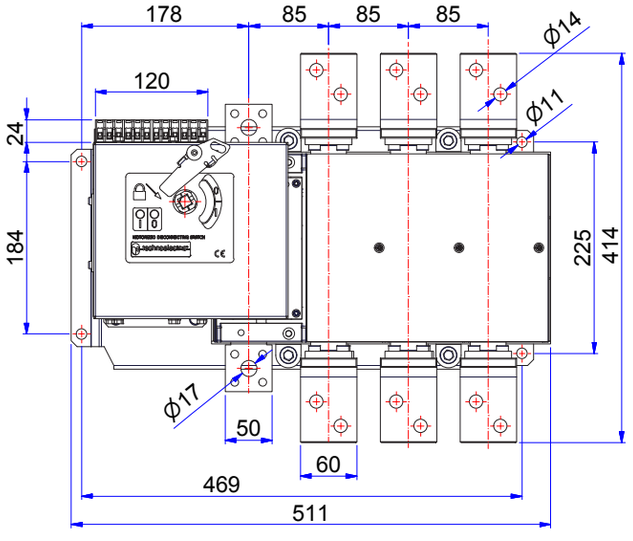




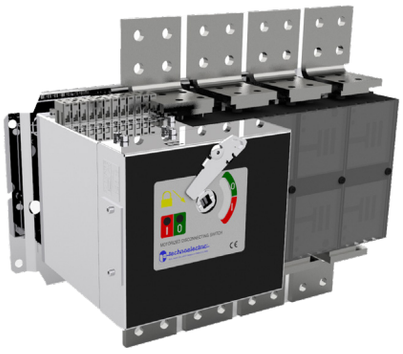
VC6P MS 1600A (NEUTRO _neutral) 1250A

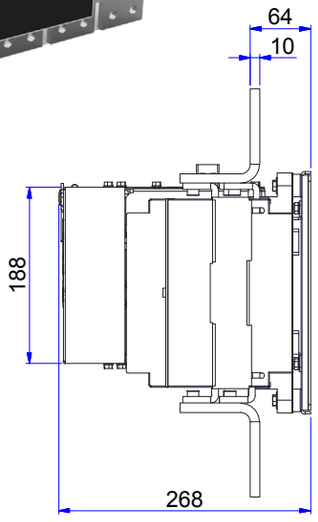


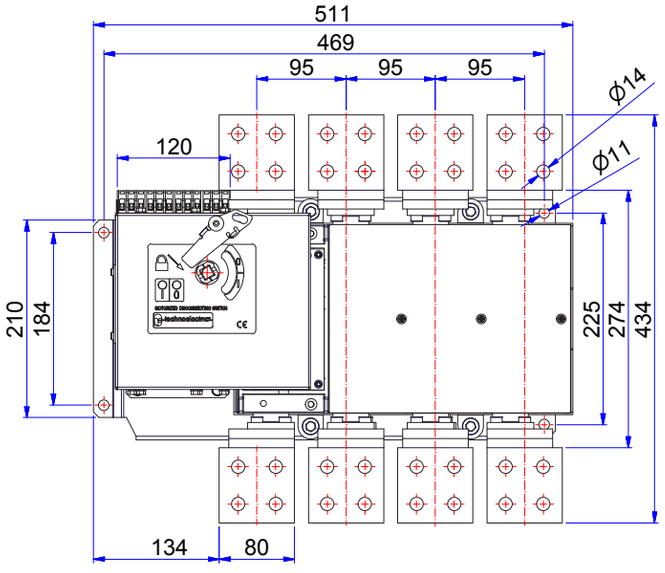




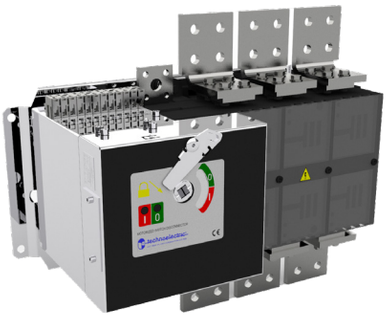
VC6P MS 2000A FN

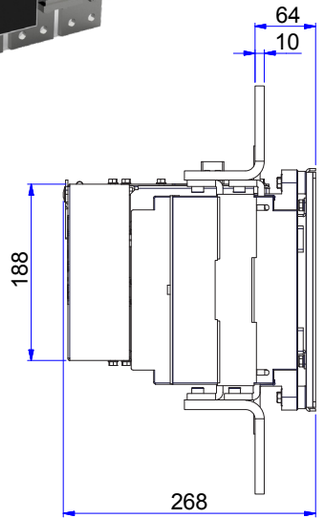


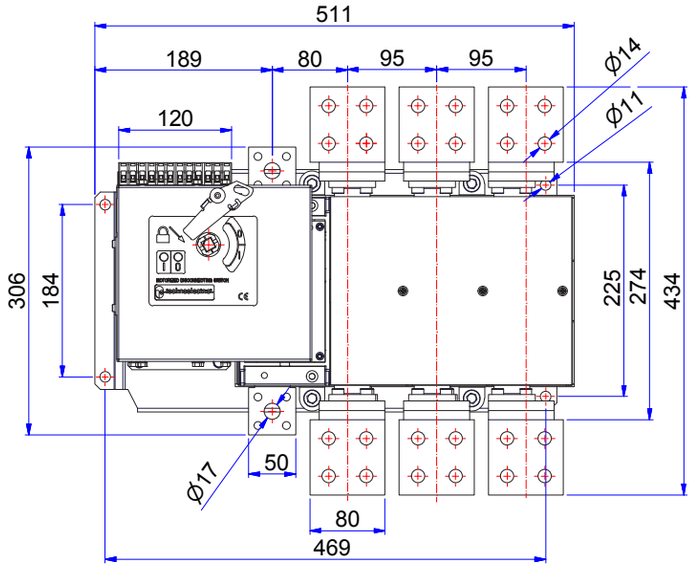




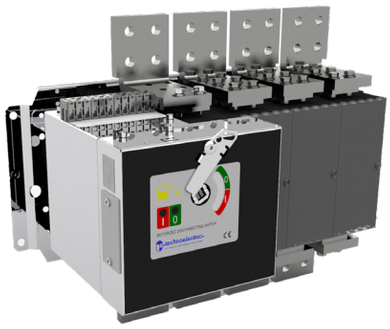
VC6P MS 2000A (NEUTRO _neutral) 1250A

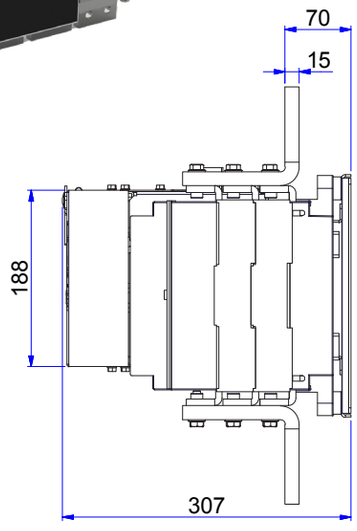


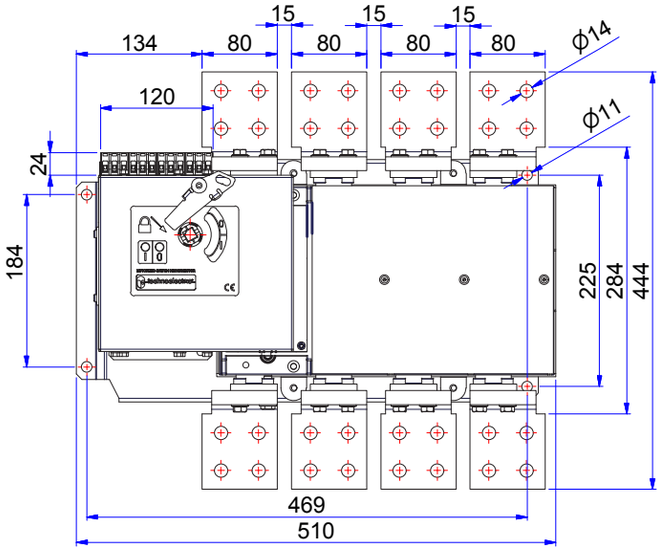




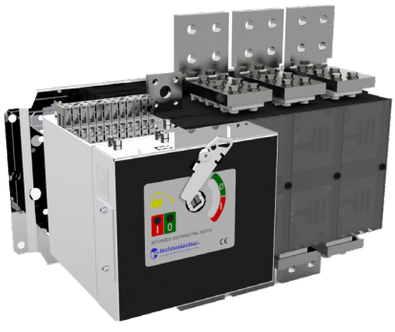
VC6P MS 2500A FN

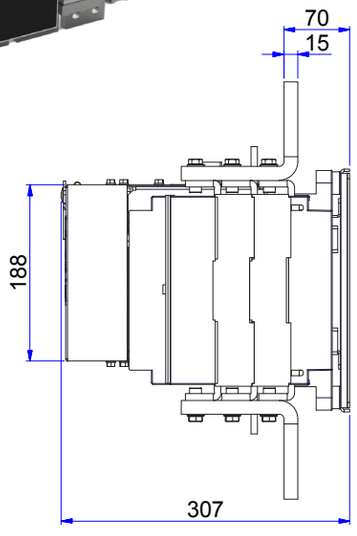


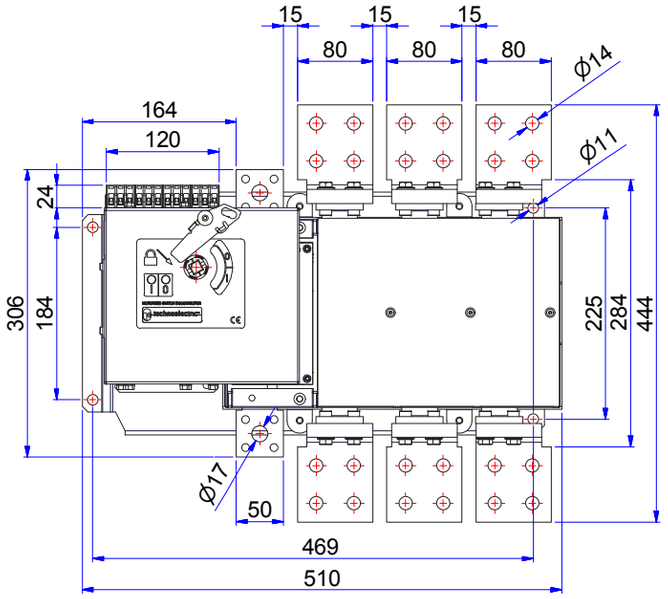




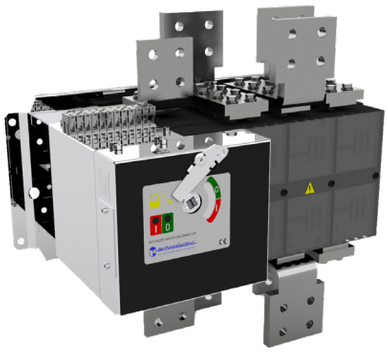
VC6P MS 2500A (NEUTRO _neutral) 1250A

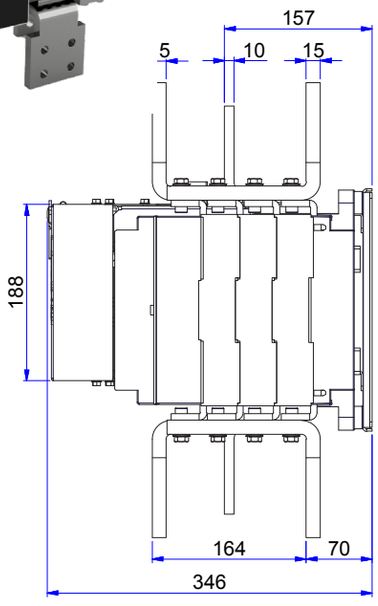


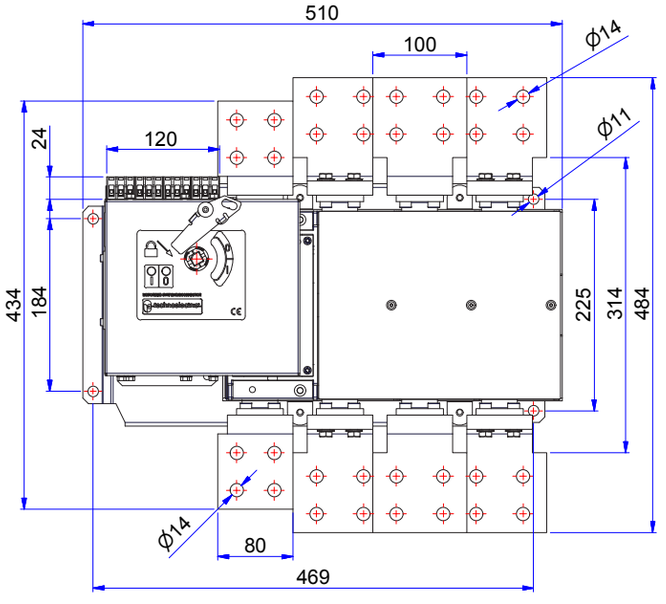




VC6P MS 3150A



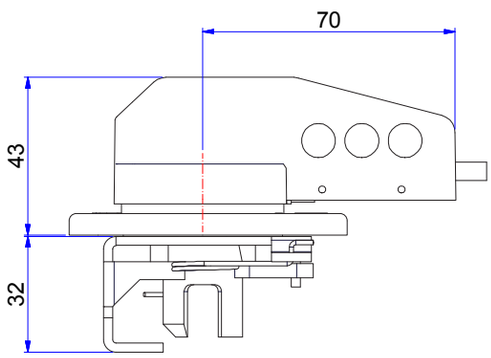




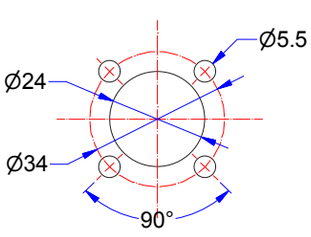
MANIGLIA BLOCCO PORTA NERA
_black door interlock handle

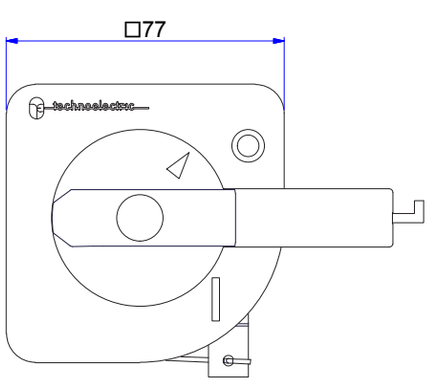
Tipo_type	Poli _poles	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	3 | 4	18001	18001	18003	18003	18005 | 18007	18830 | 18844	18830 | 18844
Codice _code	6 | 8	18003	18003	18005	18830	18870	-	-

18001

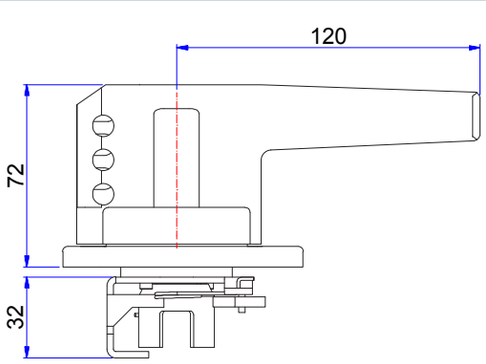


Foratura portella _Door drilling

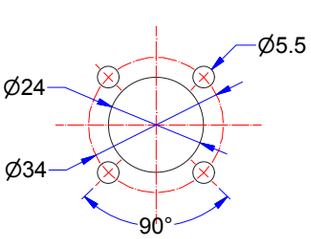


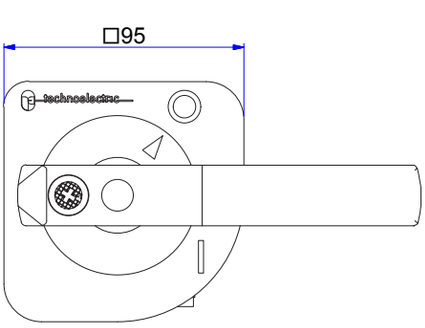


18003

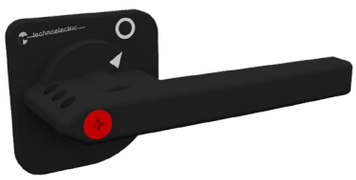


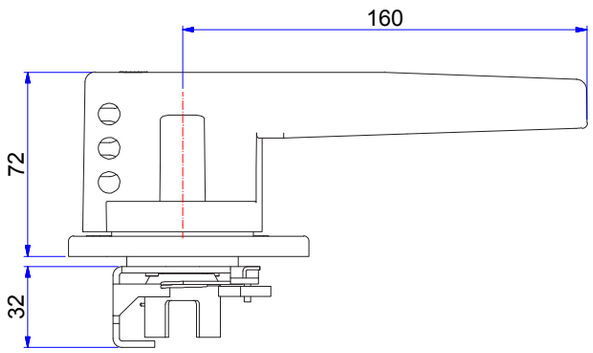
Foratura portella _Door drilling



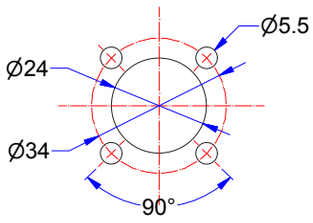


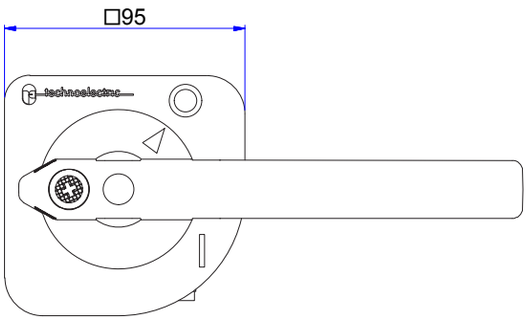
18005



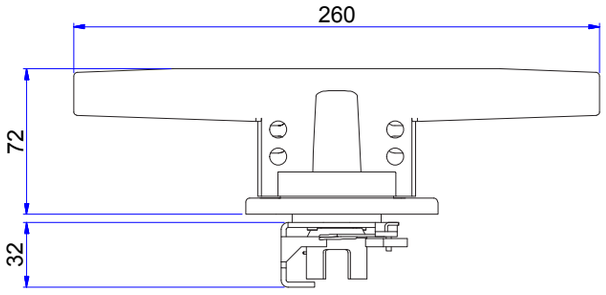


Foratura portella _Door drilling

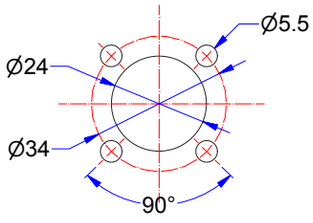


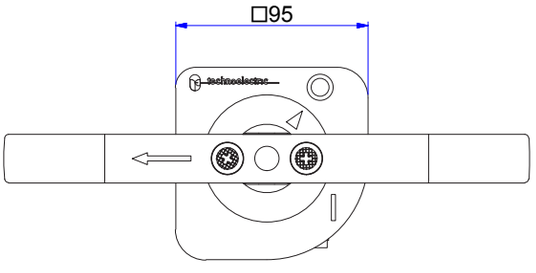


18007

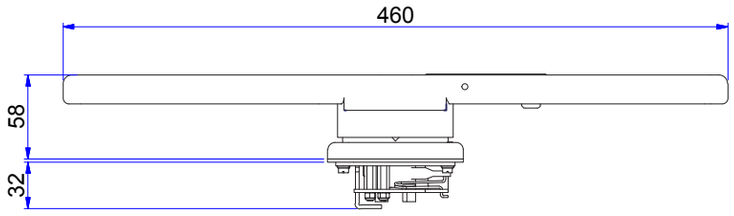


Foratura portella _Door drilling

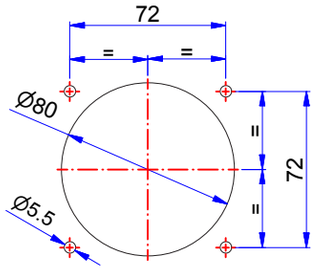


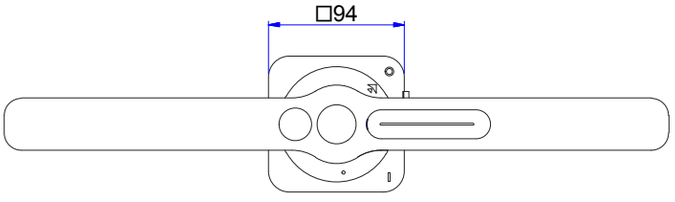


18830 - 18870

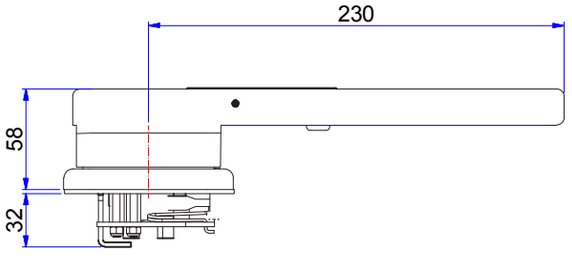


Foratura portella _Door drilling

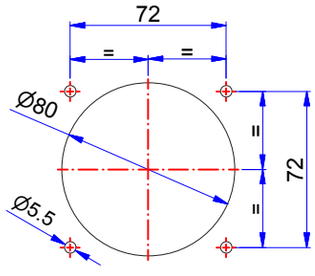


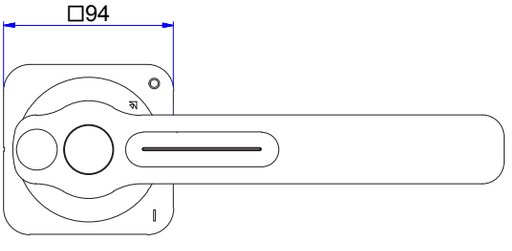


18844



Foratura portella _Door drilling

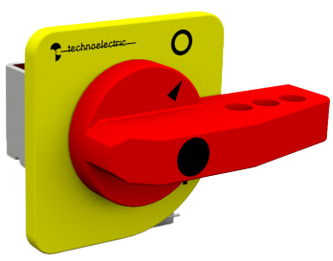


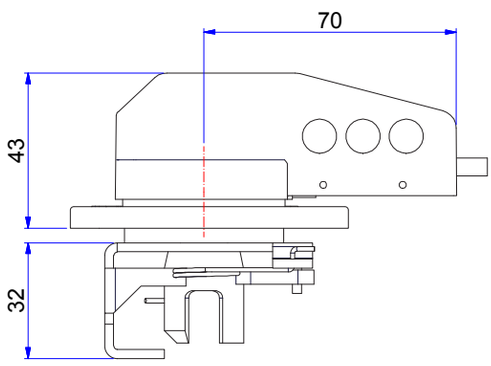


MANIGLIA BLOCCO PORTA D'EMERGENZA _red\yellow door interlock handle

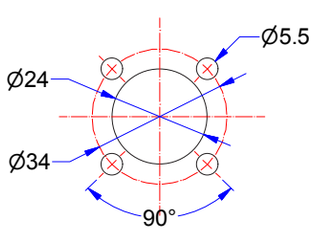
Tipo_type	Poli _poles	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	3 | 4	18002	18002	18004	18004	18006 | 18008	18831 | 18847	18831 | 18847
Codice _code	6 | 8	18004	1804	18006	18831	18871	-	-

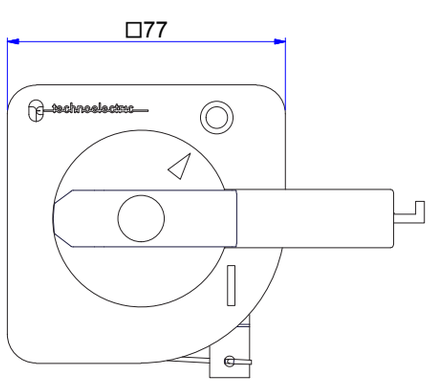
18002



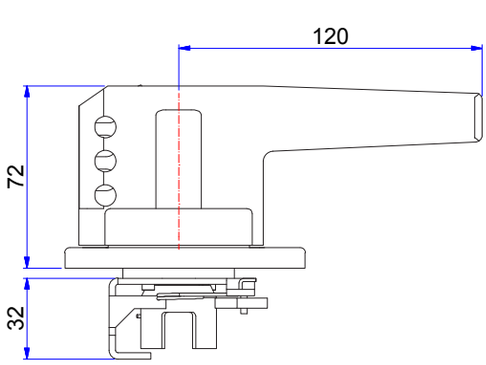


Foratura portella _Door drilling

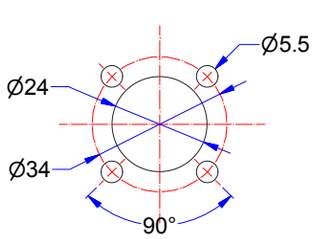


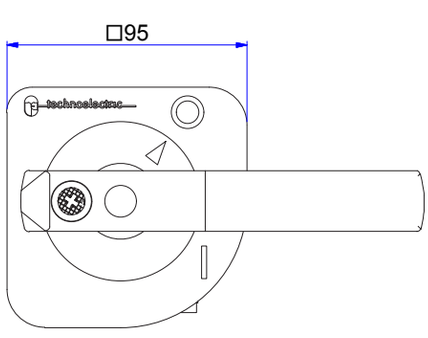


18004

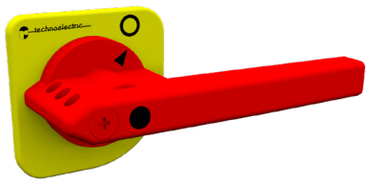


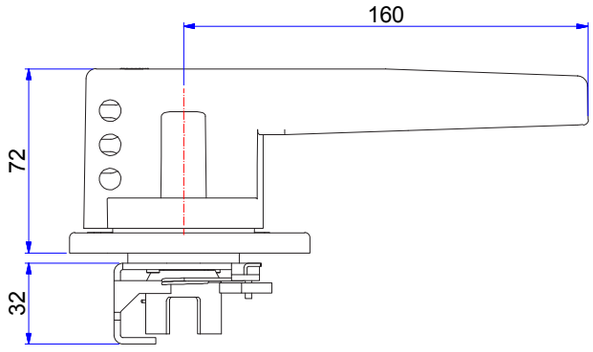
Foratura portella _Door drilling



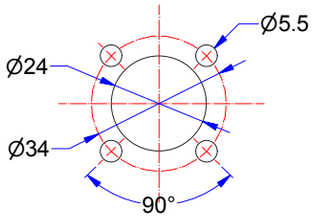


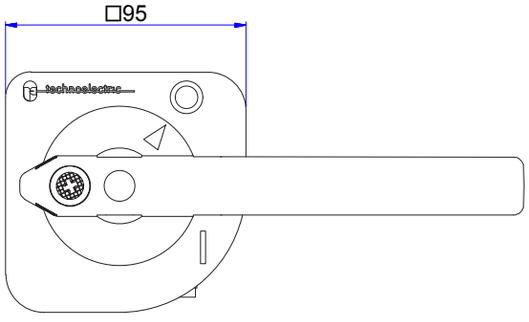
18006



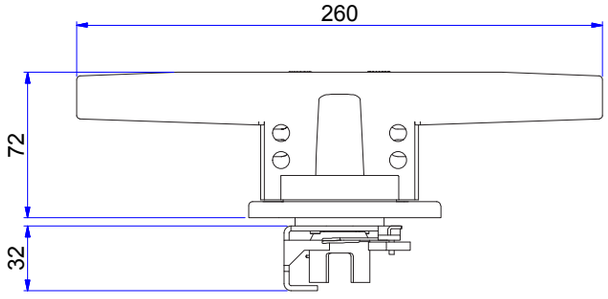


Foratura portella _Door drilling

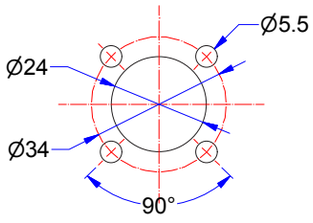


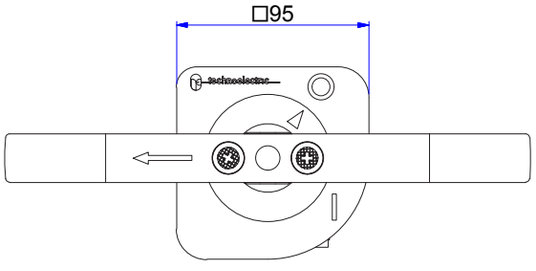


18008

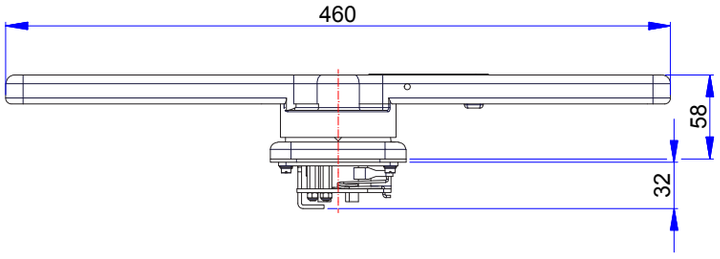


Foratura portella _Door drilling

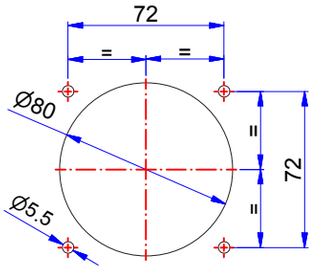


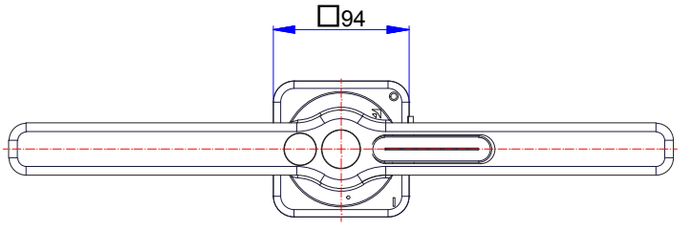


18831 - 18871

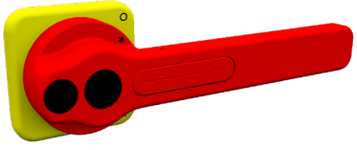


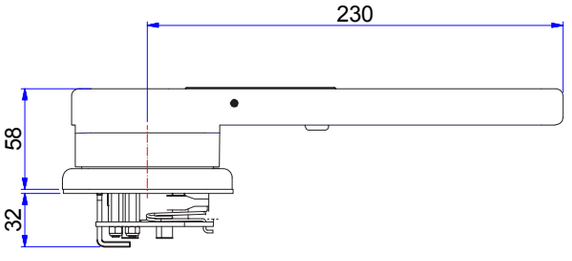
Foratura portella _Door drilling



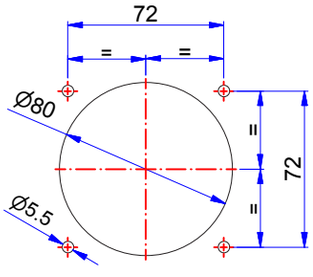


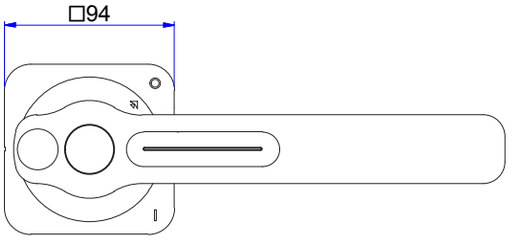
18847



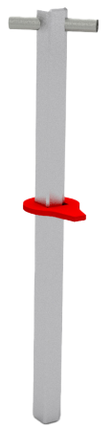


Foratura portella _Door drilling





ALBERO COMANDO
_shaft



200 mm

Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18201	18201	18207	18207	18207	18207	18207

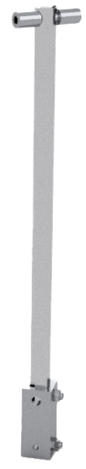
300 mm

Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18202	18202	18208	18208	18208	18208	18208

400 mm

Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18203	18203	18209	18209	18209	18209	18209

PROLUNGA ALBERO
_extension shaft



100 mm

Tipo _type	EOP 1|2	EOP 3|4|5 VCP BA 4|5
Codice _code	18030	18032

200 mm

Tipo _type	EOP 1|2	EOP 3|4|5 VCP BA 4|5
Codice _code	18033	18035

300 mm

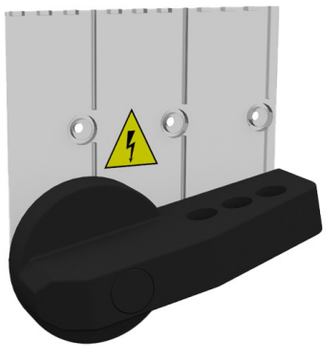
Tipo _type	EOP 1|2	EOP 3|4|5 VCP BA 4|5
Codice _code	18036	18038

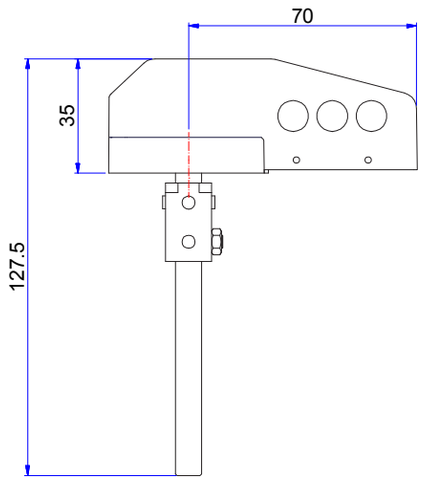
MANIGLIA DIRETTA _direct handle

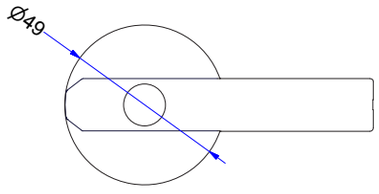
Tipo_type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18020	18021	18320	18022	18023	18840 (460 mm) / 18852 (230 mm)	18840 (460 mm) / 18852 (230 mm)

Fornita completa di schermo protezione contatti principali _Supplied with main contacts cover shield

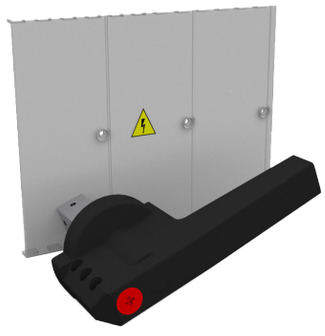
18020 - 18021

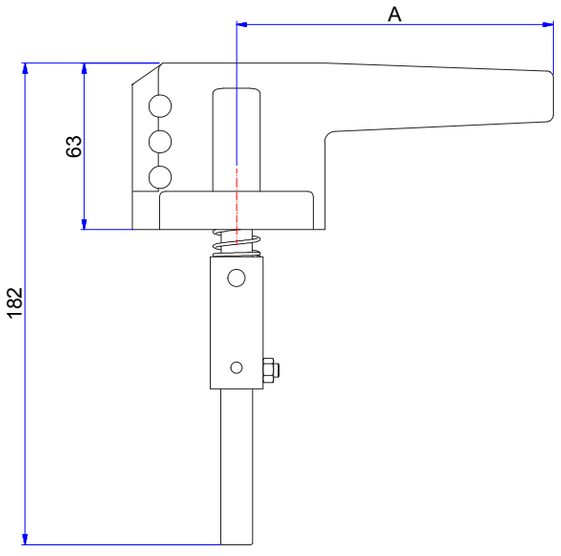




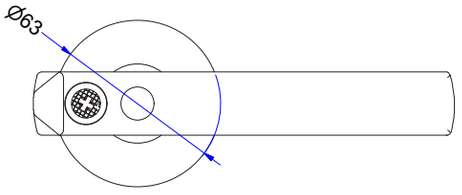


18320 - 18022 - 18023

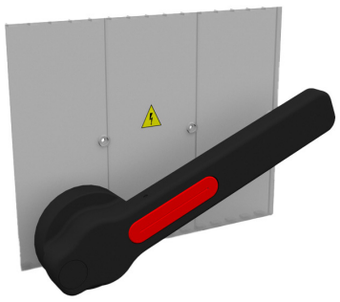


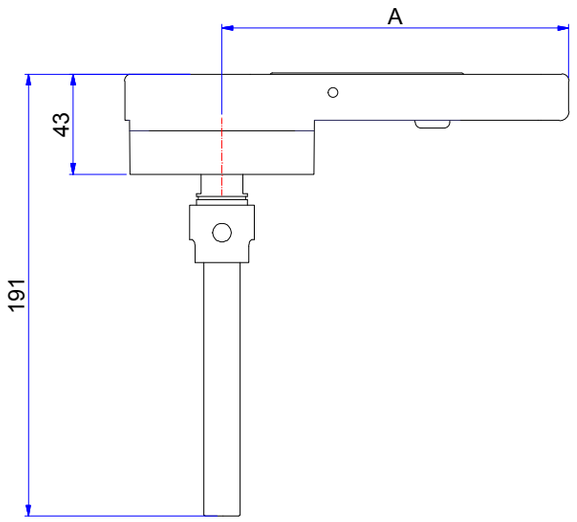


Tipo _type	A
18320	120
18022	120
18023	160

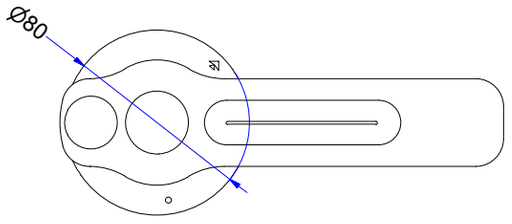


18851 - 18852

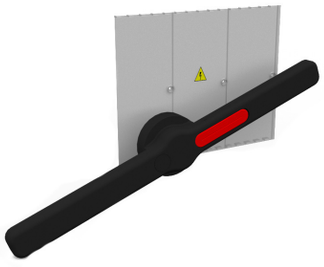


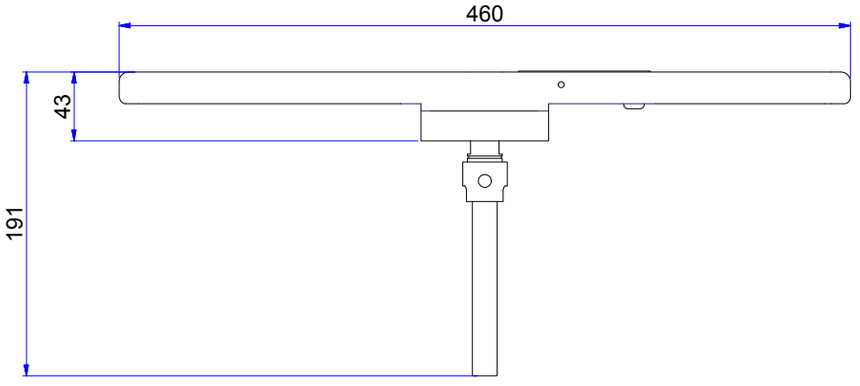


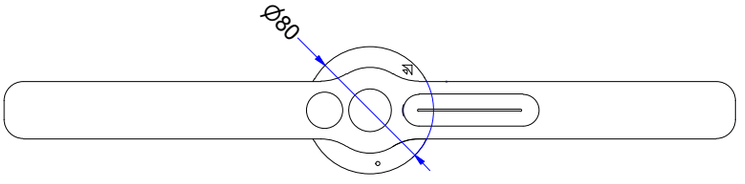
Tipo _type	A
18851	150
18852	230



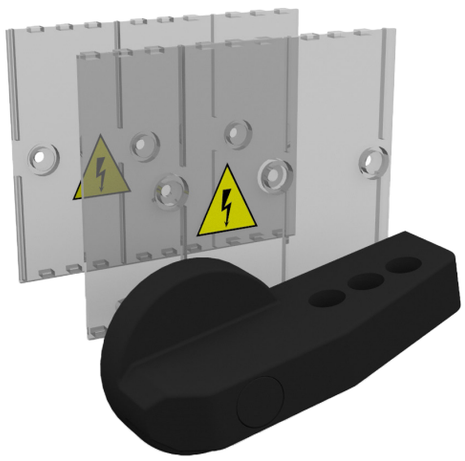
18840







MANIGLIA DIRETTA _direct handle

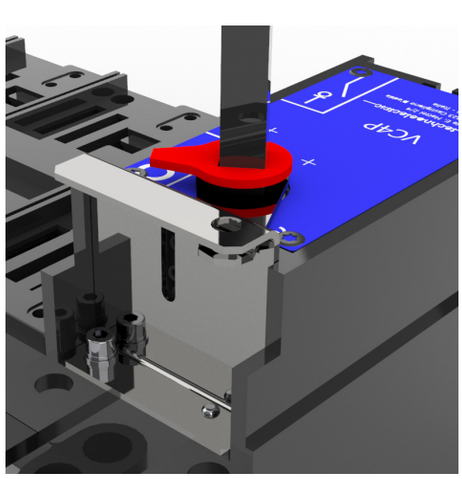


Tipo _type	EO1P	EO2P	EO3P	EO4P	EO5P
Codice _code	18588	18589	18590	18591	18853

Fornita completa di due schermi copricontatti principali per interruttori di tipo P
Versione lucchettabile fornibile a richiesta

_Supplied with two cover main contacts over shields.
Padlockable version on request

BLOCCO LUCCHETTO PER MANIGLIA DIRETTA _padlock for direct handle

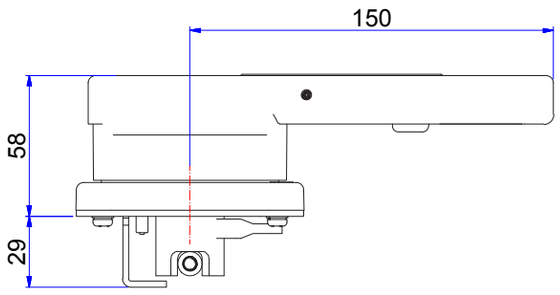


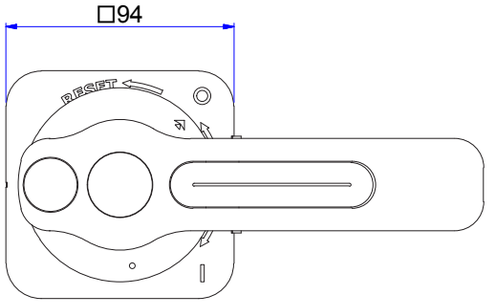
Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P
Codice _code	18240	18241	18242	18243	18244

	VC5P 50 kA				VC6P			
Tipo _type	1600A	2000A	2500A	3150A	1600A	2000A	2500A	3150A
Codice _code	18245	18245	18246	18246	18245	18245	18246	18247

MANIGLIA BLOCCO PORTA PER VCP BA
_door interlock handle for VCP BA

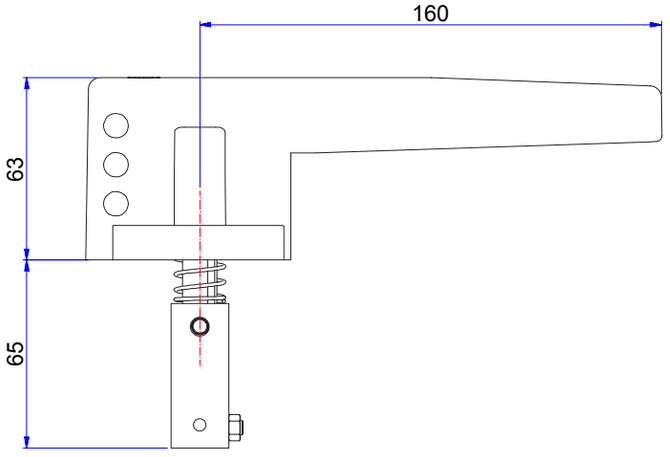
18856

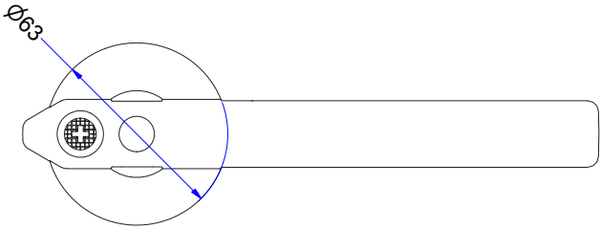




MANIGLIA DIRETTA PER VCP BA
_direct handle for VCP BA

18857

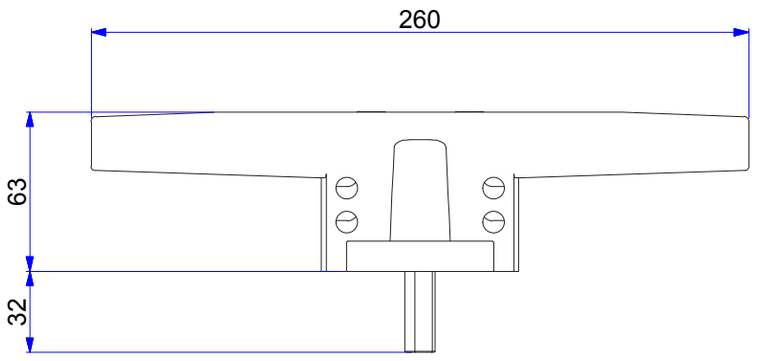


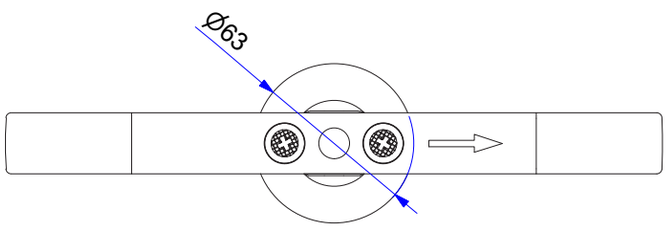


MANIGLIA DIRETTA PER VCP MS
_direct handle for VCP MS

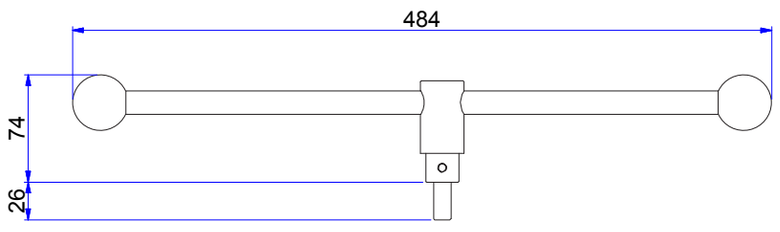
Tipo_type	VC2P MS	VC3P MS	VC4P MS	VC5P MS	VC6P MS
Codice _code	18802	18802	18802	18803	18803

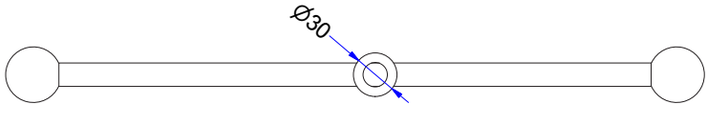
18802





18803

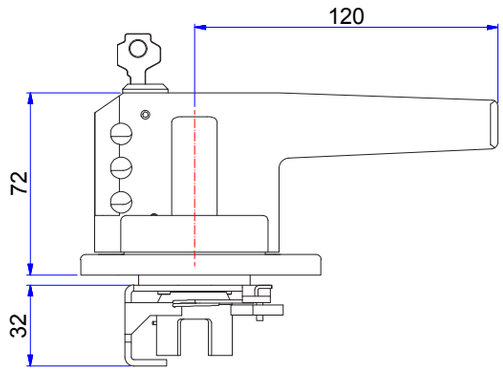




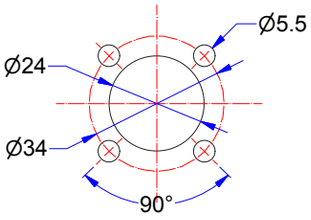
MANIGLIA BLOCCO PORTA CON BLOCCO CHIAVE
_door interlock handle with key lock

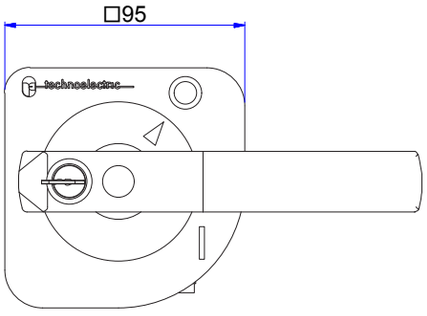
Tipo_type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18100	18100	18100	18100	18102| 18104	a richiesta _on request	a richiesta _on request

18100

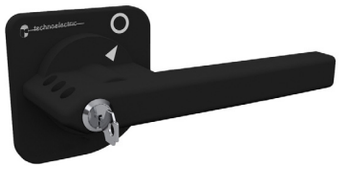


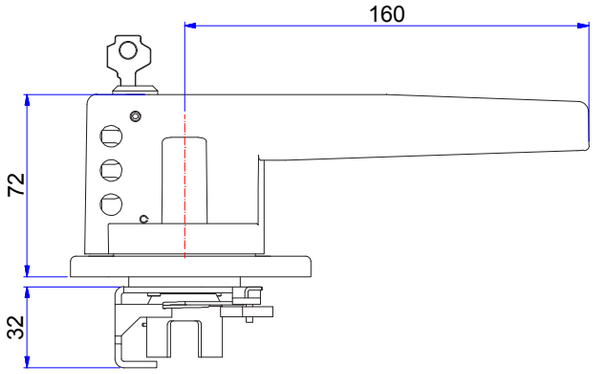
Foratura portella _Door drilling



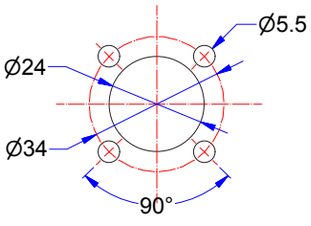


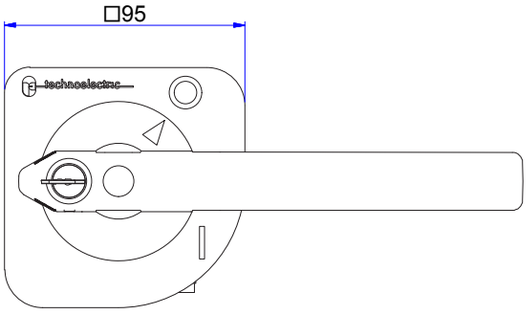
18102



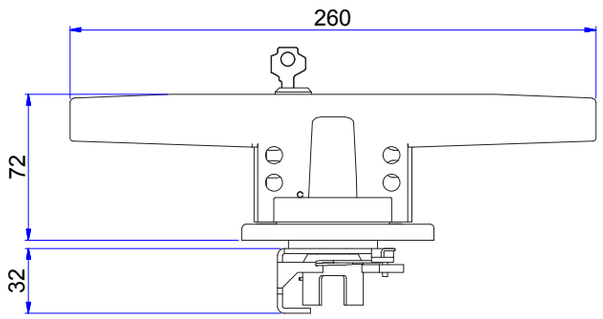


Foratura portella _Door drilling

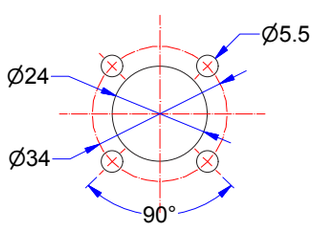


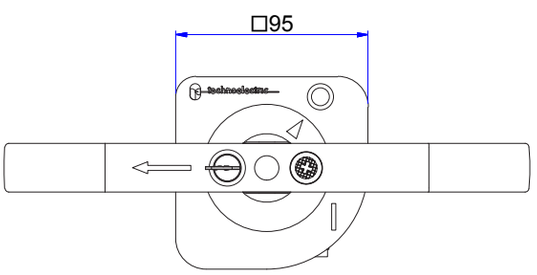


18104



Foratura portella _Door drilling

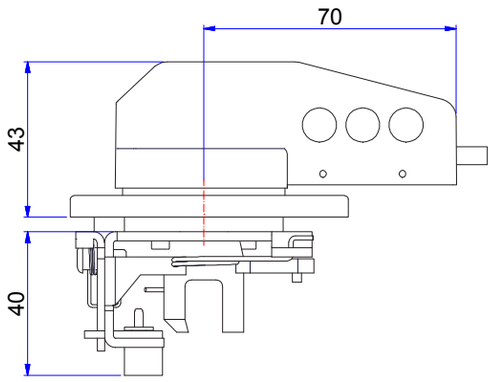




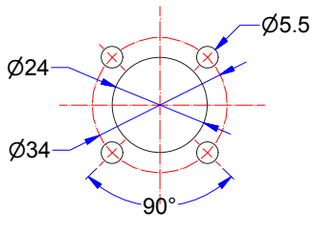
MANIGLIA BLOCCO PORTA NERA CON DISPOSITIVO DI SBLOCCO CON ATTREZZO SPECIALE _black door interlock handle with defeater mechanism (special tool)

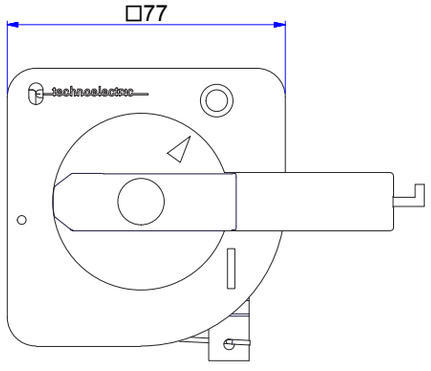
Tipo_type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18220	18220	18222	18222	18224	18832|18850	18832|18850

18220

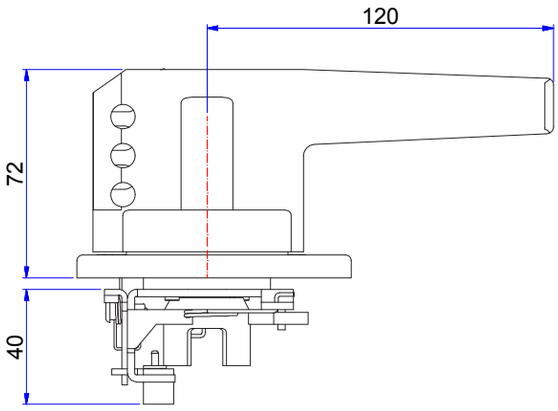


Foratura portella _Door drilling

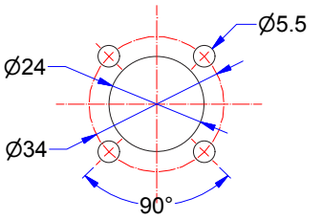


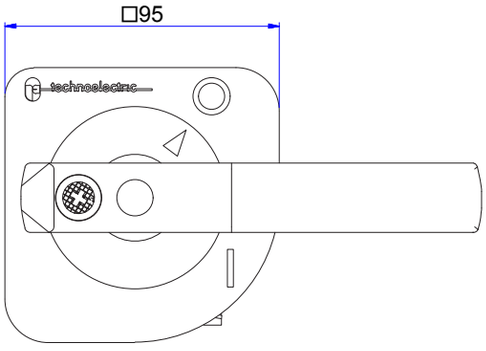


18222

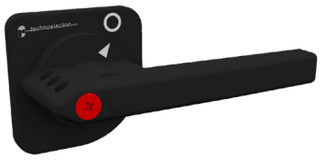


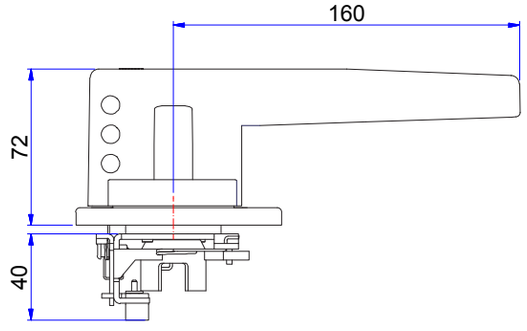
Foratura portella _Door drilling



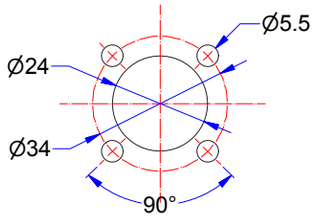


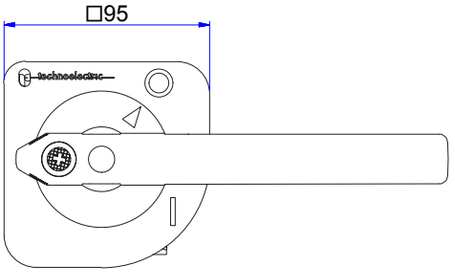
18224



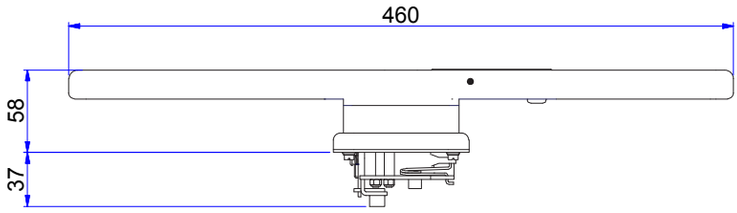


Foratura portella _Door drilling

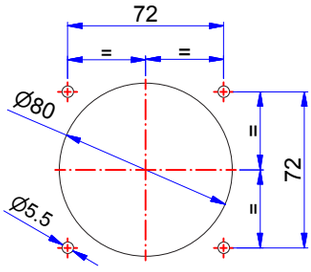


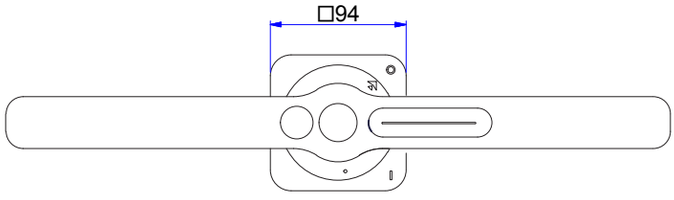


18832

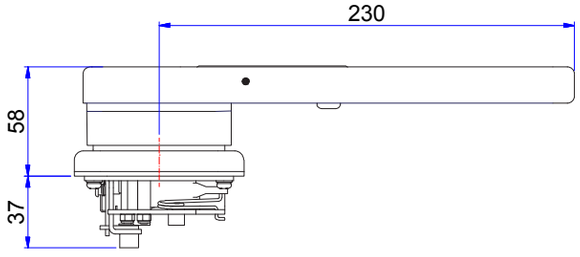


Foratura portella _Door drilling

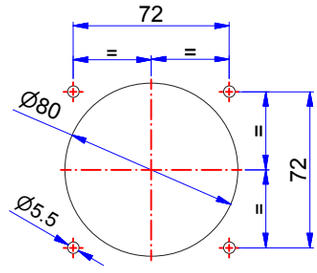


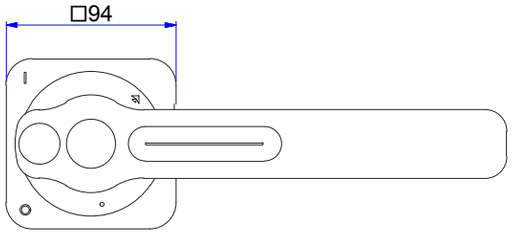


18850



Foratura portella _Door drilling

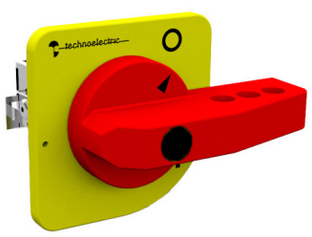




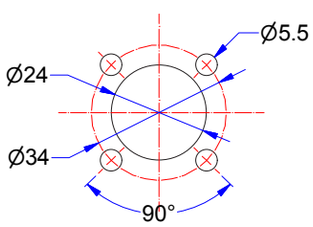
MANIGLIA BLOCCO PORTA DI EMERGENZA CON DISPOSITIVO DI SBLOCCO CON ATTREZZO SPECIALE
_red/yellow door interlock handle with defeater mechanism (special tool)

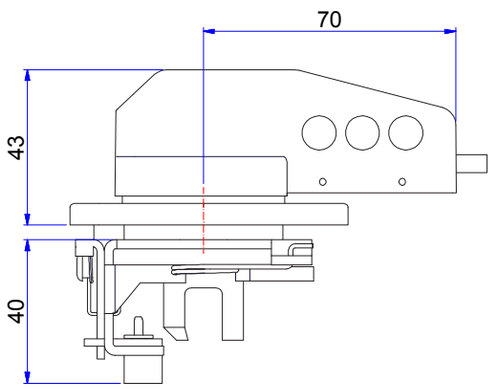
Tipo_type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50kA	VC6P
Codice _code	18221	18221	18223	18223	18225	18833|18858	18833|18858

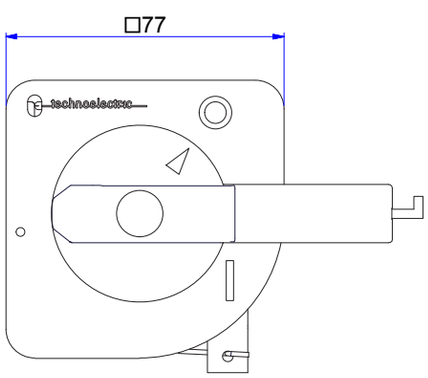
18221



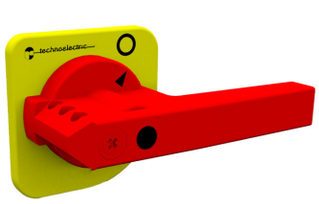
Foratura portella _Door drilling



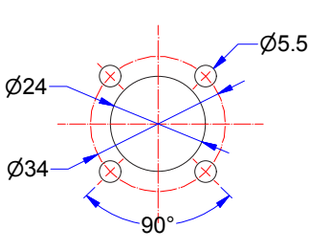


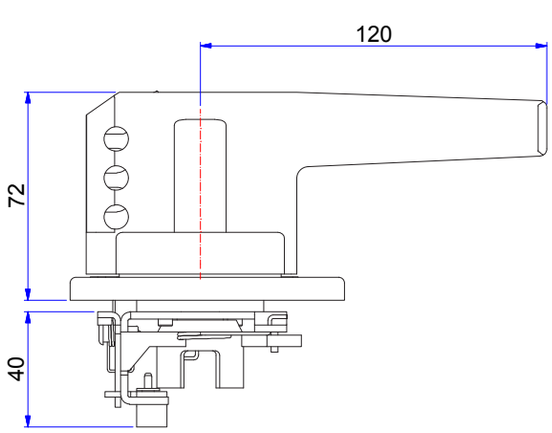


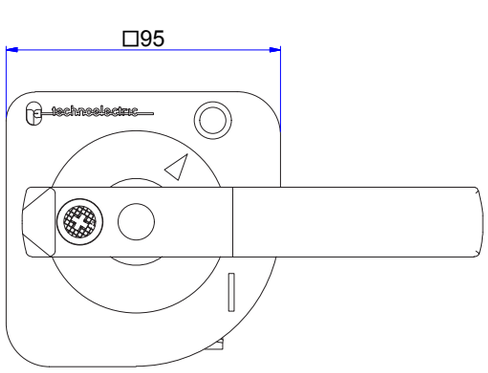
18223



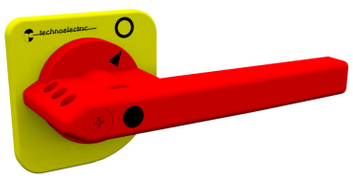
Foratura portella _Door drilling

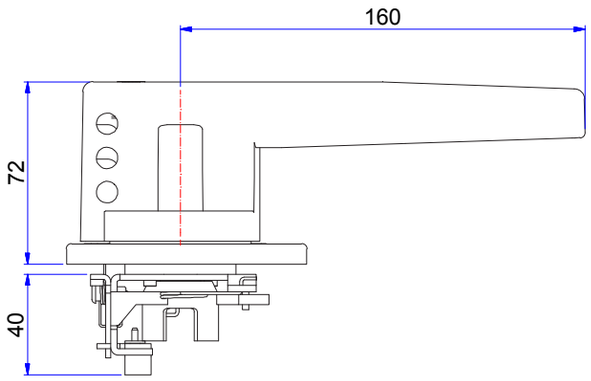




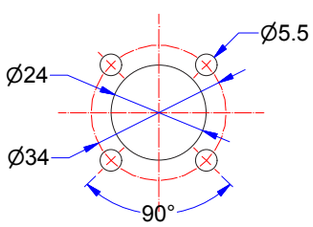


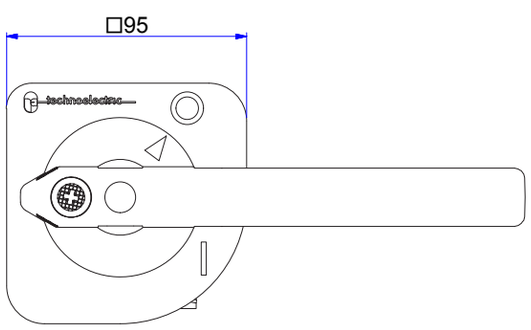
18225



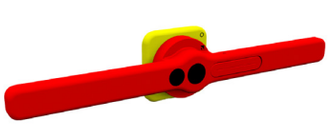


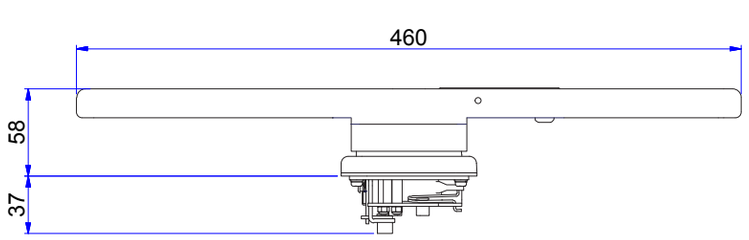
Foratura portella _Door drilling



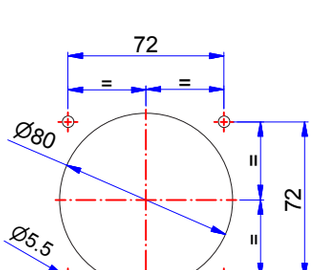


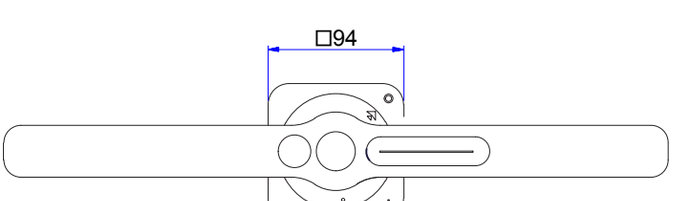
18833

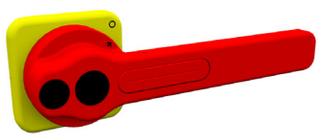


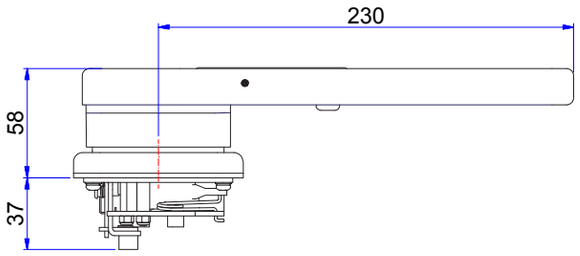


Foratura portella _Door drilling

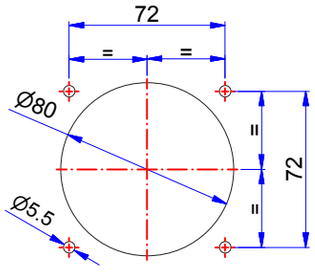


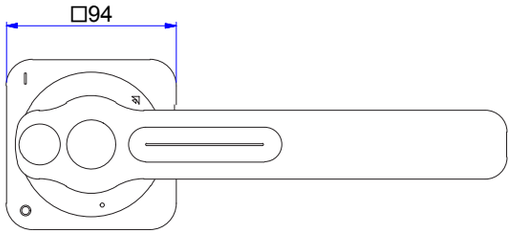






Foratura portella _Door drilling

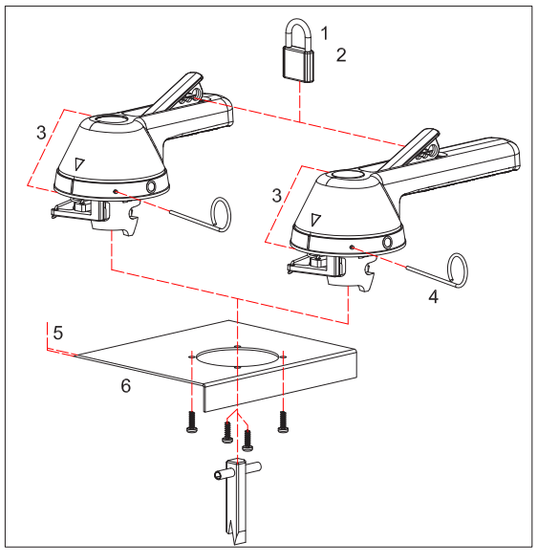


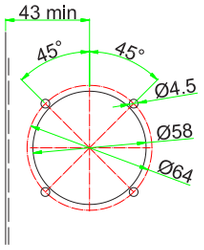


MANIGLIA BLOCCO PORTA\EMERGENZA CON DOPPIA FUNZIONE DI SICUREZZA _black/emergency compact door interlock handle with defeater mechanism

Adatta per montaggio su portella con dispositivo di blocco porta in posizione On Grado di protezione IP 65
Disponibile anche nella versione per emergenza (rosso\gialla)

_For door mounting with Door interlocking in “On” position IP 65 degree of protection
Available also for emergency operation (red\yellow)

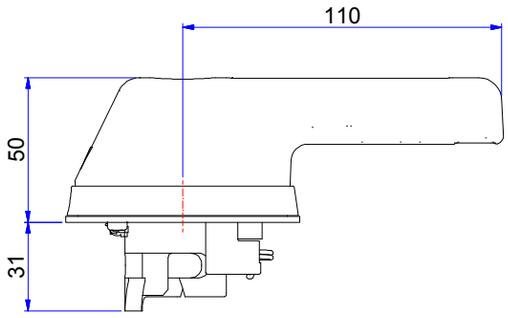




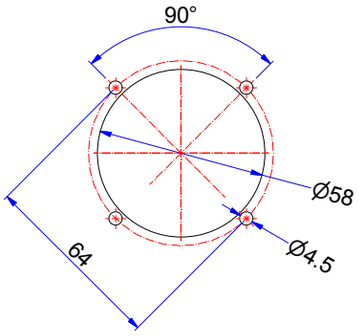
1	Lucchettabile (max 3 lucchetti 1xø8+2xø6) in posizione Off.	Padlockable in “Off” position (with max 3 padlocks of 1xø8+2xø6).
2	Apertura della portella impedita quando la maniglia è lucchettata in posizione di Off.	Door opening is prevented when the handle is padlocked in “Off” position.
3	Ingombro inferiore a 50 mm in profondità per permettere l’utilizzo anche in quadri a doppia portella.	Handle height less than 50 mm for suitability with two-doors type panels.
4	Permette, a mezzo di un apposito attrezzo, fornito con la maniglia, l’esclusione del dispositivo di blocco porta e quindi l’apertura della portella anche a interruttore in posizione di ON. Il dispositivo bloccoporta si ripristina automaticamente al chiudersi della porta.	With the use of the special tool (supplied), the door interlock mechanism can be bypassed maintaining the switch in the “On” position and the door can be opened. The door interlocking mechanism is automatically re-established when door is closed.
5	Può essere montata su portelle di qualsiasi spessore.	Can be mounted on doors of any thickness.
6	Posizione della maniglia fissa quando la portella é aperta.	When the door is open, the position of the handle is fixed

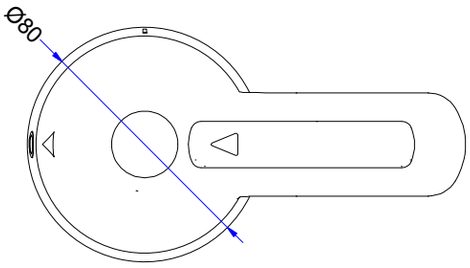
Tipo_type	VC1P	VC2P	VC3P	VC4P	VC5P 35kA
Codice _code	18234 | 18235	18234 | 18235	18234 | 18235	18236 | 18237	18236 | 18237

18234

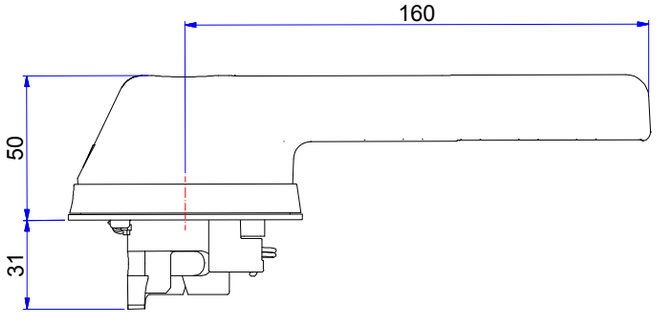


Foratura portella _Door drilling

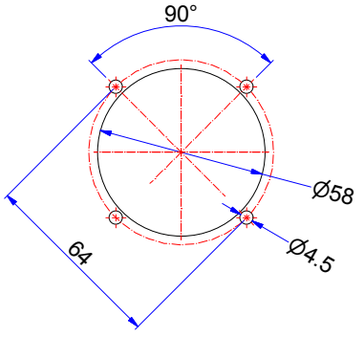


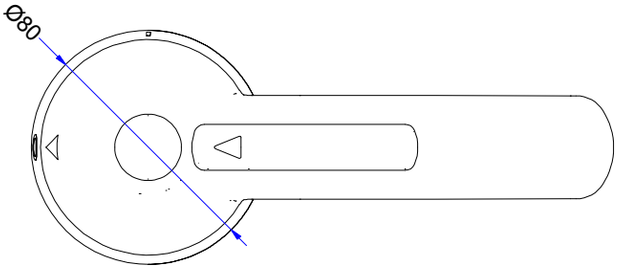


18236

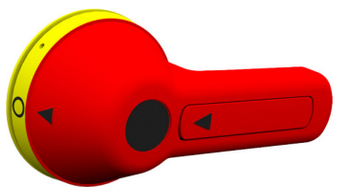


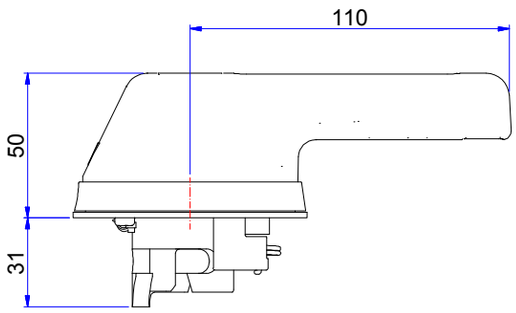
Foratura portella _Door drilling



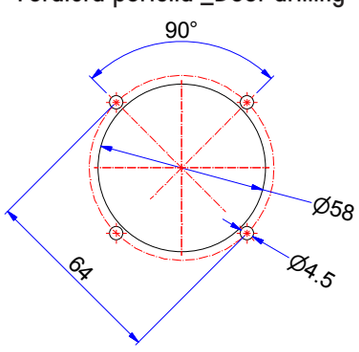


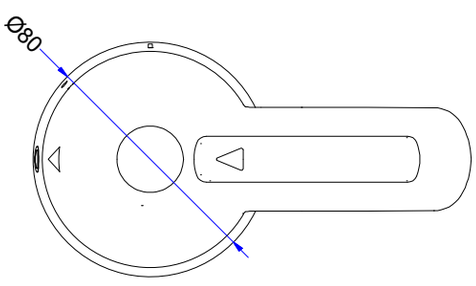
18235



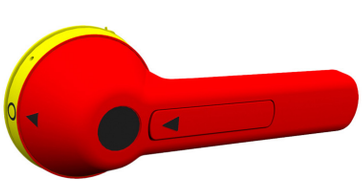


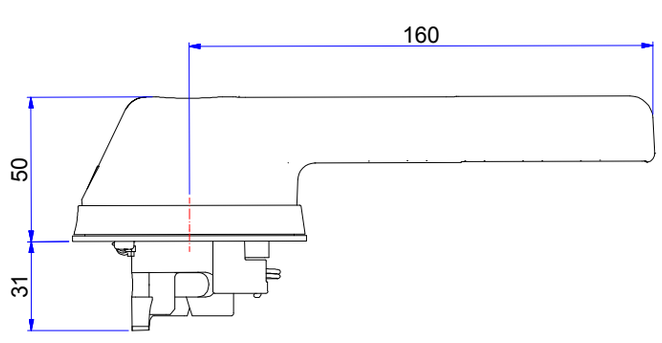
Foratura portella _Door drilling



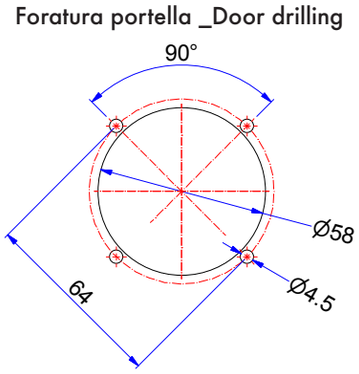


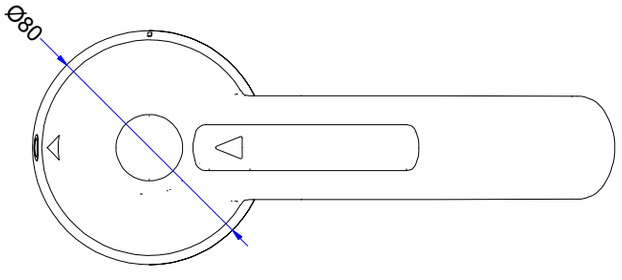
18837



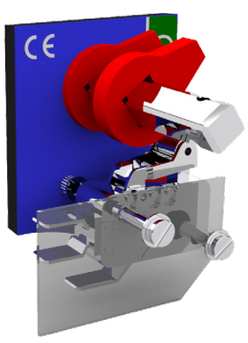


Foratura portella _Door drilling

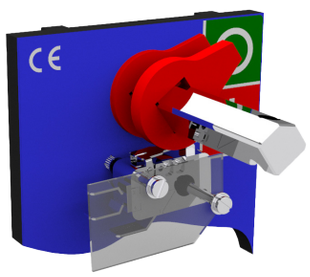




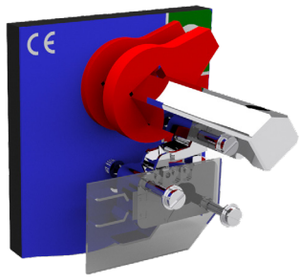
CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC PER APERTURA ANTICIPATA
_auxiliary contacts 1NO + 1NC activated before main contacts



18165



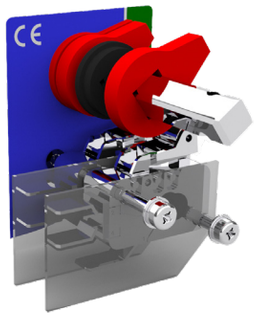
18163



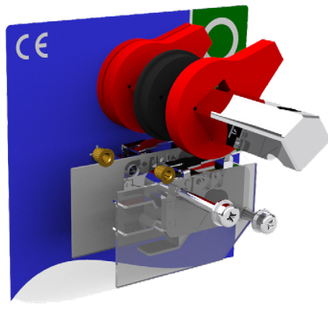
18160

Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18165	18165	18163	18160	18163	18163

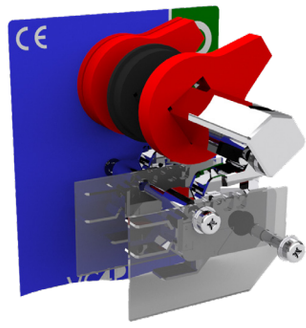
CONTATTI AUSILIARI IN SCAMBIO 2NA + 2NC PER APERTURA ANTICIPATA
_auxiliary contacts 2NO + 2NC activated before main contacts



18166



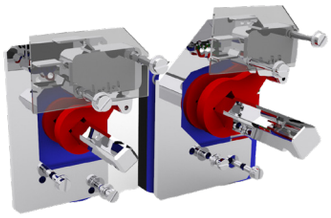
18164



18161

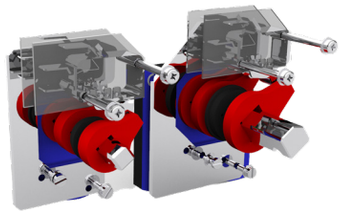
Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18166	18166	18164	18161	18164	18164

CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC PER APERTURA POSTICIPATA
_auxiliary contacts 1NO + 1NC activated after main contacts



Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18120	18120	18127	18127	18127	18127

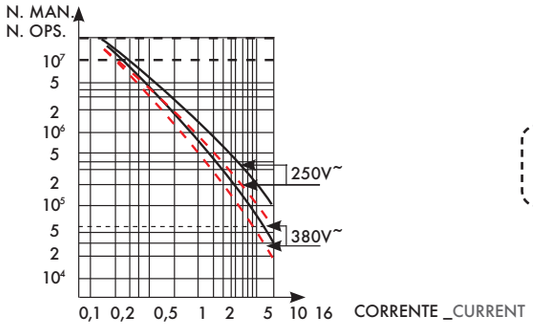
CONTATTI AUSILIARI IN SCAMBIO 2NA + 2NC PER APERTURA POSTICIPATA
_auxiliary contacts 2NO + 2NC activated after main contacts

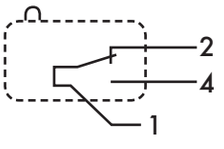


Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18123	18123	18128	18128	18128	18128

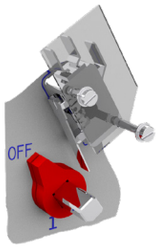
Contatti ausiliari in scambio
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore Portata nominale 16A
Portata termica 20A

_Auxiliary contacts
Break before make contacts switches
Rated current 16A
Thermal current 20A



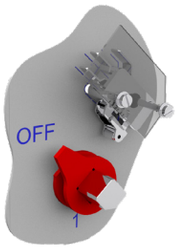


CONTATTI AUSILIARI IN SCAMBIO 1NA+1NC
_auxiliary contacts 1NO+1NC



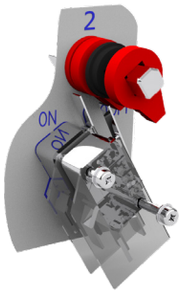
Tipo _type	EO1	EO2	ES1	ES2
Codice _code	18566 (paletta _lever)			

CONTATTI AUSILIARI IN SCAMBIO 1NA+1NC
_auxiliary contacts 1NO+1NC



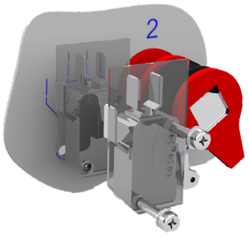
Tipo _type	EO3 - EO4 - EO5	ES3 - ES4 - ES5
Codice _code	18560 (rotella _roller)	

CONTATTI AUSILIARI IN SCAMBIO 2NA+2NC
_auxiliary contacts 2NO+2NC



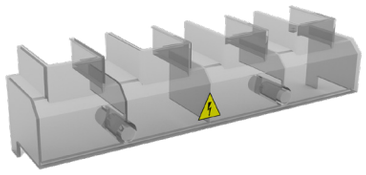
Tipo _type	EO1	EO2	ES1	ES2
Codice _code	18568 (paletta _lever)			

CONTATTI AUSILIARI IN SCAMBIO 2NA+2NC
_auxiliary contacts 2NO+2NC



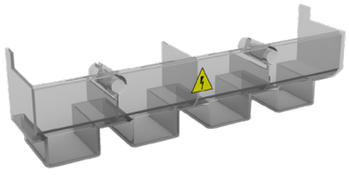
Tipo _type	EO3 - EO4 - EO5	ES3 - ES4 - ES5
Codice _code	18567 (rotella _roller)	

CALOTTA PROTEZIONE TERMINALI SUPERIORI
_upper terminal cover



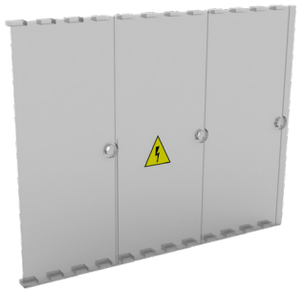
Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50 kA max 1600 A
Codice _code	18050	18052	18350	18054	18056	18058

CALOTTA PROTEZIONE TERMINALI INFERIORI
_lower terminal cover



Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC5P 50 kA max 1600 A
Codice _code	18051	18053	18351	18055	18057	18059

SCHERMO PROTEZIONE CONTATTI PRINCIPALI
_main contacts cover shield



Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18060	18061	18360	18062	18063	18063

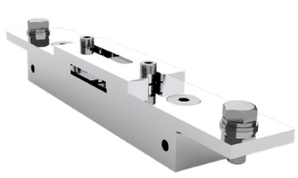
SPESSORE RIALZO _risers

Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18290	18291	18292	18293	18293	18293

Tipo _type	h/mm	ø
VC1	5	15
VC2	5	18
VC3	10	17
VC4-5	15	24

Confezione 4 pezzi _4pcs pack

NEUTRO SBULLONABILE _fuse link

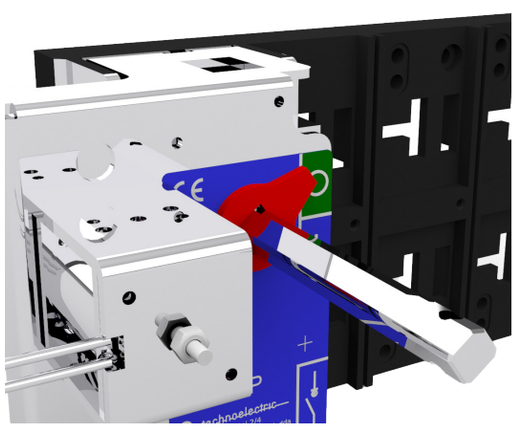


Tipo _type	VC1P	VC2P	VC3P	VC4P	VC5P	VC6P
Codice _code	18110	18111	18112	18113	18114	18114

BLOCCO MANOVRA ELETTRICO _electric interlock

Tipo _type	Tensione _voltage	VC2P	VC3P	VC4P	VC5P	VC5P 1600÷2000A	VC5P 2500÷3150A	VC6P 1600÷2000A	VC6P 2500A	VC6P 3150A
Codice _code	24 V dc	18119B	18117B	18116B	18115B	18178B	18179B	18156B	18157B	18158B
	230 V ac	18119B4	18117B4	18116B4	18115B4	18178B4	18179B4	18156B4	18157B4	18158B4

altre tensioni a richiesta _further versions upon request

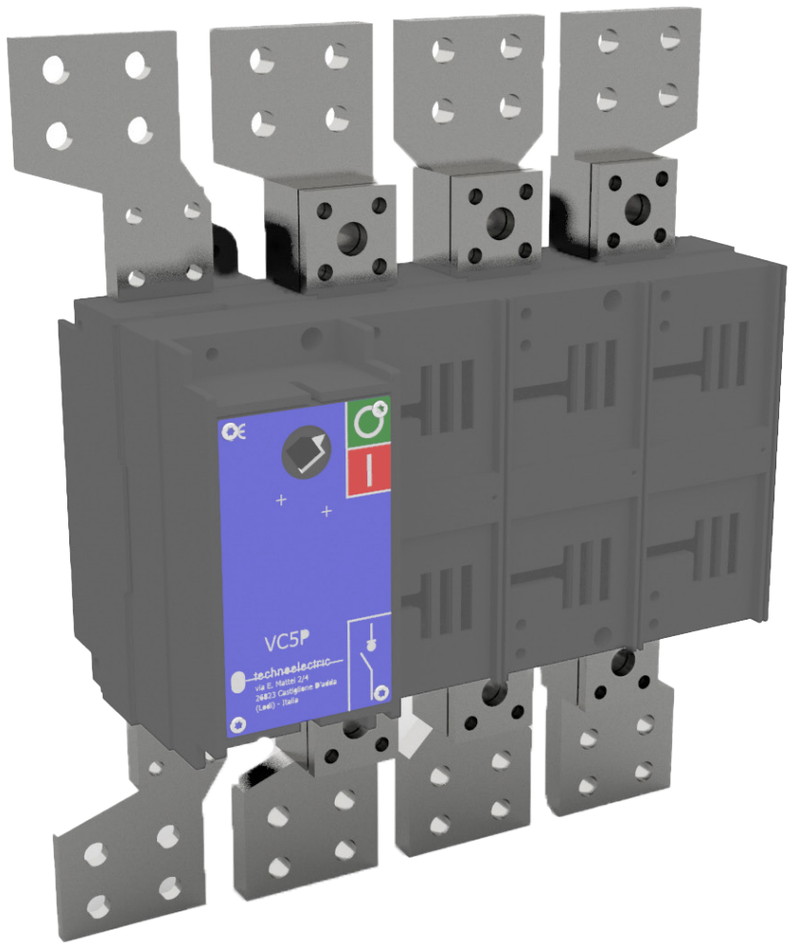


Dispositivo di sicurezza adatto per il montaggio su interruttori di manovra sezionatori VC2-3-4-5-6P. Impedisce la manovra quando l'interruttore è in posizione Off. La monovra da Off a On è consentita solo alimentando la bobina.
La bobina deve essere alimenta solo per il tempo necessario alla manovra. Disponibili nelle versioni con bobina 24 V dc oppure 220 V ac. A richiesta può essere fornito un dispositivo per blocco sia in posizione On che in posizione Off.

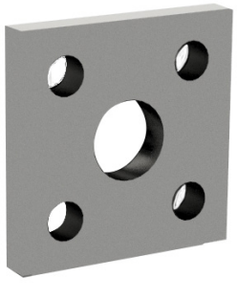
_Safety device suitable for mounting on switch disconnectors VC2-3-4-5-6P. It prevents the switch to operate when it is in Off position. The operation from Off to On is possible when the coil is energised only. The coil can remain energised just for the time needed for the operation. Available with 24 V dc or 220 V ac coil.
Device for locking in both positions available under request.

ATTACCHI A SBARRE PER VC5P 800 ÷ 3150A
_large bar terminals for VC5P 800 ÷ 3150A

Tipo _type	VC5P 3 x 800 ÷ 1250A	VC5P 3 x 1600 ÷ 2000A	VC5P 3 x 2500 ÷ 3150A	VC5P 4 x 800 ÷ 2000A	VC5P 4 x 1600 ÷ 2000A	VC5P 4 x 2500 ÷ 3150A
Codice _code	18154	18150	18151	18155	18152	18153



PIATTO PER TERMINALI SEZIONATORI
_terminal plate for switches



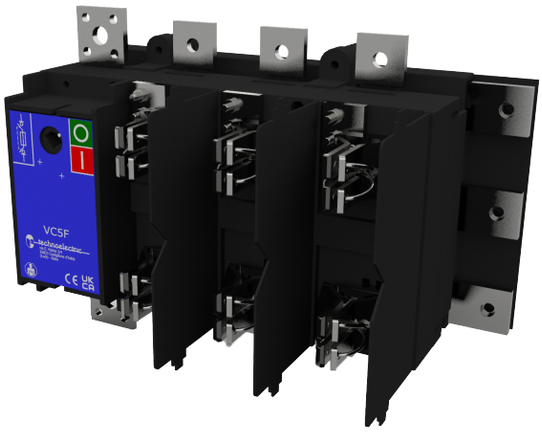
Tipo _type	VC5P 4mm	VC5P 6mm
Codice _code	18138	18139

La confezione contiene 1 piatto per terminale
_Each box contain 1 terminal plate

INTERRUTTORI DI MANOVRA SEZIONATORI CON PORTAFUSIBILI

_SWITCH DISCONNECTORS FUSES

VCF 32 ÷ 800 A



GENERALITÀ

VISUALCOMPACT F è una serie di interruttori di manovra sezionatori con portafusibili che consentono l'apertura e la chiusura di circuiti elettrici in bassa tensione.
Sono comunemente impiegati per le seguenti funzioni:
- interruttore generale
- interruttore per motori
- sezionatore
- interruttore di sicurezza

Sono disponibili 5 grandezze per 13 diversi valori di corrente nominale.

CARATTERISTICHE GENERALI

Tensione di isolamento nominale 1500v c.A. E 1500v c.C.
Disponibili 3 - 4 poli
Alto potere di interruzione (AC-22, AC-23, IEC 60947-3)
Elevata durata meccanica ed elettrica
Quattro interruzioni per ogni polo
Contatti autopulenti
Basi portafusibili isolate su entrambi i lati con interruttore aperto
Possibilità di montaggio fusibili tipo DIN, BS e NFC
Posizione della maniglia che costituisce un'indicazione positiva e affidabile della posizione dei contatti
Visibilità diretta mediante finestrelle, dei contatti fissi e mobili
Manovra a scatto rapido indipendente
Polo neutro con contatti ad apertura posticipata e chiusura anticipata rispetto ai contatti di fase
Disponibile versione con polo neutro passante
Protezione adeguata per prevenire contatti accidentali
Involucro in materiali autoestinguenti (classe V0-UL94) a bassa igroscopicità, ad alta resistenza meccanica e alle correnti superficiali
Adatto per utilizzo in climi tropicali
Ampia gamma di accessori
Comando di tipo rotativo frontale a mezzo di: maniglia esterna a doppio isolamento con blocco porta in posizione I, grado di protezione IP65, possibilità di 3
Blocchi con lucchetto in posizione 0
Maniglia diretta (a richiesta lucchettabile in posizione 0)

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO

Temperatura ambiente di immagazzinamento e trasporto - 25°c + 55°c
Temperatura ambiente di funzionamento - 20°c + 40°c
In caso di temperatura ambiente (t_a) superiore, applicare la seguente formula di declassamento:

$I_{the} = k\, i_{th}$ dove $\qquad k = 1 - \frac{t_a - 40}{100}$

Umidità relativa max 95%
Frequenza nominale 50 - 60 hz
Altitudine max 2000 m s.l.m.
Grado di inquinamento 3 secondo IEC 60947-1
Possono essere montati in qualsiasi posizione, per posizionamento fare riferimento alla istruzioni di montaggio
Montaggio in custodia: in caso di utilizzo a piena corrente e in mancanza di adeguata ventilazione assicurare un volume pari a circa 5 volte quello dell'apparecchio
Tipo di servizio (secondo IEC 60947-1): 8 ore; ininterrotto: intermittente 60% classe 30; temporaneo; periodico.

Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME

IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3

CERTIFICATI E OMOLOGAZIONI

KEMA | RINA | ENEL codice 13.32.23 | A2A | CESI | IENGF | EAC

_GENERALITIES

VISUALCOMPACT F is a range of fuse switch disconnectors suitable for making and breaking on load and disconnecting low voltage electrical circuits.
They are commonly used for the following purposes:
- main switch
- switch for motors
- disconnector
- safety switch

They are available in 5 sizes and 13 current ratings.

_GENERAL CHARACTERISTICS

Rated insulation voltage 1500v AC and 1500v DC
3 - 4 Poles available
High breaking capacity (AC-22, AC-23, IEC 60947-3)
High electrical and mechanical endurance
Four break contacts
Self cleaning contacts
Both fuse terminals are not alive when the switch is in O position
Suitable for DIN, BS and NFC fuses
Contact position positively indicated by the handle
Visibility of fixed and moving contacts by means of windows
Independent manual operation
Neutral contact makes earlier and opens later than the phase contacts
Solid neutral version available
Suitable protection to prevent accidental touching of live parts
Casing in self-extinguishing (V0-UL94), low hygroscopic and high mechanical resistance isolating material resistant to damp heat
Wide range of accessories
Rotary front operation by means of: external double insulated handle with door-interlock in ON position, IP65 degree of protection. Padlockable with three padlocks in OFF position
Direct handle (padlockable in OFF position on request)

_NORMAL SERVICE, MOUNTING AND TRANSPORT CONDITIONS

Storage and transport ambient temperature - 25°c + 55°c
Working ambient temperature - 20°c + 40°c
In case of higher ambient temperature (t_a) consider the following derating formula:

$I_{the} = k\, i_{th}$ where $\qquad k = 1 - \frac{t_a - 40}{100}$

Relative humidity max 95%
Rated frequency 50 - 60 hz
Altitude max 2000 m a.s.l.
Pollution degree 3 according IEC 60947-1
Can be mounted in any position, for what concerns the positioning, please refer to the installation instructions
Mounting in enclosure: in case of utilisation at full load and without adequate ventilation, ensure a volume of about 5 times the volume of the switch
Duty (IEC 60947-1): 8 hours; uninterrupted; intermittent 60% class 30; temporary; periodic.

For different operating conditions, please contact the manufacturer.

_CONFORMITY TO STANDARDS

IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3

_CERTIFICATES AND APPROVALS

KEMA | RINA | ENEL code 13.32.23 | A2A | CESI | IENGF | EAC

Albero di comando standard lunghezza 200 mm incluso in ogni confezione.

_Standard shaft length 200 mm included in the package.

Sono disponibili interruttori di manovra-sezionatori con portafusibili a 6-8 poli. Per informazioni contattare TECHNOELECTRIC.

_Available switch disconnectors fuse 6-8 poles version. For information contact TECHNOELECTRIC.

Tipo _type	Corrente nominale _rated current	Tipo di fusibile Fuse type			POLI _ POLES	Senza maniglia _without handle			Maniglia blocco porta _door interlock handle		
						Codice _code					
		NFC	DIN	BS		NFC	DIN	BS	NFC	DIN	BS
VC1F	32A	14x51	NH C00	A2	3	11020SM	11040SM	11060SM	11020	11040	11060
					4	11030SM	11050SM	11070SM	11030	11050	11070
	45A	14x51	NH C00	A2 - A3	3	11021SM	11041SM	11061SM	11021	11041	11061
					4	11031SM	11051SM	11071SM	11031	11051	11071
	63A	22x58	NH C00	A2 - A3	3	11022SM	11042SM	11062SM	11022	11042	11062
					4	11032SM	11052SM	11072SM	11032	11052	11072
	80A	22x58	NH C00	ODS	3	11023SM	11043SM	11063SM	11023	11043	11063
					4	11033SM	11053SM	11073SM	11033	11053	11073
	100A	22x58	NH C00	ODS	3	11024SM	11044SM	11064SM	11024	11044	11064
					4	11034SM	11054SM	11074SM	11034	11054	11074
VC2F	100A	22x58	NH 00	A4	3	12021SM	12041SM	12060SM	12021	12041	12060
					4	12031SM	12051SM	12070SM	12031	12051	12070
	125A	22x58	NH 00	DEO	3	12022SM	12042SM	12061SM	12022	12042	12061
					4	12032SM	12052SM	12071SM	12032	12052	12071
			NH 0		3	-	12044SM	-	-	12044	-
					4	-	12054SM	-	-	12054	-
	160A		NH 00	DEO	3	-	12043SM	12062SM	-	12043	12062
					4	-	12053SM	12072SM	-	12053	12072
			NH 0		3	-	12045SM	-	-	12045	-
					4	-	12055SM	-	-	12055	-
VC3F	200A		NH 1	B1-B2	3	-	13041SM	13061SM	-	13041	13061
					4	-	13051SM	13071SM	-	13051	13071
	250A		NH1	B1-B3	3	-	13042SM	13062SM	-	13042	13062
					4	-	13052SM	13072SM	-	13052	13072
VC4F	315A		NH 2	B1-B3	3	-	14022SM	14042SM	-	14022	14042
					4	-	14032SM	14052SM	-	14032	14052
	400A		NH 2	B1-B4	3	-	14023SM	14043SM	-	14023	14043
					4	-	14033SM	14053SM	-	14033	14053
VC5F	630A		NH 3	C2	3	-	15020SM	15040SM	-	15020	15040
					4	-	15030SM	15050SM	-	15030	15050
	800A		NH 3	C3	3	-	15022SM	15041SM	-	15022	15041
					4	-	15032SM	15051SM	-	15032	15051

SERIE_SERIES **VCF**

Caratteristiche tecniche _Technical Features	Tipo _Type		VC1F					VC2F		
Corrente nominale _Rated current	In	A	32	45	63	80	100	100	125	160
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	8	8	8	8	8	12	12	12
Corrente nominale termica _Thermal current	Ith	A	32	45	63	80	100	100	125	160
Corrente nominale d' impiego _Rated operational current										
AC-21A	400V	A	32	45	63	80	100	100	125	160
	500V	A	32	45	63	80	100	100	125	160
	690V	A	32	45	63	80	100	100	125	160
AC-22A	400V	A	32	45	63	80	80	100	125	160
	500V	A	32	45	63	80	80	100	125	160
	690V	A	32	45	63	80	80	100	125	160
AC-23A	400V	A	32	45	63	80	80	100	125	160
	500V	A	25	35	45	63	63	80	100	125
	690V	A	20	25	32	45	45	63	80	100
DC-21A*	48V	A	32	50	63	80	100	100	125	160
	110V	A	32	50	63	80	100	100	125	160
	220V	A	32	50	63	80	100	100	125	160
	400V	A	-	-	-	-	-	100	125	160
	500V	A	-	-	-	-	-	100	125	160
	600V	A	-	-	-	-	-	-	-	-
DC-22A*	48V	A	32	50	63	80	80	100	125	160
	110V	A	32	50	63	80	80	100	125	160
	220V	A	32	50	63	80	80	100	125	160
	400V	A	-	-	-	-	-	100	125	160
	500V	A	-	-	-	-	-	100	125	160
	600V	A	-	-	-	-	-	-	-	-
DC-23A*	48V	A	32	50	63	80	80	100	125	160
	110V	A	32	50	50	63	80	100	125	160
	220V	A	32	50	50	50	63	100	125	160
	400V	A	-	-	-	-	-	100	125	160
Potenza nominale d'impiego _Rated operational power AC23 - A	400V	kW	17	23	33	42	42	52	65	85
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current										
Tipo fusibile _Backup fuse		A	32	45	63	80	80	100	125	160
Valore efficace _R.M.S. value		kA	50	50	50	50	50	50	50	50
Valore di picco _Peak value		kA	6	9	10	12	12	12	15	15
Potere di chiusura nominale _Rated making capacity	420V cosØ 0,35 (0,45*)	A	320*	450*	630*	800*	800*	1000*	1250	1600
Potere di interruzione nominale _Rated breaking capacity	420V cosØ 0,35 (0,45*)	A	256*	360*	504*	640*	640*	800*	1000	1280
Potere di chiusura e interruzione nominale c.c. _Road making and breaking capacity DC	230V L/R=15	A	80	120	140	180	180	252	320	400
Potenza condensatori _Rated capacitor power at 400V		kVAR	15	20	30	40	45	45	50	70
Durata meccanica _Mechanical endurance		n.	10000	10000	10000	10000	10000	8000	8000	8000
Durata elettrica _Electrical endurance		n.	1500	1500	1500	1500	1500	1000	1000	1000
Potenza dissipata per polo _Power losses for pole**		W	1,2	1,2	1,2	1,2	1,2	4,8	4,8	4,8
Dimensione cavo _Cable section		mm^2	10	10	16	25	35	35	50	70
Dimensione barre _Bars dimension		mm	12x2	12x2	12x3	12x3	14x3	16x3	16x4	16x4
Sforzi di manovra _Operating torque		Nm	8	8	8	8	8	12	12	12
			8	8	8	8	8	12	12	12
Peso netto _Net weight	3P	Kg	1	1	1	1	1	1,9	1,9	1,9
	4P		1,1	1,1	1,1	1,1	1,1	2	2	2

*Due poli in serie _Two poles in series

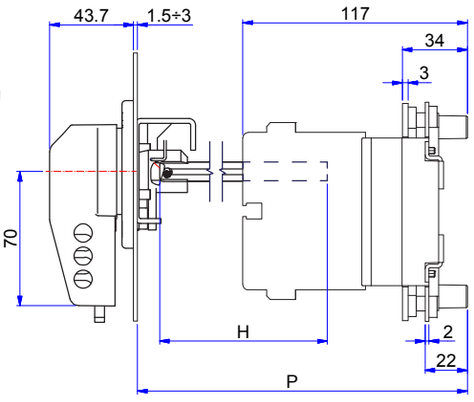
**Escluso fusibile _Fuse excluded

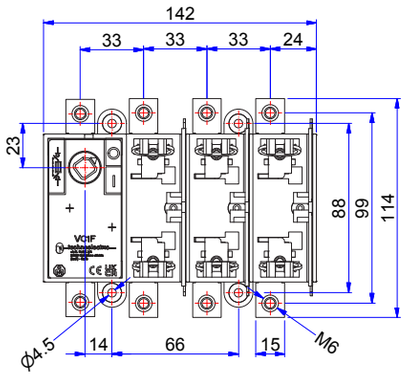
Caratteristiche tecniche _Technical Features	Tipo _Type		VC3F		VC4F		VC5F	
Corrente nominale _Rated current	In	A	200	250	315	400	630	800
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	200	250	315	400	630	800
Corrente nominale d' impiego _Rated operational current								
AC-21A	400V	A	200	250	315	400	630	800
	500V	A	200	250	315	400	630	800
	690V	A	200	250	315	400	630	800
AC-22A	400V	A	200	250	315	400	630	800
	500V	A	200	250	315	400	630	800
	690V	A	200	250	315	400	630	800
AC-23A	400V	A	200	250	315	400	630	630
	500V	A	160	200	250	315	500	500
	690V	A	125	160	200	250	400	400
DC-21A*	48V	A	200	250	315	400	630	800
	110V	A	200	250	315	400	630	800
	220V	A	200	250	315	400	630	800
	400V	A	200	250	315	400	630	630
	500V	A	200	250	315	400	630	630
	600V	A	-	-	315	400	630	630
DC-22A*	48V	A	200	250	315	400	630	800
	110V	A	200	250	315	400	630	800
	220V	A	200	250	315	400	630	800
	400V	A	200	250	315	400	630	630
	500V	A	200	250	315	400	630	630
	600V	A	-	-	315	400	630	630
DC-23A*	48V	A	200	250	315	400	630	630
	110V	A	160	200	315	315	500	500
	220V	A	160	160	250	250	400	400
	400V	A	-	-	-	-	-	-
Potenza nominale d'impiego _Rated operational power AC23 - A	400V	kW	105	130	165	210	330	420
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current								
Tipo fusibile _Backup fuse		A	200	250	315	400	630	800
Valore efficace _R.M.S. value		kA	50	50	50	50	50	50
Valore di picco _Peak value		kA	20	25	25	30	40	40
Potere di chiusura nominale _Rated making capacity	420V cosØ 0,35 (0,45*)	A	2000	2500	3150	4000	6300	8000
Potere di interruzione nominale _Rated breaking capacity	420V cosØ 0,35 (0,45*)	A	1600	2000	2520	3200	5040	6400
Potere di chiusura e interruzione nominale c.c. _Road making and breaking capacity DC	230V L/R=15	A	500	640	800	1000	1600	2000
Potenza condensatori _Rated capacitor power at 400V		kVAR	90	110	140	180	300	370
Durata meccanica _Mechanical endurance		n.	7000	7000	7000	7000	4000	4000
Durata elettrica _Electrical endurance		n.	1000	1000	1000	1000	1000	1000
Potenza dissipata per polo _Power losses for pole**		W	12	12	19,2	19,2	30	30
Dimensione cavo _Cable section		mm^2	95	120	185	240	2x185	2x240
Dimensione barre _Bars dimension		mm	25x5	25x6	32x6	2x25x5	2x40x5	2x40x6
Sforzi di manovra _Operating torque		Nm	18	18	34	34	45	45
			18	18	34	34	45	45
Peso netto _Net weight	3P	Kg	5	5	7	7	13	13
	4P		5,3	5,3	7,4	7,4	14,5	14,5

*Due poli in serie _Two poles in series

**Escluso fusibile _Fuse excluded

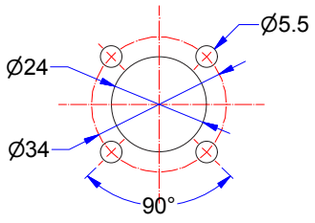
VC1F



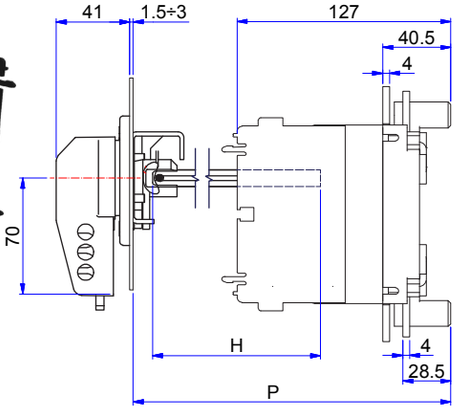


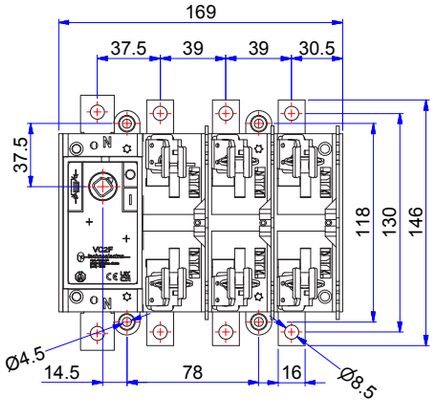
Legenda _caption			
VC1F 32 ÷ 100A			
P		C	H
min	max		
115,2	260,5	60,5	P-C
C= costante _ constant			

Foratura portella _Door drilling



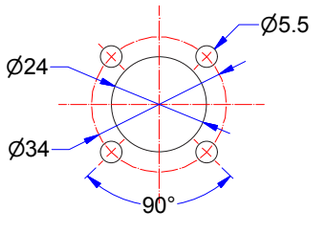
VC2F



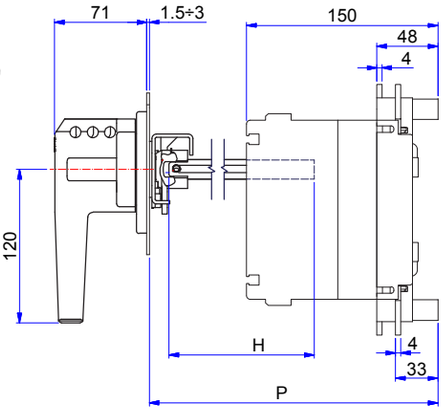


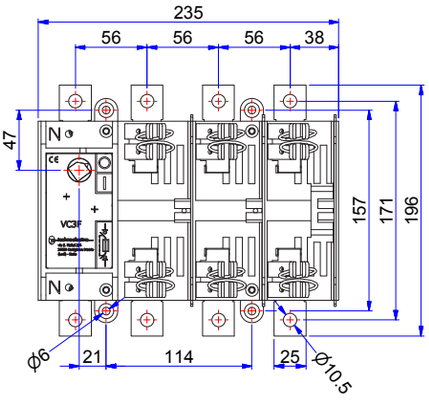
Legenda _caption			
VC2F 100 ÷ 160A			
P		C	H
min	max		
165,5	268,5	68,5	P-C
C= costante _ constant			

Foratura portella _Door drilling



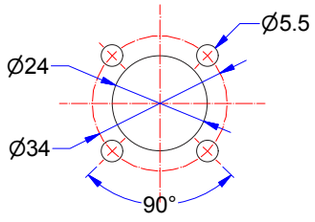
VC3F



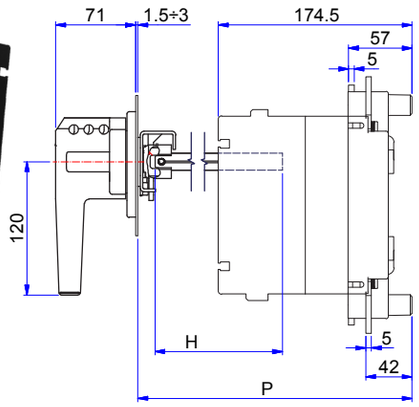


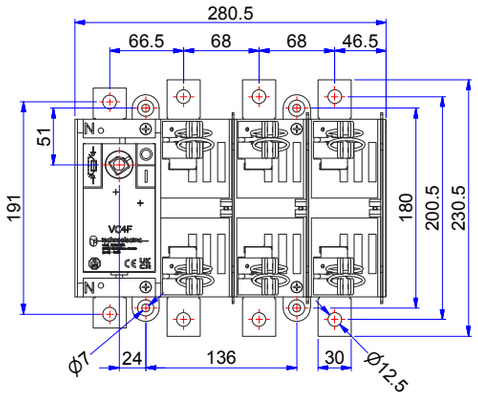
Legenda _caption VC3F 200 ÷ 250A			
P		C	H
min	max		
189	280,5	71,5	P-C
C= costante _constant			

Foratura portella _Door drilling



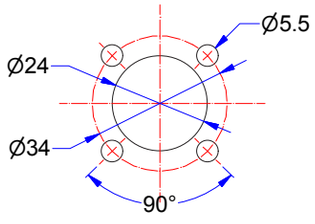
VC4F



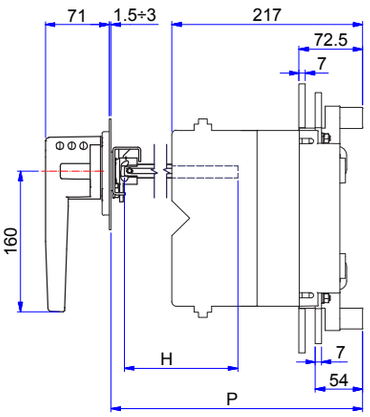


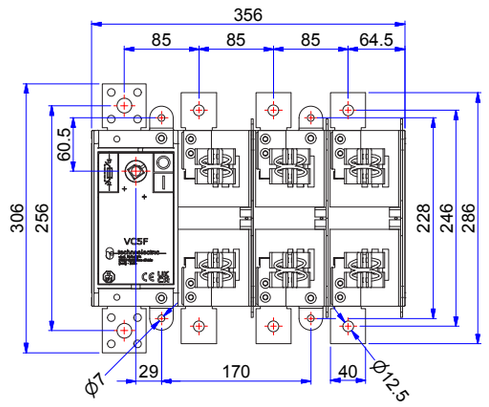
Legenda _caption VC4F 315 ÷ 400A			
P		C	H
min	max		
215	296	96	P-C
C= costante _constant			

Foratura portella _Door drilling



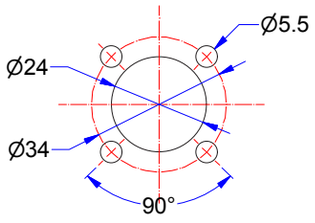
VC5F





Legenda _caption			
VC5F 630 ÷ 800 A			
P		C	H
min	max		
257	320	120	P-C
C= costante _constant			

Foratura portella _Door drilling



IMPIEGO E ABBINAMENTO DEI FUSIBILI A COLTELLO "UR DIN 43620" CON SEZIONATORI VISUAL COMPACT F STANDARD

L'abbinamento tra i sezionatori della serie VCF e i fusibili della serie UR a coltello pieno DIN 43620 consentono l'apertura o la richiusura sotto carico e il sezionamento di sicurezza, nonchè la protezione di apparati elettronici di potenza (semiconduttori, raddrizzatori, inverter ecc.).
La possibilità d'impiego dei sezionatori standard consente un notevole risparmio economico e di gestione.
Le prestazioni corrette si ottengono attenendosi scrupolosamente ai valori e modelli definiti dai nostri test, e riportati nella tabella di abbinamento fusibili UR Coltello DIN 43620 \ INT - SEZ VCF standard.

USE AND COMBINATION FUSES "UR KNIFE DIN 43620" AND STANDARD VCF SWITCHES

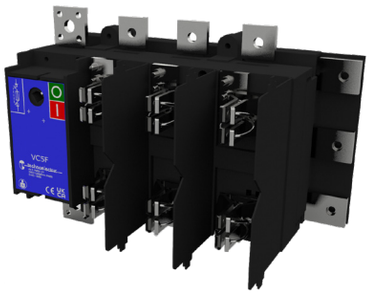
The combination between the switches VCF serie and fuses UR serie full knife DIN 43620 allow making and breaking operations under load and safety disconnector and protection of power electronic devices (semiconductors, rectifiers, inverters etc).
The possibility of use of Standard switches allows remarkable economic saving and of management. The correct performances are obtained scrupulously following the values and types of our tests, showing in the combination table fuses UR knife DIN 43620\standard switch VCF.

Tabella di abbinamento dei fusibili UR a coltello pieno DIN 43620 e i sezionatori con porta fusibili standard VCF

_Combination table fuses UR full knife DIN 43620 and standard switch VCF

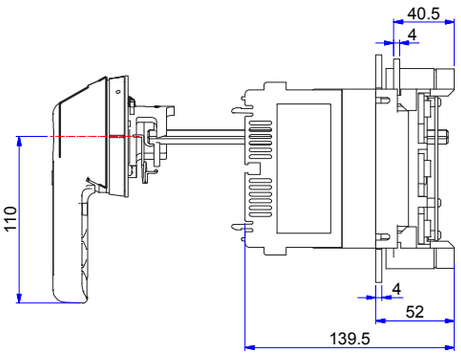
Tipo sezionatore _switch type	Corrente nominale A _rated current A	Tipo Fusibile _fuse type UR DIN 43620 I max A	Taglia fusibile _size fuse
VC2F	100	40	NH00
VC2F	125	80/90	NH00 - NH0
VC2F	160	100	NH00 - NH0
VC3F	200	140	NH1
VC3F	250	170	NH1
VC4F	315	260	NH2
VC4F	400	290	NH2
VC5F	630	450	NH3
VC5F	800	500	NH3

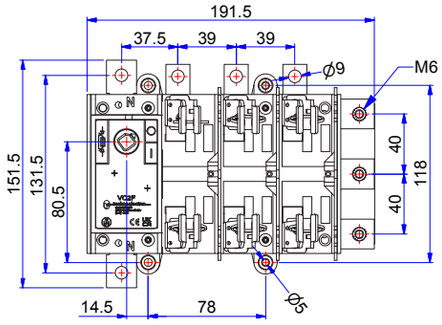
VCF con attacchi laterali
_VCF with side connections



Tipo _type	Corrente nominale _rated current	Tipo di fusibile Fuse type			POLI _ POLES	Attacchi laterali singoli _Single side connections Codice _code		
		NFC	DIN	BS		NFC	DIN	BS
VC2F	125A	22x58	NH 00	A4	3	12022DA	12042DA	12061DA
					4	12032DA	12052DA	12071DA
		-	NH 0		3	-	12043DA	-
					4	-	12053DA	-
	160A	-	NH 00	A4	3	-	12044DA	12062DA
					4	-	12054DA	12072DA
		-	NH 0	-	3	-	12045DA	-
					4	-	12055DA	-
VC3F	250A	-	NH1	B1 ÷ B3	3	-	13042DA	13062DA
					4	-	13052DA	13072DA
VC4F	400A	-	NH 2	B1 ÷ B4	3	-	14023DA	14043DA
					4	-	14033DA	14053DA
VC5F	630A	-	NH 3	C1 ÷ C2	3	-	15020DA	15040DA
					4	-	15030DA	15050DA

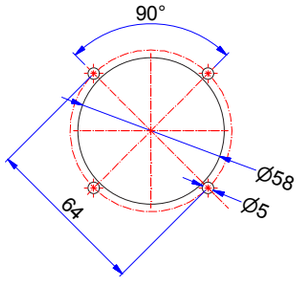
VC2F



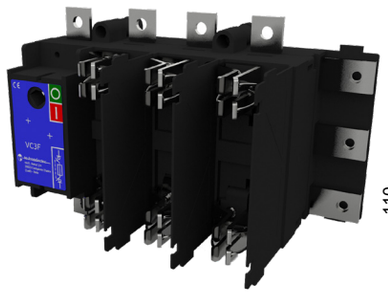


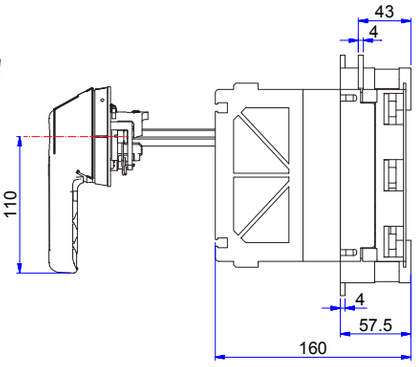
Legenda _caption VC2F 125 ÷ 160 A			
P		C	H
min	max		
177,5	280,5	68,5	P-C
C= costante _constant			

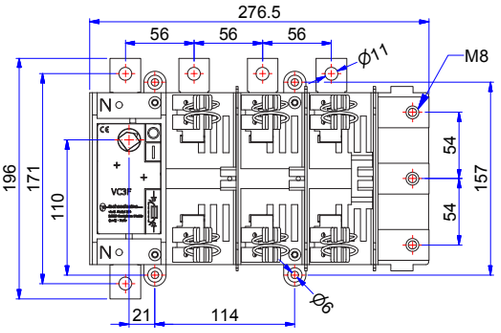
Foratura portella _Door drilling



VC3F

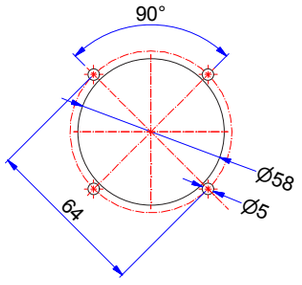




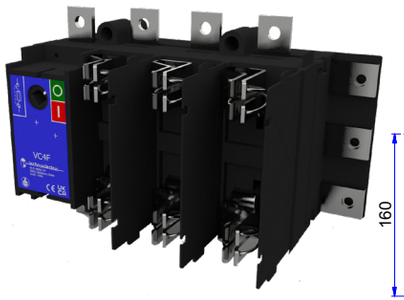


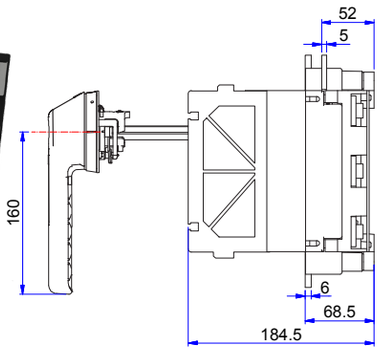
Legenda _caption VC3F 200 ÷ 250 A			
P		C	H
min	max		
209	300,5	71,5	P-C
C= costante _constant			

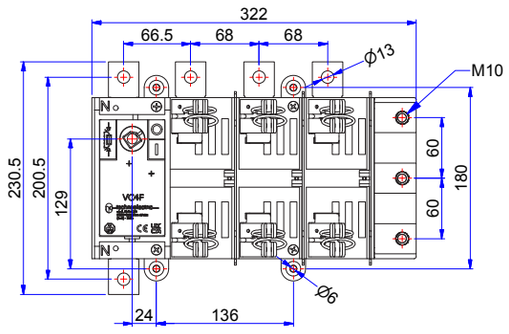
Foratura portella _Door drilling



VC4F

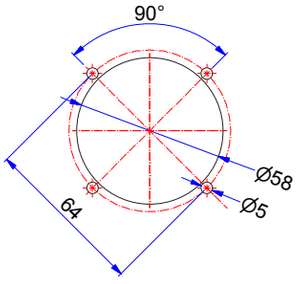




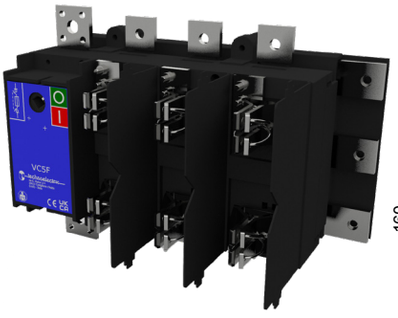


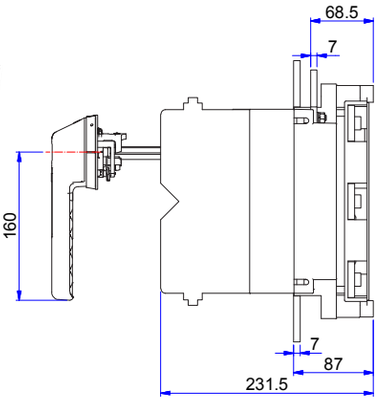
Legenda _caption			
VC4F 315 ÷ 400 A			
P		C	H
min	max		
225	306,5	96	P-C
C= costante _constant			

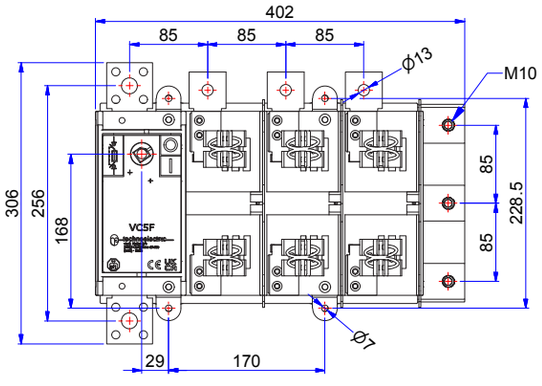
Foratura portella _Door drilling



VC5F

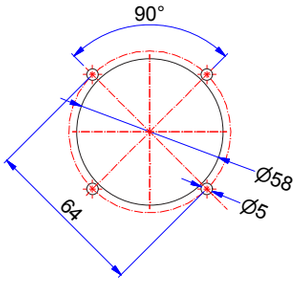






Legenda _caption			
VC5F 630 A			
P		C	H
min	max		
317	327		P-C
C= costante _constant			

Foratura portella _Door drilling



VISUALCOMPACT Fu | Ultra rapidi

GENERALITÀ

Gli interruttori della serie VISUALCOMPACT Fu sono una serie di interruttori di manovra sezionatori con porta fusibili del tipo T/80, T/110* e BK50. L'impiego di questa serie consente la manovra in apertura e richiusura sotto carico e il sezionamento di sicurezza. L'abbinamento con gli specifici fusibili, consente la protezione di apparati elettronici di potenza (semi-conduttori, raddrizzatori, inverter ecc.).

NOTE TECNICHE

Le tipologie di fusibili da noi indicate, DIN 43653 T/80 e T/110, BK50 rappresentano la migliore associazione tecnica tra il nostro interruttore e il fusibile ultra rapido. Per ulteriori esigenze di abbinamento o di portate maggiori prego consultarci.
*Fusibili T/110 a richiesta.

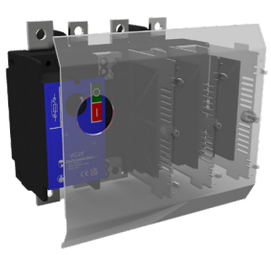
VISUALCOMPACT Fu | Ultra rapid

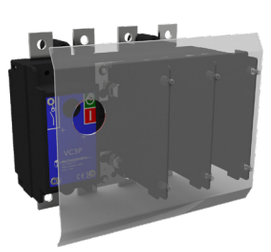
GENERALITIES

The VISUALCOMPACT Fu series is a range of switch disconnectors fuse with fuse holders of T/80, T/110* and BK50 type. The use of this series allows making and breaking operations under load and safety disconnection. With suitable fuses, it allows the protection of power electronic devices (semiconductors, rectifiers, inverters etc.).

TECHNICAL NOTES

BK50, T/80 and T/110 DIN 43653 types of fuses represent the best technical combination between Visualcompact Fu switches and ultra rapid fuses. For other types of combinations or higher current please contact us.
*Fuses T/110 on demand.



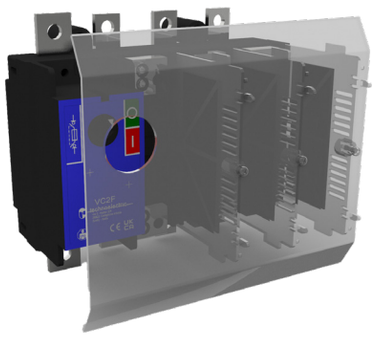


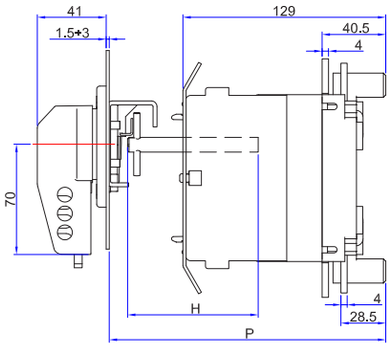
Tipo _type	Corrente nominale _rated current	POLI _POLES	Tipo fusibile _fuse type	Senza maniglia _without handle
			DIN 43653	Codice _code
VC2Fu	40A	3	T80-00	12041U
		4	T80-00	12051U
	80A	3	T80-00	12042U
		4	T80-00	12052U
	90A	3	T80-00	12043U
		4	T80-00	12053U
	100A	3	T80-00	12044U
		4	T80-00	12054U
VC3Fu	140A	3	T80-00	13041U
		4	T80-00	13051U
	170A	3	T80-00	13042U
		4	T80-00	13052U
VC4Fu	260A	3	T80-00	14022U
		4	T80-00	14032U
	290A	3	T80-00	14023U
		4	T80-00	14033U
VC5Fu	450A	3	BK50 - 2	15020U
		4	BK50 - 2	15030U
	500A	3	BK50 - 2	15021U
		4	BK50 - 2	15031U

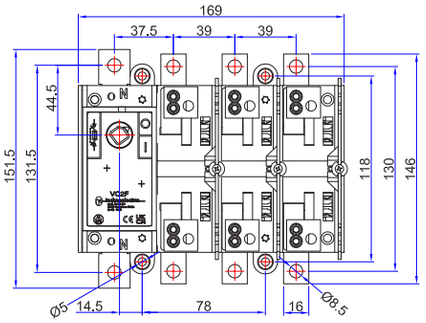
Tipo _type	Maniglia diretta _direct handle	Maniglia blocco porta _door interlock handle
VC2Fu	18081	18001
VC3Fu	18083	18003
VC4Fu	18083	18003
VC5Fu	18084	18005

Possibilità di esecuzione per EO con fusibili.
_Version for EO with fuses available.

VC2Fu

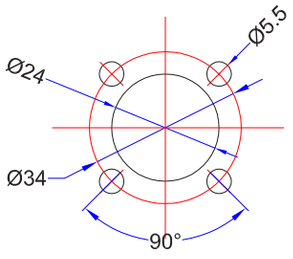




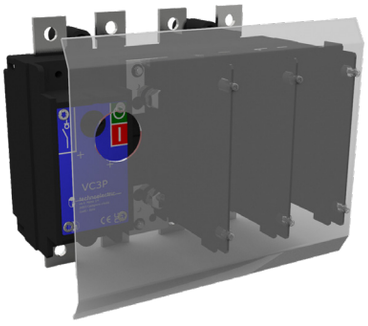


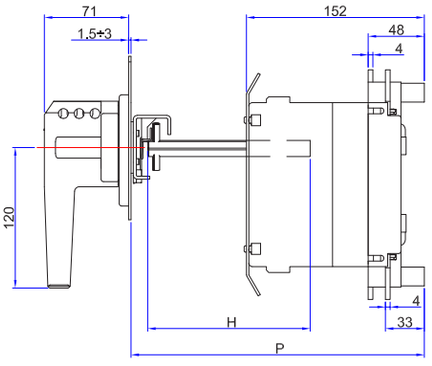
Legenda _caption VC2Fu 40 ÷ 100 A			
P		C	H
min	max		
177,5	268,5	68,5	P-C
C= costante _constant			

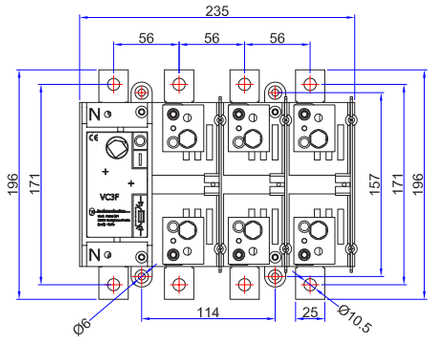
Foratura portella _Door drilling



VC3Fu

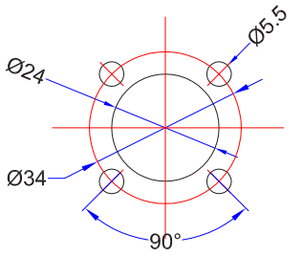




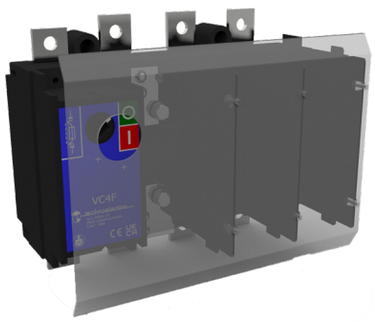


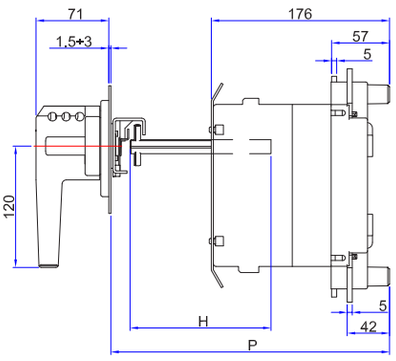
Legenda _caption VC3Fu 140 ÷ 170 A			
P		C	H
min	max		
187	280,5	71,5	P-C
C= costante _constant			

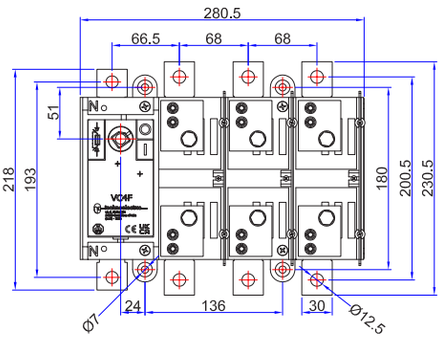
Foratura portella _Door drilling



VC4Fu

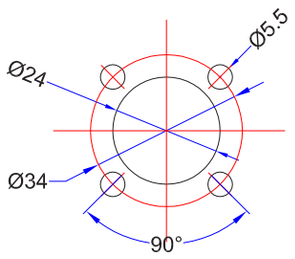




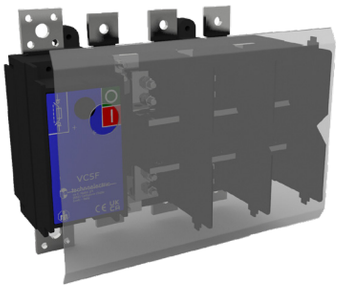


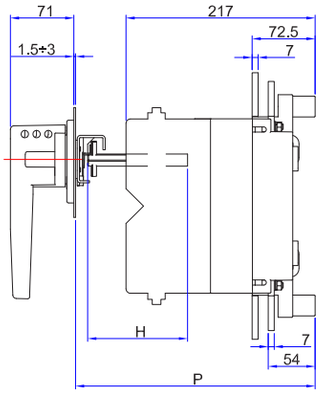
Legenda _caption VC4Fu 260 ÷ 290 A			
P		C	H
min	max		
215	296	96	P-C
C= costante _constant			

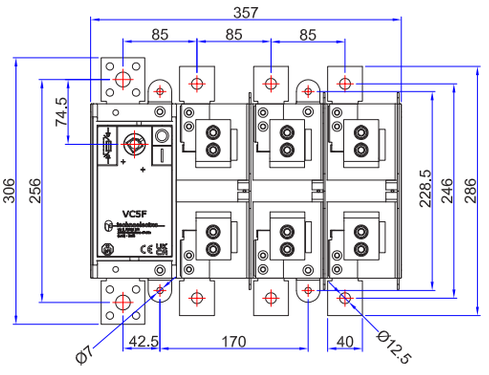
Foratura portella _Door drilling



VC5Fu

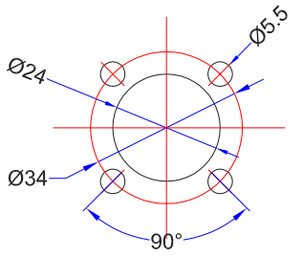






Legenda _caption VC5Fu 450 ÷ 500 A			
P		C	H
min	max		
257	320	120	P-C
C= costante _constant			

Foratura portella _Door drilling



FBA visualcompact con dispositivo di apertura

GENERALITÀ

Gli interruttori della serie VISUALCOMPACT FBA sono 3 - 4 poli con comando manuale, corredati di un comando di apertura locale per mezzo di maniglia a distanza tramite bobina a lancio di corrente alimentata dall'esterno.

FBA visualcompact with tripping device

_GENERALITIES

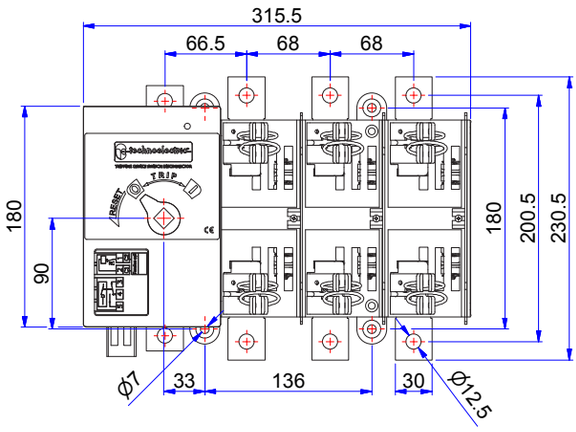
Switch disconnectors VISUALCOMPACT FBA are 3 - 4 poles manually operated and are switches supplied with a remote tripping device by means of a current shot coil.

Tipo _type	Corrente nominale _rated current	POLI _POLES	Codice _code				
			24 V c.c. \ DC	48 V c.c. \ DC	110 V c.c. \ DC	110 V c.a. \ AC	220 V c.a. \ AC
VC4F BA	250A	3	14021B	14021B1	14021B2	14021B3	14021B4
		4	14031B1	14031B1	14031B2	14031B3	14031B4
	315A	3	14022B	14022B1	14022B2	14022B3	14022B4
		4	14032B	14032B1	14032B2	14032B3	14032B4
	400A	3	14023B	14023B1	14023B2	14023B3	14023B4
		4	14033B	14033B1	14033B2	14033B3	14033B4
VC5F BA	630A DIN	3	15020B	15020B1	15020B2	15020B3	15020B4
		4	15030B	15030B1	15030B2	15030B3	15030B4
	630A BS	3	15040B	15040B1	15040B2	15040B3	15040B4
		4	15050B	15050B1	15050B2	15050B3	15050B4
	800A DIN	3	15022B	15022B1	15022B2	15022B3	15022B4
		4	15032B	15032B1	15032B2	15032B3	15032B4
	800A BS	3	15041B	15041B1	15041B2	15041B3	15041B4
		4	15051B	15051B1	15051B2	15051B3	15051B4

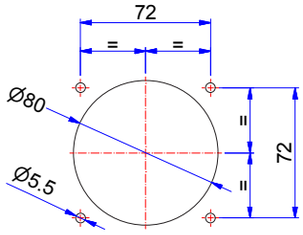
Versione per fusibile BS a richiesta
_BS version available on request

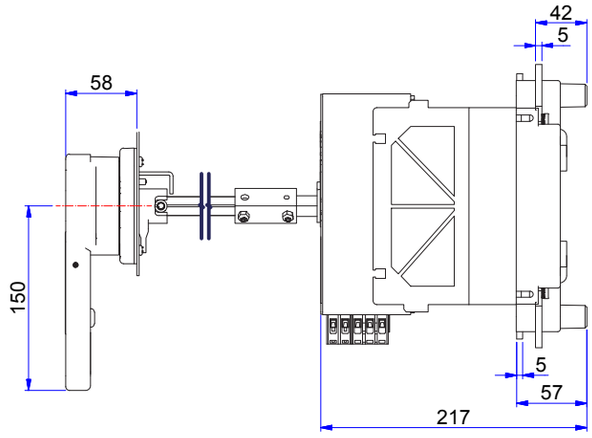
I codici sopracitati non comprendono la maniglia di manovra e la prolunga albero di comando
_the below code do not include door interlock handle and extension shaft

VC4F BA

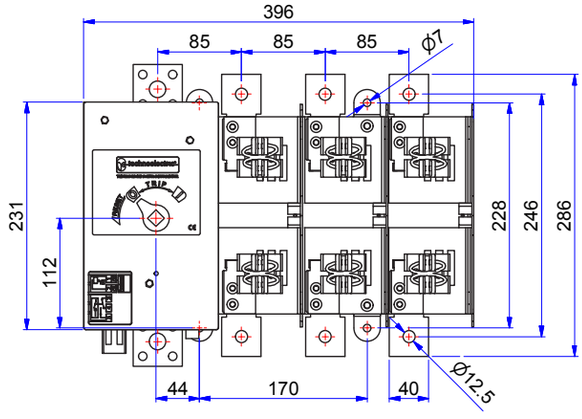


Foratura portella _Door drilling

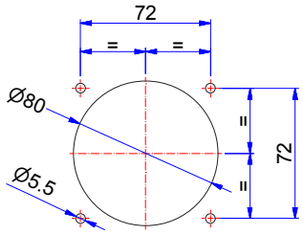


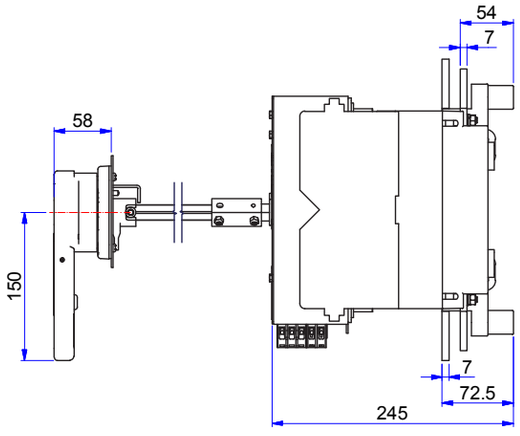


VC5F BA

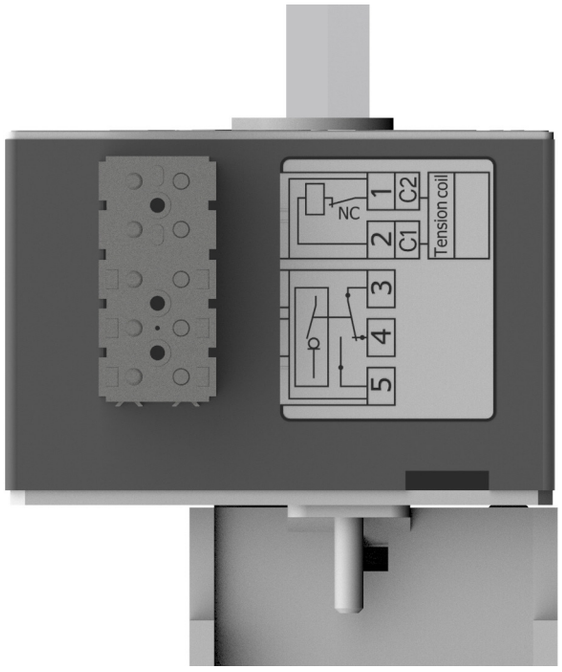


Foratura portella _Door drilling





SCHEMA MORSETTIERA BA
_terminal board diagram BA



VISUALCOMPACT VCF - MS
Interruttori di manovra a comando motorizzato

GENERALITÀ
La nuova serie VISUALCOMPACT F MS consta di interruttori-sezionatori motorizzati a 3 - 4 poli con porta fusibili. Assicura, attraverso un comando a distanza, manovre di apertura e chiusura sotto carico in sistemi e impianti di bassa tensione.

CARATTERISTICHE GENERALI
Le caratteristiche tecniche degli interruttori di manovra sezionatori impiegati nei VISUALCOMPACT F MS sono rispondenti a quanto riportato nei capitoli riguardanti la serie VISUALCOMPACT F.

Manovra manuale d'emergenza (0-1 e 1-0) con maniglia a corredo
Blocco meccanico di sicurezza lucchettabile, in posizione 0 interdice la manovra elettrica e manuale
Visualizzazione meccanica e luminosa (led) della pos 0,1
Segnalazione esterna della posizione tramite contatto AUX (vedi morsettiera)
Tempo di manovra (0-1 o 1-0) 1,5 sec
Alimentazione aux. 12/24 VCC 110/220/380 VCA
Temperatura ambiente di funzionamento – 20°C + 40°C

CONFORMITÀ ALLE NORME
IEC 60947-1 IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3
VDE 0660 Teil 107 | EAC

_VISUALCOMPACT VCF - MS
Motorized load break switches

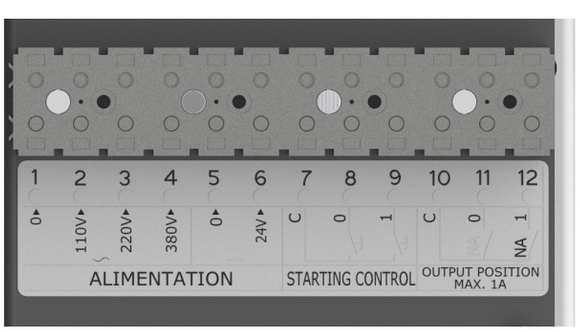
_GENERALITIES
The new series VISUALCOMPACT F MS are 3 - 4 poles load break switches and fuse load break switches. They allow making and breaking operations of low voltage system under load by control.

_GENERAL CHARACTERISTICS
The technical characteristics of the load break switches used in the VISUALCOMPACT F MS are correspondent to as shown in the chapter of VISUALCOMPACT F series.

Emergency manual operation (0-1 and 1-0) by means of equipped handle
Emergency padlockable mechanical block of electrical and manual operation in 0 position
Mechanical and illuminated indication (led) of position 0,1
External input of position segnalization by auxiliary contacts (see terminal board diagram)
0-1 or 1-0 operating time 1,5 sec.
Supply voltages 12/24V DC, 110/220/380V AC
Working ambient temperature from – 20°C + 40°C

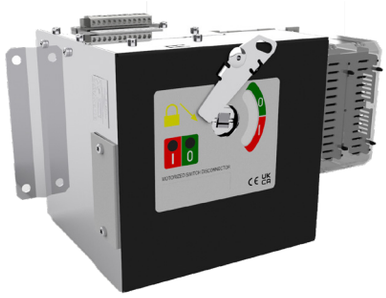
_CERTIFICATES AND APPROVALS
IEC 60947-1 IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3
VDE 0660 Teil 107 | EAC

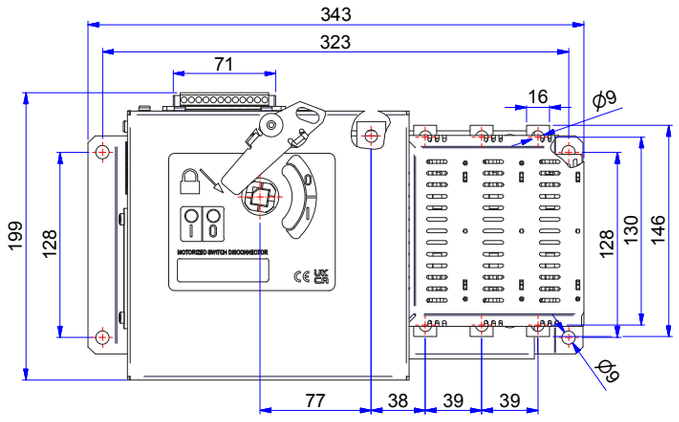
Schema morsettiera MS
_MS terminal block diagram

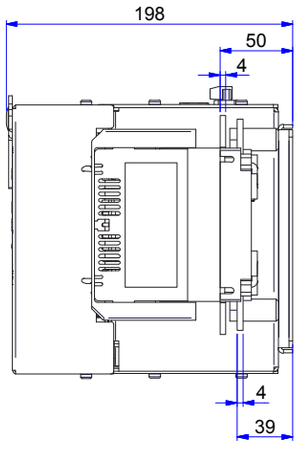


Tipo _type	Corrente nominale _rated current	POLI _POLES	Codice _code
VC2F MS	100A	3	12041MS
		4	12051MS
	125A	3	12042MS
		4	12052MS
	160A	3	12043MS
		4	12053MS
VC3F MS	200A	3	13041MS
		4	13051MS
	250A	3	13042MS
		4	13052MS
VC4F MS	315A	3	14022MS
		4	14032MS
	400A	3	14023MS
		4	14033MS
VC5F MS	630A	3	15020MS
		4	15030MS
	800A	3	15041MS
		4	15051MS

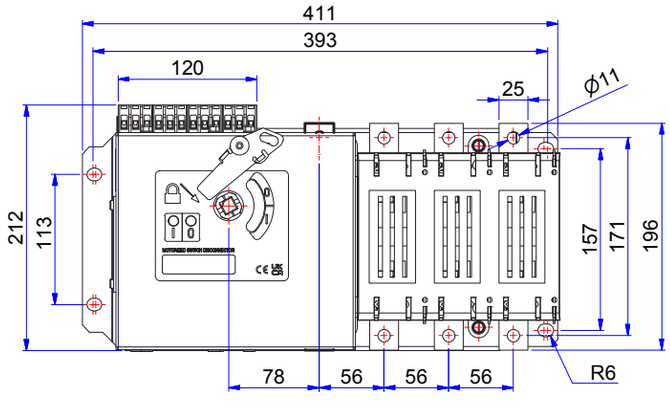
VC2F MS

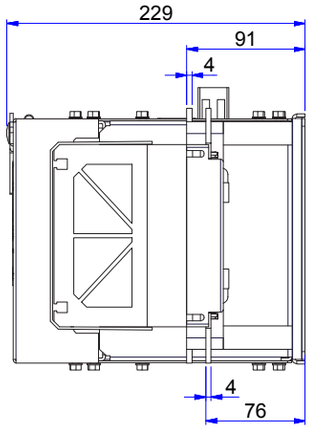




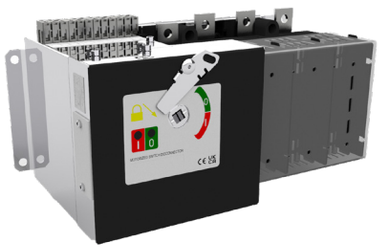


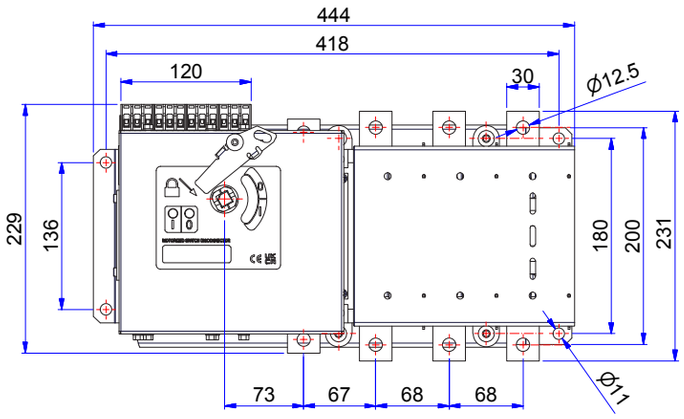
VC3F MS

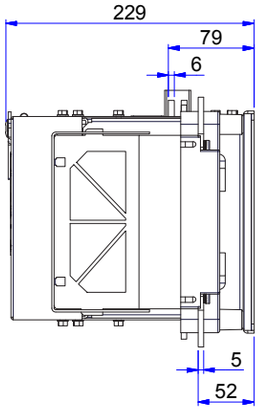




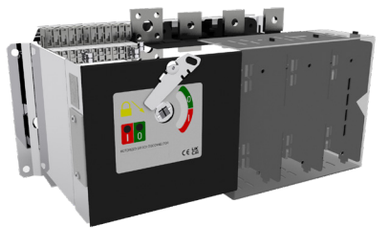
VC4F MS

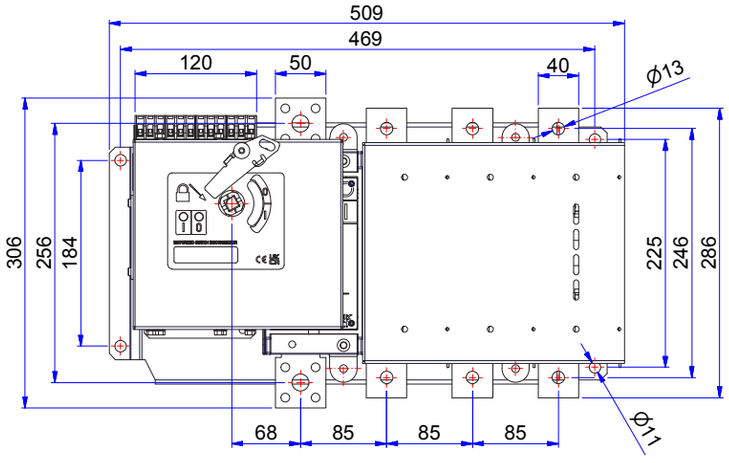


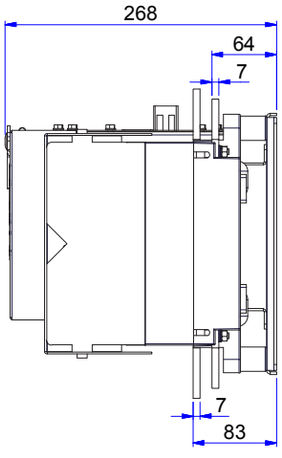




VC5F MS



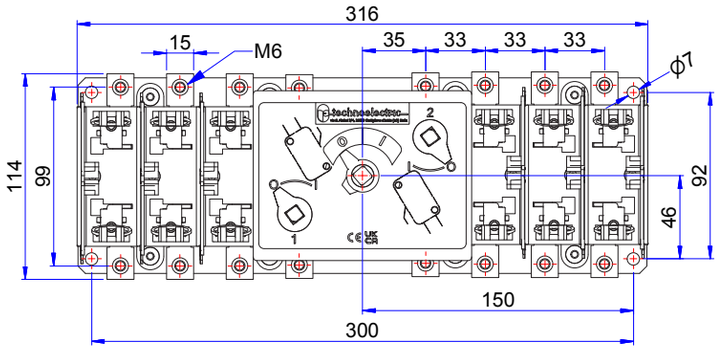




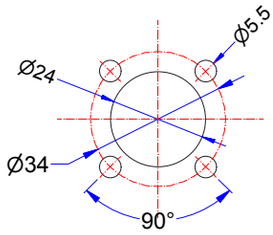
EOF

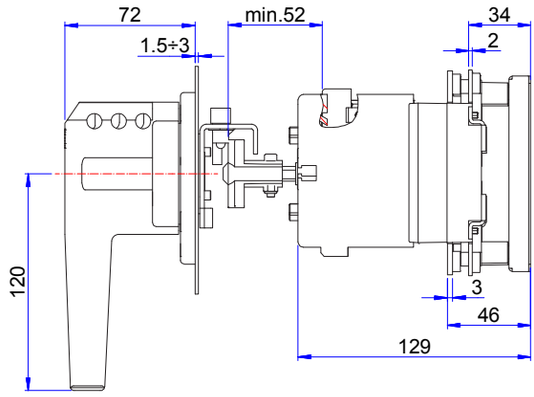
Tipo _type	Corrente nominale _rated current	Tipo fusibile _fuse type DIN	POLI _POLES	Con maniglia blocco porta _with door interlock handle	Senza maniglia _without handle
				CODICE _CODE	CODICE _CODE
EO1F	32 A	NH 00	6	110406	110406SM
			8	110506	110506SM
	45A	NH 00	6	110416	110416SM
			8	110516	110516SM
	63A	NH 00	6	110426	110426SM
			8	110526	110526SM
	80A	NH 00	6	110436	110436SM
			8	110536	110536SM
	100A	NH 00	6	110446	110446SM
			8	110546	110546SM
EO2F	100A	NH 00	6	120416	120416SM
			8	120516	120516SM
	125A	NH 00	6	120426	120426SM
			8	120526	120526SM
	160A	NH 00	6	120436	120436SM
			8	120536	120536SM
	125A	NH 0	6	120446	120446SM
			8	120546	120546SM
	160A	NH 0	6	120456	120456SM
			8	120556	120556SM
EO3F	200A	NH 1	6	130416	130416SM
			8	130516	130516SM
	250A	NH 1	6	130426	130426SM
			8	130526	130526SM
EO4F	315A	NH 2	6	140226	140226SM
			8	140326	140326SM
	400A	NH 2	6	140236	140236SM
			8	140336	140336SM
EO5F	630A	NH 3	6	150206	150206SM
			8	150306	150306SM
	800A	NH 3	6	150226	150226SM
			8	150326	150326SM

EO1F

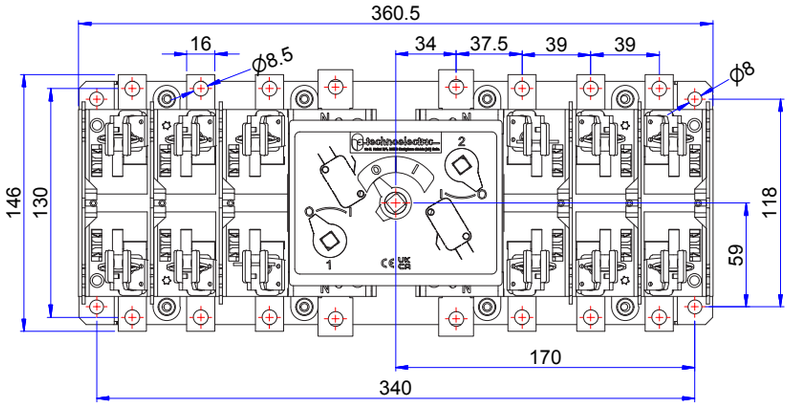


Foratura portella _Door drilling

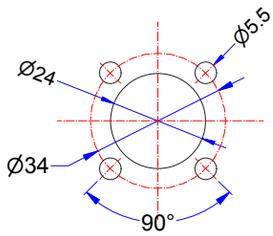


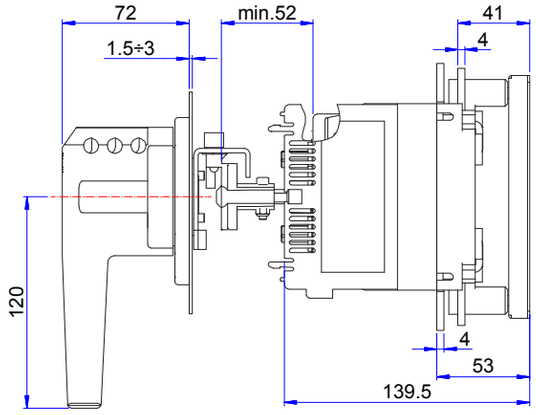


EO2F

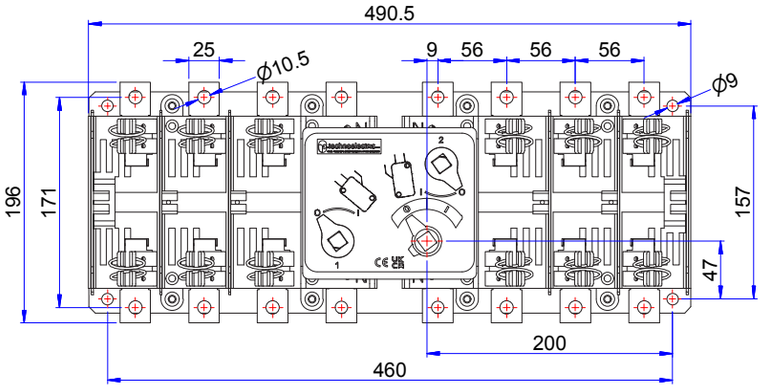


Foratura portella _Door drilling

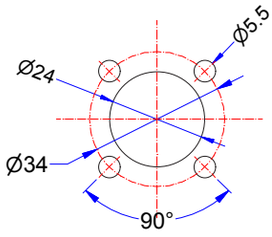


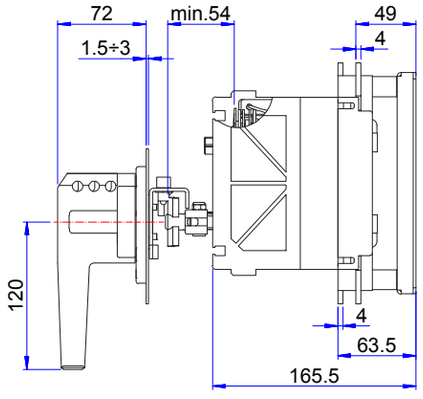


EO3F

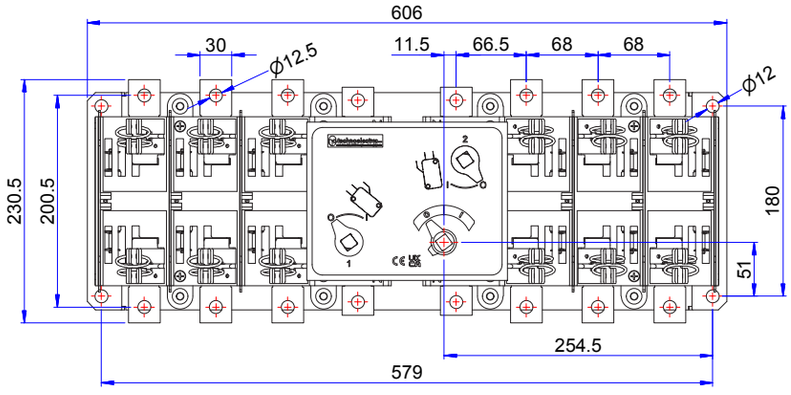


Foratura portella _Door drilling

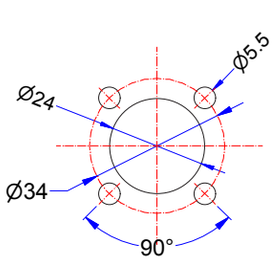


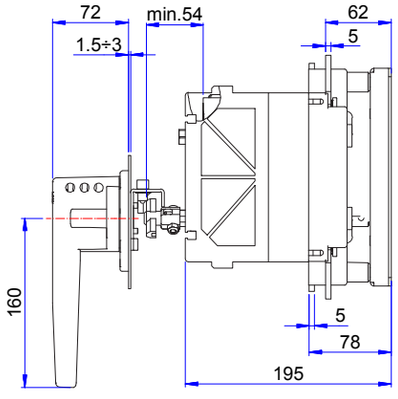


EO4F

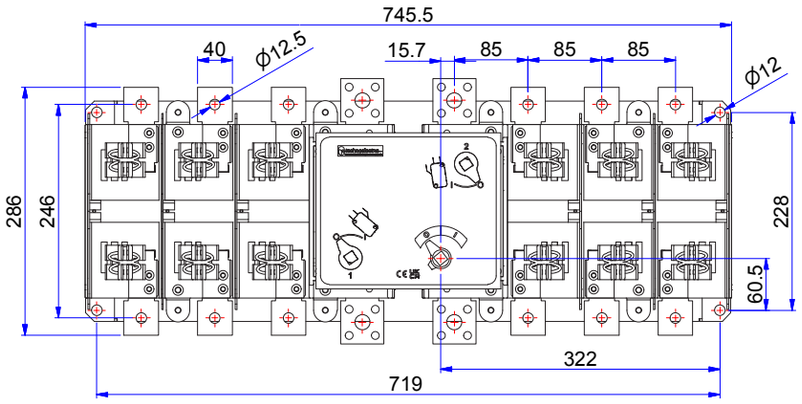


Foratura portella _Door drilling

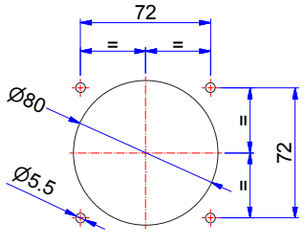


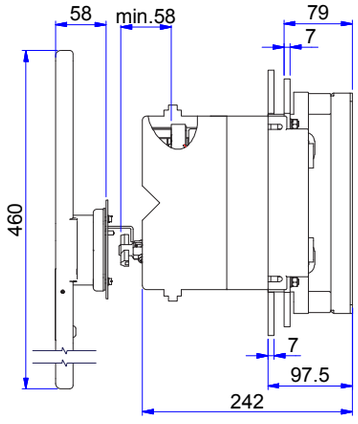


EO5F



Foratura portella _Door drilling

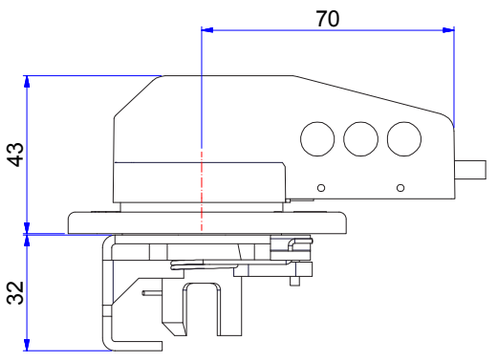




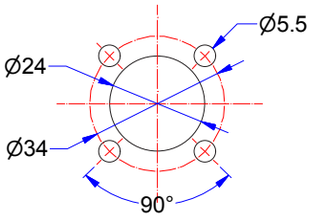
MANIGLIA BLOCCO PORTA NERA
_black door interlock handle

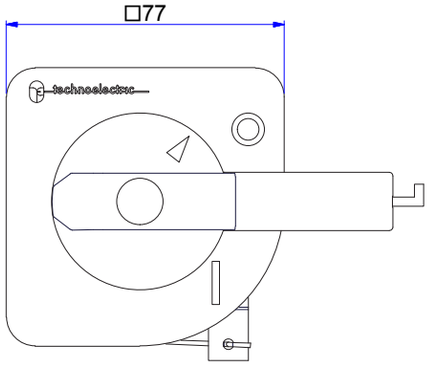
Tipo_type	Poli _poles	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	3 | 4	18001	18001	18003	18003	18005 | 18007
Codice _code	6 | 8	18003	18003	18005	18005	18830 | 18844

18001

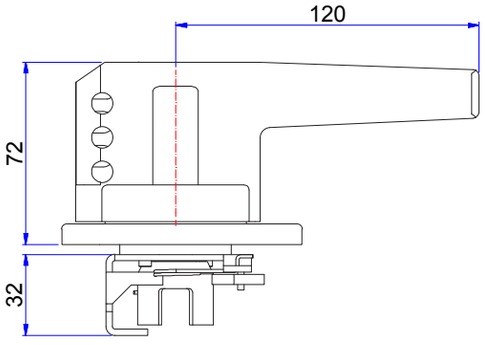


Foratura portella _Door drilling

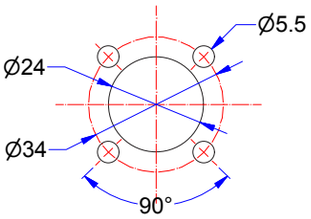


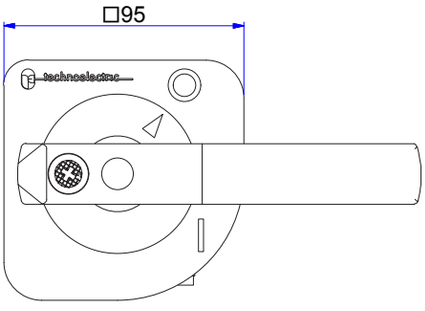


18003

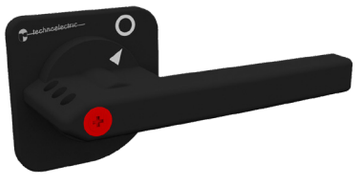


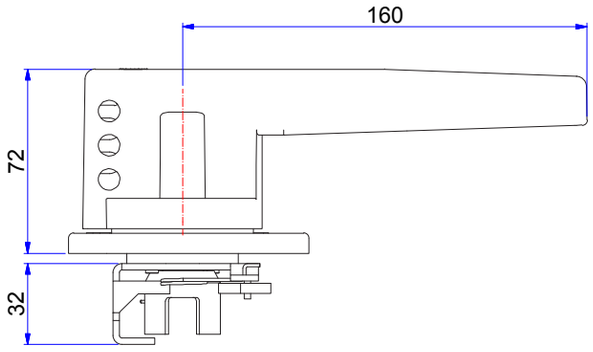
Foratura portella _Door drilling



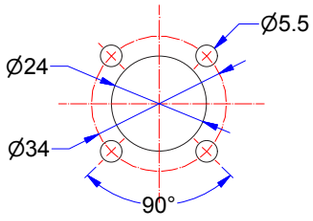


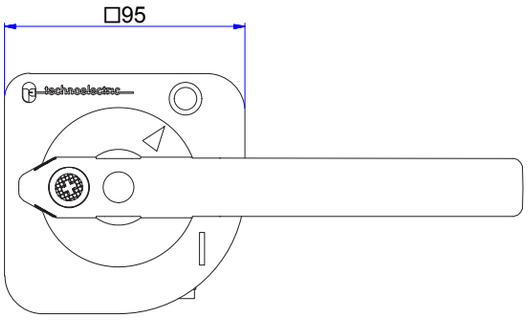
18005



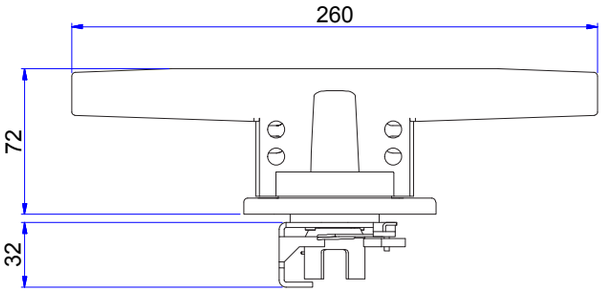


Foratura portella _Door drilling

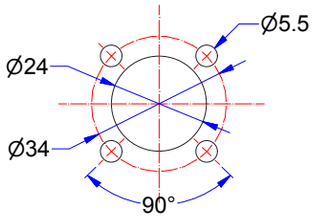


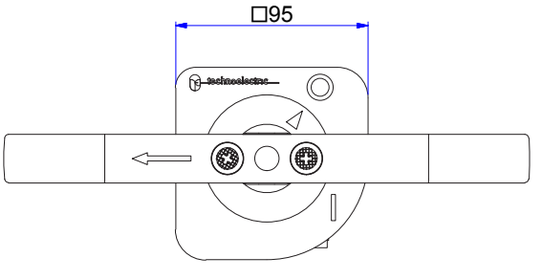


18007

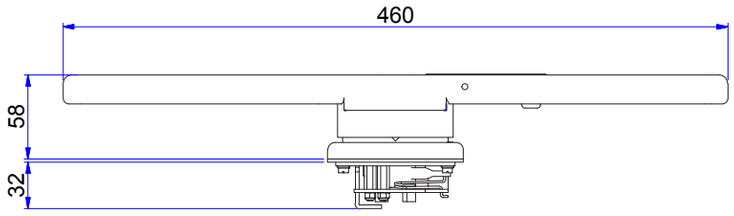


Foratura portella _Door drilling

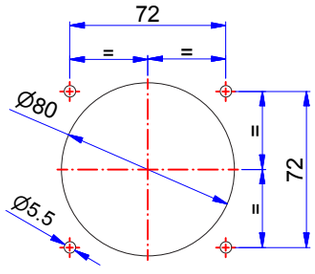


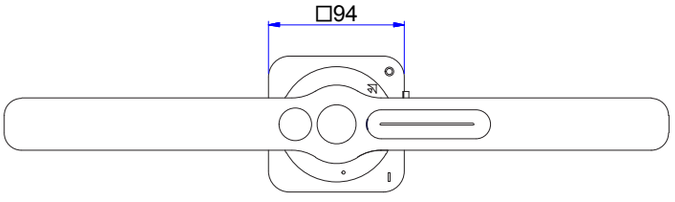


18830

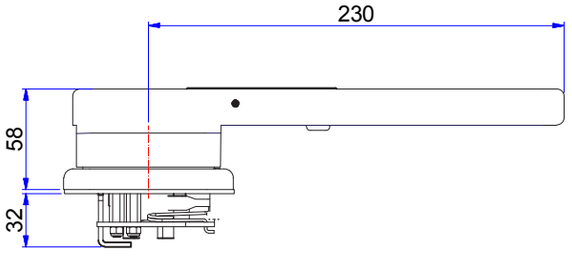


Foratura portella _Door drilling

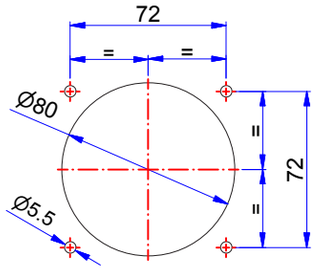


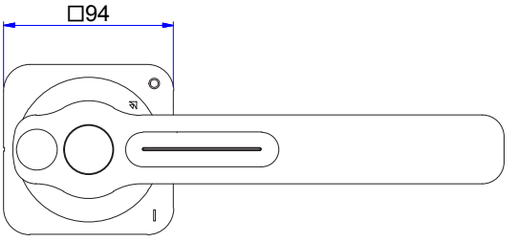


18844



Foratura portella _Door drilling

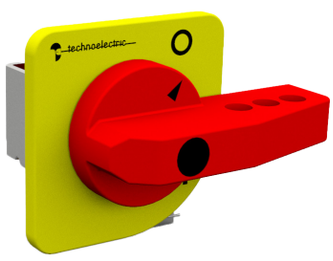


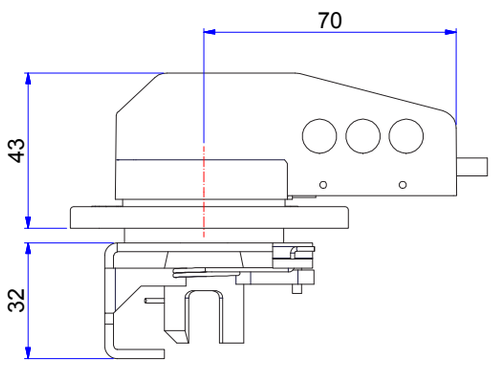


MANIGLIA BLOCCO PORTA D'EMERGENZA _red\yellow door interlock handle

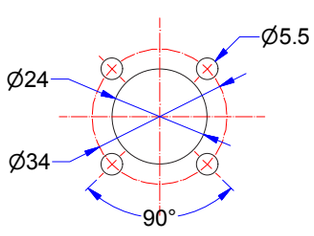
Tipo_type	Poli _poles	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	3 | 4	18002	18002	18004	18004	18006|18008
Codice _code	6 | 8	18004	18004	18006	18006	18831 | 18847

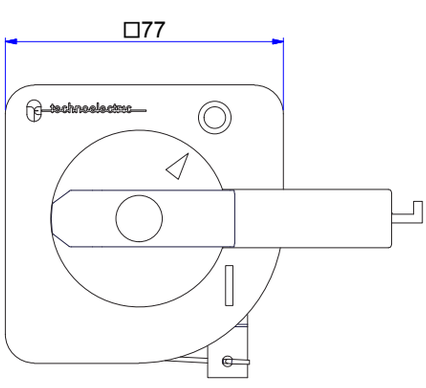
18002



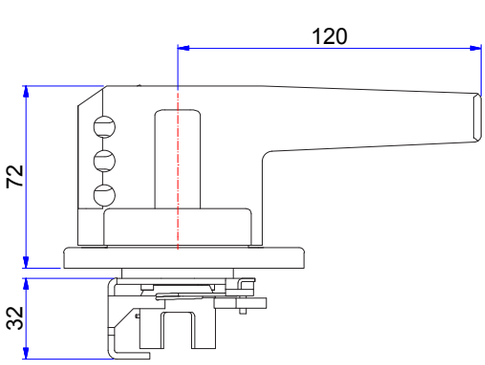


Foratura portella _Door drilling

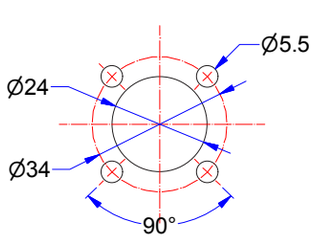


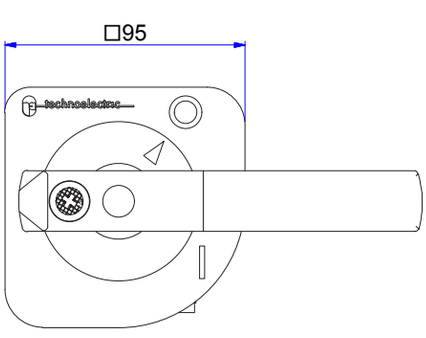


18004

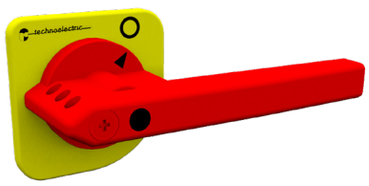


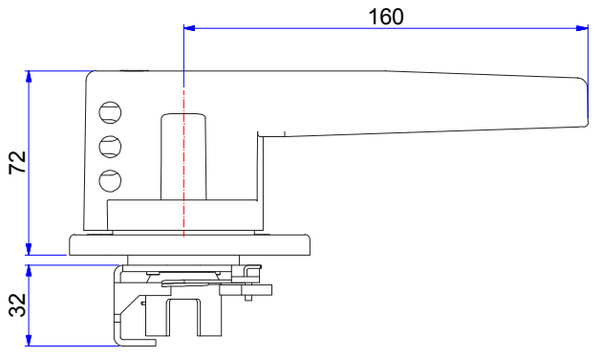
Foratura portella _Door drilling



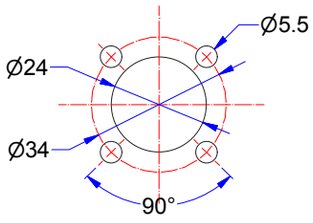


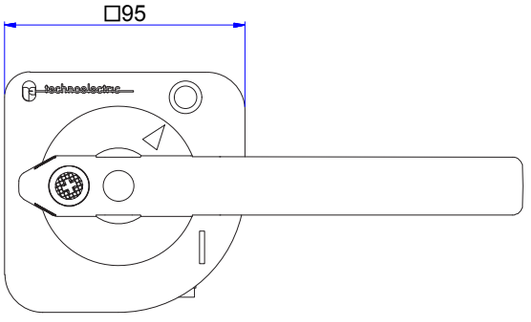
18006



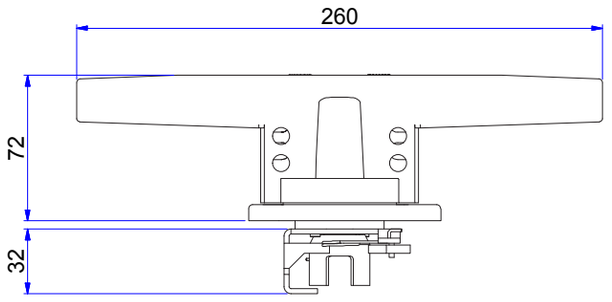


Foratura portella _Door drilling

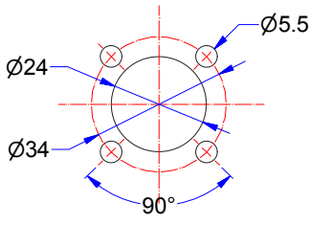


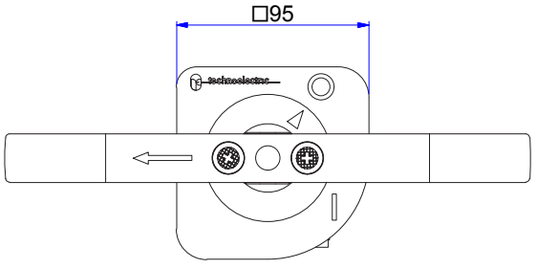


18008

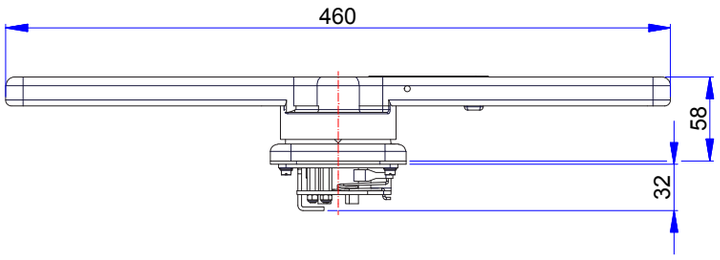


Foratura portella _Door drilling

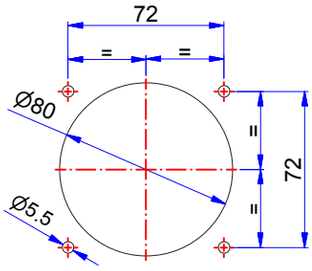


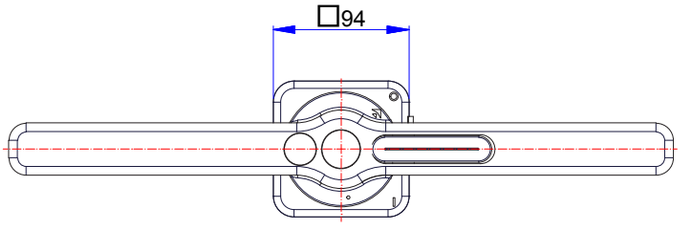


18831

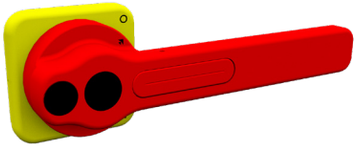


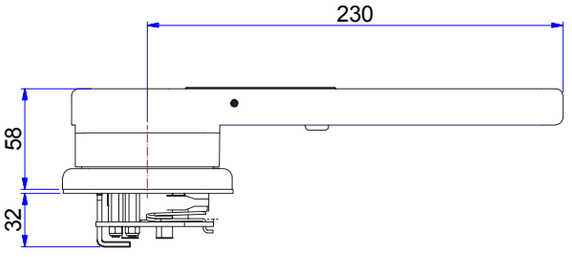
Foratura portella _Door drilling



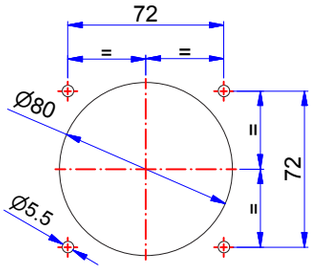


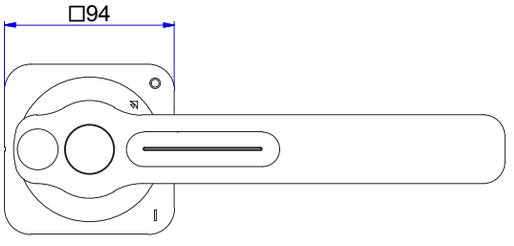
18847



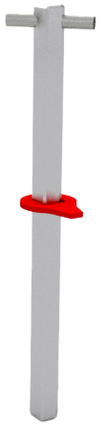


Foratura portella _Door drilling





ALBERO COMANDO
_shaft



200 mm

Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18201	18201	18207	18207	18207

300 mm

Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18202	18202	18208	18208	18208

400 mm

Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18203	18203	18209	18209	18209

PROLUNGA ALBERO
_extension shaft

100 mm

Tipo _type	EOF 1|2	EOF 3|4|5 VCF BA 4|5
Codice _code	18030	18032

200 mm

Tipo _type	EOF 1|2	EOF 3|4|5 VCF BA 4|5
Codice _code	18033	18035

300 mm

Tipo _type	EOF 1|2	EOF 3|4|5 VCF BA 4|5
Codice _code	18036	18038

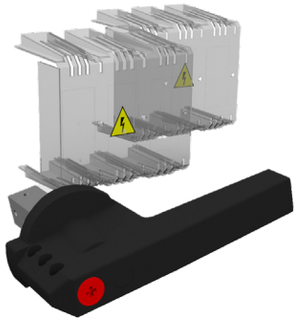
SERIE_SERIES **VCF**

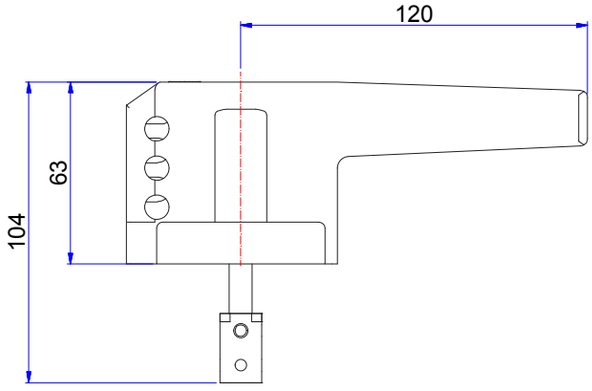
MANIGLIA DIRETTA _direct handle

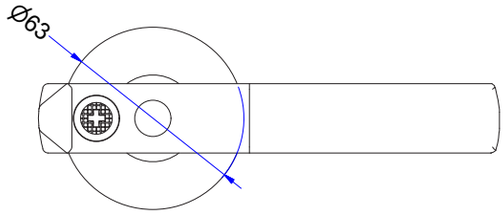
Tipo_type	CO1F	CO2F	CO3F	CO4F	CO5F
Codice _code	18594	18595	18597	18598	18599

Fornita completa di due schermi protezione fusibili. Versione lucchettabile fornibile a richiesta
_With two fuses cover. Padlockable version on request

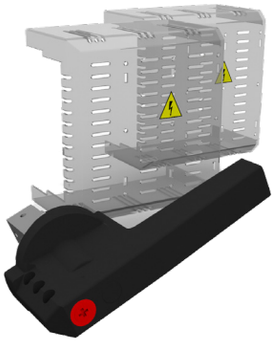
18594

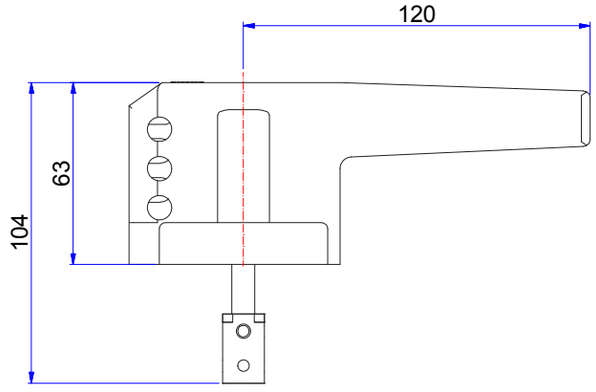


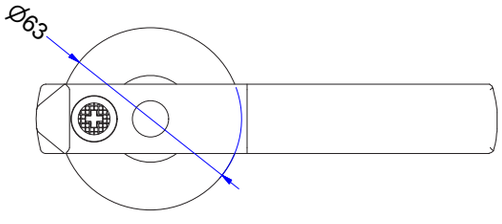




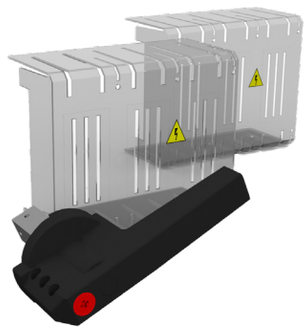
18595

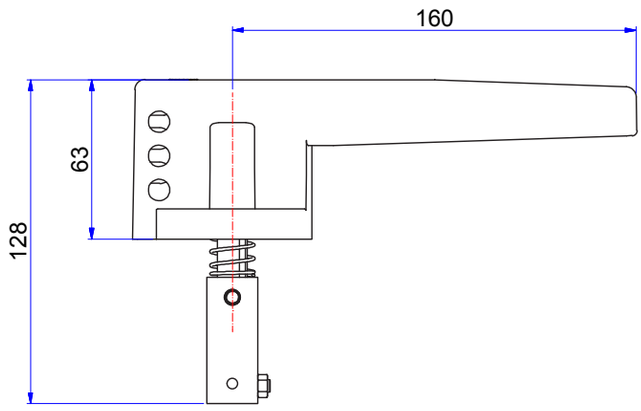


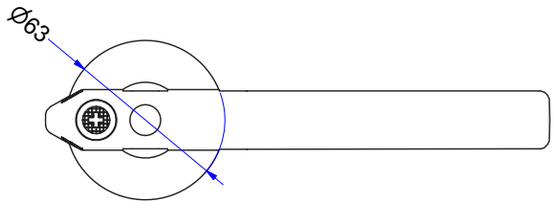




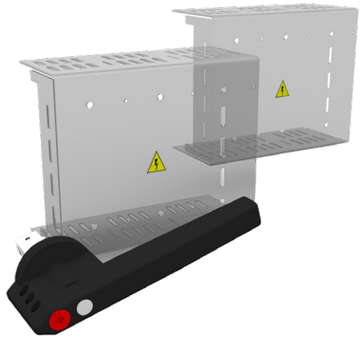
18597

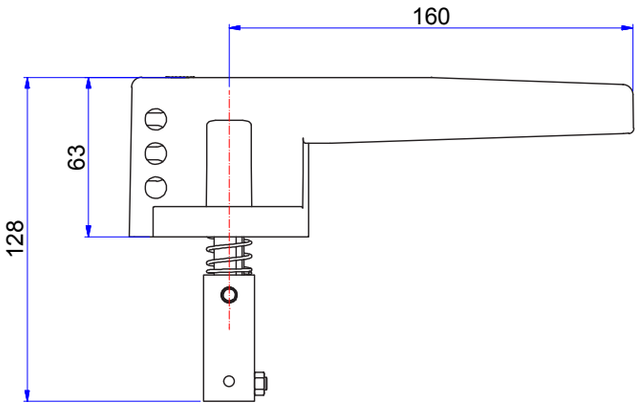


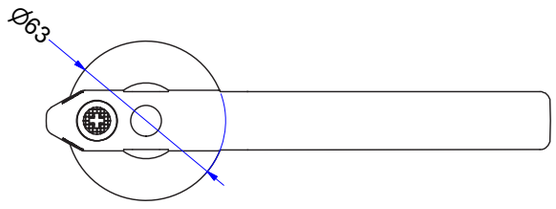




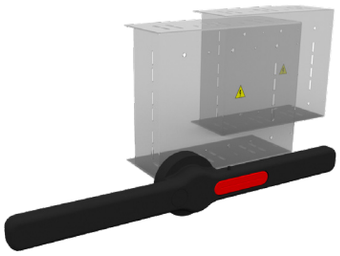
18598

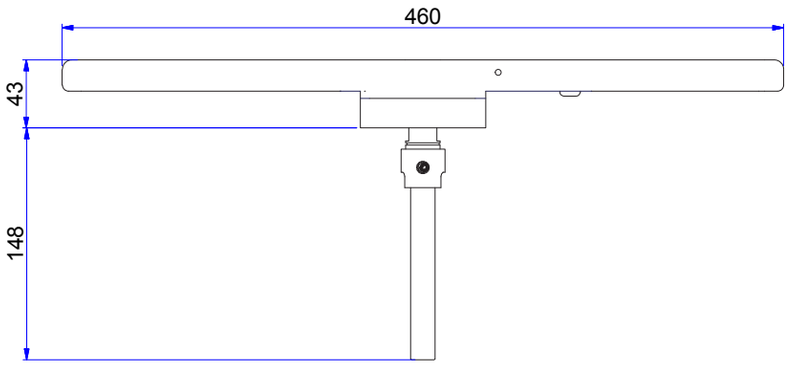


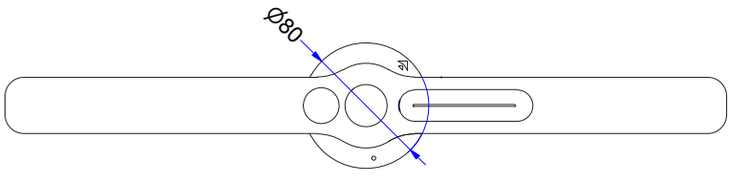




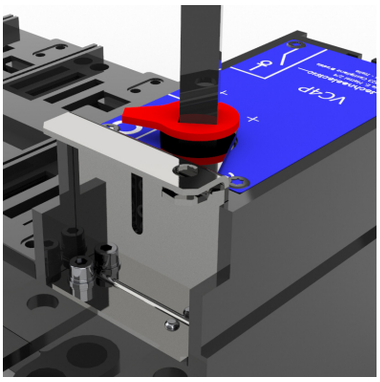
18599







BLOCCO LUCCHETTO PER MANIGLIA DIRETTA _padlock for direct handle

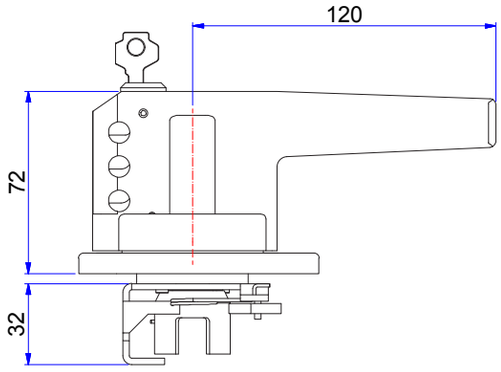


Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18240	18241	18242	18243	18244

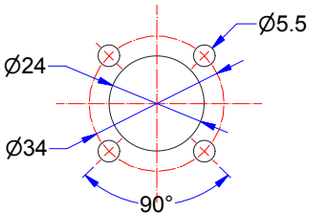
MANIGLIA BLOCCO PORTA CON BLOCCO CHIAVE
_door interlock handle with key lock

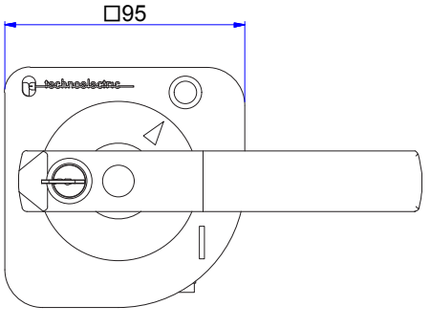
Tipo_type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18100	18100	18100	18100	18102| 18104

18100

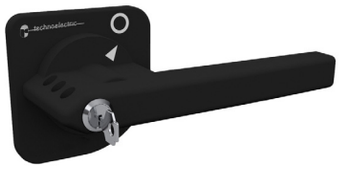


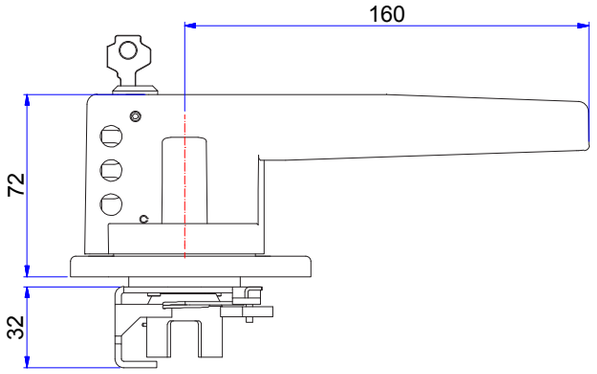
Foratura portella _Door drilling



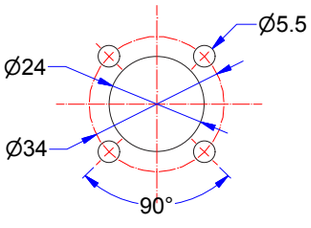


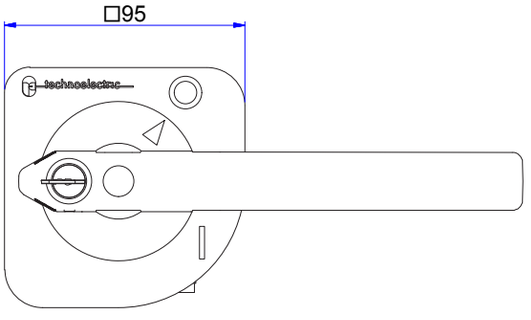
18102





Foratura portella _Door drilling





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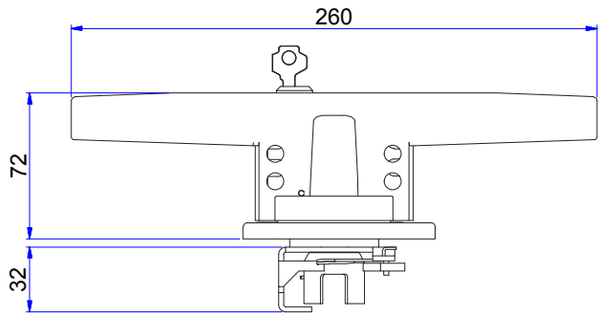
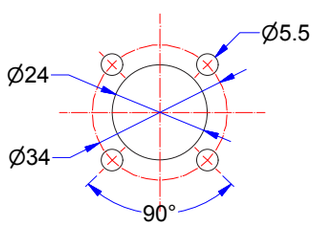
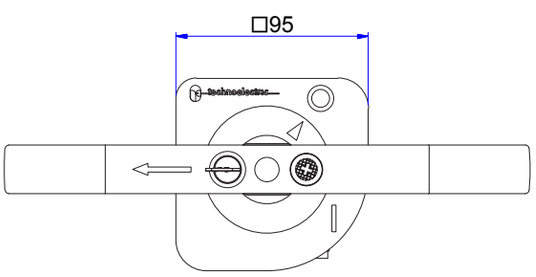


Foratura portella _Door drilling

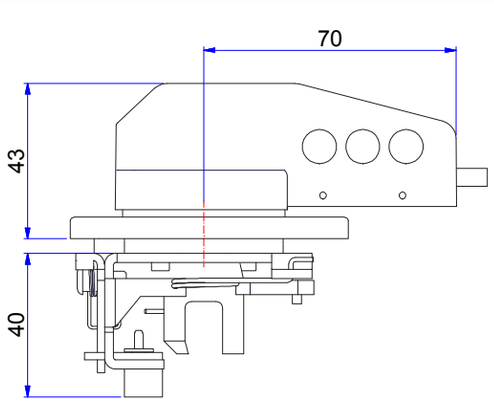




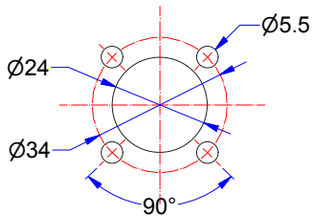
MANIGLIA BLOCCO PORTA NERA CON DISPOSITIVO DI SBLOCCO CON ATTREZZO SPECIALE _black door interlock handle with defeater mechanism (special tool)

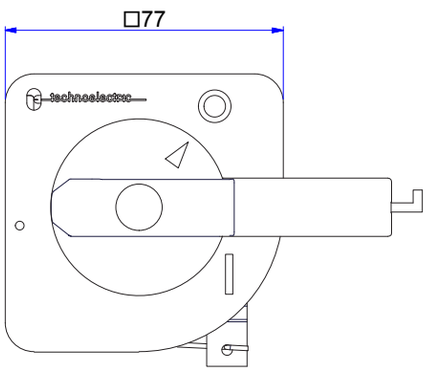
Tipo_type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18220	18220	18222	18222	18224 | 18832 18226 | 18850

18220

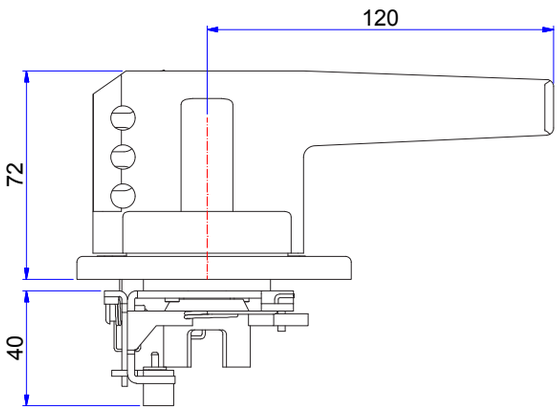


Foratura portella _Door drilling

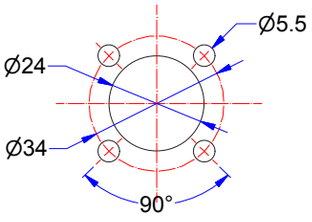


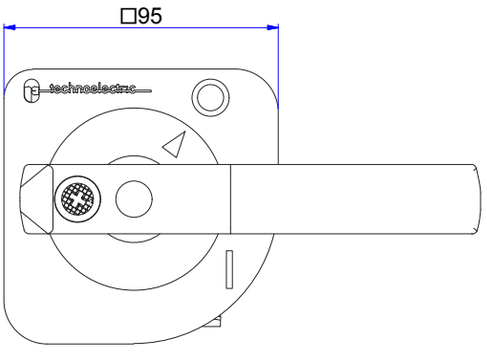


18222

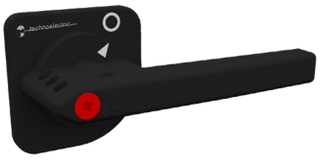


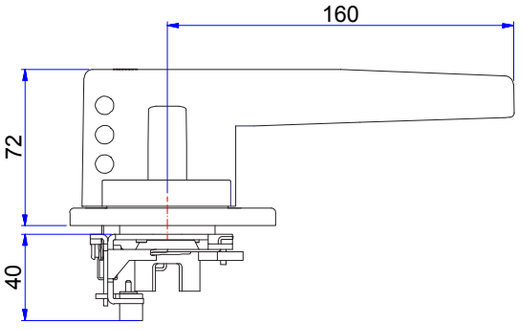
Foratura portella _Door drilling



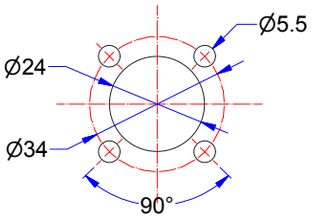


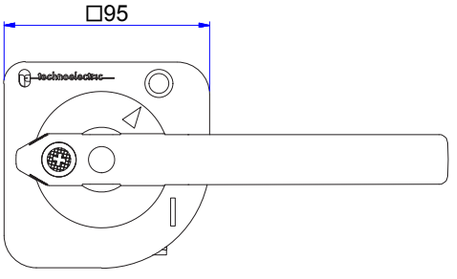
18224



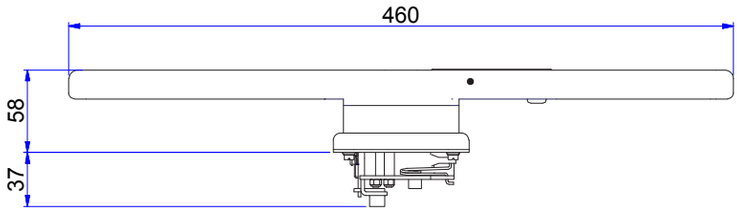


Foratura portella _Door drilling

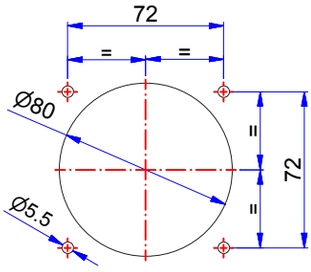


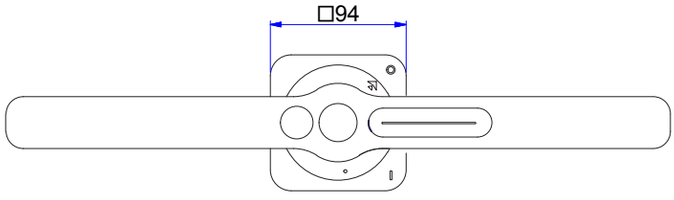


18832

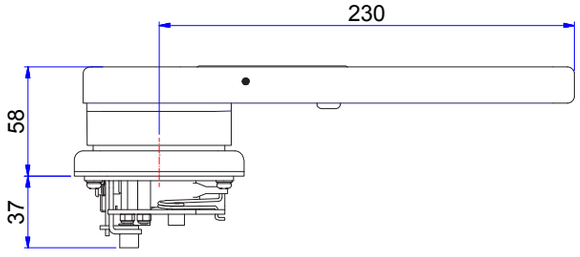


Foratura portella _Door drilling

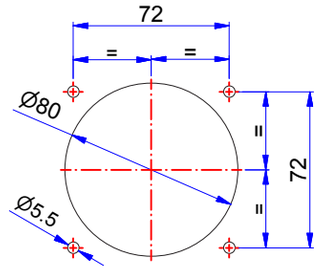


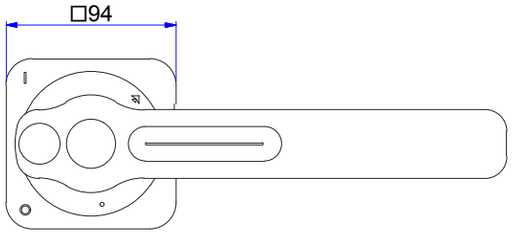


18850



Foratura portella _Door drilling

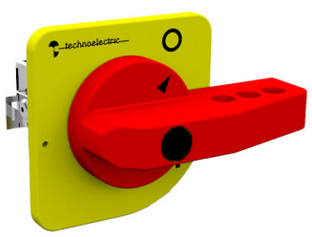


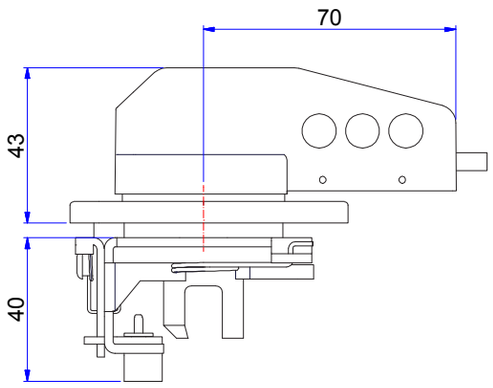


MANIGLIA BLOCCO PORTA DI EMERGENZA CON DISPOSITIVO DI SBLOCCO CON ATTREZZO SPECIALE
_red/yellow door interlock handle with defeater mechanism (special tool)

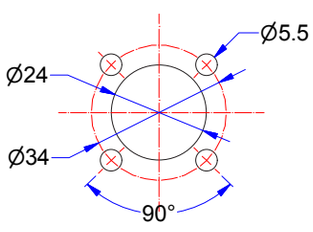
Tipo_type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18221	18221	18223	18223	18225

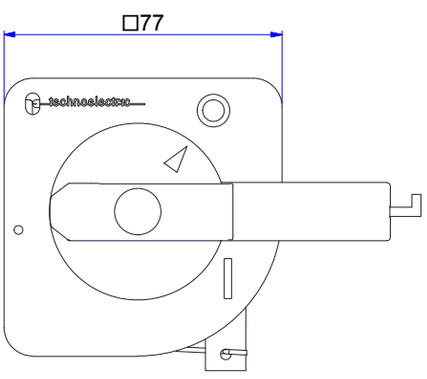
18221



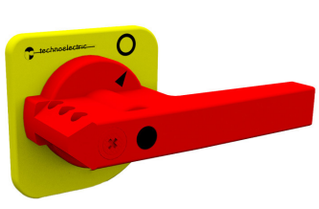


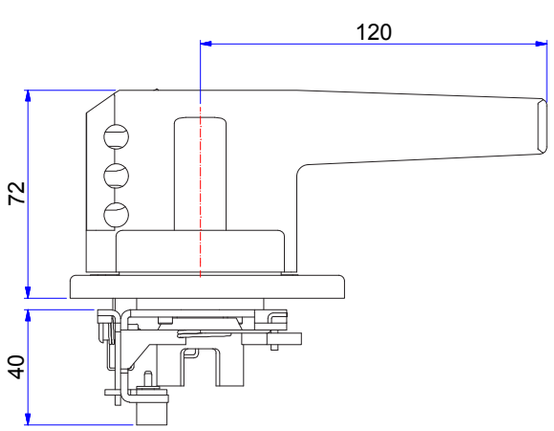
Foratura portella _Door drilling



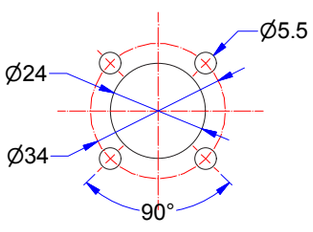


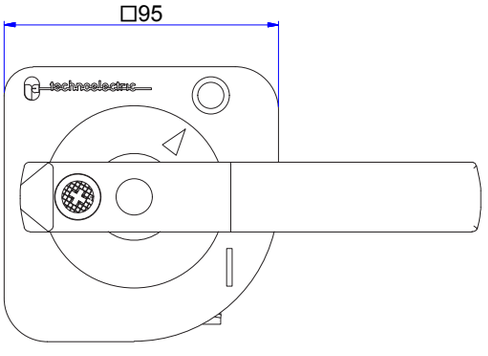
18223



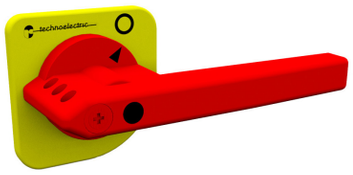


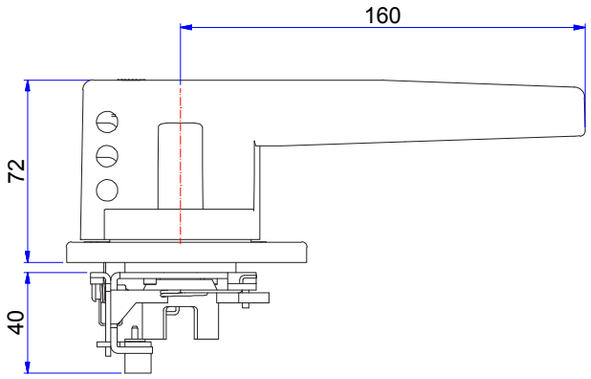
Foratura portella _Door drilling



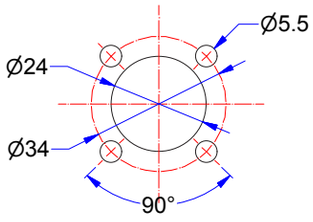


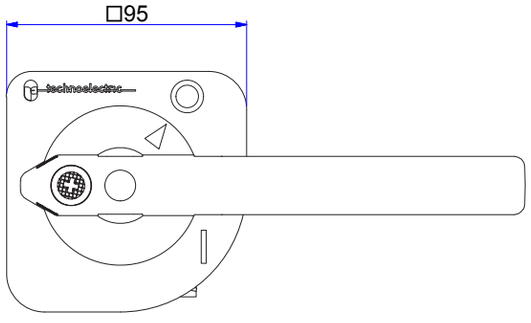
18225





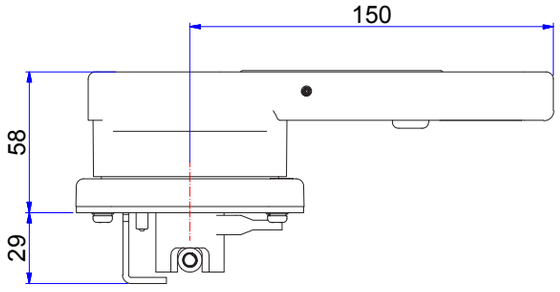
Foratura portella _Door drilling

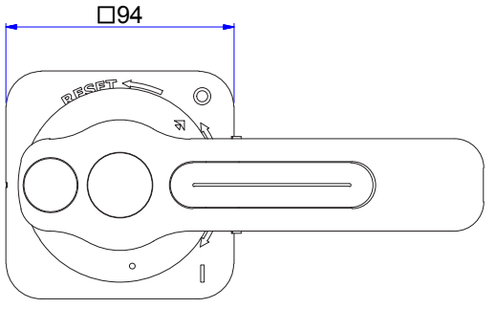




MANIGLIA BLOCCO PORTA PER VCF BA _door interlock handle for VCF BA

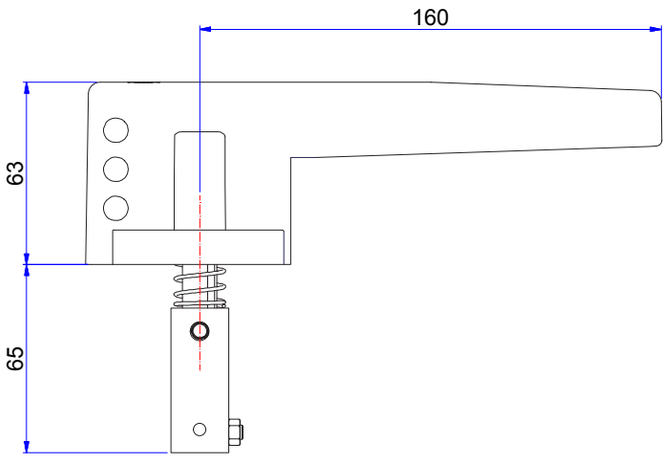
18856

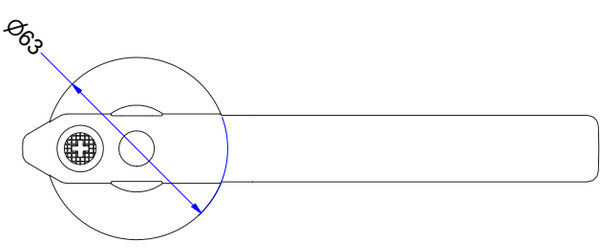




MANIGLIA DIRETTA PER VCF BA
_direct handle for VCF BA

18857

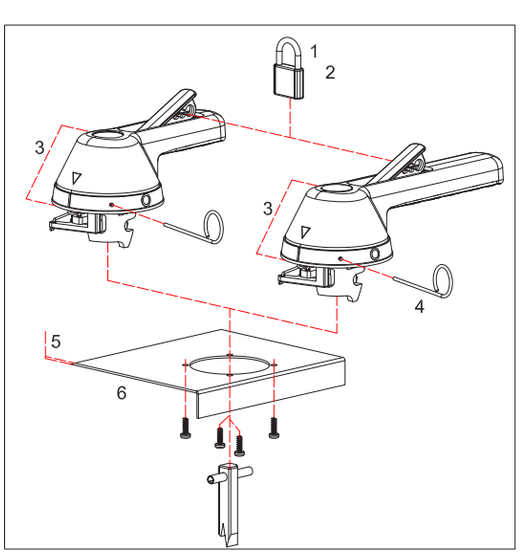


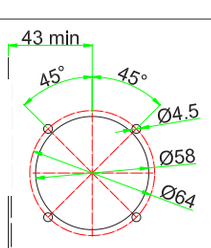


MANIGLIA BLOCCO PORTA\EMERGENZA CON DOPPIA FUNZIONE DI SICUREZZA
_black/emergency door interlock handle with defeater mechanism

Adatta per montaggio su portella con dispositivo di blocco porta in posizione On Grado di protezione IP 65
Disponibile anche nella versione per emergenza (rosso\gialla)

_For door mounting with door interlocking in “On” position IP 65 degree of protection
Available also for emergency operation (red\yellow)



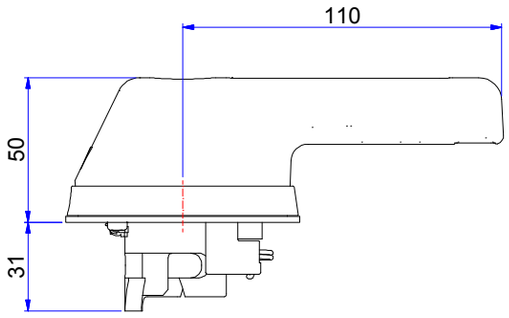


Foratura portella
_Door drilling

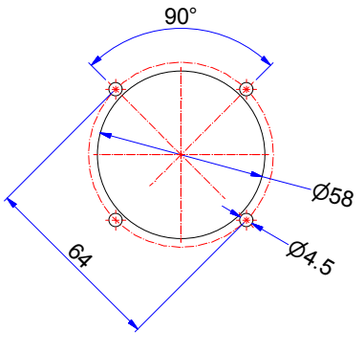
1	Lucchettabile (max 3 lucchetti 1xø8+2xø6) in posizione Off.	Padlockable in “Off” position (with max 3 padlocks of 1xø8+2xø6).
2	Apertura della portella impedita quando la maniglia è lucchettata in posizione di Off.	Door opening is prevented when the handle is padlocked in “Off” position.
3	Ingombro inferiore a 50 mm in profondità per permettere l’utilizzo anche in quadri a doppia portella.	Handle height less than 50 mm for suitability with two-doors type panels.
4	Permette, a mezzo di un apposito attrezzo, fornito con la maniglia, l’esclusione del dispositivo di blocco porta e quindi l’apertura della portella anche a interruttore in posizione di ON. Il dispositivo bloccoporta si ripristina automaticamente al chiudersi della porta.	With the use of the special tool (supplied), the door interlock mechanism can be bypassed maintaining the switch in the “On” position and the door can be opened. The door interlocking mechanism is automatically re-established when door is closed.
5	Può essere montata su portelle di qualsiasi spessore.	Can be mounted on doors of any thickness.
6	Posizione della maniglia fissa quando la portella é aperta.	When the door is open, the position of the handle is fixed

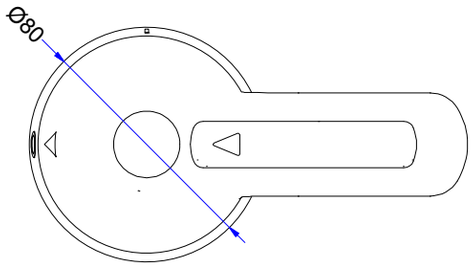
Tipo_type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18234 | 18235	18234 | 18235	18234 | 18235	18236 | 18237	18236 | 18237

18234

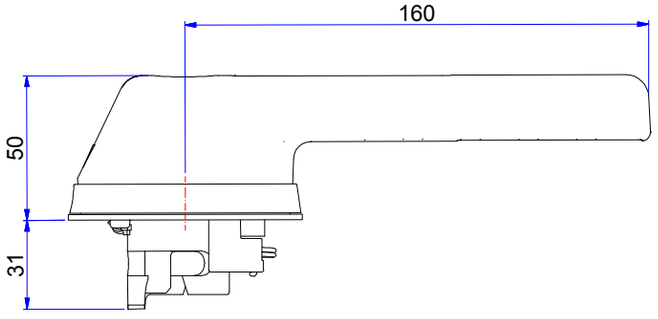


Foratura portella _Door drilling

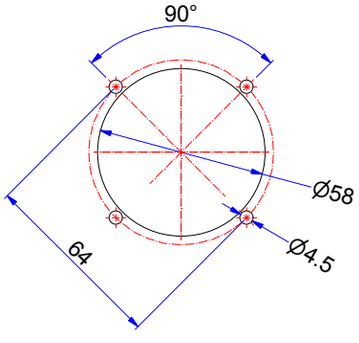


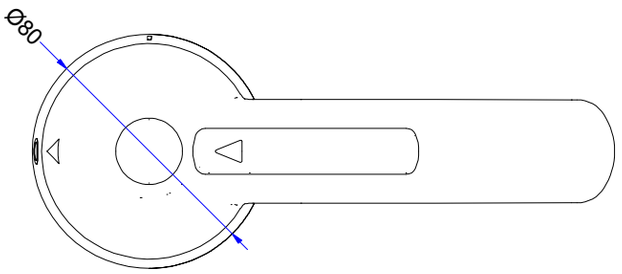


18236

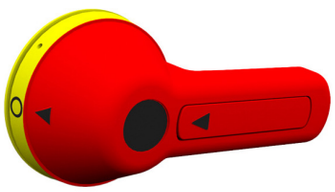


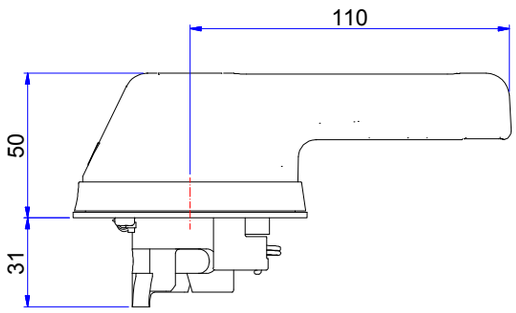
Foratura portella _Door drilling



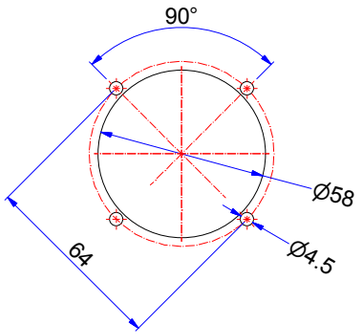


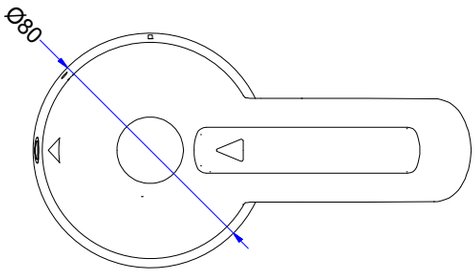
18235



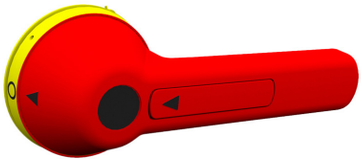


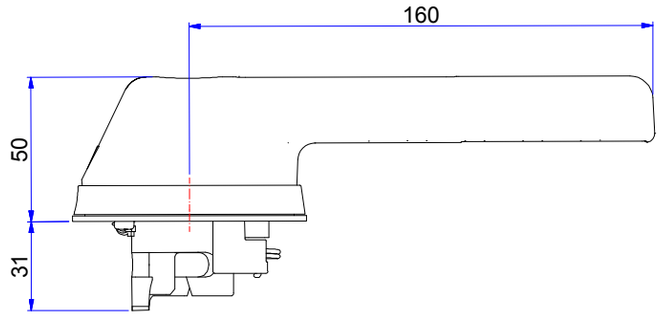
Foratura portella _Door drilling



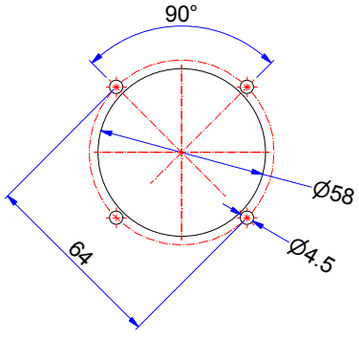


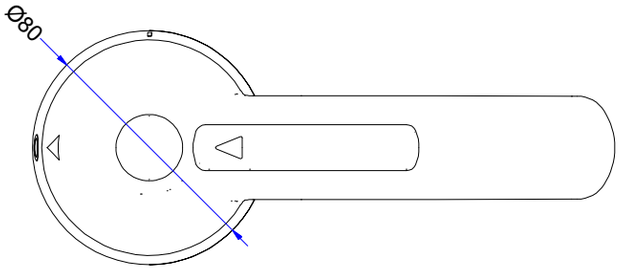
18837





Foratura portella _Door drilling

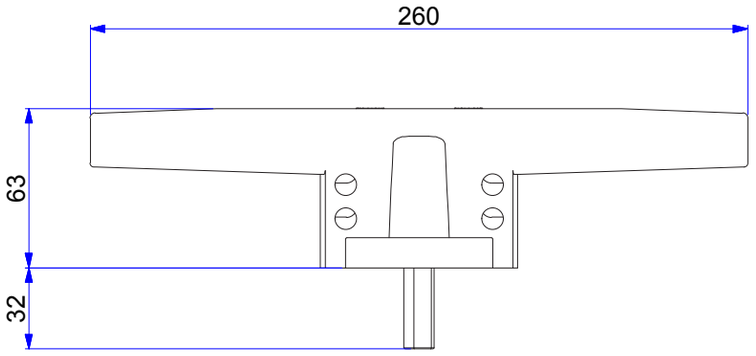


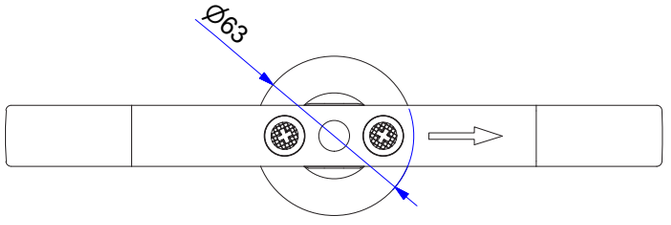


MANIGLIA DIRETTA PER VCF MS
_direct handle for VCf MS

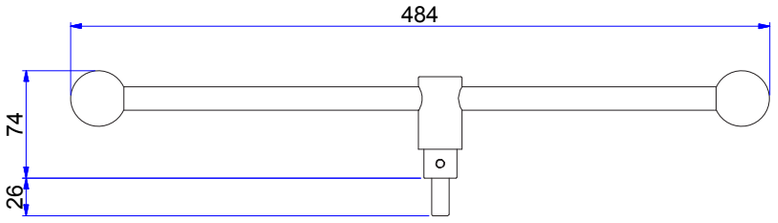
Tipo_type	VC2F MS	VC3F MS	VC4F MS	VC5F MS
Codice _code	18802	18802	18802	18803

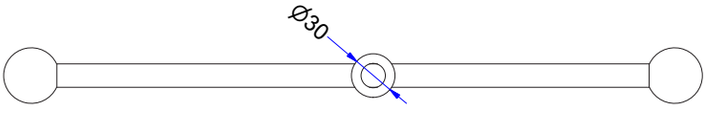
18802



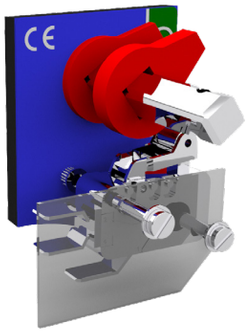


18803

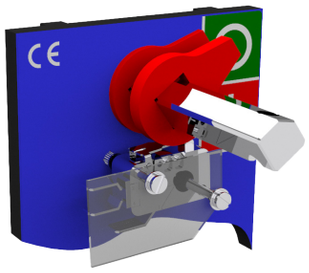




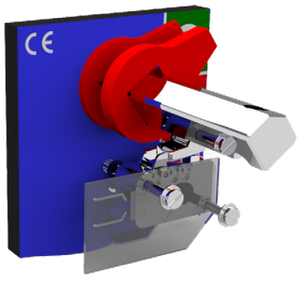
CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC PER APERTURA ANTICIPATA
_auxiliary contacts 1NO + 1NC activated before main contacts



18165



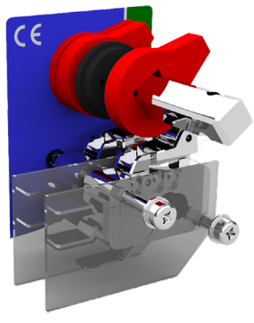
18163



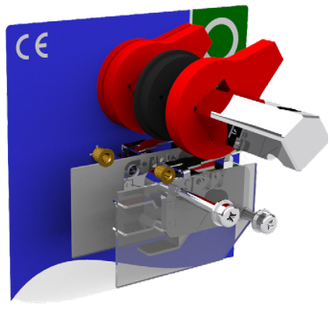
18160

Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18165	18165	18163	18160	18163

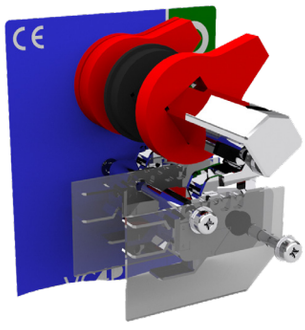
CONTATTI AUSILIARI IN SCAMBIO 2NA + 2NC PER APERTURA ANTICIPATA
_auxiliary contacts 2NO + 2NC activated before main contacts



18166



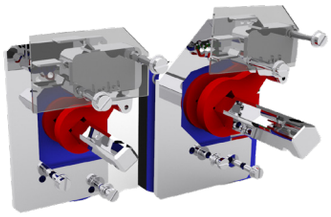
18164



18161

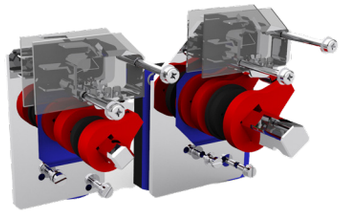
Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18166	18166	18164	18161	18164

CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC PER APERTURA POSTICIPATA _auxiliary contacts 1NO + 1NC activated after main contacts



Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18120	18120	18127	18127	18127

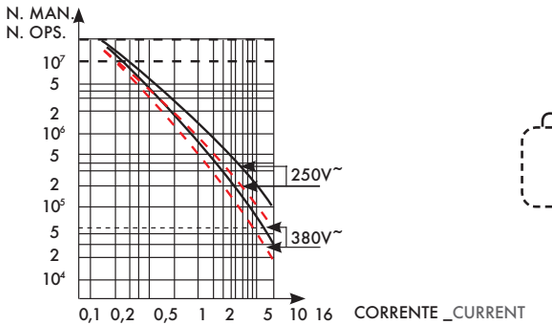
CONTATTI AUSILIARI IN SCAMBIO 2NA + 2NC PER APERTURA POSTICIPATA _auxiliary contacts 2NO + 2NC activated after main contacts

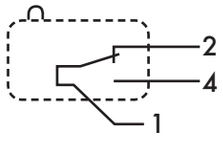


Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18123	18123	18128	18128	18128

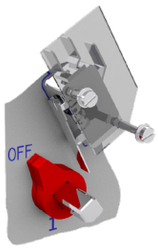
Contatti ausiliari in scambio
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore Portata nominale 16A
Portata termica 20A

_Auxiliary contacts
break before make contacts switches
Rated current 16A
Thermal current 20A



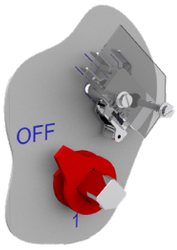


CONTATTI AUSILIARI IN SCAMBIO 1NA+1NC
_auxiliary contacts 1NO+1NC



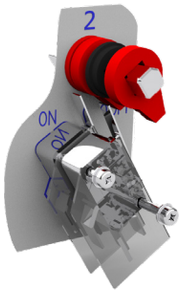
Tipo _type	EO1F	EO2F
Codice _code	18566 (paletta _lever)	

CONTATTI AUSILIARI IN SCAMBIO 1NA+1NC
_auxiliary contacts 1NO+1NC



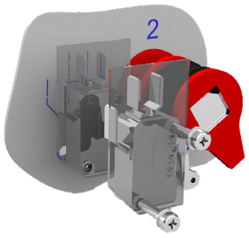
Tipo _type	EO3F - EO4F - EO5F
Codice _code	18560 (rotella _roller)

CONTATTI AUSILIARI IN SCAMBIO 2NA+2NC
_auxiliary contacts 2NO+2NC



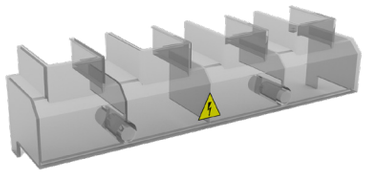
Tipo _type	EO1F	EO2F
Codice _code	18568 (paletta _lever)	

CONTATTI AUSILIARI IN SCAMBIO 2NA+2NC
_auxiliary contacts 2NO+2NC



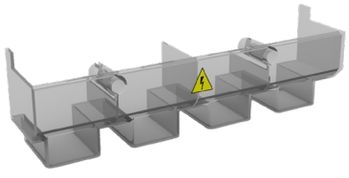
Tipo _type	EO3F - EO4F - EO5F
Codice _code	18567 (rotella _roller)

CALOTTA PROTEZIONE TERMINALI SUPERIORI _upper terminal cover



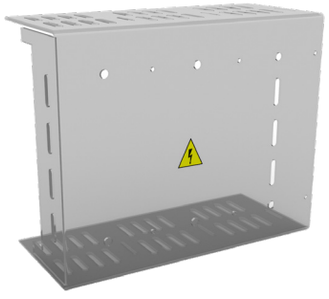
Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18050	18052	18350	18054	18056

CALOTTA PROTEZIONE TERMINALI INFERIORI _lower terminal cover



Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18051	18053	18351	18055	18057

SCHERMO PROTEZIONE FUSIBILI _fuse cover



Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18180	18181	18380	18183	18184

SPESSORE RIALZO
_risers

Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18290	18291	18292	18293	18293

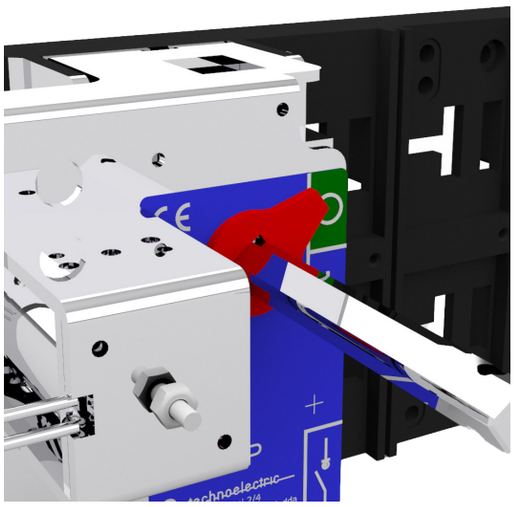
Tipo _type	h/mm	Ø
VC1	5	15
VC2	5	18
VC3	10	17
VC4-5	15	24

Confezione 4 pezzi _4pcs pack

BLOCCO MANOVRA ELETTRICO
_electric interlock

Tipo _type	Tensione _voltage	VC2F	VC3F	VC4F	VC5F
Codice _code	24 V dc	18119B	18117B	18116B	18115B
	230 V ac	18119B4	18117B4	18116B4	18115B4

altre tensioni a richiesta _further versions upon request



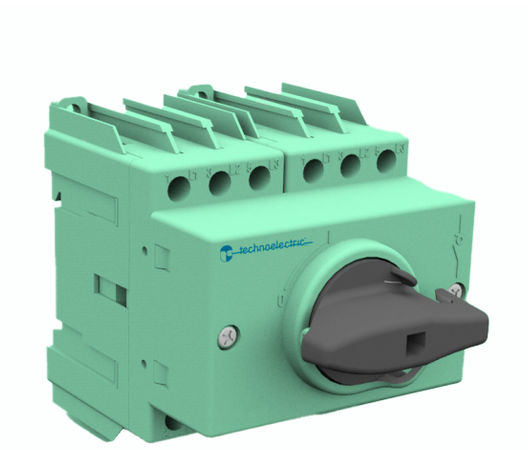
Dispositivo di sicurezza adatto per il montaggio su interruttori di manovra sezionatori VC2-3-4-5F. Impedisce la manovra quando l'interruttore è in posizione Off. La monovra da Off a On è consentita solo alimentando la bobina.
La bobina deve essere alimentata solo per il tempo necessario alla manovra. Disponibili nelle versioni con bobina 24 V dc oppure 220 V ac. A richiesta può essere fornito un dispositivo per blocco sia in posizione On che in posizione Off.

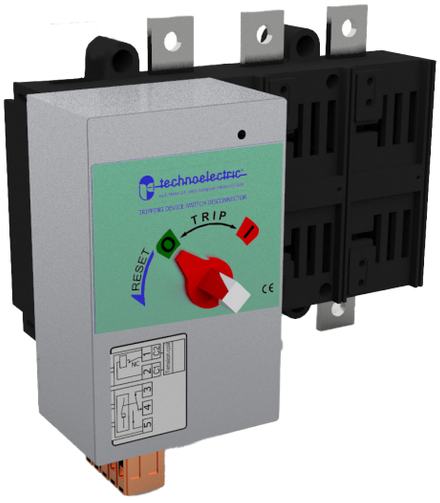
_Safety device suitable for mounting on switch disconnectors VC2-3-4-5F. It prevents the switch to operate when it is in Off position. The operation from Off to On is possible when the coil is energised only. The coil can remain energised just for the time needed for the operation. Available with 24 V dc or 220 V ac coil.
Device for locking in both positions available under request.

INTERRUTTORI DI MANOVRA SEZIONATORI

_SWITCHES DISCONNECTORS

TSM 25 ÷ 80A - TSP 80 ÷ 1250A





SERIE_SERIES TECHNO**SOLAR**

GENERALITÀ
Gli interruttori-sezionatori della serie Technosolar nascono per applicazioni sulle energie rinnovabili

IMPIEGO
Gli apparecchi sono abitualmente impiegati nelle seguenti funzioni:
Scaricatori
Inverter
Quadri di stringa
Colonnine di Ricarica
O in qualsiasi applicazione con corrente continua.

CARATTERISTICHE GENERALI
Ottimo potere d'interruzione (DC21B)
Tensione nominale di isolamento 1.500 VDC
Tensione di Esercizio fino a 1.000 VDC
Doppia interruzione per ogni polo
Elevata durata meccanica ed elettrica
Adatto per l'utilizzo in climi tropicali
Grado di protezione ip20 (accessori inclusi)

GAMMA
TSM, interruttori-sezionatori da guida DIN
TSP, interruttori- sezionatori da fondo quadro
TSP-MS, interruttori sezionatori motorizzati
TSP-BA, interruttori – sezionatori con bobina di sgancio

COMANDO
Comando di tipo rotativo frontale a mezzo di: maniglia esterna a doppio isolamento con blocco porta in posizione I, grado di protezione IP65, possibilità di 3 blocchi con lucchetto in posizione 0
Maniglia diretta (a richiesta lucchettabile in posizione di 0

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO
Temperatura ambiente di immagazzinamento e trasporto - 25°C + 55°C
Temperatura ambiente di funzionamento - 20°C + 40°C
in caso di temperatura ambiente (ta) superiore, applicare la seguente formula di declassamento:

$$IThe = k\ ITh \text{ dove } K = 1 - \frac{t - 40}{100}$$

Umidità relativa max 95%
Frequenza nominale 50 - 60 Hz
Altitudine max 2000 m s.l.m.
Grado di inquinamento 3 secondo IEC 60947-1
Possono essere montati in qualsiasi posizione.
Montaggio in custodia: in caso di utilizzo a piena corrente e in mancanza di adeguata ventilazione assicurare un volume pari a circa 5 volte quello dell'apparecchio
Tipo di servizio (secondo IEC 60947-1): 8 ore; ininterrotto: intermittente 60% classe 30; temporaneo; periodico.

Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3

CERTIFICATI E OMOLOGAZIONI
INTEK | RINA

_GENERALITIES
The switch disconnectors of the Technosolar series are designed for applications on renewable energy or where there is the need of a use in DC.

_USE
The devices are usually used in the following applications:
Unloaders
Inverter
String combiner box
Charging Columns
Or in any other DC application.

_GENERAL CHARACTERISTICS
Excellent breaking capacity (DC21B)
Rated insulation voltage 1,500 VDC
Operating voltage up to 1.000 VDC
Double interruption for each pole
High mechanical and electrical durability
Suitable for use in tropical climates
Degree of protection ip20 (accessories included)

_RANGE
TSM, DIN rail switch-disconnectors
TSP, plate mounted switch-disconnectors
TSP-MS, Motorized switch disconnectors
TSP-BA, switches - disconnectors with release coil

_OPERATING MECHANISM
Black (standard execution) or emergency direct handle padlockable in 0 position. Handle with door interlock handle, black or emergency handle padlockable with up to three padlocks in 0 position.
IP 65 degree of protection.
Direct handle (padlockable in 0 position on request)

_STANDARD SERVICE, MOUNTING AND TRANSPORT CONDITIONS
Storage and transport ambient temperature - 25°c + 55°c
Working ambient temperature - 20°c + 40°c
In case of higher ambient temperature (ta) consider the following derating formula:

$$Ithe = k\ ith \text{ dove } k = 1 - \frac{t - 40}{100}$$

Relative humidity max 95%
Rated frequency 50 - 60 Hz
Altitude max 2000 m a.s.l.
Pollution degree 3 according IEC 60947-1
Can be mounted in any position, for what concerns the positioning, please refer to the installation instructions
Mounting in enclosure: in case of utilisation at full load and without adequate ventilation, ensure a volume of about 5 times the volume of the switch
Duty (IEC 60947-1): 8 hours; uninterrupted; intermittent 60% class 30; temporary; periodic.

For different operating conditions, please contact the manufacturer.

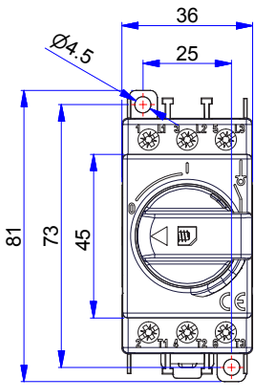
_CONFORMITY TO STANDARDS
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3

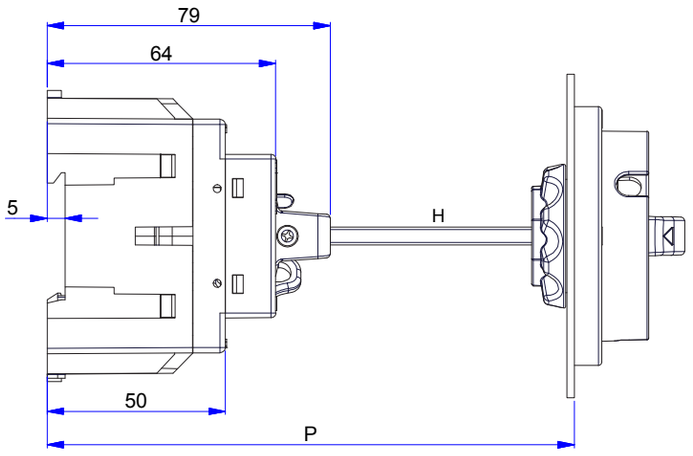
_CERTIFICATES AND APPROVALS
INTEK | RINA

Codice ordinazione _Reference code		TS013M	TS014M	TS015M	TS016M	TS028M	TS038M
Tensione nominale d'isolamento _Rated insulation voltage		1500	1500	1500	1500	1500	1500
Corrente nominale termica Ith (A a 40° C) _Rated thermal current Ith (A a 40° C)		25A	30A	35A	40A	60A	80A
Tensione nominale impulso Uimp (kV) _Impulse withstand voltage Uimp (kV)		8	8	8	8	8	8
Tensione nominale d'impiego in DC-20 _Rated operational voltage ui in DC-20		1500	1500	1500	1500	1500	1500
Corrente nominale In (A) in DC21-B _Rated operational current In (A) in DC21-B	400Vdc	25	30	35	40	60	80
	500Vdc	25	30	35	40	45	65
	600Vdc	15	20	25	40	40	60
	750Vdc	10	15	20	25	30	40
	800Vdc	10	15	20	25	30	40
	1000Vdc	-	-	-	-	-	-
N° di poli in serie _N° of poles in series		3	4	5	6	8	8
Corrente breve durata per 1 sec a 400V (kA) _Short-circuit withstand current 1 sec. a 400V (kA)		1,1	1,1	1,1	1,1	1,5	3
Massima dimensione cavo Cu (mm^2) _Max cable section Cu (mm^2)		16	16	16	16	35	70
Massima torsione terminali (NM) _Max terminal torque (NM)		2	2	2	2	2	6
Sforzo di manovra (nm) _Operating torque (nm)		1,6	1,6	1,6	1,6	1,6	2,6
Durata meccanica (N° manovre) _Mechanical endurance (N° of operations)		50.000	50.000	50.000	50.000	30.000	30.000
Comando diretto (per uso in centralino) _Direct operation (for use on modular panels)		Si _Yes	Si _Yes	Si _Yes	Si _Yes	Si _Yes	No
Peso netto _Net weight		0,13	0,16	0,19	0,30	0,65	1,05

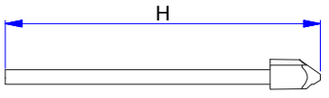
Codice ordinazione _Reference code		TS043P	TS046P	TS056P	TS063P	TS073P	TS083P	TS093P	TS103P
Tensione nominale d'isolamento _Rated insulation voltage		1500	1500	1500	1500	1500	1500	1500	1500
Corrente nominale termica Ith (A a 40° C) _Rated thermal current Ith (A a 40° C)		80A	100A	250A	400A	800A	800A	1000A	1250A
Tensione nominale impulso Uimp (kV) _Impulse withstand voltage Uimp (kV)		8	8	12	12	12	12	12	12
Tensione nominale d'impiego in DC-20 _Rated operational voltage ui in DC-20		1500	1500	1500	1500	1500	1500	1500	1500
Corrente nominale In (A) in DC21-B _Rated operational current In (A) in DC21-B	400Vdc	80	100	250	400	800	800	1000	1250
	500Vdc	60	100	160	400	630	800	1000	1250
	600Vdc	30	80	125	300	400	800	1000	1250
	750Vdc	30	80	125	300	350	800	1000	1250
	800Vdc	30	80	125	300	350	800	1000	1250
	1000Vdc	-	-	-	-	-	800	1000	1250
N° di poli in serie _N° of poles in series		3	6	6	3	3	3	3	3
Corrente breve durata per 1 sec a 400V (kA) _Short-circuit withstand current 1 sec. a 400V (kA)		5	5	8	12	26,5	35	50	50
Massima dimensione cavo Cu (mm^2) _Max cable section Cu (mm^2)		50÷70	50÷70	70÷120	185÷300	300÷480	2x240 2x50x5	2x50x6	2x50x8
Massima torsione terminali (NM) _Max terminal torque (NM)		-	-	-	-	-	-	-	-
Sforzo di manovra (nm) _Operating torque (nm)		16	16	24	18	34	45	70	70
Durata meccanica (N° manovre) _Mechanical endurance (N° of operations)		10.000	10.000	10.000	8.000	8.000	5.000	5.000	5.000
Comando diretto (per uso in centralino) _Direct operation (for use on modular panels)		No	No	No	No	No	No	No	No
Peso netto _Net weight		0,9	2,2	3,4	3,5	5,5	11	11	11

TS013M

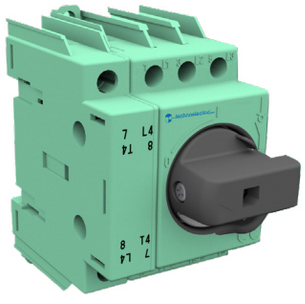


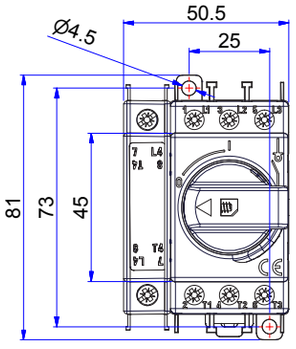


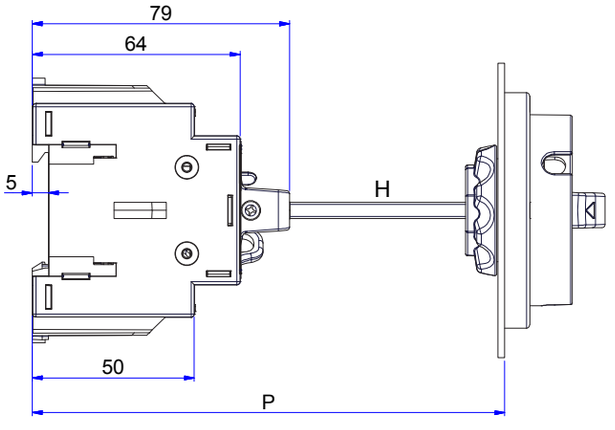
TS013M			
HANDLE	P	C	H
19460	--	34	P-C
19466	--	22	P-C



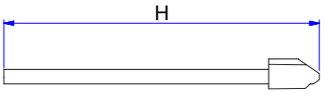
TS014M



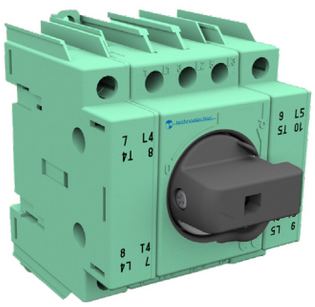


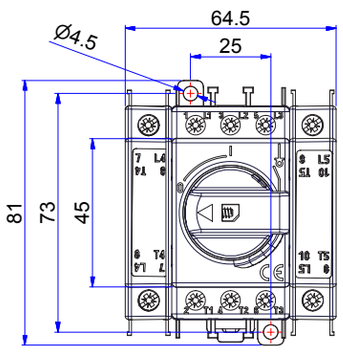


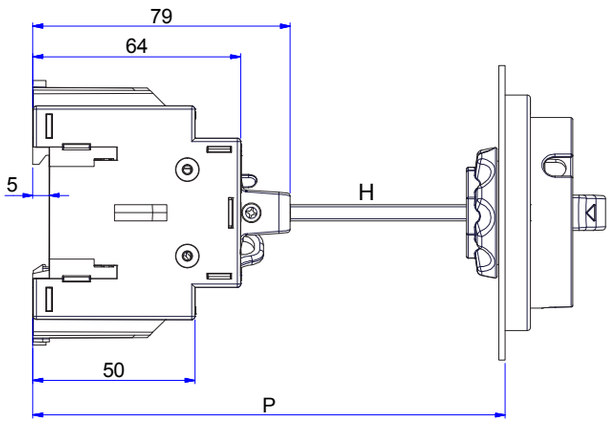
TS014M			
HANDLE	P	C	H
19460	--	34	P-C
19466	--	22	P-C



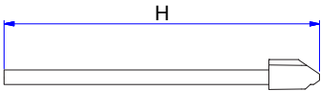
TS015M



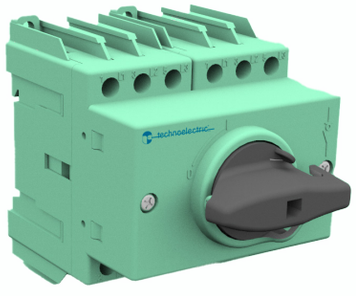


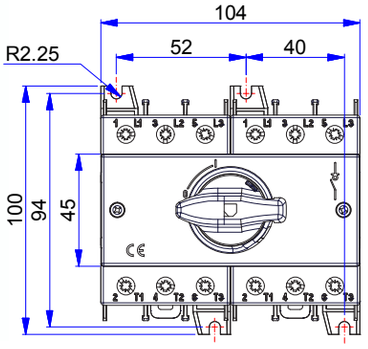


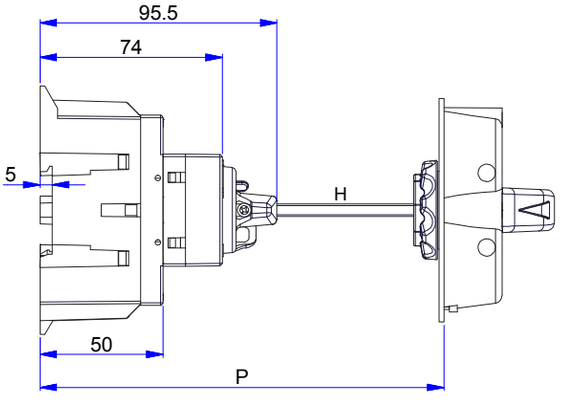
TS015M			
HANDLE	P	C	H
19460	--	34	P-C
19466	--	22	P-C



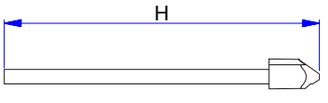
TS016M



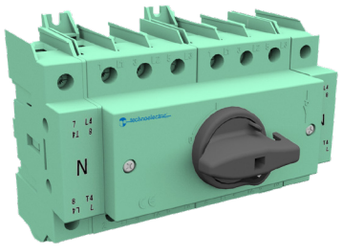


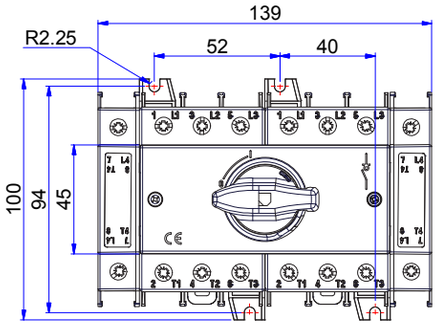


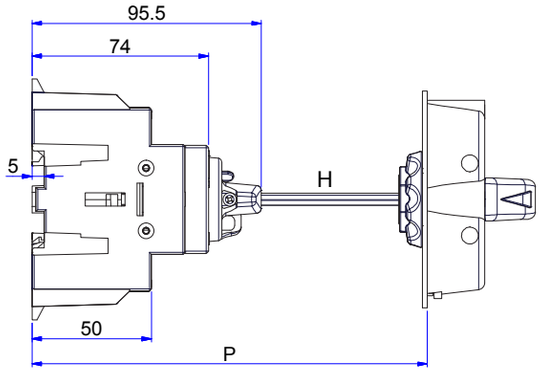
TS016M			
HANDLE	P	C	H
19466	--	40	P-C



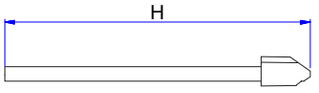
TS028M



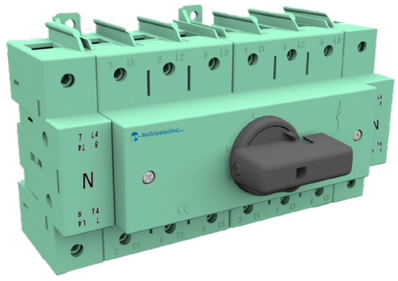


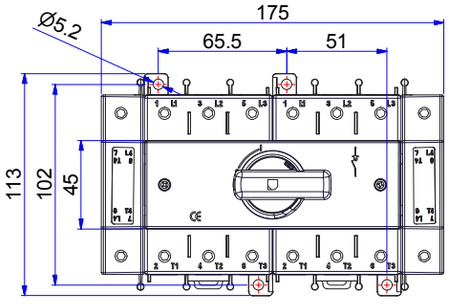


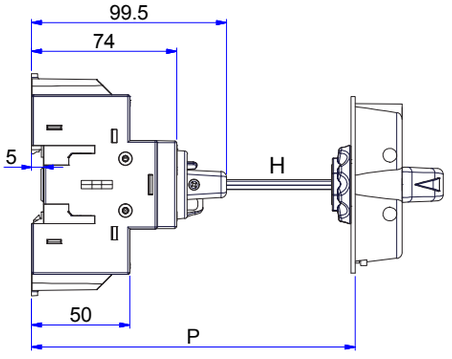
TS028M			
HANDLE	P	C	H
19466	--	40	P-C



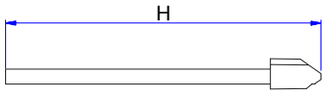
TS038M



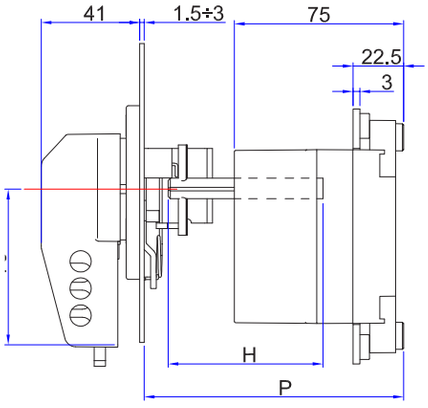


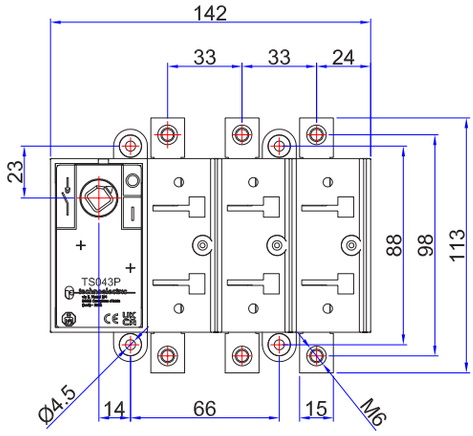


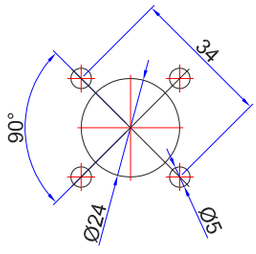
TS038M			
HANDLE	P	C	H
19466	--	40	P-C



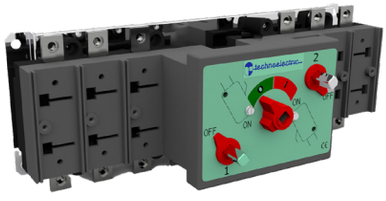
TS043P

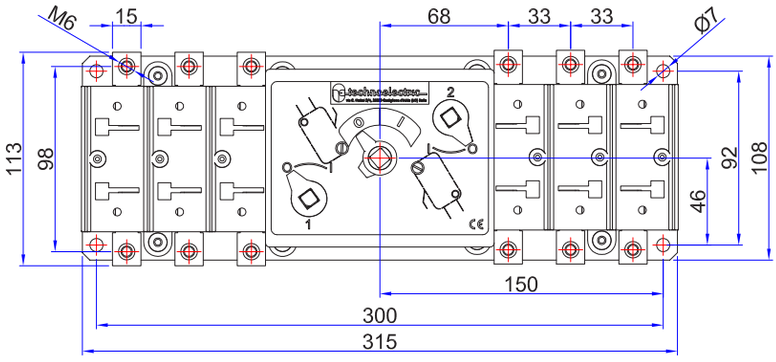


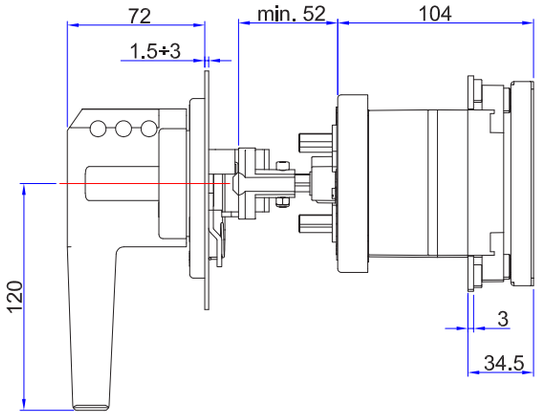




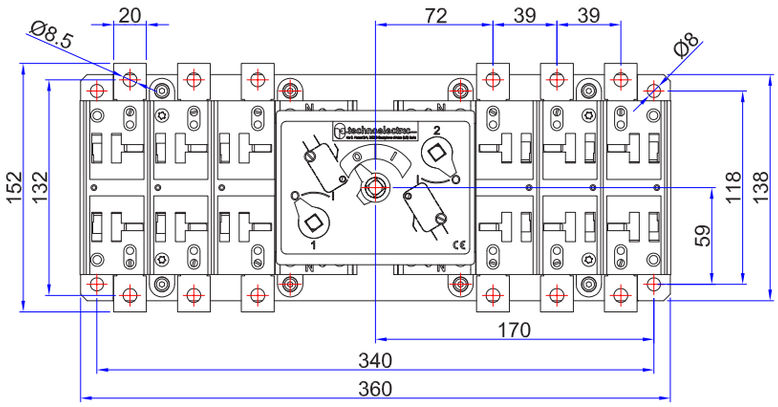
TS046P

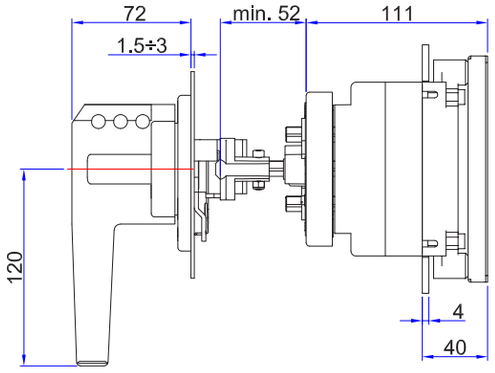




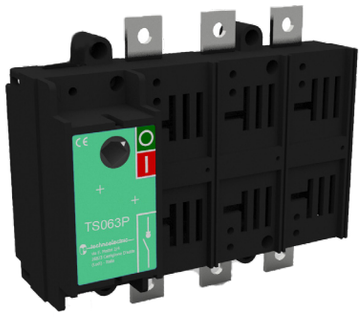


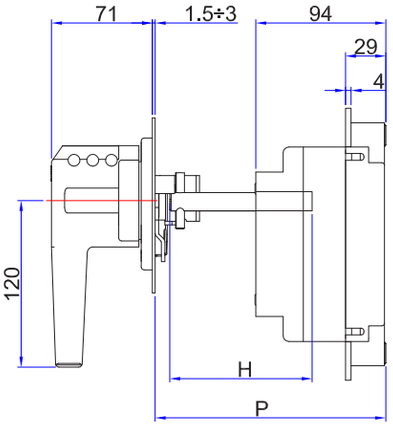
TS056P

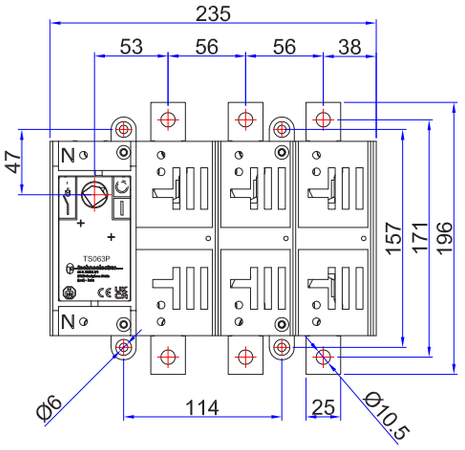


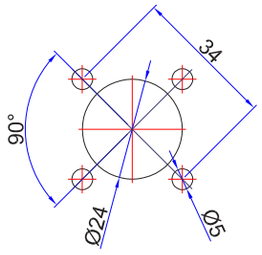


TS063P

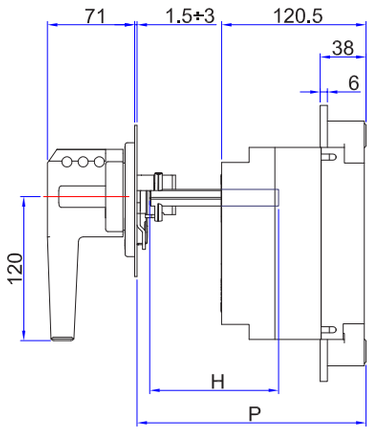


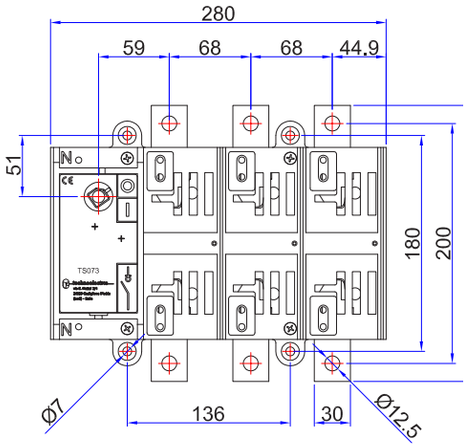


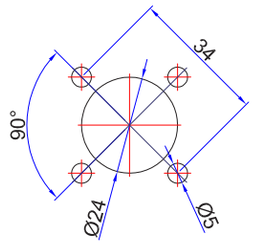




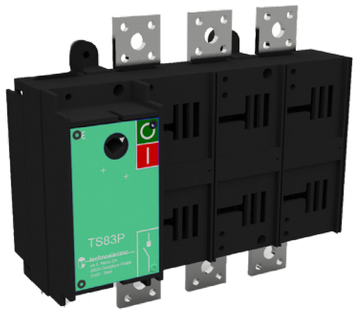
TS073P

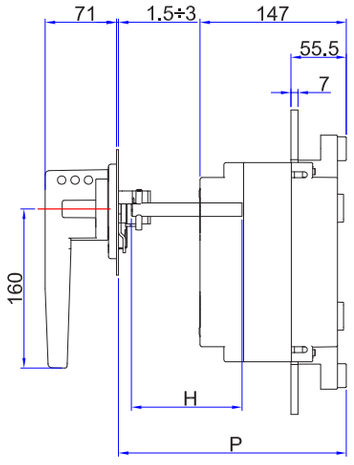


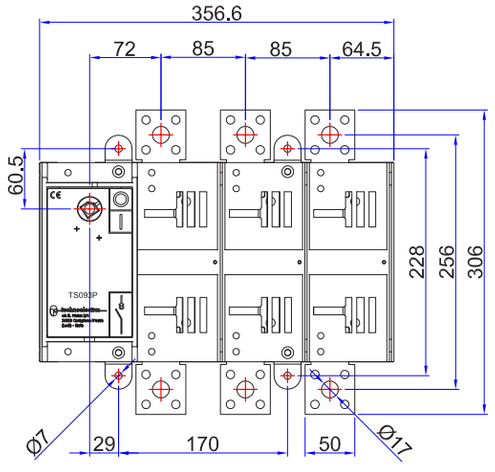


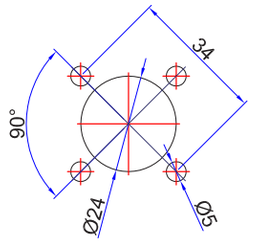


TS083P - TS093P - TS103P





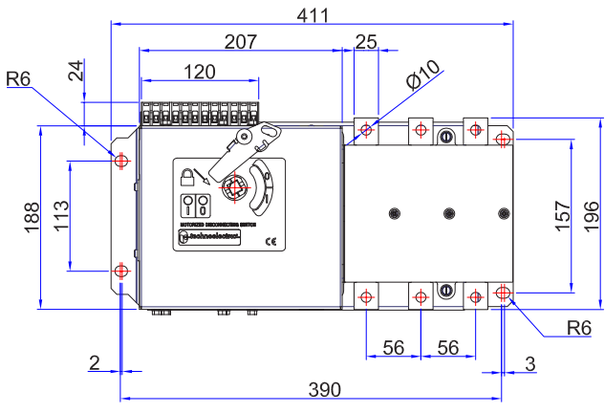


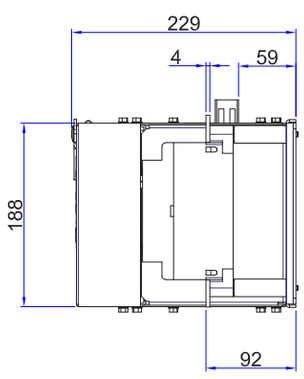


		TSP-MS				
Codice ordinazione _Reference code		**TS063PMS**	**TS073PMS**	**TS083PMS**	**TS093PMS**	**TS103PMS**
Tensione nominale d'isolamento _Rated insulation voltage		1500	1500	1500	1500	1500
Corrente nominale termica Ith (A a 40° C) _Rated thermal current Ith (A a 40° C)		400A	800A	800A	1000A	1250A
Tensione nominale impulso Uimp (kV) _Impulse withstand voltage Uimp (kV)		12	12	12	12	12
Tensione nominale d'impiego in DC-20 _Rated operational voltage ui in DC-20		1500	1500	1500	1500	1500
Corrente nominale In (A) in DC21 _Rated operational current In (A) in DC21						
Corrente nominale In (A) in DC21 _Rated operational current In (A) in DC21	400Vdc	400	800	800	1000	1250
	500Vdc	400	630	800	1000	1250
	600Vdc	300	400	800	1000	1250
	750Vdc	300	350	800	1000	1250
	800Vdc	300	350	800	1000	1250
	1000Vdc	-	-	800	1000	1250
N° di poli in serie _N° of poles in series		3	3	3	3	3
Corrente breve durata per 1 sec a 400V (kA) _Short-circuit withstand current 1 sec. a 400V (kA)		12	26,5	35	50	50
Massima dimensione cavo Cu (mm^2) _Max cable section Cu (mm^2)		185÷300	300÷480	2x240 2x50x5	2x50x6	2x50x8
Sforzo di manovra (nm) _Operating torque (nm)		18	34	45	70	70
Durata meccanica (N° manovre) _Mechanical endurance (N° of operations)		8.000	8.000	7.000	4.000	4.000
Comando diretto (per uso in centralino) _Direct operation (for use on modular panels)		No	No	No	No	No
Peso netto _Net weight		12,5	15	18,5	19	19

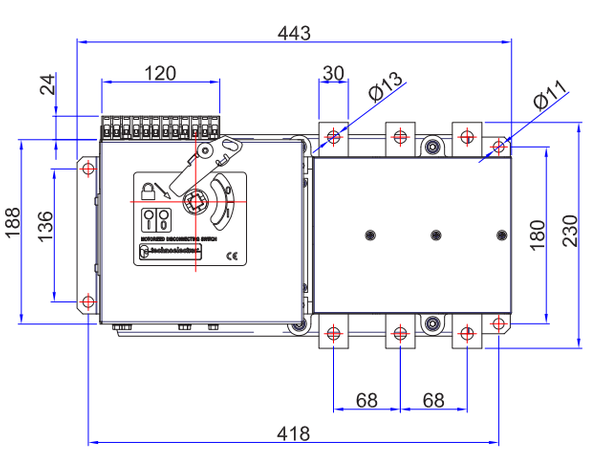
		TSP-BA			
Codice ordinazione _Reference code V aux bobina _V aux coil	24 V cc/DC	**TS073PB**	**TS083PB**	**TS093PB**	**TS103PB**
	48 V cc/DC	**TS073PB1**	**TS083PB1**	**TS093PB1**	**TS103PB1**
	110 V cc/DC	**TS073PB2**	**TS083PB2**	**TS093PB2**	**TS103PB2**
	110 V ac/AC	**TS073PB3**	**TS083PB3**	**TS093PB3**	**TS103PB3**
	220 V ac/AC	**TS073PB4**	**TS083PB4**	**TS093PB4**	**TS103PB4**
Tensione nominale d'isolamento _Rated insulation voltage		1500	1500	1500	1500
Corrente nominale termica Ith (A a 40° C) _Rated thermal current Ith (A a 40° C)		800A	800A	1000A	1250A
Tensione nominale impulso Uimp (kV) _Impulse withstand voltage Uimp (kV)		12	12	12	12
Tensione nominale d'impiego in DC-20 _Rated operational voltage ui in DC-20		1500	1500	1500	1500
Corrente nominale In (A) in DC21 _Rated operational current In (A) in DC21	400Vdc	800	800	1000	1250
	500Vdc	630	800	1000	1250
	600Vdc	400	800	1000	1250
	750Vdc	350	800	1000	1250
	800Vdc	350	800	1000	1250
	1000Vdc	-	800	1000	1250
N° di poli in serie _N° of poles in series		3	3	3	3
Corrente breve durata per 1 sec a 400V (kA) _Short-circuit withstand current 1 sec. a 400V (kA)		26,5	35	50	50
Massima dimensione cavo Cu (mm^2) _Max cable section Cu (mm^2)		300÷480	2x240 2x50x5	2x50x6	2x50x8
Sforzo di manovra (nm) _Operating torque (nm)		34	45	70	70
Durata meccanica (N° manovre) _Mechanical endurance (N° of operations)		8.000	7.000	4.000	4.000
Comando diretto (per uso in centralino) _Direct operation (for use on modular panels)		No	No	No	No
Peso netto _Net weight		8,2	13	13,5	13,5

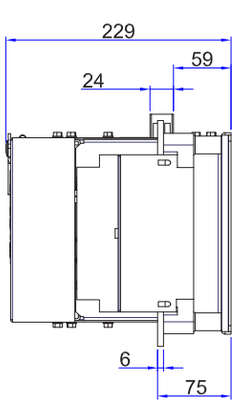
TS063PMS



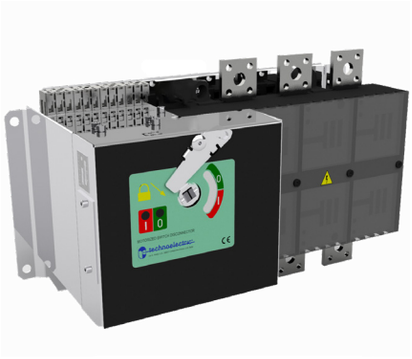


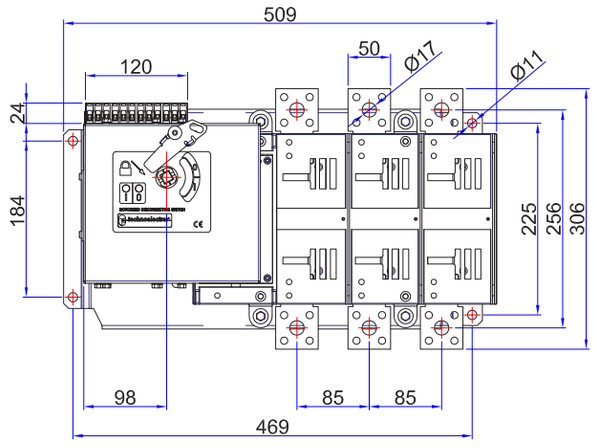
TS073PMS

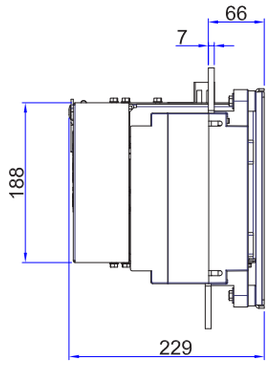




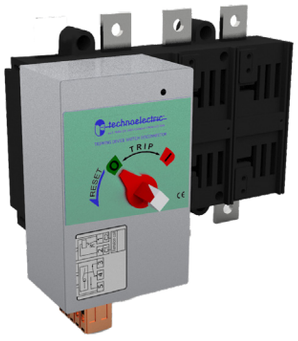
TS083PMS - TS093PMS - TS103PMS

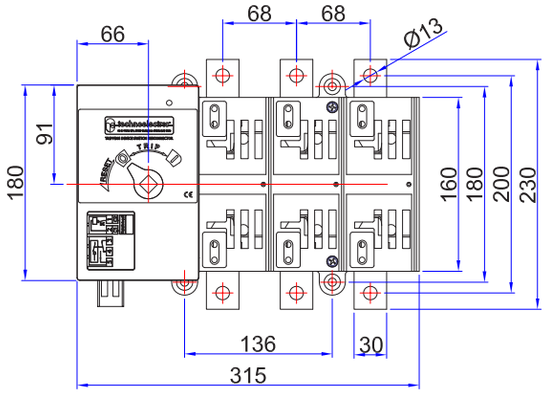


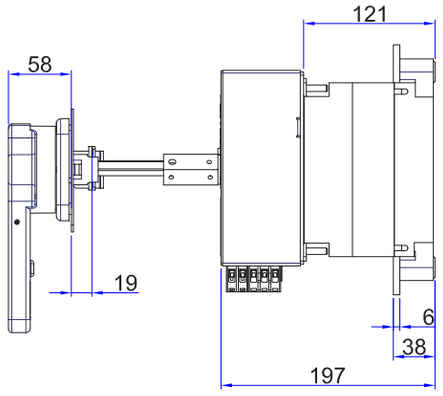




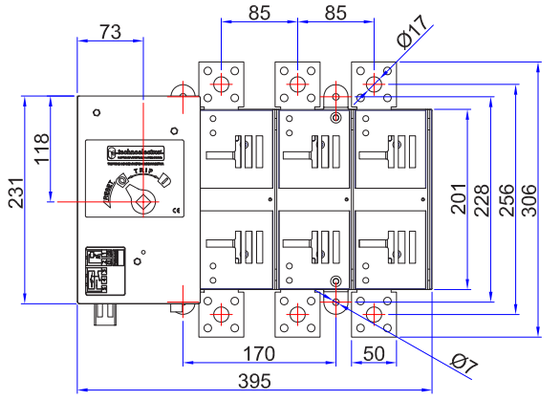
TS073PB







TS083PB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231
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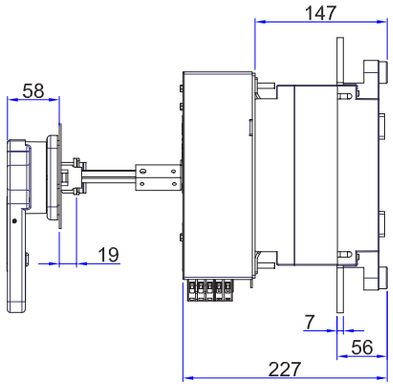
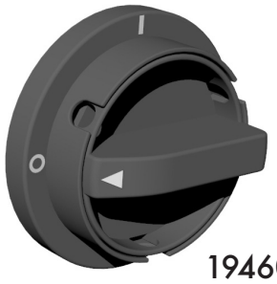
201
228
256
306
170
50
Ø7
395

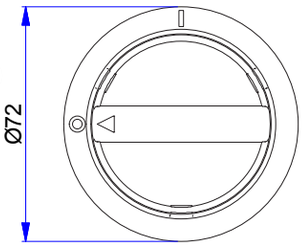

147
58
19
7
56
227

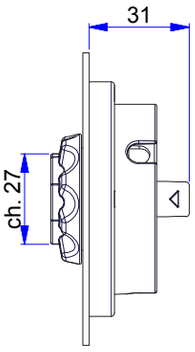
ACCESSORI TSM _TSM accessories

MANIGLIE BLOCCO PORTA _Door interlock handles

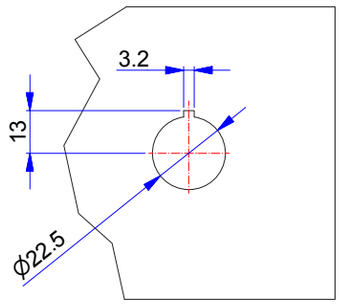


19460



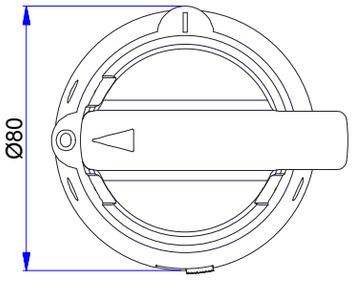


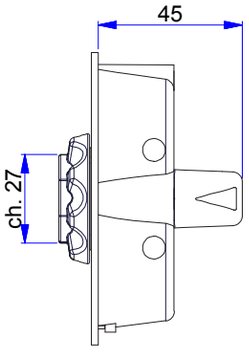
Foratura portella _Door drilling



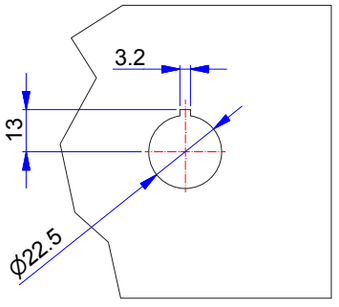
MANIGLIA CON SBLOCCO PORTA _handle with defeater mechanism

19466





Foratura portella _Door drilling

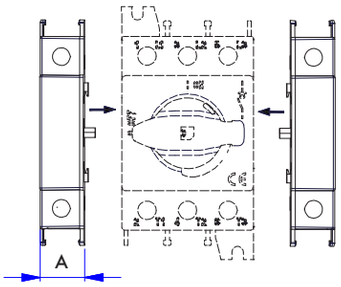


ALBERI DI COMANDO CON PUNTALE _shaft for external operation with tip

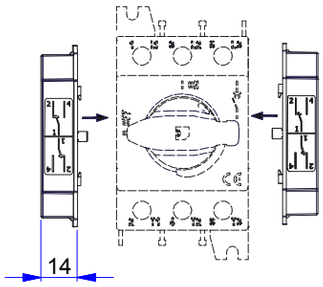
Tipo _type	TSM alluminio _alluminium			TSM acciaio _steel		
Poli _poles	3 - 4 - 5			3 - 4 - 5 | 6 - 8		
mm	100	200	300	100	200	300
Codice_ code	19535-100P	19535-200P	19535-300P	19534-100P	19534-200P	19534-300P

SERIE_SERIES TECHNO**SOLAR**

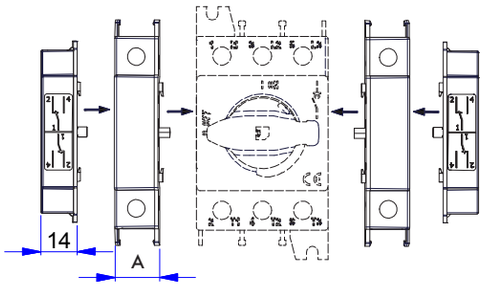
montaggio poli addizionali
_additional poles assembly



montaggio contatti ausiliari
_auxiliary contacts assembly

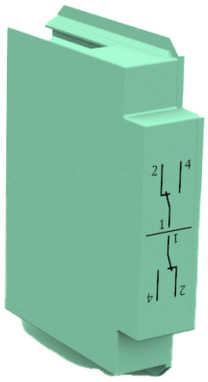


montaggio poli addizionali + contatti ausiliari
_additional poles + auxiliary contacts assembly



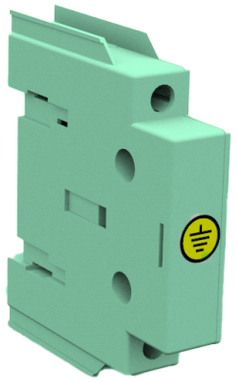
Tipo_Type	TS01M	TS02M	TS03M
A	14	17	22

CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC
_auxiliary contacts 1NO + 1NC



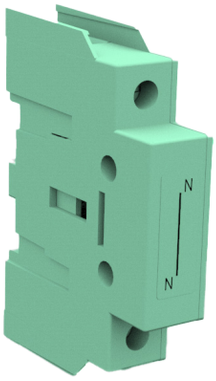
Tipo_Type	TS01M	TS02M	TS03M
Codice _code	19442	19443	19444

MORSETTO DI TERRA
_Earthing neutral



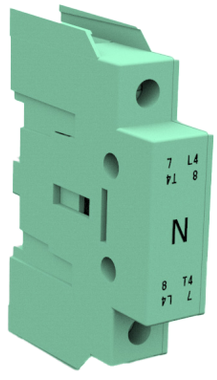
Tipo_Type	TS01M	TS02M	TS03M
Codice _code	19322	19422	19452

NEUTRO PASSANTE
_Solid neutral



Tipo_Type	TS01M	TS02M	TS03M
Codice _code	19321	19420	19451

4° POLO CONTEMPORANEO
_Contemporary 4th pole

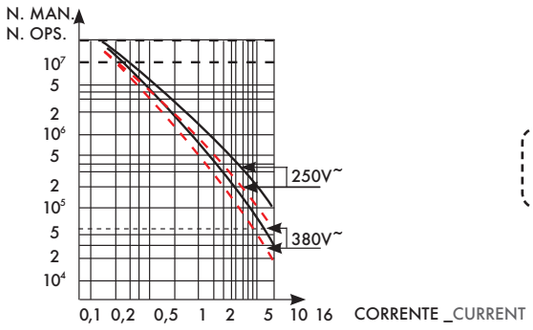


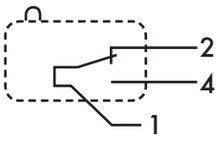
Tipo_Type	TS01M	TS02M	TS03M
Codice _code	19442	19443	19444

Per il montaggio dei contatti ausiliari addossati al 4° polo, ordinare la confezione viti cod 11190311
_For the installation of the auxiliary contacts on the 4th pole, please order the screws set with code 11190311

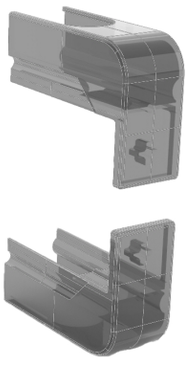
Contatti ausiliari in scambio
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore Portata nominale 16A
Portata termica 20A

_Auxiliary contacts
break before make contacts switches
Rated current 16A
Thermal current 20A

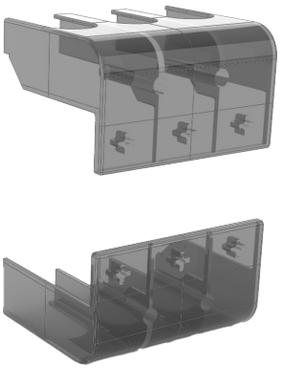




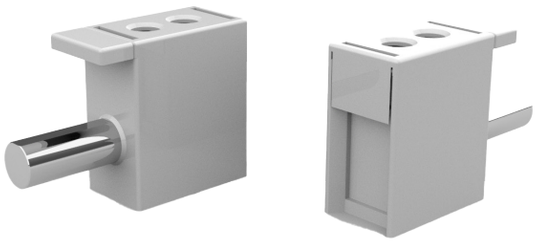
KIT COPRI TERMINALI 4° POLO _4th pole terminals cover kit

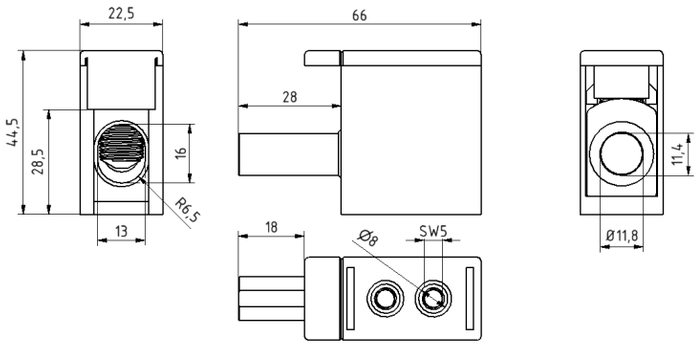


KIT COPRI TERMINALI 3 POLI _3 poles terminals cover kit



MORSETTO ADATTATORE 200A PER CAVI DA 95MM² _Terminal adapter 200A for 95 mm² cables





Il codice include 3 pezzi _3 pcs in each code

Codice _code :19565

Poli _poles	Diametro massimo cavo _Max. Cross section	Corrente Nominale _Nominal current	Tensione Nominale _Nominal voltage
1	120	190A - 200A	690V

Adattatore terminali per cavo da 95 mm². Per il collegamento di conduttori in alluminio e rame alle apparecchiature. Il corpo è in alluminio stagnato e l'alloggiamento è in poliammide.

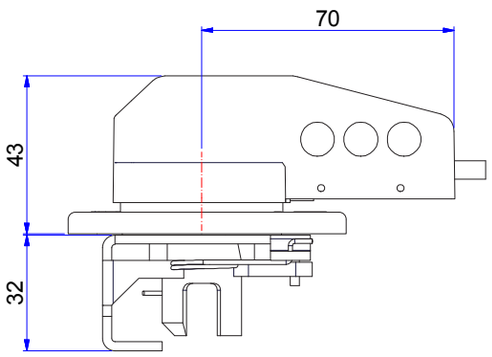
_Terminal Adapter for 95 sqmm cable. for connecting Al-and Cu-conductors to equipment. Body is made of tin-plated aluminium and housing is polyamid.

SERIE_SERIES TECHNO**SOLAR**

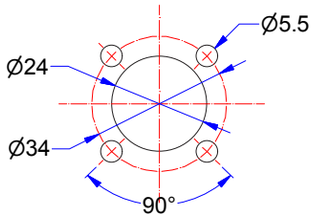
MANIGLIA BLOCCO PORTA NERA PER TS P
_door interlock handle for TS P

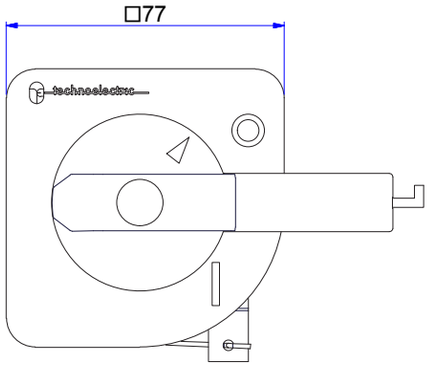
Tipo_type	TS043P	TS046P	TS056P	TS063P	TS073P	TS083P	TS093P	TS0103P
Codice _code	18001	18003	18003	18003	18003	18005	18830 18844	18830 18844

18001

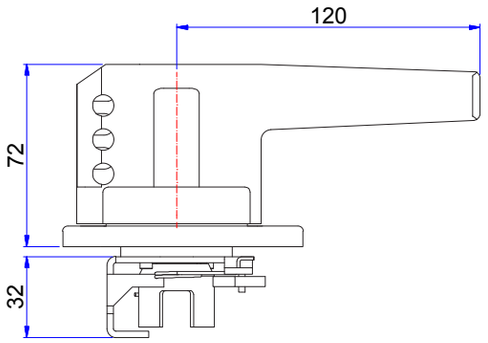


Foratura portella _Door drilling

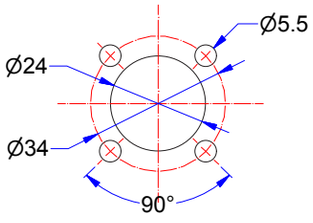


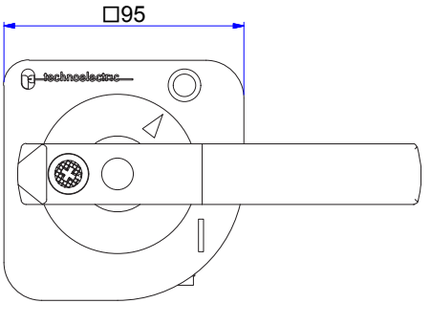


18003

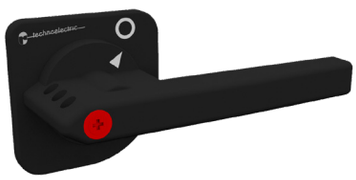


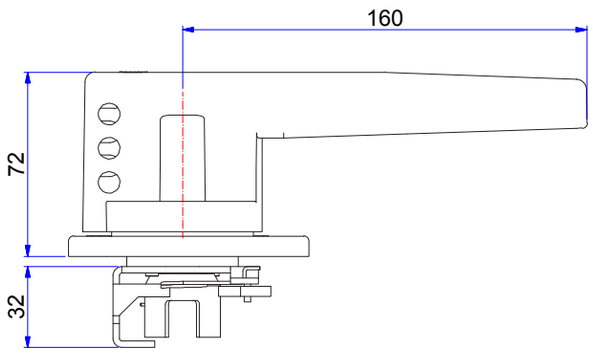
Foratura portella _Door drilling



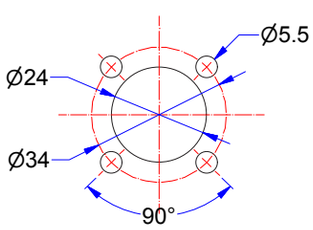


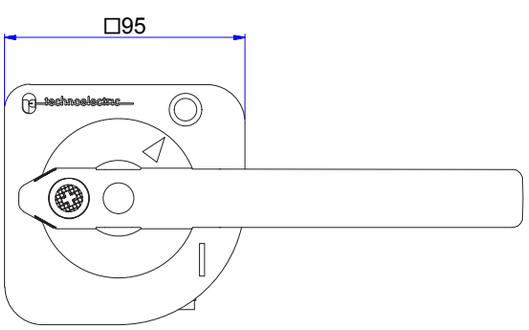
18005



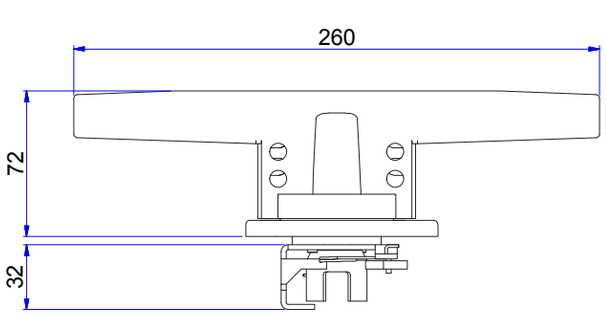


Foratura portella _Door drilling

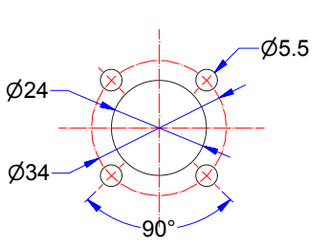


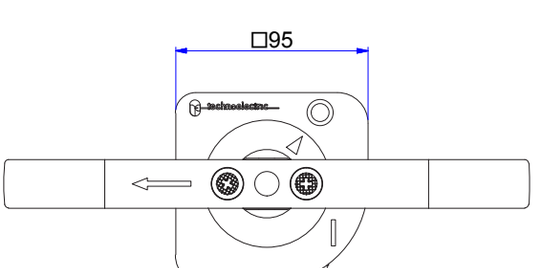


18007

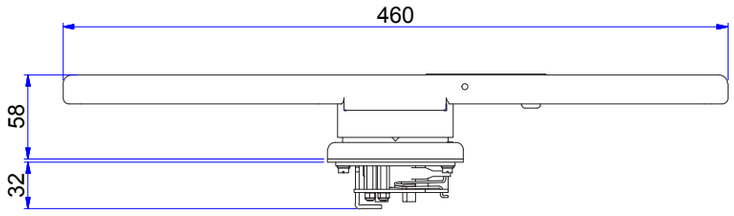


Foratura portella _Door drilling

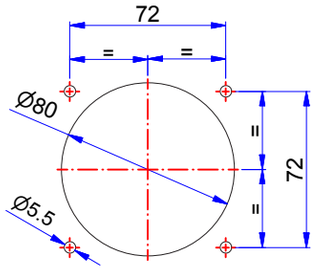


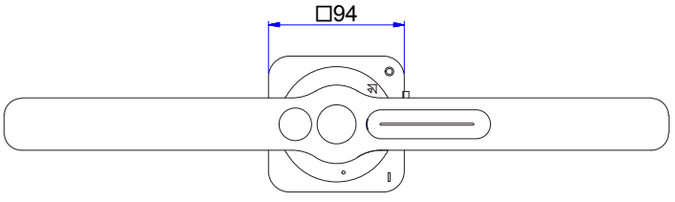


18830

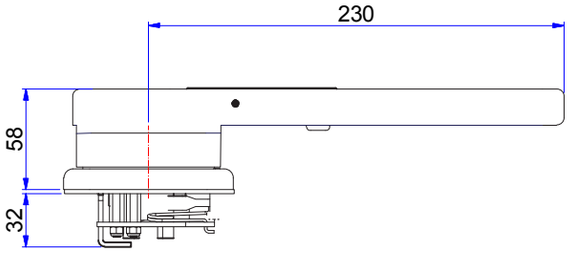


Foratura portella _Door drilling

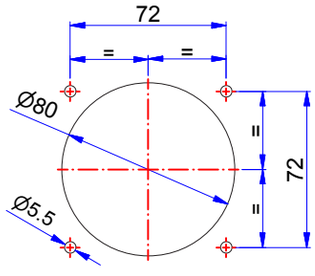


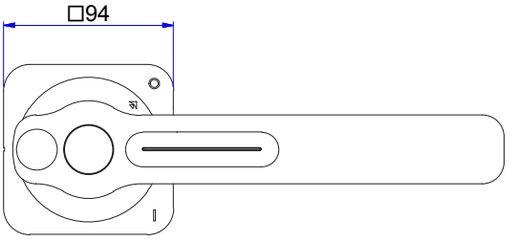


18844

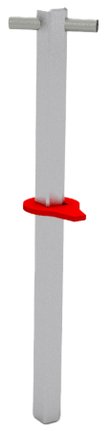


Foratura portella _Door drilling





ALBERO COMANDO
_shaft



200 mm

Tipo _type	TS4 | 5	TS6 | 7 | 8 | 9 | 10
Codice _code	18201	18207

300 mm

Tipo _type	TS4 | 5	TS6 | 7 | 8 | 9 | 10
Codice _code	18202	18208

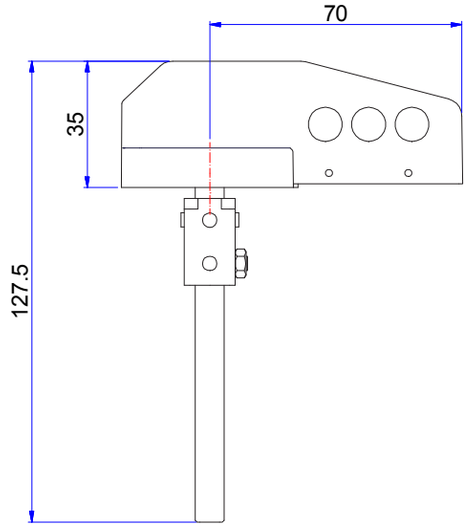
400 mm

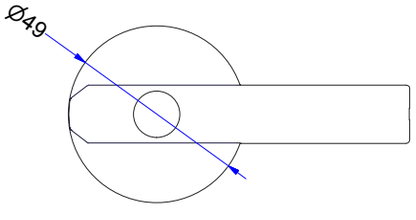
Tipo _type	TS4 | 5	TS6 | 7 | 8 | 9 | 10
Codice _code	18203	18209

MANIGLIA DIRETTA NERA PER TS P
_direct interlock handle for TS P

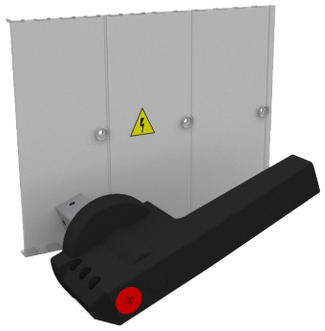
Tipo_type	TS043P	TS046P	TS056P	TS063P	TS073P	TS083P	TS093P	TS0103P
Codice _code	18020	18588	18589	18320	18022	18023 18851	18852 18840	18852 18840

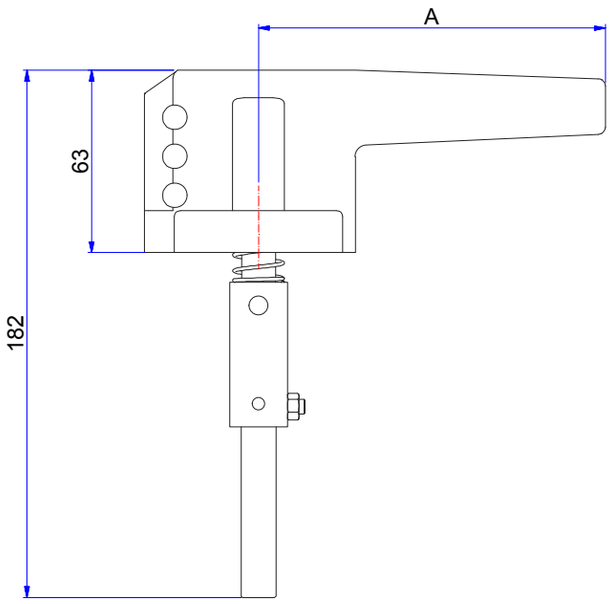
18020

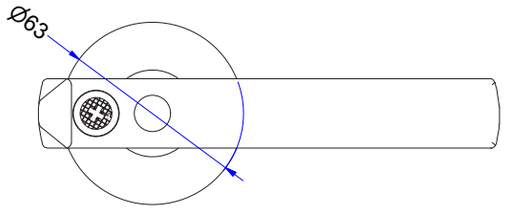




18320 - 18588 - 18589 - 18022 - 18023

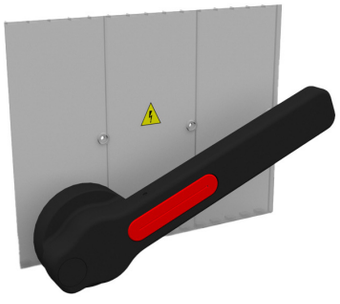


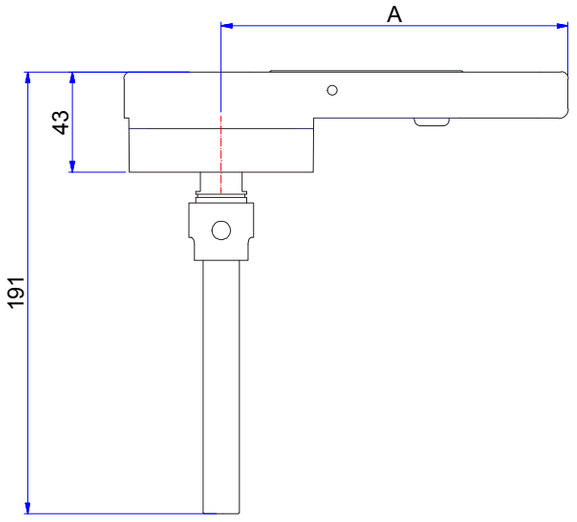


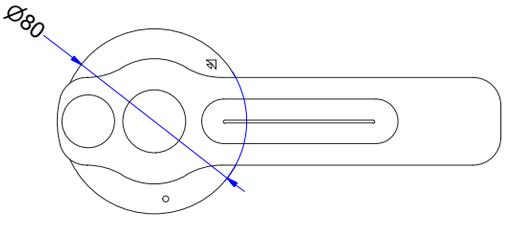


Tipo _type	A/mm
18320	120
18588	120
18589	120
18022	160
18023	160

18851 - 18852

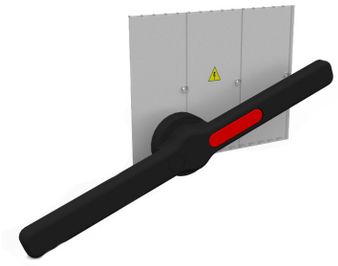


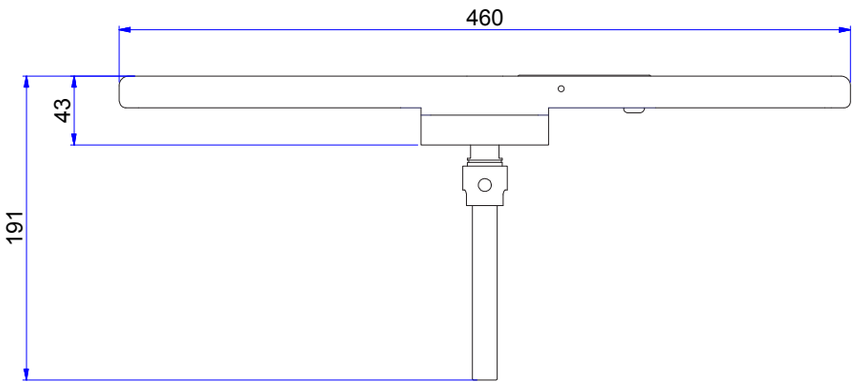


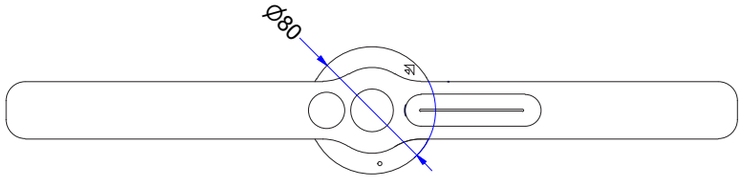


Tipo _type	A/mm
18851	150
18852	230

18840



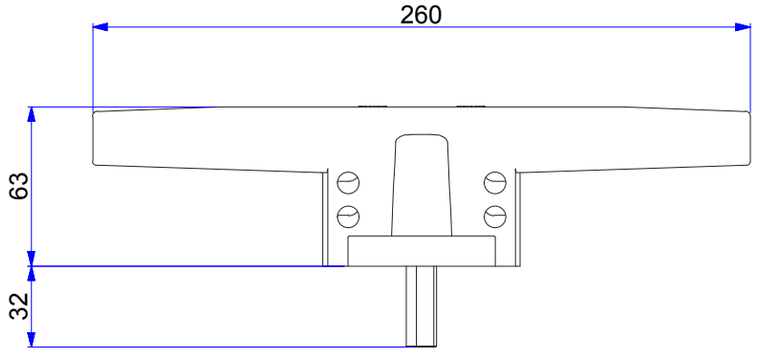


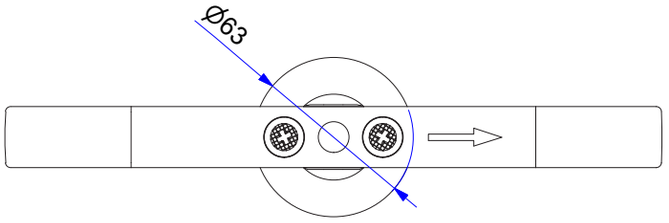


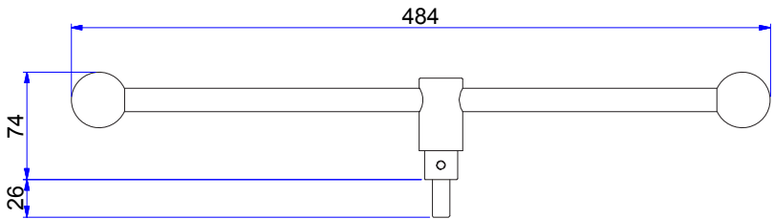
MANIGLIA DIRETTA PER TS P
_direct handle for TS P

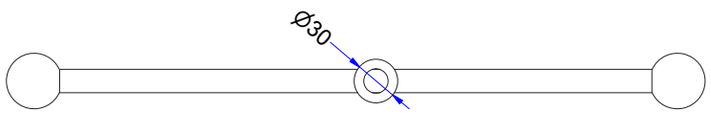
Tipo_type	TS073PB	TS083PB	TS093PB	TS103PB
Codice _code	18802	18803	18803	18803

18802





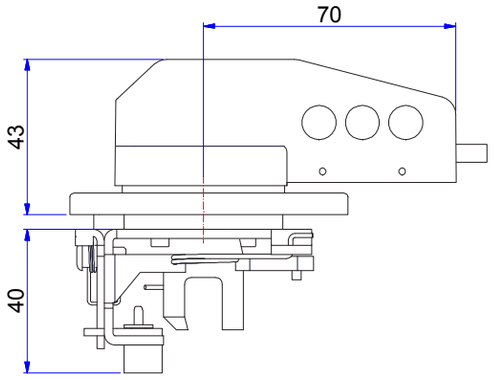




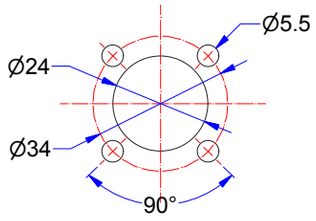
MANIGLIA BLOCCO PORTA NERA
CON DISPOSITIVO DI SBLOCCO CON ATTREZZO SPECIALE
_black door interlock handle with defeater mechanism (special tool)

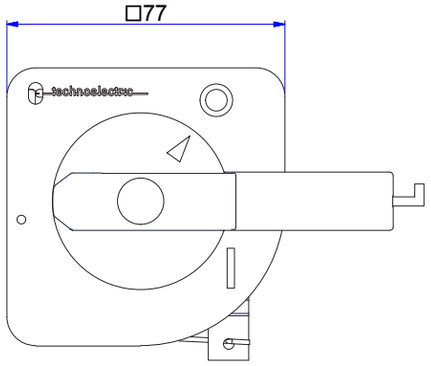
Tipo_type	TS043P	TS046P	TS056P	TS063P	TS073P	TS083P	TS093P	TS103P
Codice _code	18220	18222	18222	18222	18222	18224	18832|18850	18832|18850

18220

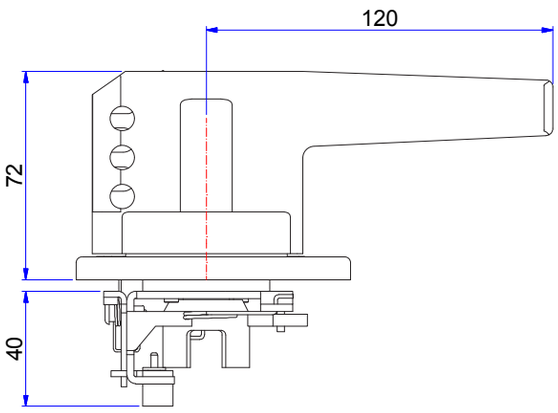


Foratura portella _Door drilling

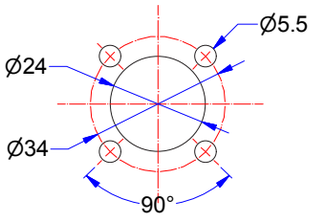


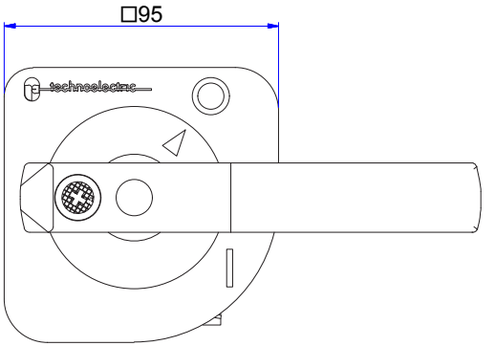


18222

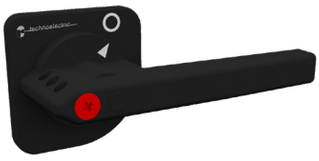


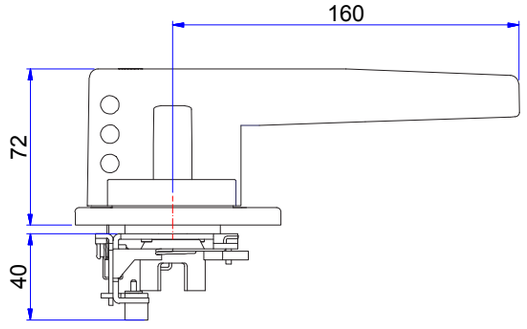
Foratura portella _Door drilling



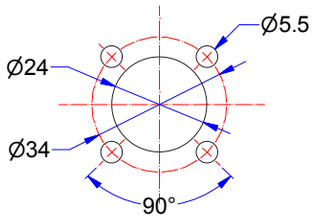


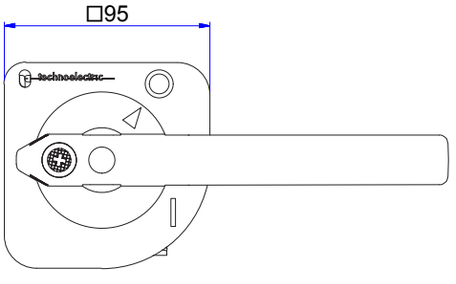
18224



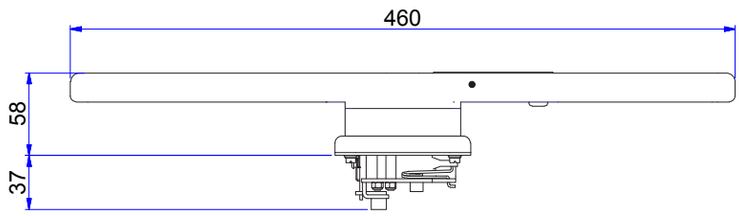


Foratura portella _Door drilling

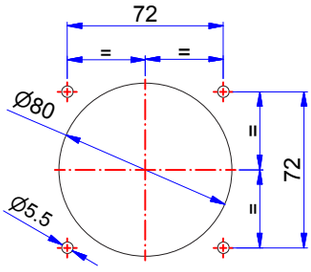


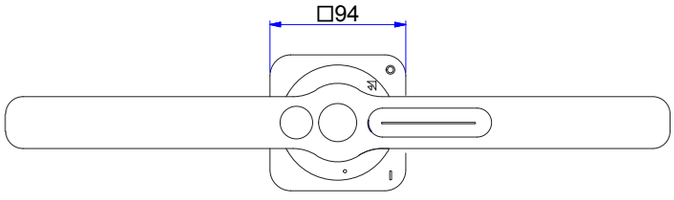


18832

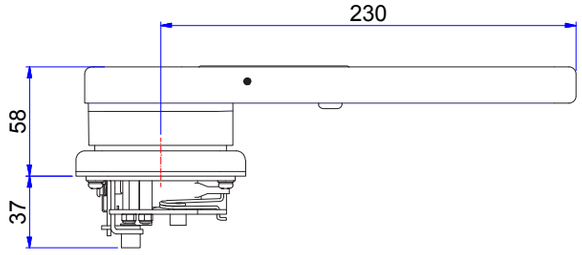


Foratura portella _Door drilling

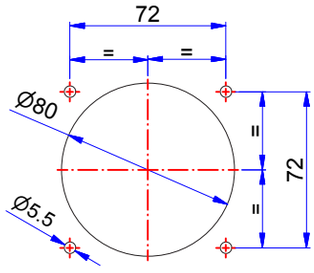


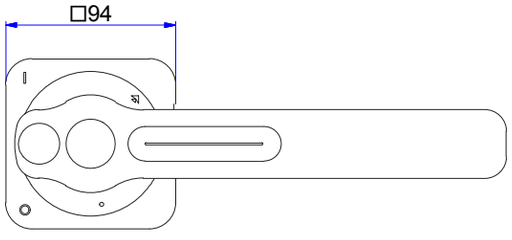


18850



Foratura portella _Door drilling

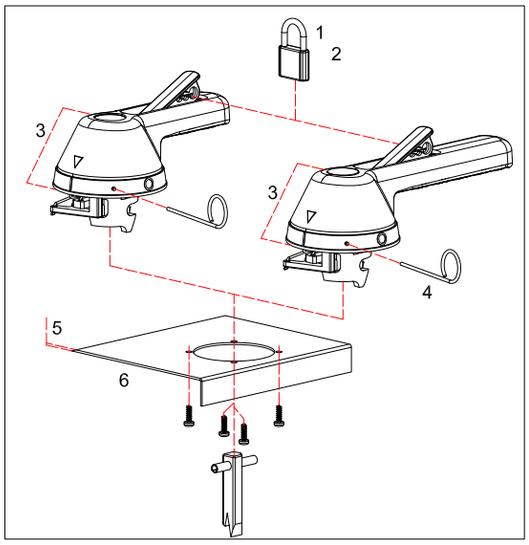


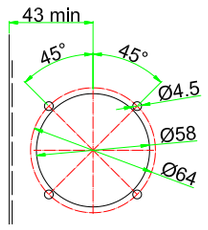


MANIGLIA BLOCCO PORTA NERA
CON DOPPIA FUNZIONE DI SICUREZZA PER TS P
_black interlock handle with double function of security for TS P

Adatta per montaggio su portella con dispositivo di blocco porta in posizione On Grado di protezione IP 65
Disponibile anche nella versione per emergenza (rosso\giallo)

_For door mounting with Door interlocking in “On” position IP 65 degree of protection
Available also for emergency operation (red\yellow)

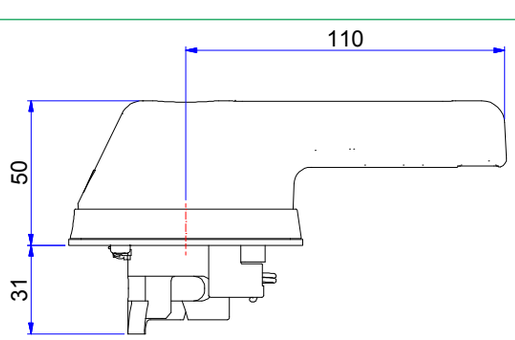




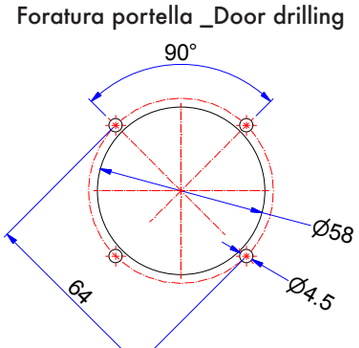
1	Lucchettabile (max 3 lucchetti 1xø8+2xø6) in posizione Off.	Padlockable in “Off” position (with max 3 padlocks of 1xø8+2xø6).
2	Apertura della portella impedita quando la maniglia è lucchettata in posizione di Off.	Door opening is prevented when the handle is padlocked in “Off” position.
3	Ingombro inferiore a 50 mm in profondità per permettere l’utilizzo anche in quadri a doppia portella.	Handle height less than 50 mm for suitability with two-doors type panels.
4	Permette, a mezzo di un apposito attrezzo, fornito con la maniglia, l’esclusione del dispositivo di blocco porta e quindi l’apertura della portella anche a interruttore in posizione di ON. Il dispositivo bloccoporta si ripristina automaticamente al chiudersi della porta.	With the use of the special tool (supplied), the door interlock mechanism can be bypassed maintaining the switch in the “On” position and the door can be opened. The door interlocking mechanism is automatically re-established when door is closed.
5	Può essere montata su portelle di qualsiasi spessore.	Can be mounted on doors of any thickness.
6	Posizione della maniglia fissa quando la portella é aperta.	When the door is open, the position of the handle is fixed

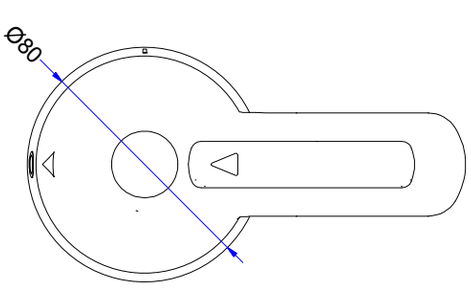
Tipo_type	TS043P | TS046P	TS056P	TS063P	TS083P
Codice _code	18234	18234	18234	18236

18234

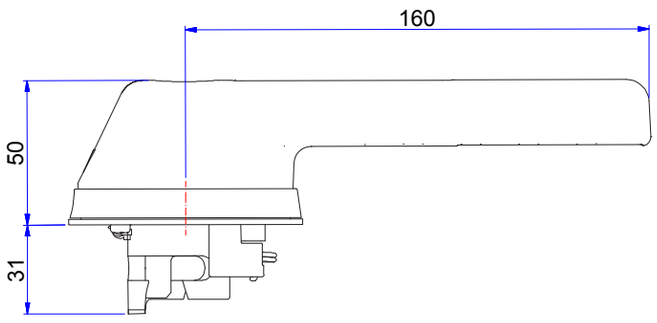


Foratura portella _Door drilling

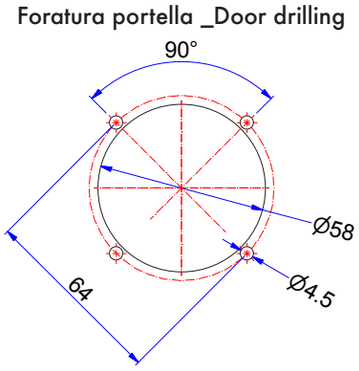


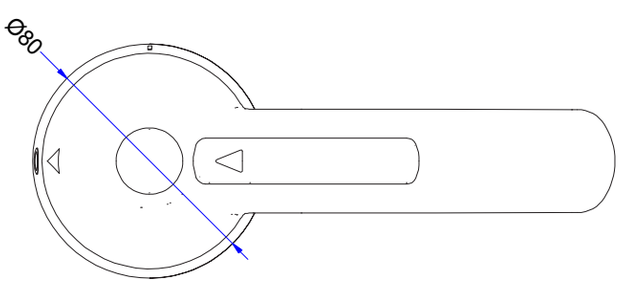


18236

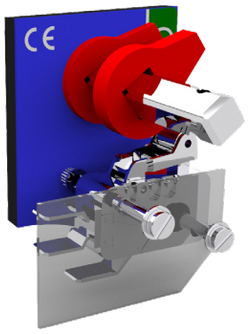


Foratura portella _Door drilling

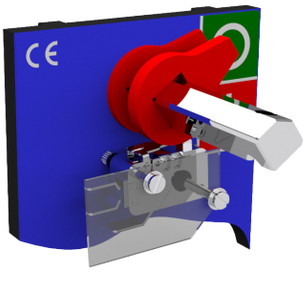




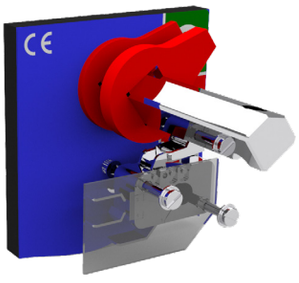
CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC PER APERTURA ANTICIPATA _auxiliary contacts 1NO + 1NC activated before main contacts



18165



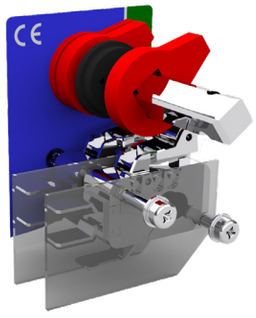
18163



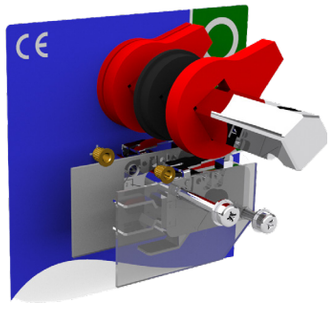
18160

Tipo _type	TS043P	TS063P	TS073P	TS083P | TS093P | TS103P
Codice _code	18165	18163	18160	18163

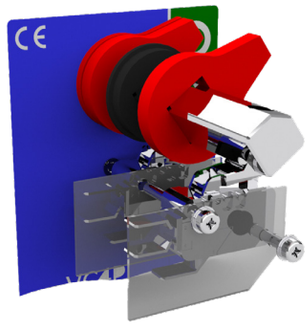
CONTATTI AUSILIARI IN SCAMBIO 2NA + 2NC PER APERTURA ANTICIPATA
_auxiliary contacts 2NO + 2NC activated before main contacts



18166



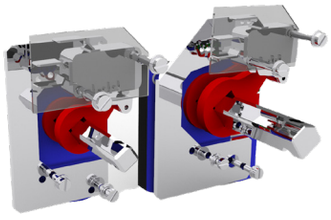
18164



18161

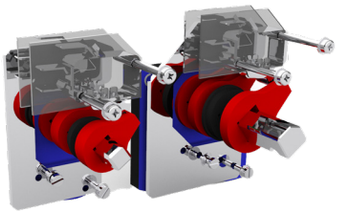
Tipo _type	TS043P	TS063P	TS073P	TS083P | TS093P | TS103P
Codice _code	18166	18164	18161	18164

CONTATTI AUSILIARI IN SCAMBIO 1NA + 1NC PER APERTURA POSTICIPATA
_auxiliary contacts 1NO + 1NC activated after main contacts



Tipo _type	TS043P	TS063P	TS073P	TS083P | TS093P | TS103P
Codice _code	18120	18127	18127	18127

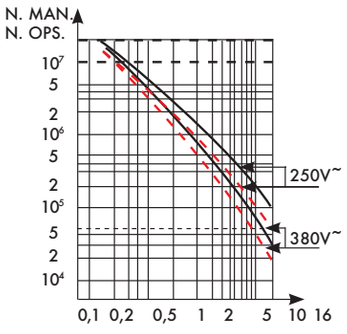
CONTATTI AUSILIARI IN SCAMBIO 2NA + 2NC PER APERTURA POSTICIPATA
_auxiliary contacts 2NO + 2NC activated after main contacts

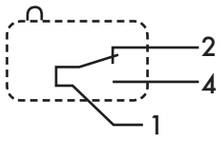


Tipo _type	TS043P	TS063P	TS073P	TS083P | TS093P | TS103P
Codice _code	18123	18128	18128	18128

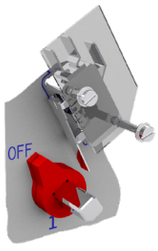
Contatti ausiliari in scambio
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore Portata nominale 16A
Portata termica 20A

_Auxiliary contacts
break before make contacts switches
Rated current 16A
Thermal current 20A



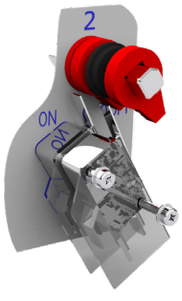


CONTATTI AUSILIARI IN SCAMBIO 1NA+1NC
_auxiliary contacts 1NO+1NC



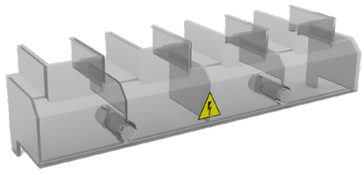
Tipo _type	TS046P	TS056P
Codice _code	18566 (paletta _lever)	

CONTATTI AUSILIARI IN SCAMBIO 2NA+2NC
_auxiliary contacts 2NO+2NC



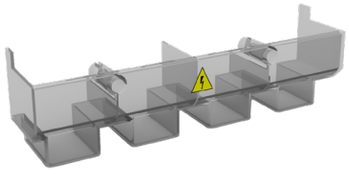
Tipo _type	TS046P	TS056P
Codice _code	18568 (paletta _lever)	

CALOTTA PROTEZIONE TERMINALI SUPERIORI
_upper terminal cover



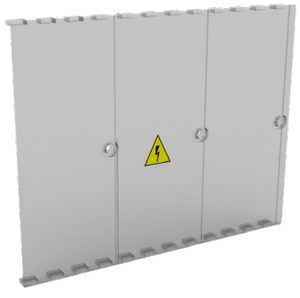
Tipo _type	TS043P TS046P	TS056P	TS063P	TS073P	TS083P	TS943P TS103P
Codice _code	18050	18052	18350	18054	18056	18058

CALOTTA PROTEZIONE TERMINALI INFERIORI
_lower terminal cover



Tipo _type	TS043P TS046P	TS056P	TS063P	TS073P	TS083P	TS943P TS103P
Codice _code	18051	18053	18351	18055	18057	18059

SCHERMO PROTEZIONE CONTATTI PRINCIPALI
_main contacts cover shield



Tipo _type	TS043P TS046P	TS056P	TS063P	TS073P	TS083P	TS943P TS103P
Codice _code	18060	18061	18360	18062	18063	18063

SPESSORE RIALZO
_risers

Tipo _type	VC1F	VC2F	VC3F	VC4F	VC5F
Codice _code	18290	18291	18292	18293	18293

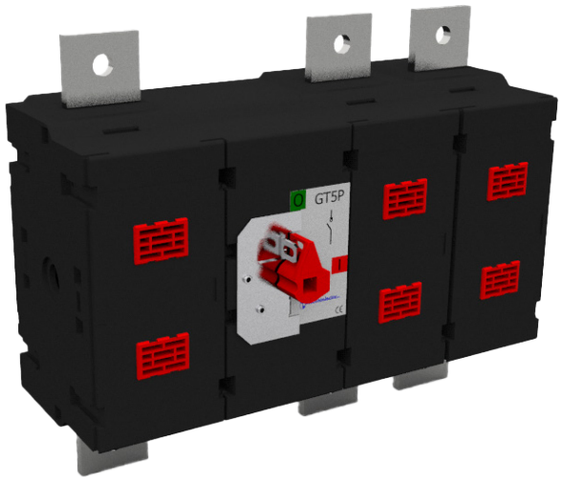
Tipo _type	h/mm	ø
VC1	5	15
VC2	5	18
VC3	10	17
VC4-5	15	24

Confezione 4 pezzi _4pcs pack

INTERRUTTORI, SEZIONATORI MODULARI CON E SENZA PORTAFUSIBILI

_SWITCH DISCONNECTORS WITH AND WITHOUT FUSE

GT 630 ÷ 4000 A



GENERALITÀ
Gli interruttori di manovra sezionatori GT-GLOBE TECHNICS con e senza porta fusibili, consentono l'apertura e la chiusura sotto carico di circuiti elettrici in bassa tensione.

IMPIEGO
Sono normalmente impiegati nelle seguenti funzioni:
- interruttore generale
- interruttore per motori
- interruttore sezionatore
- interruttore di sicurezza

Con la versione dotata di porta fusibile tipo GT-FP e specifici fusibili, svolge le funzioni di protezione contro i corto circuiti e il sovraccarico di impianti e macchine.

CARATTERISTICHE GENERALI
Tensione di isolamento nominale 1500v c.A. e 1500v c.C.
Disponibili 2-3-4 poli
Il polo di fase e quello del comando possono essere collocati in qualsiasi posizione
Terminali con attacchi frontali, posteriori o con combinazioni di entrambi
Alto potere di interruzione (AC22, AC23, IEC 60947-3)
Elevata durata meccanica ed elettrica
Doppia interruzione per polo (con porta fusibili)
Porta fusibili isolati su entrambi i lati con interruttore aperto
Possibilità di montaggio fusibili DIN-BS
Contatti autopulenti
La posizione della maniglia costituisce una indicazione positiva e affidabile della posizione dei contatti
Visibilità diretta mediante opportune feritoie, dei contatti fissi e mobili
Manovra a scatto rapido indipendente può essere frontale o laterale
Disponibile versione con polo di neutro passante
Neutro a piena corrente
Protezione adeguata per prevenire i contatti accidentali
Involucro in materiali autoestinguenti (classe VO-UL94) a bassa igroscopicità, ad alta resistenza meccanica e alle correnti superficiali
Adatto per l'utilizzo in climi tropicali
Maniglia esterna a doppio isolamento con blocco porta in pos. 1 grado di protezione IP65, possibilità di 3 blocchi con lucchetto in posizione 0
Maniglia diretta lucchettabile in posizione di zero
Albero di comando telescopico
Contatti aux di segnalazione (max 4NA+4NC) + contatti di pre-apertura (max 2NA+2NC)
Vasta gamma di accessori

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO
Temperatura ambiente di immagazzinamento e trasporto - 25°c + 55°c
Temperatura ambiente di funzionamento - 20°c + 40°c
In caso di temperatura ambiente (t_a) superiore, applicare la seguente formula di declassamento:

$I_{the} = k\, i_{th}$ dove $\qquad k = 1 - \frac{t_a - 40}{100}$

Umidità relativa max 95%
Frequenza nominale 50 - 60 hz
Altitudine max 2000 m, s.l.m.
Grado di inquinamento 3 secondo IEC 60947-1
Montaggio in custodia: in caso di utilizzo a piena corrente e in mancanza di adeguata ventilazione assicurare un volume pari a circa 5 volte quello dell'apparecchio
Tipo di servizio (secondo IEC 60947-1): 8 ore; ininterrotto: intermittente 60% classe 30; temporaneo; periodico.

Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3 | EAC

CERTIFICATI E OMOLOGAZIONI
IENGF

_GENERALITIES
The switch disconnector GT-GLOBE TECHNICS with and without fuses are suitable for making and breaking on load and disconnecting low voltage electrical circuits.

_USE
GT switches commonly used for the following purposes:
- main switch
- switch for motors
- switch disconnector
- safety switch

The version type GT-FP with fuses it carry out the protection functions against the short circuits and overload system and machines

_GENERAL CHARACTERISTICS
Rated insulation voltage 1500V AC and 1500V DC
2-3-4 Poles available
Each phase, pole phase and the operating mechanism can be mounted in any position
Terminals with front or rear connections or with both combination
High breaking capacity (AC22, AC23, IEC 60947-3)
High electrical and mechanical endurance
Double break contacts (with fuse)
Totally insulated when opened switch
Suitable for din-bs fuses
Self cleaning contacts
Contact position positively indicated by the handle
Visibility of fixing and moving contacts by means of windows
Side and frontal indipendent manual operation
Solid neutral version available
Full neutral current
Suitable protection to prevent accidental touching of the live parts
Casing in self-extinguishing (vo-ul94), low hygroscopic and high mechanical
Resistance isolating material
Resistant to damp heat
External double insulated handle with door interlock in ON position, IP65 degree of protection, padlockable with three padlocks in off position
Direct handle padlockable in off position
Adjustable shaft
Max 4NO+4NC auxiliary signaling contacts and max 2NO+2NC pre-break auxiliary contacts
Wide range of accessories

_NORMAL SERVICE, MOUNTING AND TRANSPORT CONDITIONS
Storage and transport ambient temperature - 25°c + 55°c
Working ambient temperature - 20°c + 40°c
In case of higher ambient temperature (t_a) consider the following derating formula:

$I_{the} = k\, i_{th}$ where $\qquad k = 1 - \frac{t_a - 40}{100}$

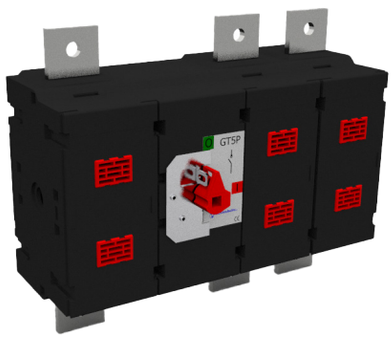
Relative humidity max 95%
Rated frequency 50 - 60 hz
Altitude max 2000 m a.s.l.
Pollution degree 3 according IEC 60947-1
Mounting in enclosure: in case of utilisation at full load and without adequate ventilation, ensure a volume of about 5 times the volume of the switch
Duty (IEC 60947-1): 8 hours; uninterrupted; intermittent 60% class 30; temporary; periodic.

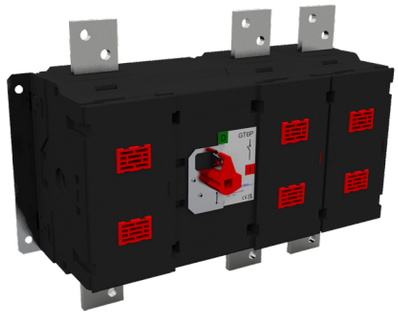
For different operating conditions, please contact the manufacturer.

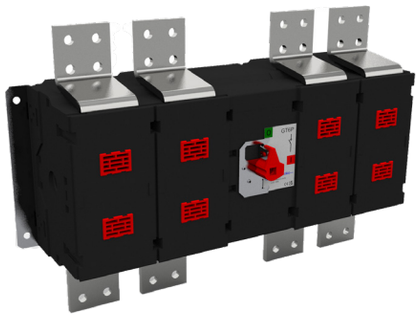
_CONFORMITY TO STANDARDS
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3 | EAC

_CERTIFICATES AND APPROVALS
IENGF

Configurazione standard _Standard configuration





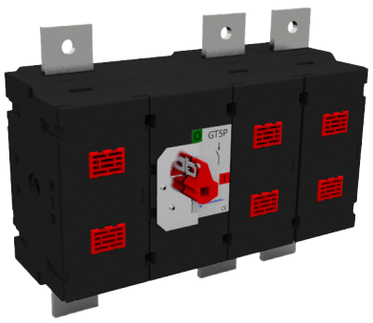


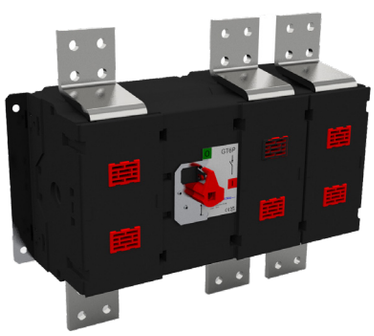
Tipo _type	Corrente nominale _rated current	POLI _POLES	CODICE _CODE
GT5 PN	800A	3	GT5000
		4	GT5010
	1000A	3	GT5001
		4	GT5011
	1250A	3	GT5002
		4	GT5012
GT6 PN	1600A	3	GT6000
		4	GT6010
	2000A	3	GT6001
		4	GT6011
	2500A	3	GT6002
		4	GT6012
	3150A	3	GT6003
		4	GT6013
	4000A	3	GT6004
		4	GT6014
GT5 FP NH3-DIN	630A	3	GT5020
		4	GT5030
	800A	3	GT5022
		4	GT5032
GT5 FB C3-BS88	630A	3	GT5040
		4	GT5050
	800A	3	GT5041
		4	GT5051
GT6 FP NH4-DIN	1000A	3	GT6020
		4	GT6030
	1250A	3	GT6021
		4	GT6031
GT6 FB D1-BS88	1000A	3	GT6040
		4	GT6050
	1250A	3	GT6041
		4	GT6051

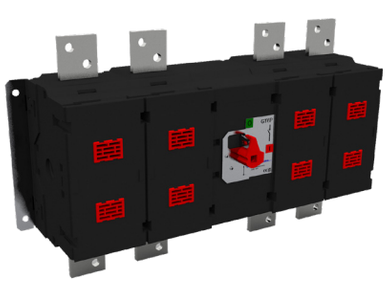
CODICI DI ORDINAZIONE COMMUTATORI
Aggiungere cifra 3 a fine codice per orizzontali e cifra 8 per sovrapposti

_ORDERS REFERENCES FOR CHANGE OVER
Add number 3 at the end of code for horizontal type, number 8 for double layer type

Comando laterale _Side operation







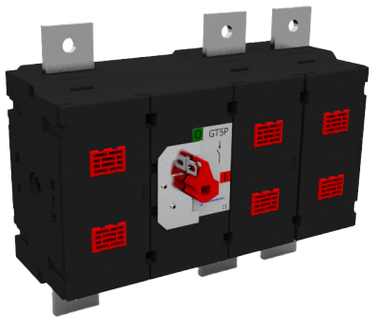
CODICI DI ORDINAZIONE COMMUTATORI
Aggiungere cifra 3 a fine codice per orizzontali e cifra 8 per sovrapposti

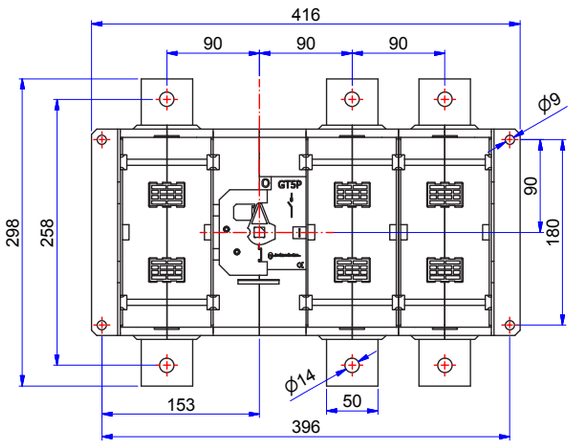
_ORDERS REFERENCES FOR CHANGE OVER
Add number 3 at the end of code for horizontal type, number 8 for double layer type

Tipo _type	Corrente nominale _rated current	POLI _POLES	CODICE _CODE
GT5 PN	800A	3	GT5000CL
		4	GT5010CL
	1000A	3	GT5001CL
		4	GT5011CL
	1250A	3	GT5002CL
		4	GT5012CL
GT6 PN	1600A	3	GT6000CL
		4	GT6010CL
	2000A	3	GT6001CL
		4	GT6011CL
	2500A	3	GT6002CL
		4	GT6012CL
	3150A	3	GT6003CL
		4	GT6013CL
	4000A	3	GT6004CL
		4	GT6014CL
GT5 FP NH3-DIN	630A	3	GT5020CL
		4	GT5030CL
	800A	3	GT5022CL
		4	GT5032CL
GT5 FB C3-BS88	630A	3	GT5040CL
		4	GT5050CL
	800A	3	GT5041CL
		4	GT5051CL
GT6 FP NH4-DIN	1000A	3	GT6020CL
		4	GT6030CL
	1250A	3	GT6021CL
		4	GT6031CL
GT6 FB D1-BS88	1000A	3	GT6040CL
		4	GT6050CL
	1250A	3	GT6041CL
		4	GT6051CL

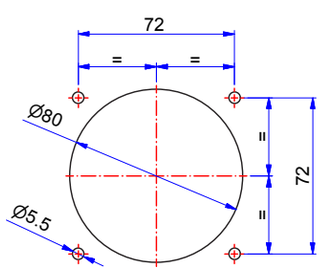
Caratteristiche tecniche _Technincal Features	Tipo _Type		GT5 PN			GT6 PN					GT5 FP NH3-DIN	GT5 FB C3-BS88	GT6 FP NH4-DIN	GT6 FB D1-BS88	GT6 FP NH4-DIN	GT6 FB D1-BS88
Corrente nominale _Rated current	In	A	800	1000	1250	1600	2000	2500	3150	4000	630	800	1000	1000	1250	1250
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Corrente nominale termica _Thermal current	Ith	A	800	1000	1250	1600	2000	2500	3150	4000	630	800	1000	1000	1250	1250
Corrente nominale d' impiego _Rated operational current																
AC-21A	420V	A	800	1000	1250	1600	2000	2500	3150	4000	630	800	1000	1000	1250	1250
	500V	A	800	1000	1250	1600	2000	2500	3150	4000	630	800	1000	1000	1250	1250
	690V	A	800	1000	1250	1600	-	-	-	-	630	800	1000	1000	1250	1250
AC-22A	420V	A	800	1000	1250	1600	2000	2500	-	-	630	800	1000	1000	1250	1250
	500V	A	800	1000	1250	1600	2000	2500	-	-	630	800	1000	1000	1250	1250
	690V	A	800	1000	1250	1600	-	-	-	-	630	800	1000	1000	1250	1250
AC-23A	420V	A	800	1000	1250	1600	1250	1250	-	-	630	800	1000	1000	1250	1250
	500V	A	800	1000	1250	1200	1000	1000	-	-	630	800	1000	1000	1250	1250
	690V	A	800	800	800	1000	-	-	-	-	630	800	1000	1000	1250	1250
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	40	40	40	50	50	50	50	50	-	-	-	-	-	-
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	84	84	84	105	105	105	105	105	-	-	-	-	-	-
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current																
Tipo fusibile _Backup fuse		A	800	1000	1250	-	-	-	-	-	630	800	1000	1000	1250	1250
Valore efficace _R.M.S. value		kA	100	100	100	-	-	-	-	-	100	100	100	100	100	100
Valore di picco _Peak value		kA	50	60	70	-	-	-	-	-	40	50	60	60	70	70
Durata meccanica _Mechanical endurance		n.	4000	4000	4000	4000	2500	2500	2500	2500	4000	4000	4000	4000	4000	4000
Durata elettrica _Electrical endurance		n.	1000	1000	1000	1000	500	500	500	500	1000	1000	1000	1000	1000	1000
Potenza dissipata per polo _Power losses for pole		W	12	20	78	128	80	125	170	272	36	58	90	90	140	140
Potenza condensatori _rated capacitor power	400V	kVAR	380	475	600	780	850	1100	1250	1600	300	380	475	475	600	600
Peso netto _Net weight	3P	Kg	15	15	16	36	40	40	80	80	15	15	36	36	36	36
	4P		19,5	19,5	20,5	46	50	50	100	100	19,5	19,5	46	46	46	46

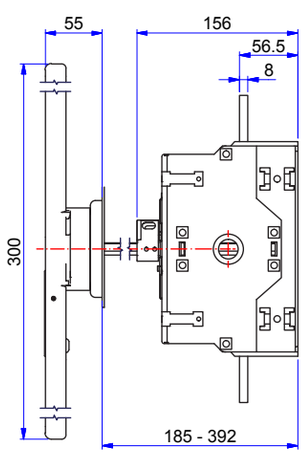
GT5PN 800 ÷ 1000 A 3P



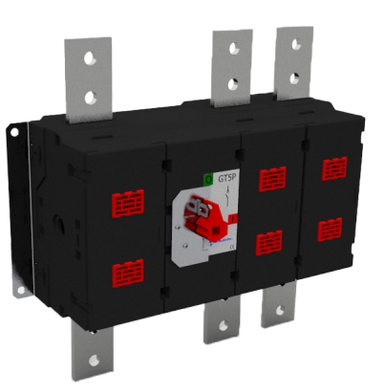


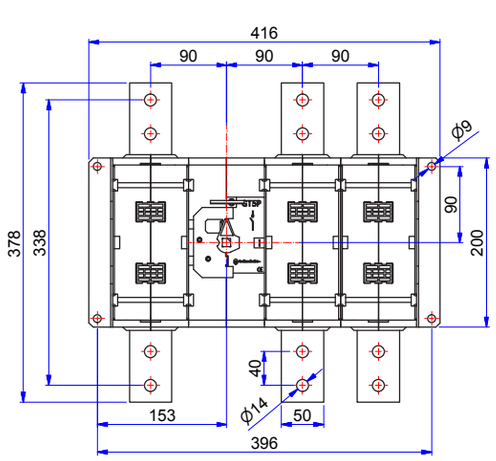
Foratura portella _Door drilling





GT5PN 1250 A 3P





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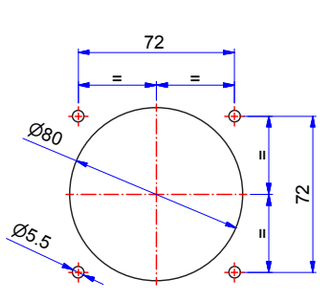
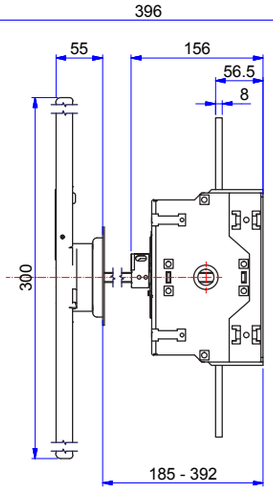
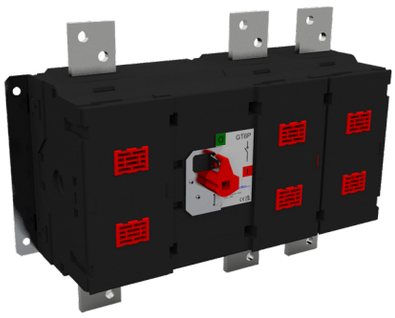
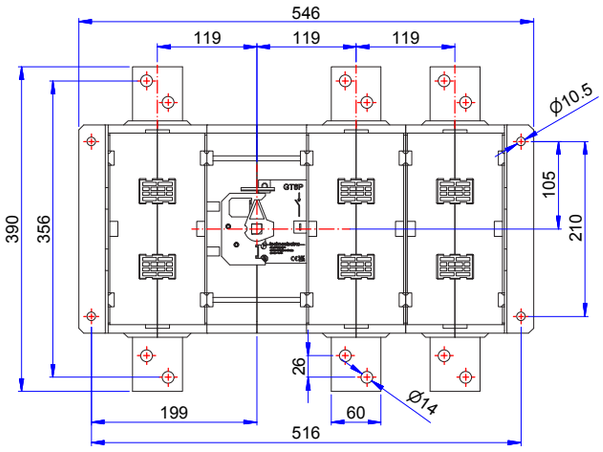




GT6PN 1600 A 3P





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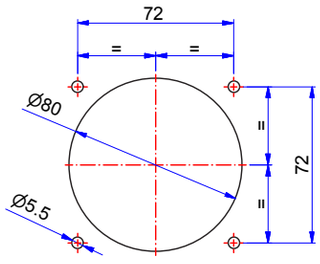
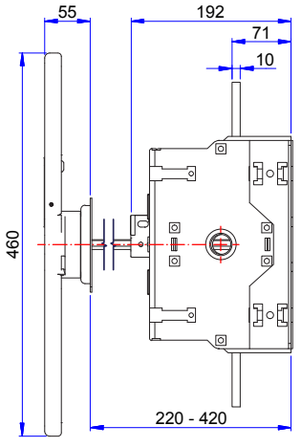
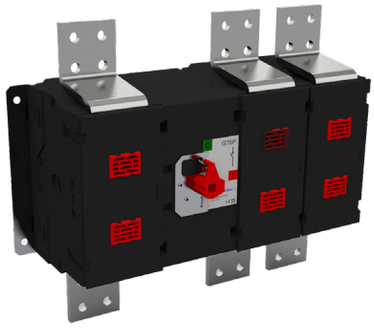
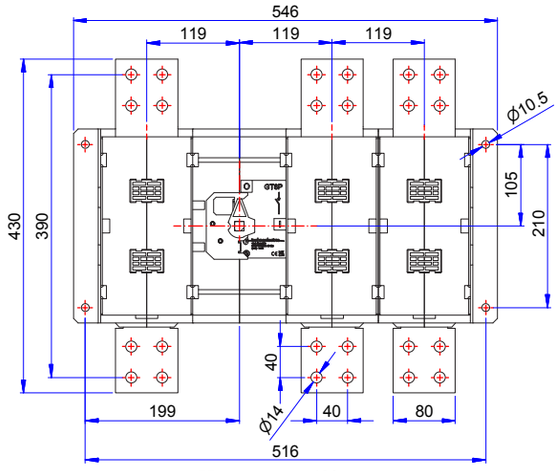


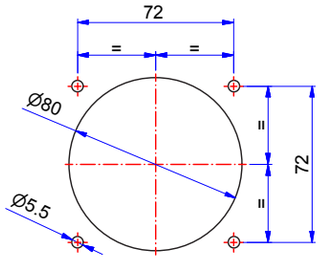


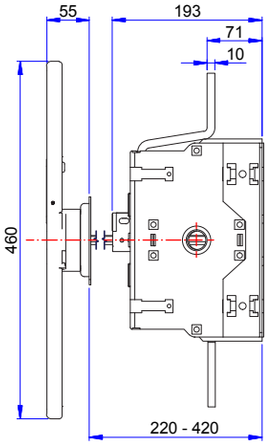
GT6PN 2000 ÷ 2500 A 3P



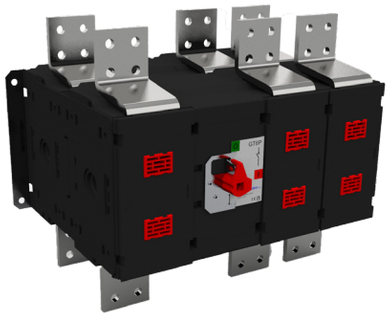


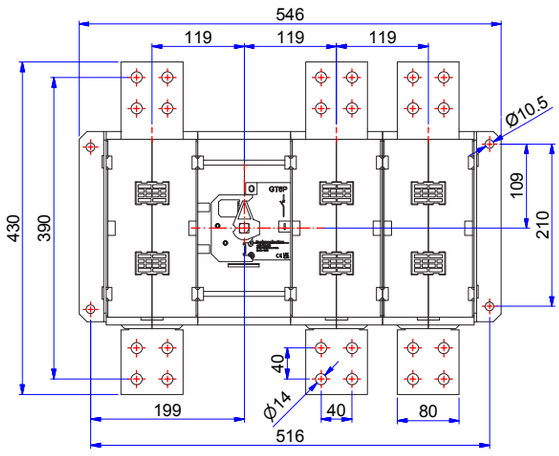
Foratura portella _Door drilling



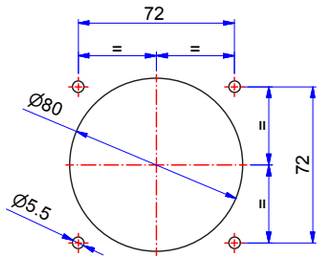


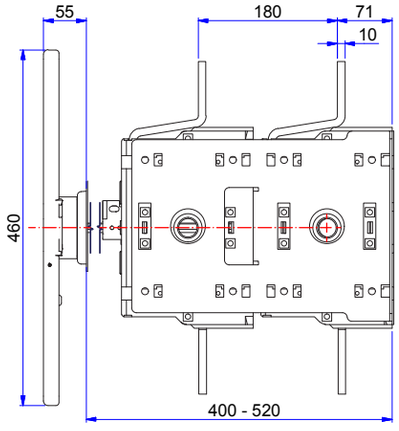
GT6PN 3150 ÷ 4000 A 3P



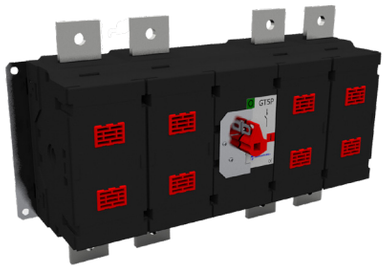


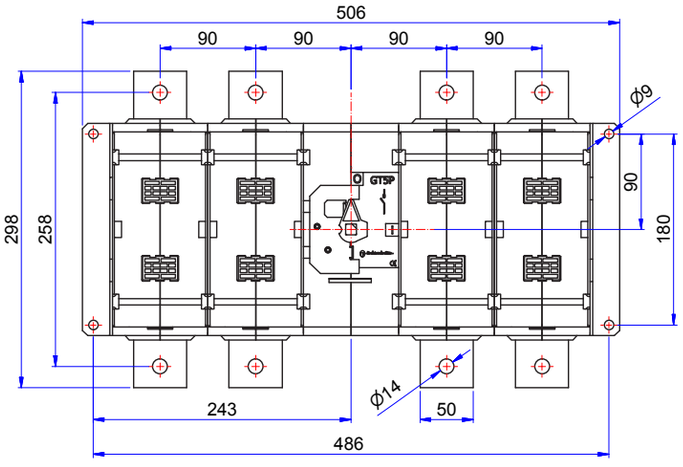
Foratura portella _Door drilling



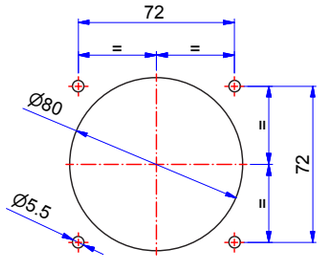


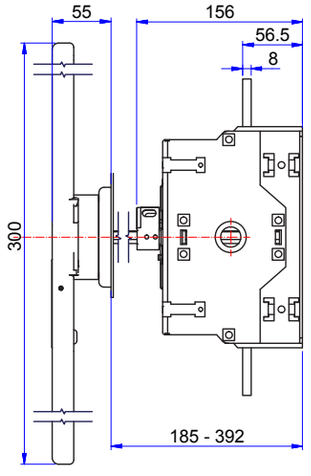
GT5PN 800 ÷ 1000 A 4P



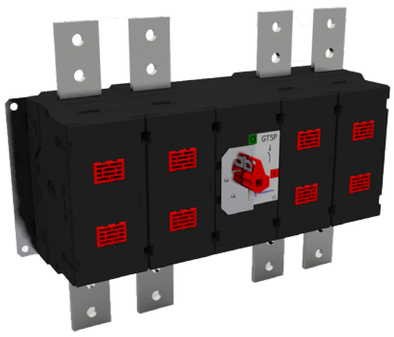


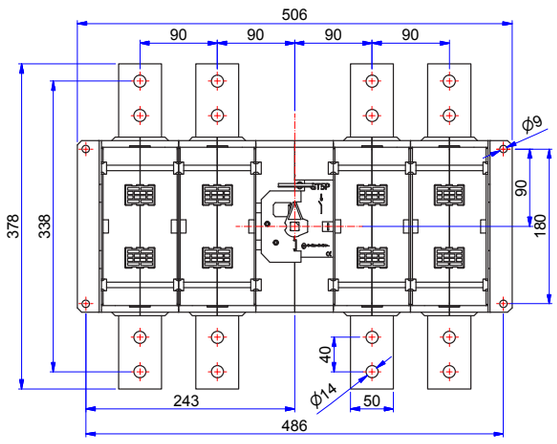
Foratura portella _Door drilling

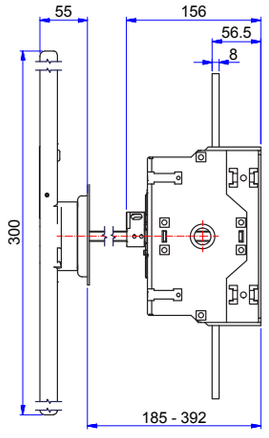




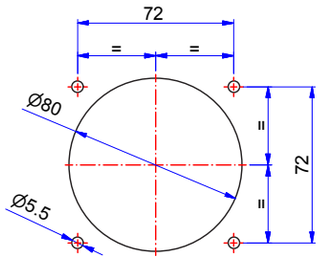
GT5PN 1250 A 4P



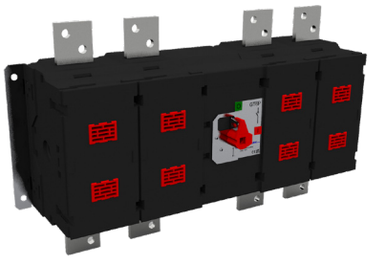


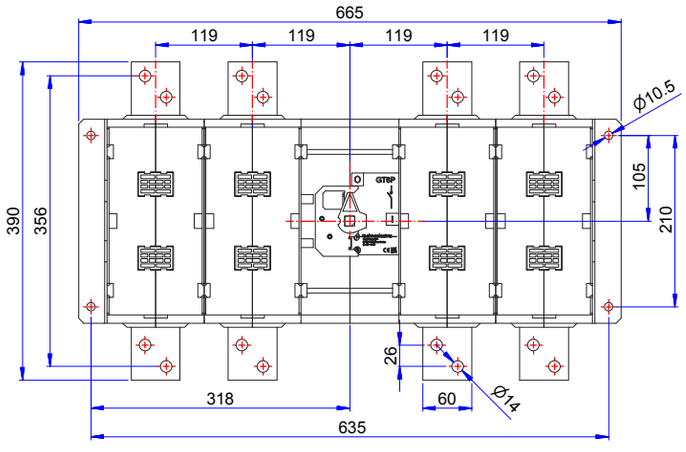


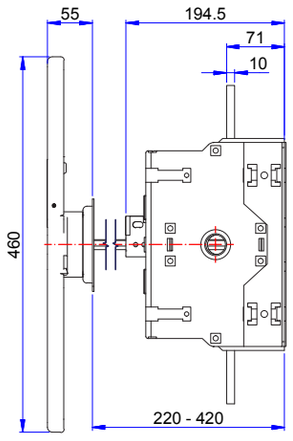
Foratura portella _Door drilling



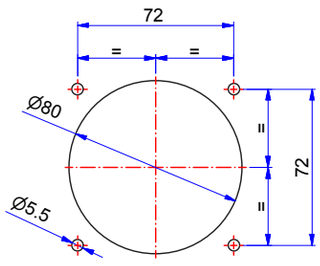
GT6PN 1600 A 4P



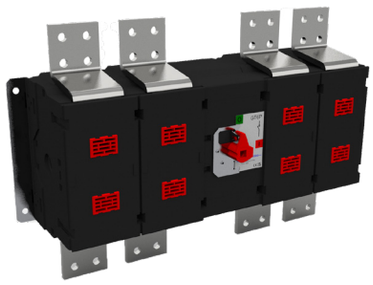


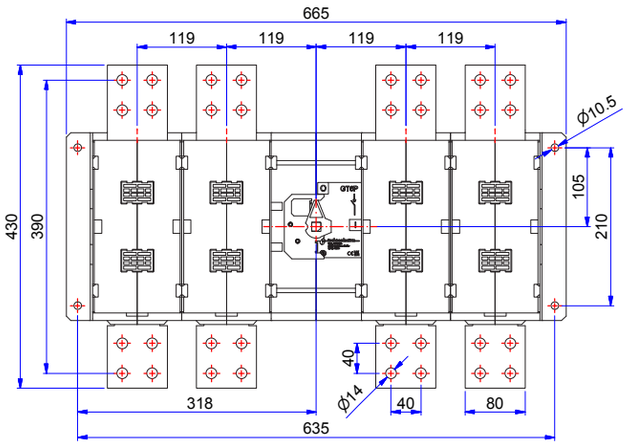


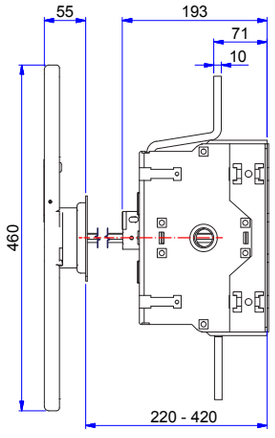
Foratura portella _Door drilling



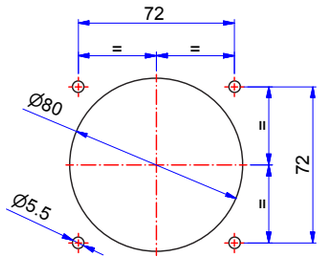
GT6PN 2000 ÷ 2500 A 4P



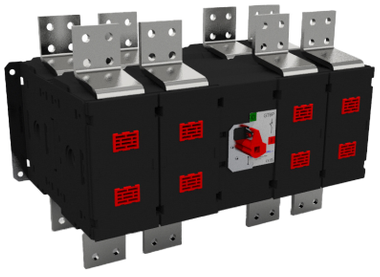


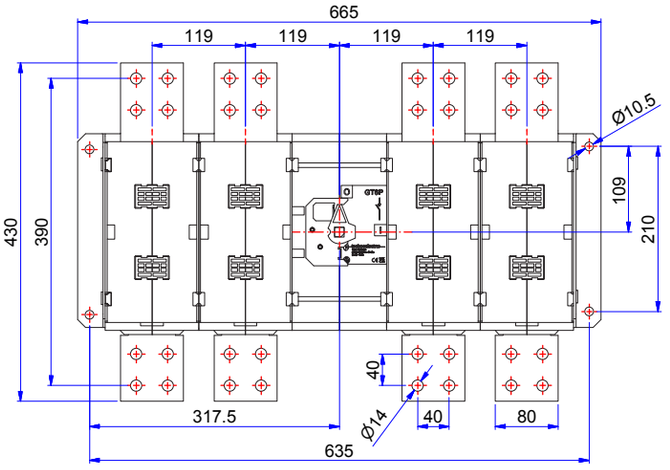


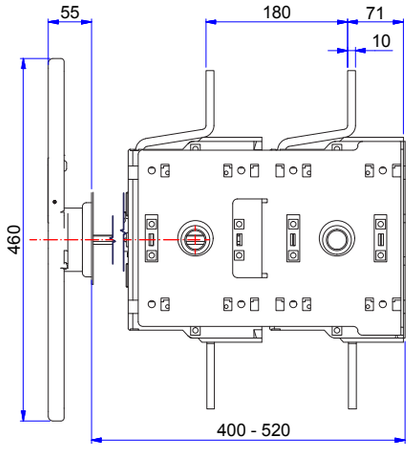
Foratura portella _Door drilling



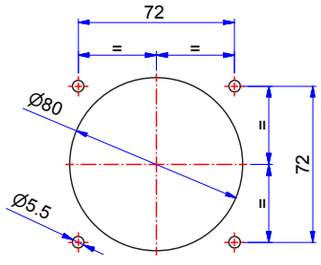
GT6PN 3150 ÷ 4000 A 4P



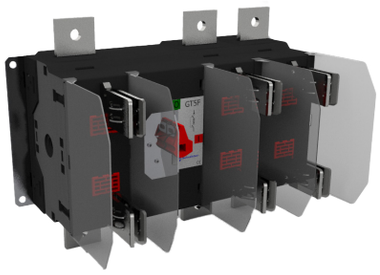


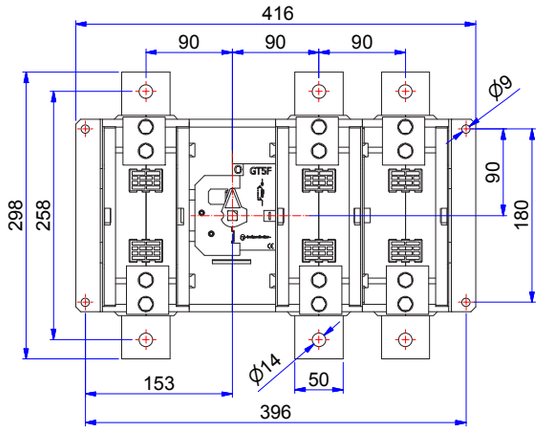


Foratura portella _Door drilling

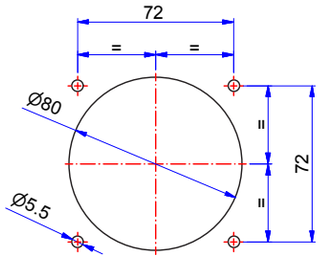


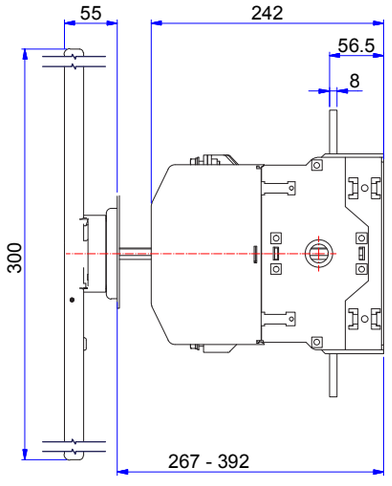
GT5FP-B 630 ÷ 800 A 3P



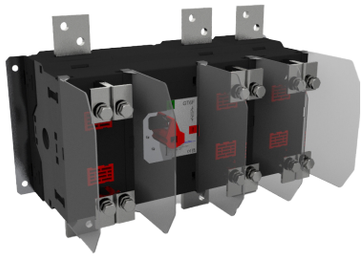


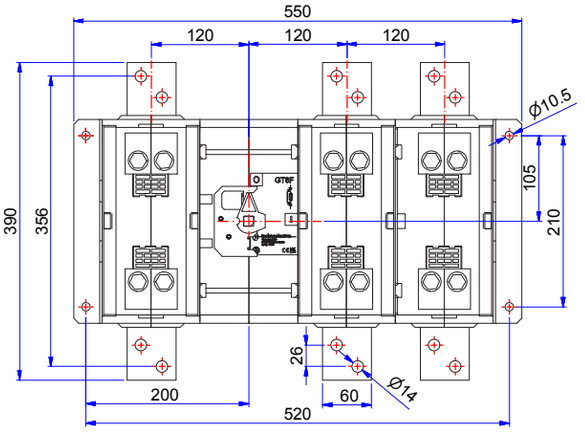
Foratura portella _Door drilling



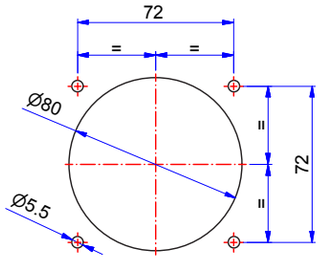


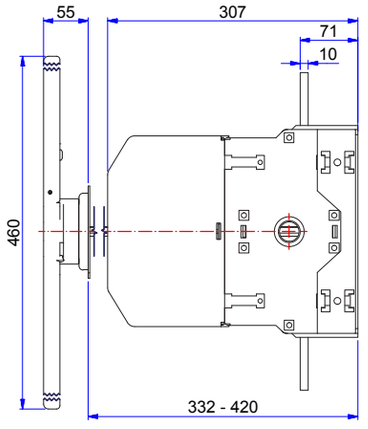
GT6FP-B 1000 ÷ 1250 A 3P



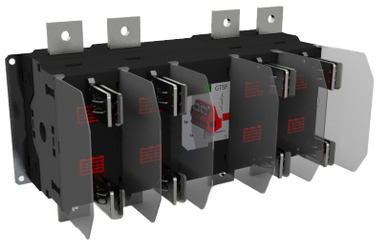


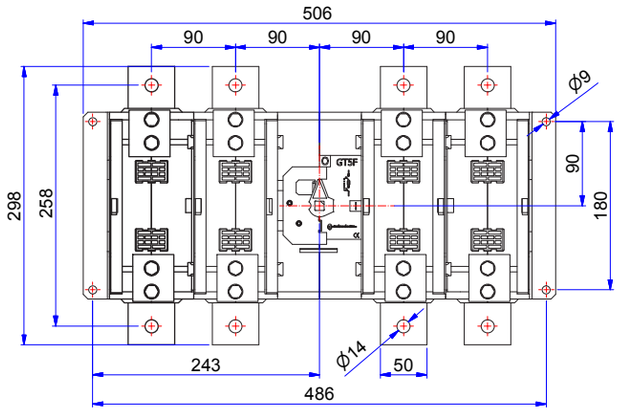
Foratura portella _Door drilling



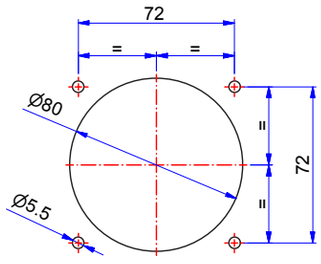


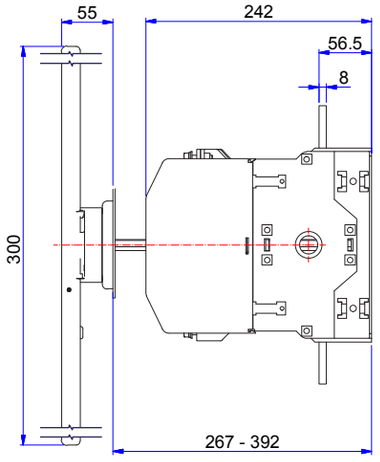
GT5FP-B 630 ÷ 800 A 4P



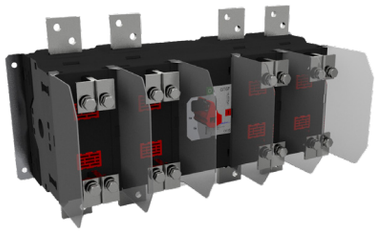


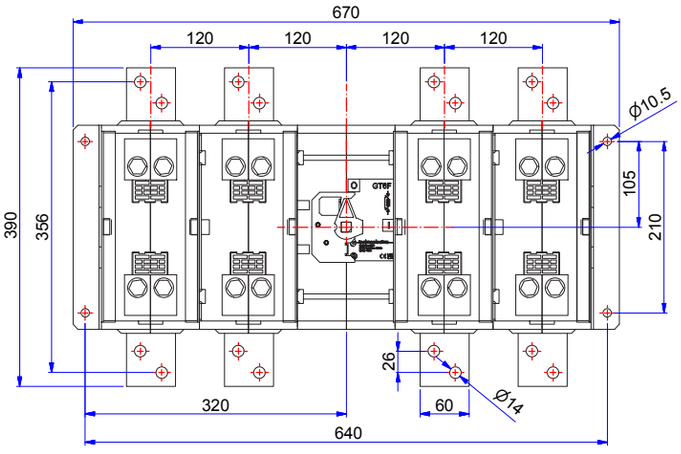
Foratura portella _Door drilling



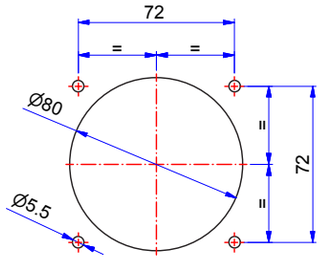


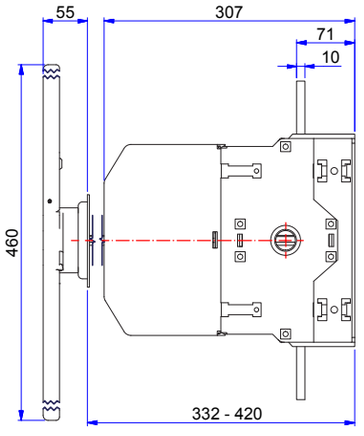
GT6FP-B 1000 ÷ 1250 A 4P



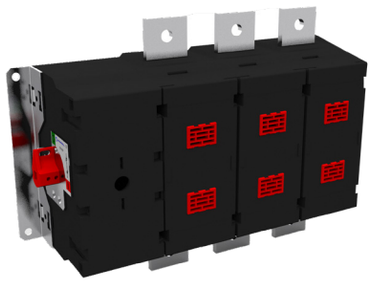


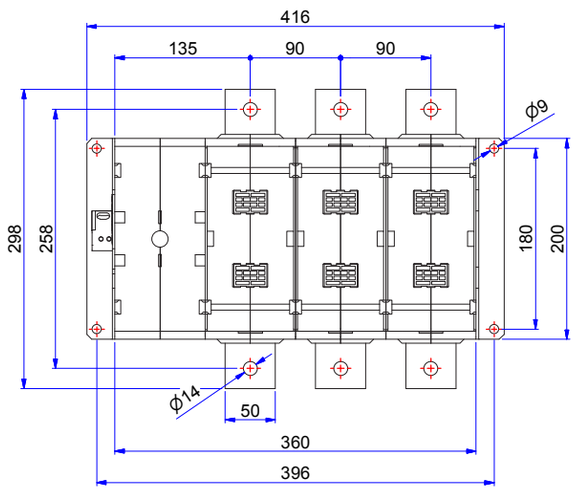
Foratura portella _Door drilling

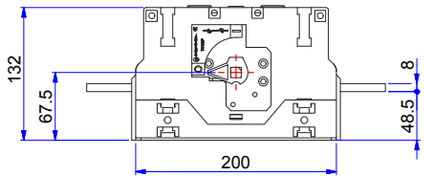




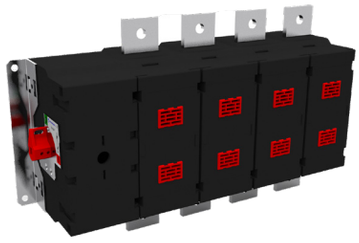
GT5P CL 3P
Comando laterale _side operation

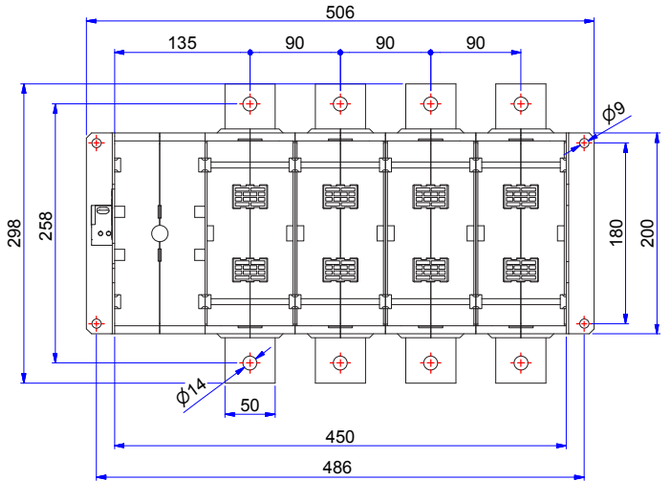


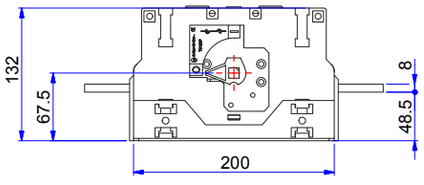




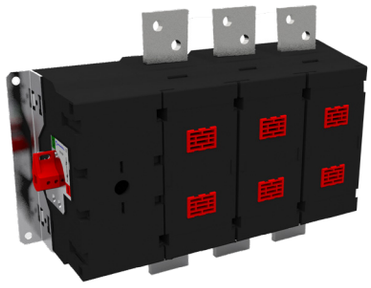
GT5P CL 4P
Comando laterale _side operation

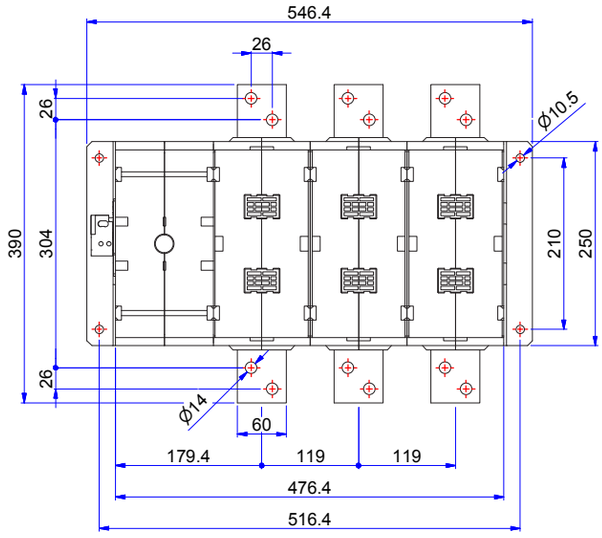


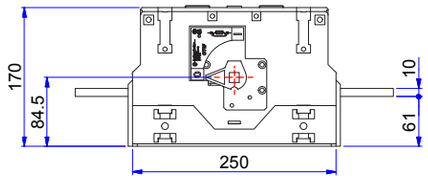




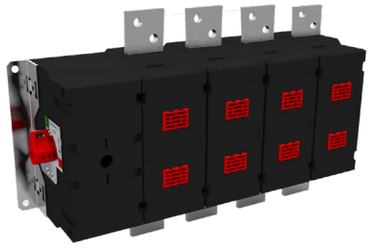
GT6P CL 3P
Comando laterale _side operation

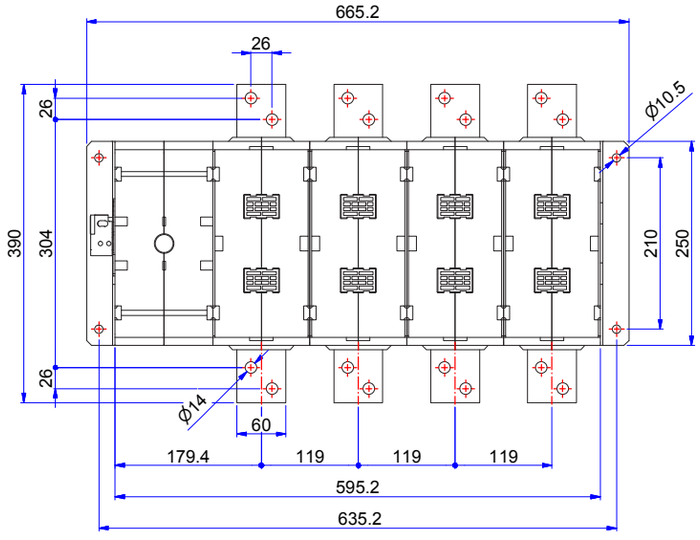


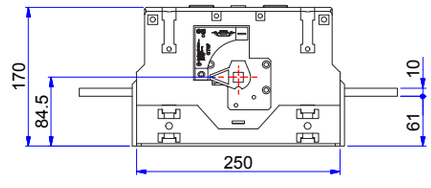




GT6P CL 4P
Comando laterale _Side operation



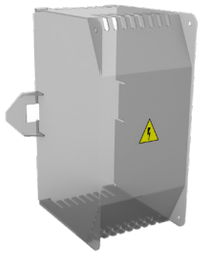




SEPARATORI FUSIBILI
_fuse separators

Tipo _type	GT5	GT6
Codice _code	GA5401	GA6401

SCHERMO PROTEZIONE FUSIBILI
_fuse cover

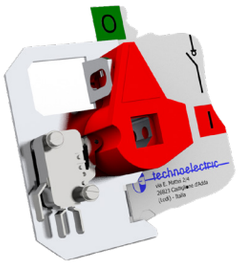


Tipo _type	GT5	GT6
Codice _code	GA5301-3	GA6301-3

COPRI TERMINALI
_terminal covers

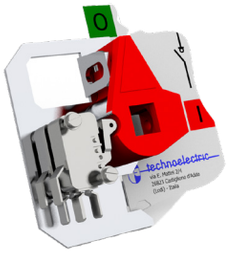
Tipo _type	GT5	GT6
Codice _code	GA5302-3 GA5302-4	GA6302-3 GA6302-4

CONTATTI AUSILIARI DI PREAPERTURA 1NA + 1NC
_break before make auxiliary contacts 1NO + 1NC



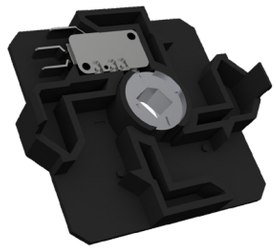
Tipo _type	GT5	GT6
Codice _code	GA6205	

CONTATTI AUSILIARI DI PRE-APERTURA 3NA + 3NC
_break before make auxiliary contacts 3NO + 3NC



Tipo _type	GT5	GT6
Codice _code	GA6206	

CONTATTI AUSILIARI 1NA + 1NC
_auxiliary contacts 1NO + 1NC



Tipo _type	GT5	GT6
Codice _code	GA5201	GA6201

CONTATTI AUSILIARI 2NA + 2NC
_auxiliary contacts 2NO + 2NC

Tipo _type	GT5	GT6
Codice _code	GA5202	GA6202

CONTATTI AUSILIARI 3NA + 3NC
_auxiliary contacts 3NO + 3NC

Tipo _type	GT5	GT6
Codice _code	GA5203	GA6203

CONTATTI AUSILIARI 4NA + 4NC
_auxiliary contacts 4NO + 4NC

Tipo _type	GT5	GT6
Codice _code	GA5204	GA6204

ALBERO COMANDO
_shaft

300 mm

Tipo _type	GT5	GT6
Codice _code	GA5103	GA6103

400 mm

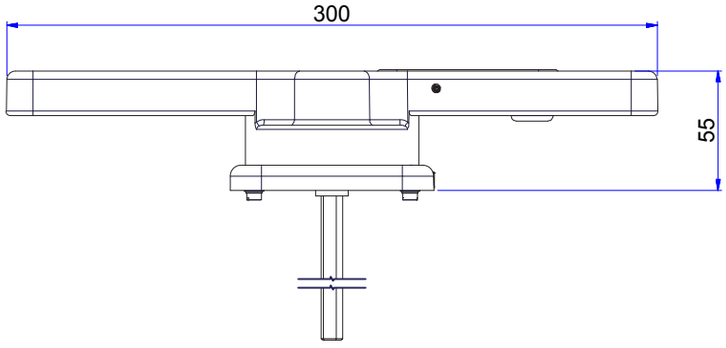
Tipo _type	GT5	GT6
Codice _code	GA5104	GA6104

MANIGLIA DOPPIA BLOCCO PORTA
_door interlock double handle

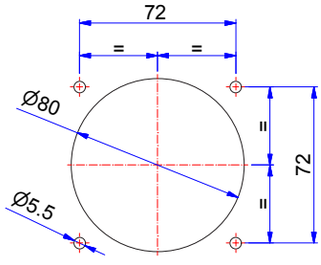
Tipo_type	GT5	GT6
Codice _code	GA6001	GA6016

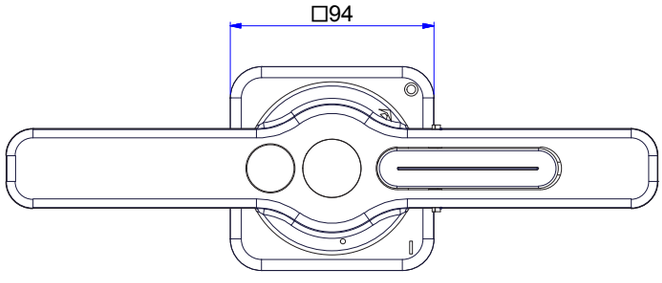
Albero di comando standard lunghezza 300 mm incluso in ogni confezione
_Standard shaft length 300 mm included into the package

GA6001

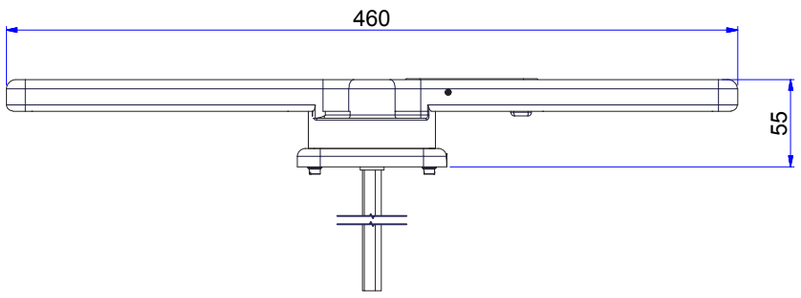


Foratura portella _Door drilling

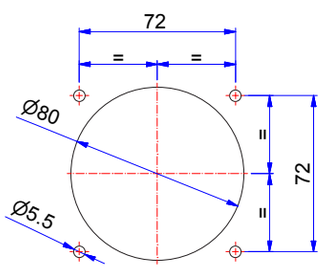


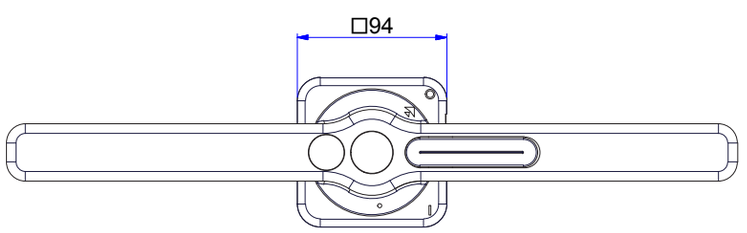


GA6016



Foratura portella _Door drilling



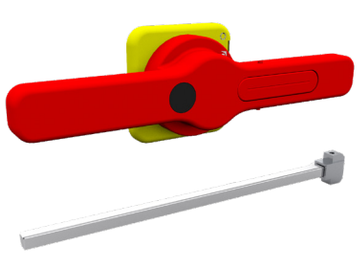


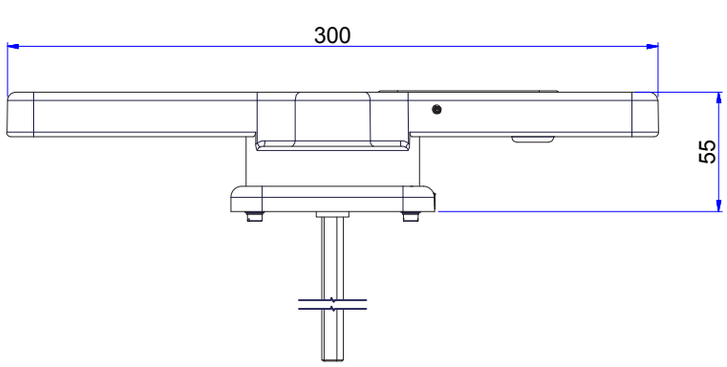
MANIGLIA DOPPIA BLOCCO PORTA D'EMERGENZA _emergency door interlock double handle

Tipo_type	GT5	GT6
Codice _code	GA6003	GA6015

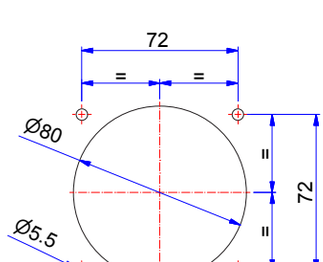
Albero di comando standard lunghezza 300 mm incluso in ogni confezione
_Standard shaft length 300 mm included into the package

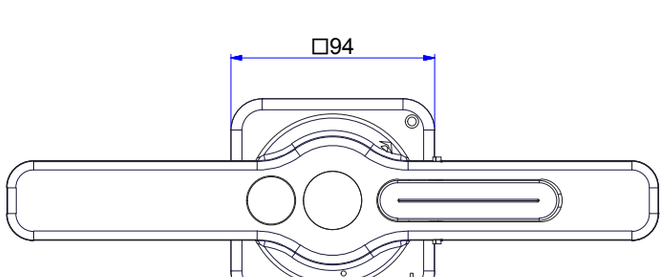
GA6003



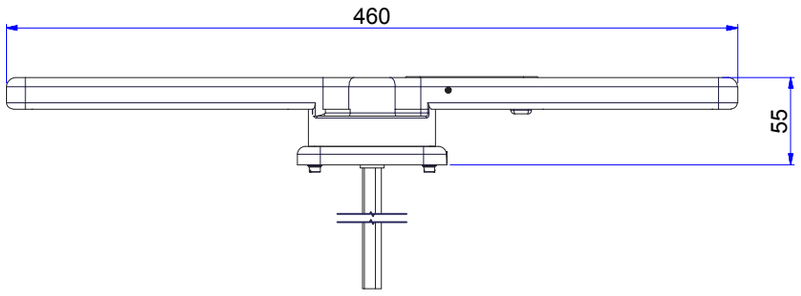


Foratura portella _Door drilling

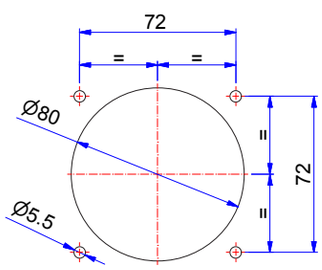


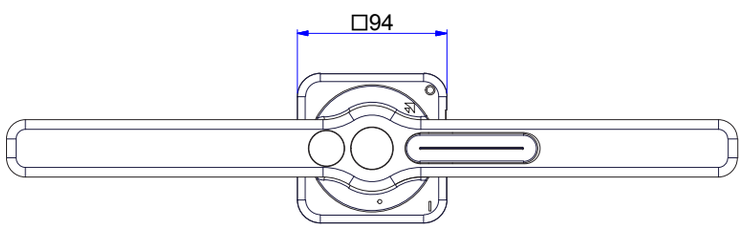


GA6015



Foratura portella _Door drilling

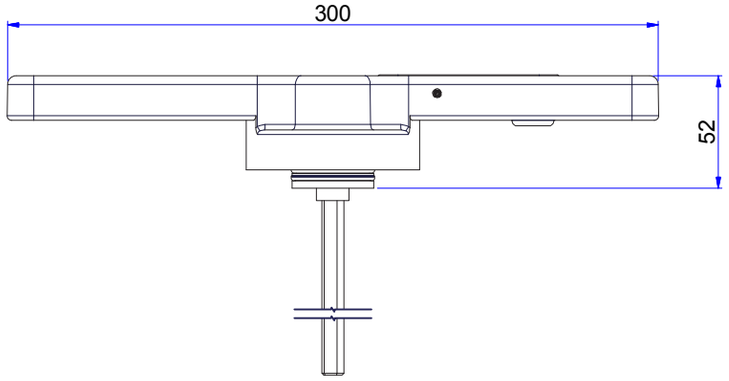




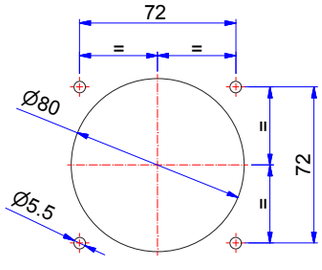
MANIGLIA DIRETTA DOPPIA _ double direct handle

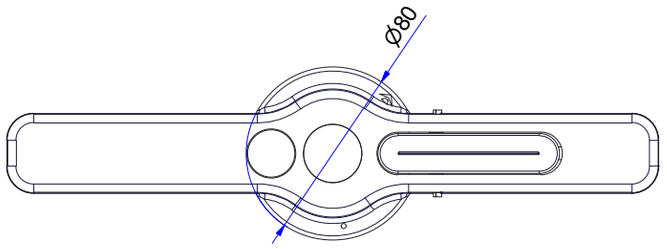
Tipo_type	GT5	GT6
Codice _code	GA6005	GA6006

GA6005

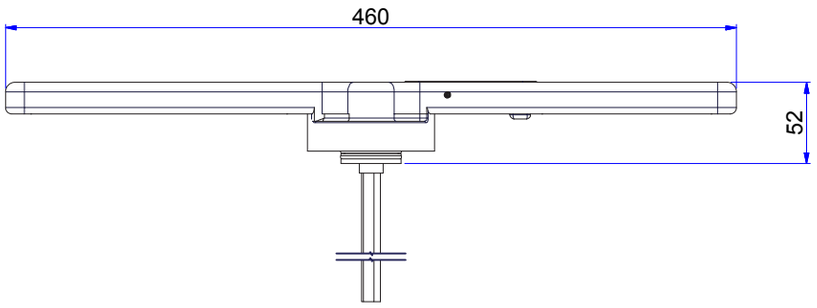


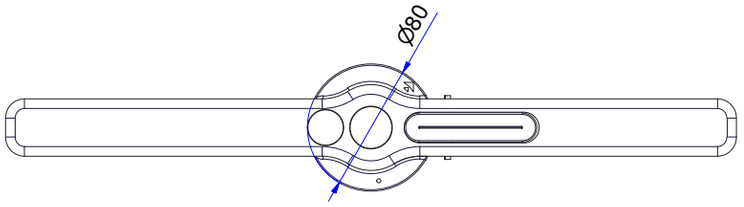
Foratura portella _Door drilling





GA6006



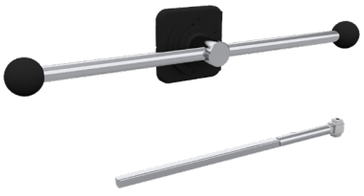


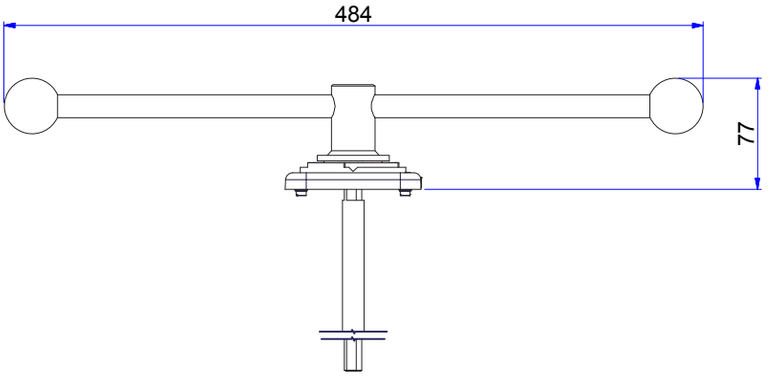
MANIGLIA DOPPIA BLOCCO PORTA NERA 3150/4000 A _black double door interlock handle 3150/4000A

Tipo_type	GT5	GT6
Codice _code	-	GA6007

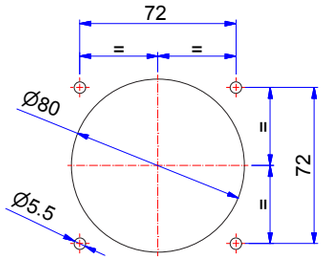
Albero di comando standard lunghezza 300 mm incluso in ogni confezione
_Standard shaft length 300 mm included into the package

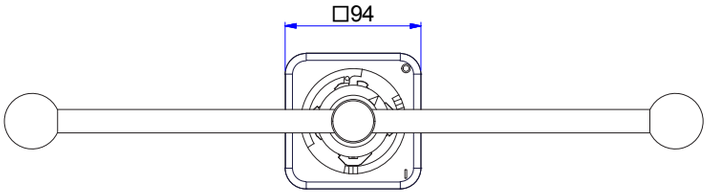
GA6007





Foratura portella _Door drilling



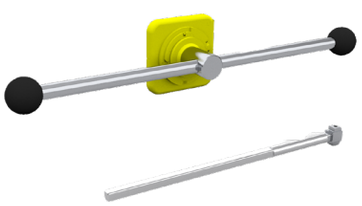


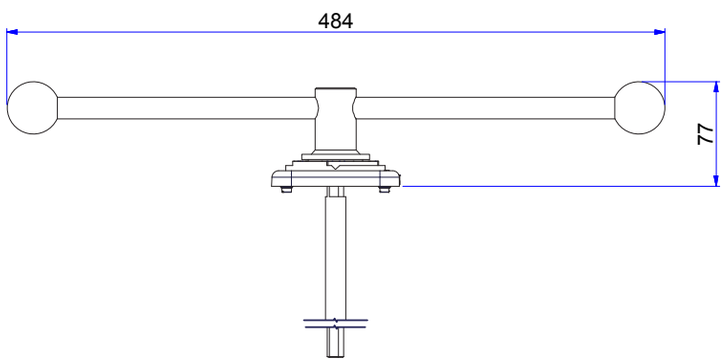
MANIGLIA DOPPIA BLOCCO PORTA GIALLA 3150/4000A
_yellow door interlock double handle 3150/4000A

Tipo_type	GT5	GT6
Codice _code	-	GA6008

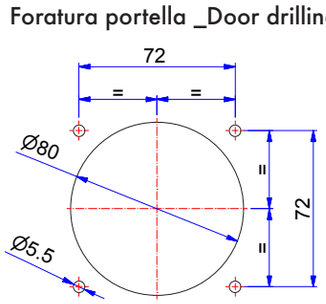
Albero di comando standard lunghezza 300 mm incluso in ogni confezione
_Standard shaft length 300 mm included into the package

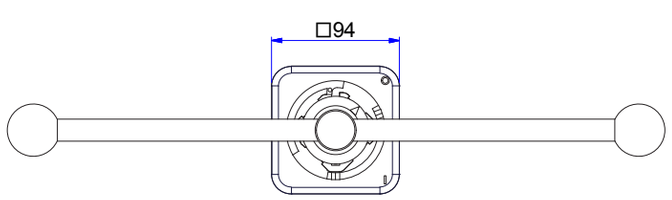
GA6008





Foratura portella _Door drilling

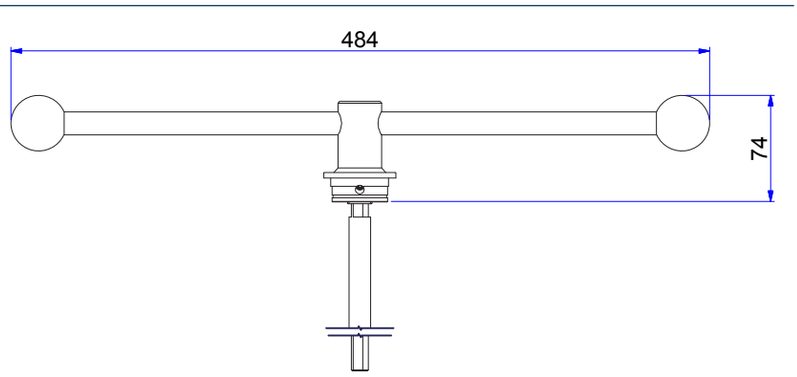




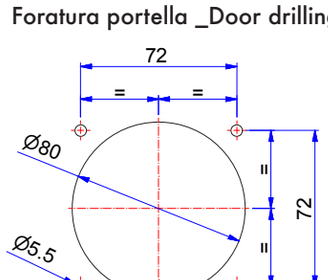
MANIGLIA DIRETTA DOPPIA 3150/4000A
_ double direct handle 3150/4000A

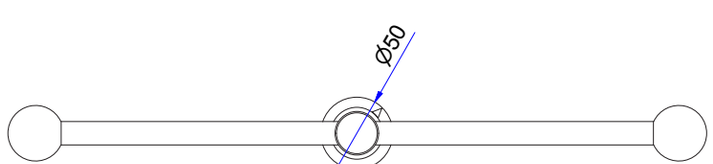
Tipo_type	GT5	GT6
Codice _code	-	GA6009

GA6009



Foratura portella _Door drilling

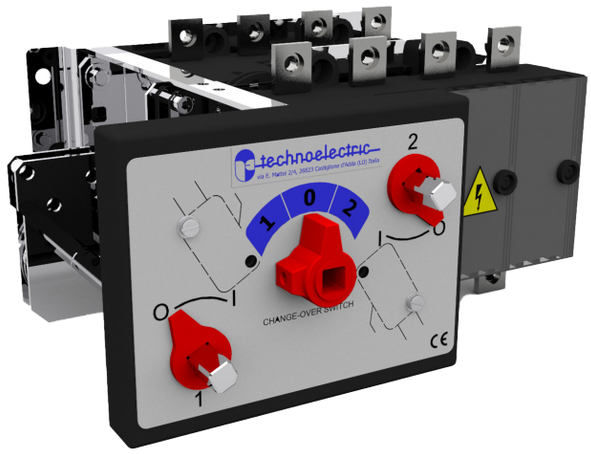


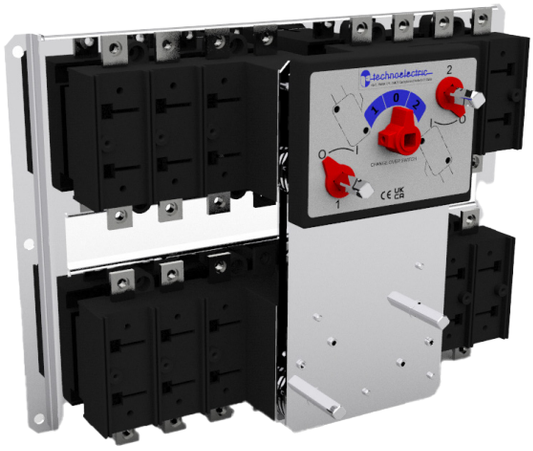


COMMUTATORI MANUALI E BY-PASS

_MANUAL CHANGE-OVER SWITCHES

CMA 32 ÷ 4000 A





GENERALITÀ
Serie di commutatori ad azionamento manuale che permettono l'apertura e la commutazione di due circuiti elettrici in bassa tensione.
Sono realizzati interbloccando due normali interruttori sezionatori della serie VISUALCOMPACT.
La posizione sovrapposta dei due interruttori sezionatori rende particolarmente compatta questa soluzione facilitando notevolmente il collegamento a cavi o barre.

CARATTERISTICHE GENERALI
3 posizioni I-O-II
versione senza zero con sovrapposizione dei contatti 1, 1+II, II (overlapping) fino a 3150A.
Interruttori-sezionatori interbloccati in sovvraposizione o orizzontalmente
Visibilità diretta, mediante finestrelle, dei contatti fissi e mobili
Manovre a scatto rapido indipendente
Doppia interruzione per ogni polo
Alto potere di interruzione (AC-23A IEC 60947-3)
Elevata durata meccanica ed elettrica
Adatti per utilizzo in climi tropicali
Ampia gamma di accessori
Comando di tipo rotativo frontale a mezzo di:
- Maniglia esterna a doppio isolamento con dispositivo bloccoporta nelle posizioni I e II
- Grado di protezione IP65.
- Lucchettabilità fino a 3 lucchetti in posizione O

Possibilità di esecuzione per by-pass fino a 1250A 35kA
Possibilità di esecuzioni speciali di commutatori a 6-8 poli

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO
temperatura ambiente di immagazzinamento e trasporto - 25°C + 55°C
temperatura ambiente di funzionamento - 20°C + 40°C
in caso di temperatura ambiente (t_a) superiore, applicare la seguente formula di declassamento:

$I_{The} = k\, I_{Th}$ dove $\qquad K = 1 - \frac{t_a - 40}{100}$

umidità relativa max 95%
frequenza nominale 50 - 60 Hz
altitudine max 2000 m s.l.m.
grado di inquinamento 3 secondo IEC 60947-1
tipo di servizio (secondo IEC 60947-1):
- servizio 8 ore
- servizio ininterrotto
- servizio intermittente 60% classe 30
- servizio temporaneo
- servizio periodico

Per condizioni di impiego diverse consultare il costruttore.

CONFORMITÀ ALLE NORME
IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3

CERTIFICATI E OMOLOGAZIONI
KEMA | RINA | ENEL codice 13.32.23 | A2A | CESI | IENGF | EAC

_GENERALITIES
Manually Operated Changeover Switches, suitable for breaking and switching between two low voltage electrical circuits.
They are made by two standard switches of VISUALCOMPACT series. mechanically interlocked.
The arrangement of two switches mounted one on top of the other makes this execution particularly compact and easy to connect to cables or bus- bars.

_GENERAL CHARACTERISTICS
3 positions I-0-II
Version without 0 (overlapping) functions 1, 1+II, II up to 3150A
Load break switches two-layer or horizontally interlocked
Visibility of fixed and moving contacts by means of windows
Indipendent fast action operation
Double break contacts
High breaking capacity (ac-23a iec 60947-3)
High electrical and mechanical endurance
Resistant to damp heat
Wide range of accessories
Rotary front operation by means of:
- External double insulated handle with door-interlock in I and II position.
- IP65 degree of protection.
- Padlockable with up to three padlocks in 0 position

ByPass version available up to 1250 A, 35kA.
6-8 pole special execution available.

_NORMAL SERVICE, MOUNTING AND TRANSPORT CONDITIONS
storage and transport ambient temperature - 25°C + 55°C
working ambient temperature - 20°C + 40°C
in case of higher ambient temperature (t_a) consider the following derating formula:

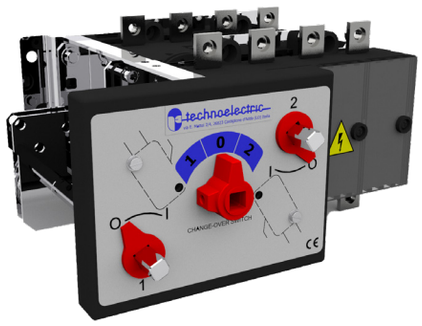
$I_{The} = k\, I_{Th}$ dove $\qquad K = 1 - \frac{t_a - 40}{100}$

relative humidity max 95%
rated frequency 50 - 60 Hz
altitude max 2000 m a.s.l.
pollution degree 3 according IEC 60947-1
duty (IEC 60947-1):
- eight-hour duty
- uninterrupted duty
- intermittent duty 60% class 30
- temporary duty
- periodic duty

For different operating conditions please contact the manufacturer.

_CONFORMITY TO STANDARDS
IEC 60947-1|IEC 60947-3|UNI EN 60947-1|UNI EN 60947-3

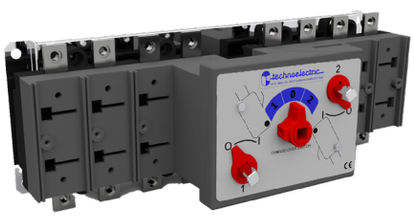
_CERTIFICATES AND APPROVALS
KEMA | RINA | ENEL code 13.32.23 | A2A | CESI | IENGF | EAC

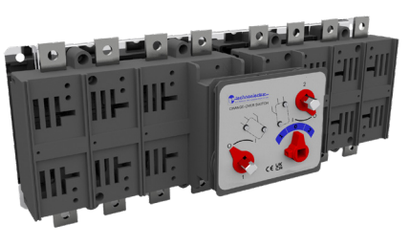


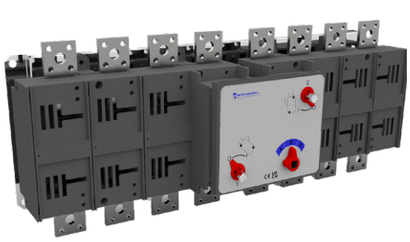
Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
CS1P	32 A	3	110008SM	3	110008
		4	110108SM	4	110108
	45A	3	110018SM	3	110018
		4	110118SM	4	110118
	63A	3	110028SM	3	110028
		4	110128SM	4	110128
	80A	3	110038SM	3	110038
		4	110138SM	4	110138
	100A	3	110048SM	3	110048
		4	110148SM	4	110148
	125A	3	110058SM	3	110058
		4	110158SM	4	110158
	160A	3	110068SM	3	110068
		4	110168SM	4	110168
CS2P	160A	3	120018SM	3	120018
		4	120118SM	4	120118
	200A	3	120028SM	3	120028
		4	120128SM	4	120128
	250A	3	120038SM	3	120038
		4	120138SM	4	120138
	315A	3	120048SM	3	120048
		4	120148SM	4	120148
CS3P	315A	3	130018SM	3	130018
		4	130118SM	4	130118
	400A	3	130028SM	3	130028
		4	130128SM	4	130128
	500A	3	130038SM	3	130038
		4	130138SM	4	130138
CS4P	630A	3	140038SM	3	140038
		4	140138SM	4	140138
	800A	3	140048SM	3	140048
		4	140148SM	4	140148
CS5P (35kA)	800A	3	150008SM	3	150008
		4	150108SM	4	150108
	1000A	3	150018SM	3	150018
		4	150118SM	4	150118
	1250A	3	150028SM	3	150028
		4	150128SM	4	150128
CS5P (50kA)	800A	3	150078SM	3	150078
		4	150178SM	4	150178
	1000A	3	150088SM	3	150088
		4	150188SM	4	150188
	1250A	3	150098SM	3	150098
		4	150198SM	4	150198
	1600A	3	150038SM	3	150038
		4	150138SM	4	150138
	2000A	3	150048SM	3	150048
		4	150148SM	4	150148
	2500A	3	150058SM	3	150058
		4	150158SM	4	150158
	3150A	3	150068SM	3	150068
		4	150168SM	4	150168
CS6P	1600A	3	160008SM	3	160008
		4	160108SM	4	160108
	2000A	3	160018SM	3	160018
		4	160118SM	4	160118
	2500A	3	160028SM	3	160028
		4	160128SM	4	160128
	3150A	3	160038SM	3	160038
		4	160138SM	4	160138

COP

Commutatori orizzontali _horizontal change-over switches







Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
CO1P	32 A	3	110003SM	3	110003
		4	110103SM	4	110103
	45A	3	110013SM	3	110013
		4	110113SM	4	110113
	63A	3	110023SM	3	110023
		4	110123SM	4	110123
	80A	3	110033SM	3	110033
		4	110133SM	4	110133
	100A	3	110043SM	3	110043
		4	110143SM	4	110143
	125A	3	110053SM	3	110053
		4	110153SM	4	110153
	160A	3	110063SM	3	110063
		4	110163SM	4	110163
CO2P	160A	3	120013SM	3	120013
		4	120113SM	4	120113
	200A	3	120023SM	3	120023
		4	120123SM	4	120123
	250A	3	120033SM	3	120033
		4	120133SM	4	120133
	315A	3	120043SM	3	120043
		4	120143SM	4	120143
CO3P	315A	3	130013SM	3	130013
		4	130113SM	4	130113
	400A	3	130023SM	3	130023
		4	130123SM	4	130123
	500A	3	130033SM	3	130033
		4	130133SM	4	130133
CO4P	630A	3	140033SM	3	140033
		4	140133SM	4	140133
	800A	3	140043SM	3	140043
		4	140143SM	4	140143
CO5P (35kA)	800A	3	150003SM	3	150003
		4	150103SM	4	150103
	1000A	3	150013SM	3	150013
		4	150113SM	4	150113
	1250A	3	150023SM	3	150023
		4	150123SM	4	150123
CO5P (50kA)	800A	3	150073SM	3	150073
		4	150173SM	4	150173
	1000A	3	150083SM	3	150083
		4	150183SM	4	150183
	1250A	3	150093SM	3	150093
		4	150193SM	4	150193
	1600A	3	150033SM	3	150033
		4	150133SM	4	150133
	2000A	3	150043SM	3	150043
		4	150143SM	4	150143
	2500A	3	150053SM	3	150053
		4	150153SM	4	150153
	3150A	3	150063SM	3	150063
		4	150163SM	4	150163
CO6P	1600A	3	160003SM	3	160003
		4	160103SM	4	160103
	2000A	3	160013SM	3	160013
		4	160113SM	4	160113
	2500A	3	160023SM	3	160023
		4	160123SM	4	160123
	3150A	3	160033SM	3	160033
		4	160133SM	4	160133

BYP

BYP sovrapposti | Commutatori BY-PASS

_BYP two layers | BY-PASS change-over switches

GENERALITÀ

I commutatori by-pass sono una combinazione di tre interruttori interbloccati tra loro meccanicamente cosi da costituire un dispositivo in grado di collegare in derivazione parti in manutenzione.

GENERALITIES

By Pass Change over switches are a combination of three mechanically interlocked switches, make to shunt circuit sections that has to go under maintenance.

I codici riportati nelle tabelle corrispondono alla portata indicata.
Il codice, di un by-pass con valori di portata (Amp.) diverso da quelli riportati nelle tabelle, si ottiene aggiungendo la desinenza 0 al codice del corrispondente sezionatore.

_By-pass switch disconnectors code written in the tables corresponding at the specific rated current value.
To order a by-pass Change over switches , not included in these tables, add 0 at the end of the code of the corresponding switch disconnector.

Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
BYP1 SOVRAPPOSTI _TWO LAYERS	125A	3	110050SM	3	110050
		4	110150SM	4	110150
BYP2 SOVRAPPOSTI _TWO LAYERS	250A	3	120030SM	3	120030
		4	120130SM	4	120130
BYP3 SOVRAPPOSTI _TWO LAYERS	400A	3	130020SM	3	130020
		4	130120SM	4	130120
BYP4 SOVRAPPOSTI _TWO LAYERS	800A	3	140040SM	3	140040
		4	140140SM	4	140140
BYP5 SOVRAPPOSTI _TWO LAYERS	1250A	3	150020SM	3	150020
		4	150120SM	4	150120

SERIE_SERIES **CMA**

Caratteristiche tecniche _Technincal Features	Tipo _Type		CS|CO - 1P							CS|CO - 2P			
Corrente nominale _Rated current	In	A	32	45	63	80	100	125	160	160	200	250	315
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	8	8	8	8	8	8	8	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	32	45	63	80	100	125	160	160	200	250	315
Corrente nominale d' impiego _Rated operational current													
AC-21A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	690V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
AC-22A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	32	45	63	80	100	125	125/125	160	200	250	250/250
	690V	A	32	45	63	80	100	125	125/125	160	200	250	250/250
AC-23A/B	400V	A	32	45	63	80	100	125	125/125	160	200	250	250/250
	500V	A	25	35	45	63	80	100	100/100	125	160	200	200/200
	690V	A	20	30	35	45	63	80	80/80	100	125	160	160/160
DC-21A/B	220V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	420V	A	-	-	-	-	-	-	-	160	200	250	250/315
	560V	A	-	-	-	-	-	-	-	-	-	-	-
DC-22A/B	220V	A	32	45	63	80	100	125	125/125	160	200	250	250/315
	420V	A	-	-	-	-	-	-	-	160	200	250	250/250
	560V	A	-	-	-	-	-	-	-				
DC-23A/B	220V	A	20	30	35	45	63	80	80/80	160	200	250	250/250
	420V	A	-	-	-	-	-	-	-	160	200	250	250/250
	560V	A	-	-	-	-	-	-	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	320	450	630	800	1000	1250	1250	1600	2000	2500	2500
Potere di interruzione _Breaking capacity	400V AC23	A	256	360	504	640	800	1000	1000	1280	1600	2000	2000
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	5	5	5	5	5	5	5	8	8	8	8
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	10	10	10	10	10	10	10	16	16	16	16
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	7,5	7,5	7,5	7,5	7,5	7,5	7,5	13,5	13,5	13,5	13,5
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	17	23	33	42	52	65	65	85	105	130	130
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current													
Tipo fusibile _Backup fuse		A	32	45	63	80	100	125	160	160	200	250	315
Valore efficace _R.M.S. value		kA	50	50	50	50	50	50	50	50	50	50	50
Valore di picco _Peak value		kA	6	9	10	12	12	15	16	16	20	25	27
Durata meccanica _Mechanical endurance		n.	12000	12000	12000	12000	12000	10000	10000	10000	10000	10000	10000
Durata elettrica _Electrical endurance		n.	3000	3000	3000	3000	3000	2000	2000	2000	2000	2000	2000/200
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	15	20	30	40	45	50	50	70	90	110	110
Potenza dissipata per polo _Power losses for pole		W	0,1	0,2	0,4	0,7	1,1	1,7	2,7	1,6	2,4	3,8	6,1
Dimensione cavo _Cable section		mm^2	10	10	16	25	35	50	70	70	95	120	185
Dimensione barre _Bars dimension		mm	10x2	10x2	12x3	12x3	14x3	16x3	16x4	20x4	20x5	20x6	22x8
Peso netto _Net weight	3P	Kg	3,2 / 2	3,2 / 2	3,2 / 2	3,2 / 2	3,2 / 2	3,2 / 2	3,2 / 2	4,5 / 3	4,5 / 3	4,5 / 3	4,5 / 3
	4P		3,5 / 2,1	3,5 / 2,1	3,5 / 2,1	3,5 / 2,1	3,5 / 2,1	3,5 / 2,1	3,5 / 2,1	5 / 3,2	5 / 3,2	5 / 3,2	5 / 3,2

Caratteristiche tecniche _Technincal Features	Tipo _Type		CS|CO - 3P			CS|CO - 4P		CS|CO - 5P		
Corrente nominale _Rated current	In	A	315	400	500	630	800	800	1000	1250
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	315	400	500	630	800	800	1000	1250
Corrente nominale d' impiego _Rated operational current										
AC-21A/B	400V	A	315	400	500/500	630	630/800	800	1000	1250
	500V	A	315	400	500/500	630	630/800	800	1000	1250
	690V	A	315	400	400/500	630	630/800	800	1000	1250
AC-22A/B	400V	A	315	400	500/500	630	630/800	800	1000	1250
	500V	A	315	400	400/400	630	630/630	800	1000	1250
	690V	A	315	400	400/400	630	630/630	800	1000	1250
AC-23A/B	400V	A	315	400	500/500	630	630/630	800	1000	1250
	500V	A	250	315	315/315	500	500/500	800	800	800
	690V	A	200	250	250/250	400	400/400	400	400	400
DC-21A/B	220V	A	315	400	400/500	630	630/800	800	1000	1250
	420V	A	315	400	400/500	630	630/800	-	-	-
	560V	A	315	400	400/500	630	630/800	-	-	-
DC-22A/B	220V	A	315	400	400/500	630	630/800	800	1000	1250
	420V	A	315	400	400/400	630	630/630	-	-	-
	560V	A	315	400	400/400	630	630/630	-	-	-
DC-23A/B	220V	A	315	400	400/400	630	630/630	500	630	800
	420V	A	315	400	400/400	630	630/630	-	-	-
	560V	A	315	400	400/400	630	630/630	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	3150	4000	5000	6300	6300	8000	10000	12500
Potere di interruzione _Breaking capacity	400V AC23	A	2520	3200	4000	5040	5040	6400	8000	10000
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	13	13	13	26,5	26,5	35	35	35
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	26	26	26	53	53	70	70	70
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	26	26	26	30	30	73,5	73,5	73,5
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	165	210	210	330	330	420	525	630
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current										
Tipo fusibile _Backup fuse		A	315	400	500	630	800	800	1000	1250
Valore efficace _R.M.S. value		kA	50	50	50	50	50	100	100	100
Valore di picco _Peak value		kA	27	30	37	40	40	50	60	70
Durata meccanica _Mechanical endurance		n.	8000	8000	8000	8000	8000	7000	7000	7000
Durata elettrica _Electrical endurance		n.	1500	1500	1500/200	1500	1500/200	1000	1000	1000
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	140	180	180	300	300	380	475	600
Potenza dissipata per polo _Power losses for pole		W	5,9	9,4	14,8	15,6	25,7	17,5	27,3	42,7
Dimensione cavo _Cable section		mm^2	185	2x120	2x150	2x185	2x240	2x240	-	-
Dimensione barre _Bars dimension		mm	30x6	2x25x5	2x30x5	2x40x5	2x40x6	2x50x5	2x50x5	2x50x5
Peso netto _Net weight	3P	Kg	9,4 / 7,5	9,4 / 7,5	9,4 / 7,5	15 / 13,8	15 / 13,8	28 / 23,5	36,7 / 31	46,6 / 40,3
	4P		10,2 / 8,3	10,2 / 8,3	10,2 / 8,3	16,8 / 14,6	16,8 / 14,6	30 / 25,2	39,2 / 33,5	50,8 / 44,2

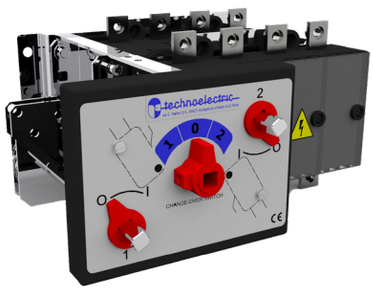
Caratteristiche tecniche _Technincal Features	Tipo _Type		CS|CO| - 5P 50kA							CS|CO - 6P			
Corrente nominale _Rated current	In	A	800	1000	1250	1600	2000	2500	3150	1600	2000	2500	3150
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12	12	12	12	8	8	8
Corrente nominale termica _Thermal current	Ith	A	800	1000	1250	1600	2000	2500	3150	1600	2000	2500	3150
Corrente nominale d' impiego _Rated operational current													
AC-21A/B	400V	A	800	1000	1250	1600	2000	2500	3150	1600	2000	2500	3150
	500V	A	800	1000	1250	1250	1600	2000	2500	1600	2000	2500	3150
	690V	A	800	1000	1250	1250	1250	1250	1250	1250	1250	1250	1250
AC-22A/B	400V	A	800	1000	1250	1250	1250	-	-	1600	2000	2500	1600
	500V	A	800	1000	1250	-	-	-	-	1250	1250	1250	-
	690V	A	800	1000	1250	-	-	-	-	400	400	800	-
AC-23A/B	400V	A	800	1000	1250	-	-	-	-	1250	1250	-	-
	500V	A	630	800	1000	-	-	-	-	800	800	-	-
	690V	A	500	630	800	-	-	-	-	400	400	-	-
DC-21A	220V	A	800	1000	1250	1600	2000	-	-	1600	2000	-	-
	420V	A	-	-	-	-	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-	-	-	-	-
DC-22A	220V	A	800	1000	1250	-	-	-	-	-	-	-	-
	420V	A	-	-	-	-	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-	-	-	-	-
DC-23A	220V	A	500	630	800	-	-	-	-	-	-	-	-
	420V	A	-	-	-	-	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	8000	10000	12500	-	-	-	-	12500	12500	-	-
Potere di interruzione _Breaking capacity	400V AC23	A	6400	8000	10000	-	-	-	-	10000	10000	-	-
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	50	50	50	50	50	50	50	60	60	70	70
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	100	100	100	100	100	100	100	120	120	140	140
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	105	105	105	105	105	105	105	105	105	105	105
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	420	525	630	630	630	-	-	630	630	-	-
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current													
Tipo fusibile _Backup fuse		A	800	1000	1250	-	-	-	-	-	-	-	-
Valore efficace _R.M.S. value		kA	100	100	100	-	-	-	-	-	-	-	-
Valore di picco _Peak value		kA	50	60	70	-	-	-	-	-	-	-	-
Durata meccanica _Mechanical endurance		n.	4000	4000	4000	4000	4000	2000	2500	4000	2500	2500	2500
Durata elettrica _Electrical endurance		n.	1000	1000	1000	500	500	500	500	1000	500	500	500
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	380	475	600	-	-	-	-	780	850	1.100	1250
Potenza dissipata per polo _Power losses for pole		W	15,6	24,3	38,0	38,3	61,3	91,7	145,5	47,8	74,7	85,4	118,1
Dimensione cavo _Cable section		mm^2	2x240	-	-	-	-	-	-	-	-	-	-
Dimensione barre _Bars dimension		mm	2x50x5	2x50x6	2x50x8	3x50x8	3x50x12	4x50x12	6x50x12	2x80x10	2x80x10	3x80x10	32x100x10
Peso netto _Net weight	3P	Kg	28 / 23,5	28 / 23,5	28 / 23,5	36,7 / 31	36,7 / 31	46,6 / 40,3	46,6 / 40,3	47 / 41,3	49,7 / 44	70 / 63,8	89,5 / 81,8
	4P		30 / 25,2	30 / 25,2	30 / 25,2	39,2 / 33,5	39,2 / 33,5	50,8 / 44,2	50,8 / 44,2	50,3 / 44,5	53 / 47,3	72 / 65,8	95,5 / 88

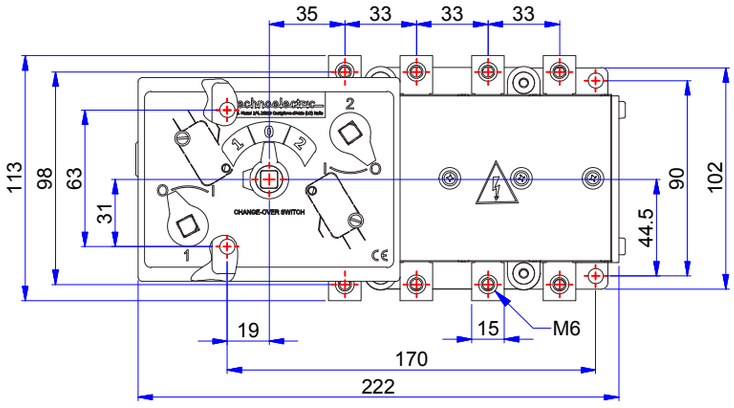
Caratteristiche tecniche _Technincal Features	Tipo _Type		BYP - 1P							BYP - 2P			
Corrente nominale _Rated current	In	A	32	45	63	80	100	125	160	160	200	250	315
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	8	8	8	8	8	8	8	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	32	45	63	80	100	125	160	160	200	250	315
Corrente nominale d' impiego _Rated operational current													
AC-21A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	690V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
AC-22A/B	400V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	500V	A	32	45	63	80	100	125	125/125	160	200	250	250/250
	690V	A	32	45	63	80	100	125	125/125	160	200	250	250/250
AC-23A/B	400V	A	32	45	63	80	100	125	125/125	160	200	250	250/250
	500V	A	25	35	45	63	80	100	100/100	125	160	200	200/200
	690V	A	20	30	35	45	63	80	80/80	100	125	160	160/160
DC-21A	220V	A	32	45	63	80	100	125	125/160	160	200	250	250/315
	420V	A	-	-	-	-	-	-	-	160	200	250	250/315
	560V	A	-	-	-	-	-	-	-	-	-	-	-
DC-22A	220V	A	32	45	63	80	100	125	125/125	160	200	250	250/315
	420V	A	-	-	-	-	-	-	-	160	200	250	250/250
	560V	A	-	-	-	-	-	-	-				
DC-23A	220V	A	20	30	35	45	63	80	80/80	160	200	250	250/250
	420V	A	-	-	-	-	-	-	-	160	200	250	250/250
	560V	A	-	-	-	-	-	-	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	320	450	630	800	1000	1250	1250	1600	2000	2500	2500
Potere di interruzione _Breaking capacity	400V AC23	A	256	360	504	640	800	1000	1000	1280	1600	2000	2000
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	5	5	5	5	5	5	5	8	8	8	8
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	10	10	10	10	10	10	10	16	16	16	16
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	7,5	7,5	7,5	7,5	7,5	7,5	7,5	13,5	13,5	13,5	13,5
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	17	23	33	42	52	65	65	85	105	130	130
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current													
Tipo fusibile _Backup fuse		A	32	45	63	80	100	125	160	160	200	250	315
Valore efficace _R.M.S. value		kA	50	50	50	50	50	50	50	50	50	50	50
Valore di picco _Peak value		kA	6	9	10	12	12	15	16	16	20	25	27
Durata meccanica _Mechanical endurance		n.	12000	12000	12000	12000	12000	10000	10000	10000	10000	10000	10000
Durata elettrica _Electrical endurance		n.	3000	3000	3000	3000	3000	2000	2000	2000	2000	2000	2000/200
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	15	20	30	40	45	50	50	70	90	110	110
Potenza dissipata per polo _Power losses for pole		W	0,1	0,2	0,4	0,7	1,1	1,7	2,7	1,6	2,4	3,8	6,1
Dimensione cavo _Cable section		mm2	10	10	16	25	35	50	70	70	95	120	185
Dimensione barre _Bars dimension		mm	10x2	10x2	12x3	12x3	14x3	16x3	16x4	20x4	20x5	20x6	22x8
Peso netto _Net weight	3P	Kg	4	4	4	4	4	4	4	6	6	6	6
	4P		4,5	4,5	4,5	4,5	4,5	4,5	4,5	6,5	6,5	6,5	6,5

SERIE_SERIES **CMA**

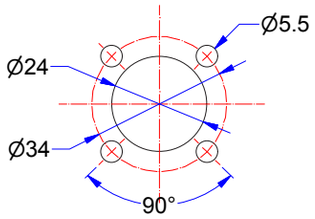
Caratteristiche tecniche _Technincal Features	Tipo _Type		BYP - 3P			BYP - 4P		BYP - 5P 35kA		
Corrente nominale _Rated current	In	A	315	400	500	630	800	800	1000	1250
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	315	400	500	630	800	800	1000	1250
Corrente nominale d' impiego _Rated operational current										
AC-21A/B	400V	A	315	400	500/500	630	630/800	800	1000	1250
	500V	A	315	400	500/500	630	630/800	800	1000	1250
	690V	A	315	400	400/500	630	630/800	800	1000	1250
AC-22A/B	400V	A	315	400	500/500	630	630/800	800	1000	1250
	500V	A	315	400	400/400	630	630/630	800	1000	1250
	690V	A	315	400	400/400	630	630/630	800	1000	1250
AC-23A/B	400V	A	315	400	500/500	630	630/630	800	1000	1250
	500V	A	250	315	315/315	500	500/500	800	800	800
	690V	A	200	250	250/250	400	400/400	400	400	400
DC-21A	220V	A	315	400	400/500	630	630/800	800	1000	1250
	420V	A	315	400	400/500	630	630/800	-	-	-
	560V	A	315	400	400/500	630	630/800	-	-	-
DC-22A	220V	A	315	400	400/500	630	630/800	800	1000	1250
	420V	A	315	400	400/400	630	630/630	-	-	-
	560V	A	315	400	400/400	630	630/630	-	-	-
DC-23A	220V	A	315	400	400/400	630	630/630	500	630	800
	420V	A	315	400	400/400	630	630/630	-	-	-
	560V	A	315	400	400/400	630	630/630	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	3150	4000	5000	6300	6300	8000	10000	12500
Potere di interruzione _Breaking capacity	400V AC23	A	2520	3200	4000	5040	5040	6400	8000	10000
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	13	13	13	26,5	26,5	35	35	35
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	26	26	26	53	53	70	70	70
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	26	26	26	30	30	73,5	73,5	73,5
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	165	210	210	330	330	420	525	630
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current										
Tipo fusibile _Backup fuse		A	315	400	500	630	800	800	1000	1250
Valore efficace _R.M.S. value		kA	50	50	50	50	50	100	100	100
Valore di picco _Peak value		kA	27	30	37	40	40	50	60	70
Durata meccanica _Mechanical endurance		n.	8000	8000	8000	8000	8000	7000	7000	7000
Durata elettrica _Electrical endurance		n.	1500	1500	1500/200	1500	1500/200	1000	1000	1000
Potenza condensatori a 400V _Rated capacitor power at 400V		kVAR	140	180	180	300	300	380	475	600
Potenza dissipata per polo _Power losses for pole		W	5,9	9,4	14,8	15,6	25,7	17,5	27,3	42,7
Dimensione cavo _Cable section		mm^2	185	2x120	2x150	2x185	2x240	2x240	-	-
Dimensione barre _Bars dimension		mm	30x6	2x25x5	2x30x5	2x40x5	2x40x6	2x50x5	2x50x5	2x50x5
Peso netto _Net weight	3P	Kg	12,5	12,5	12,5	21	21	38,6	38,6	38,6
	4P		14	14	14	23,5	23,5	41,7	41,7	41,7

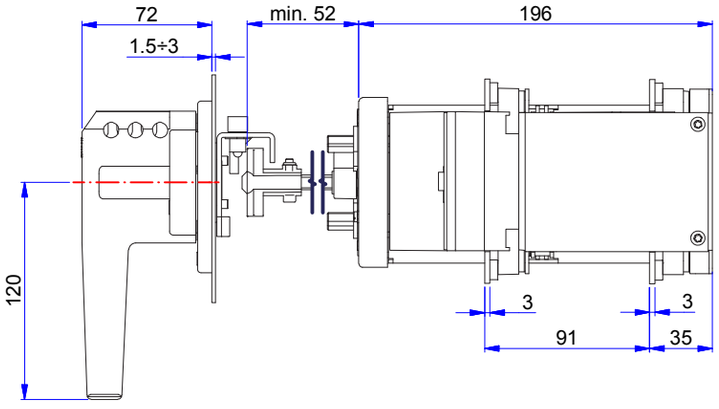
CS1P 32 ÷ 160 A



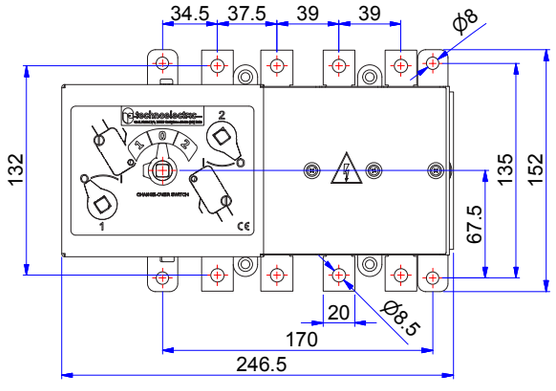


Foratura portella _Door drilling

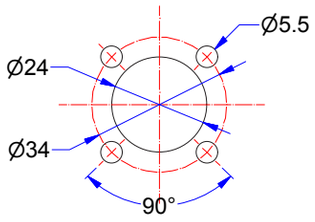


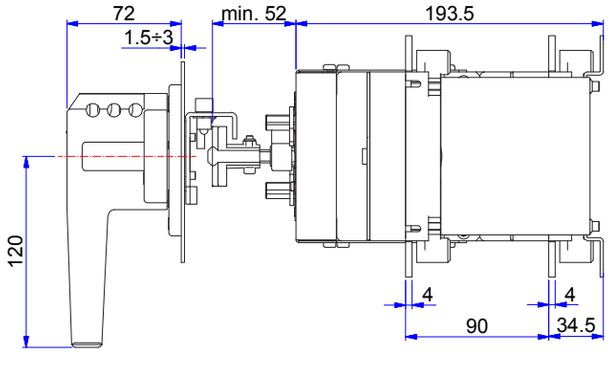


CS2P 160 ÷ 315 A

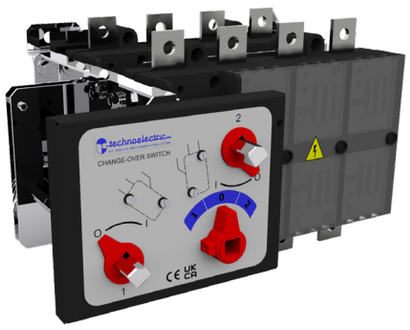


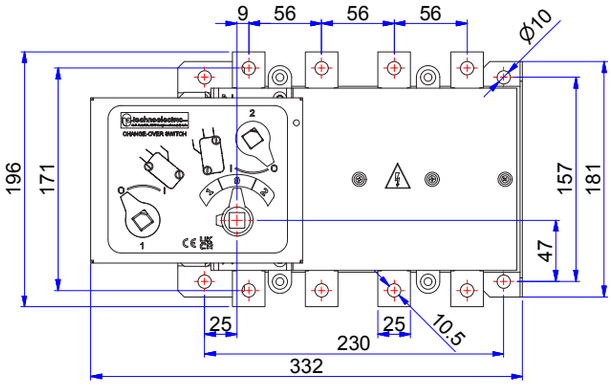
Foratura portella _Door drilling



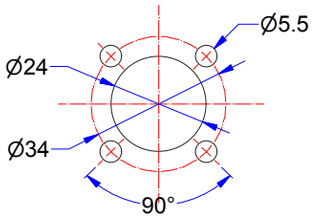


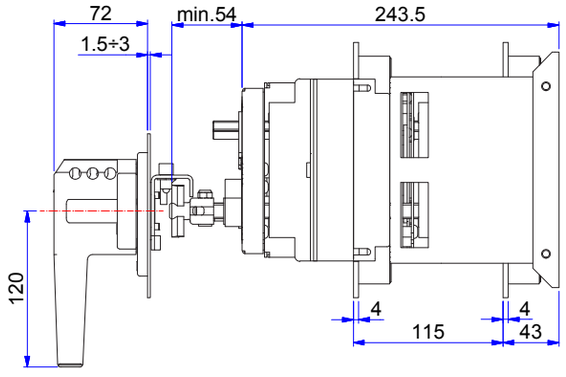
CS3P 315 ÷ 500 A



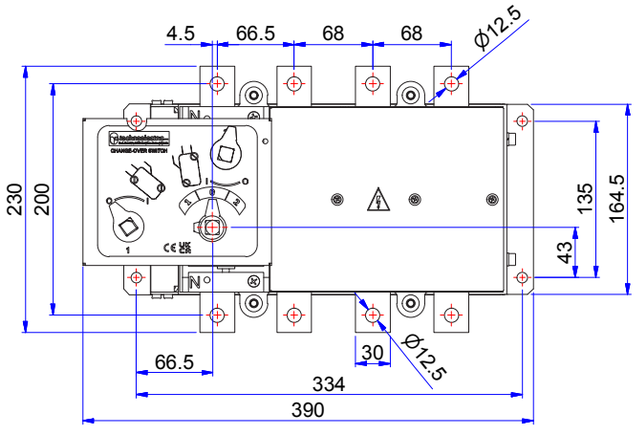


Foratura portella _Door drilling

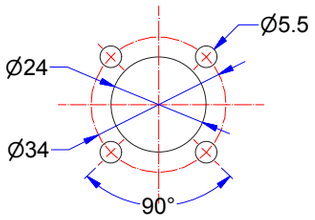


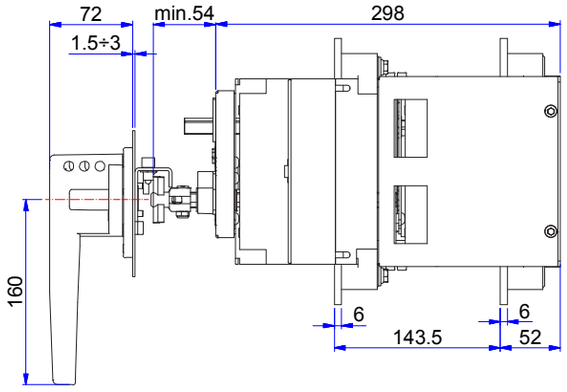


CS4P 630 ÷ 800 A

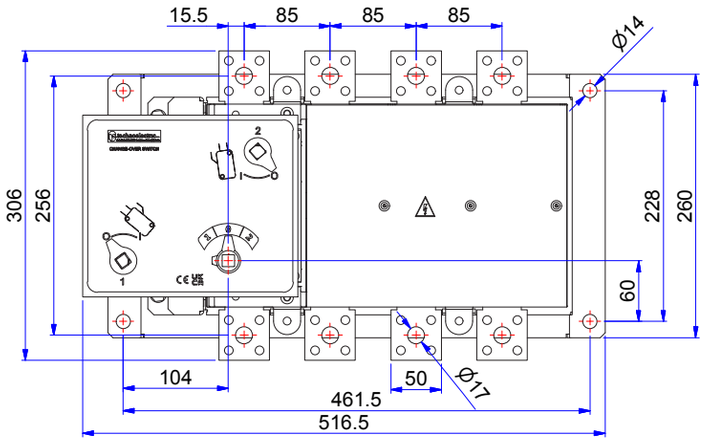


Foratura portella _Door drilling

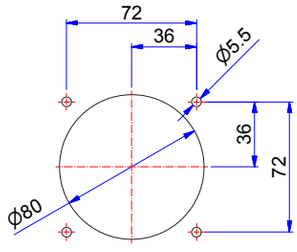


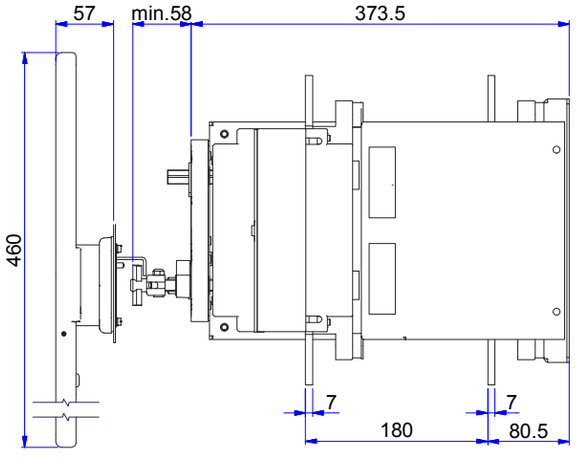


CS5P 800 ÷ 1250 A

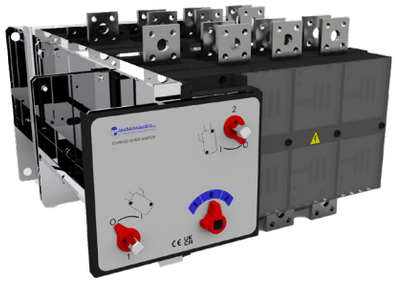


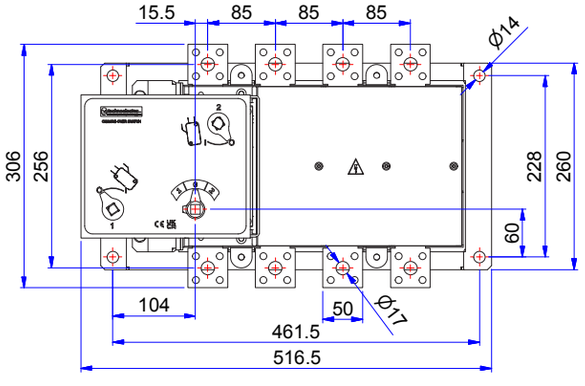
Foratura portella _Door drilling



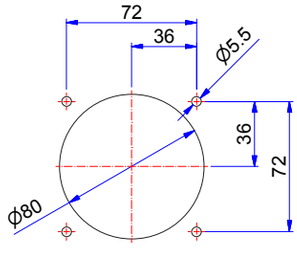


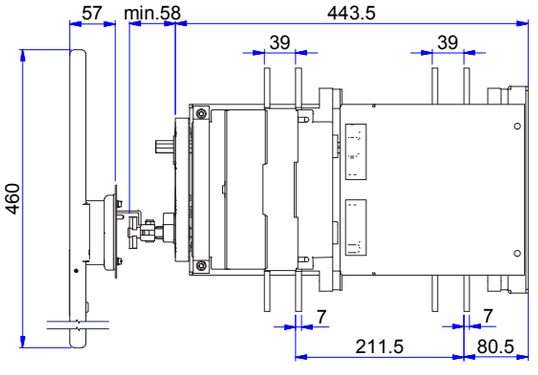
CS5P 1600 ÷ 2000 A



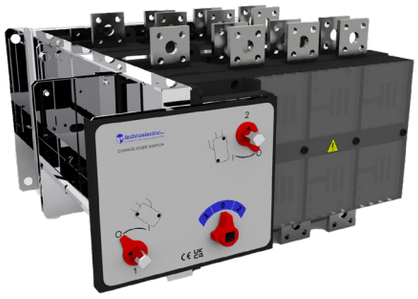


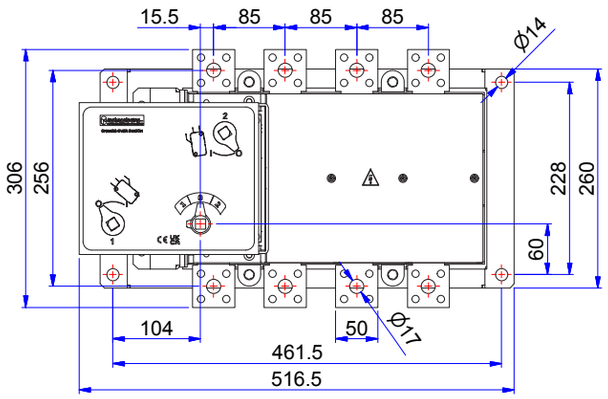
Foratura portella _Door drilling



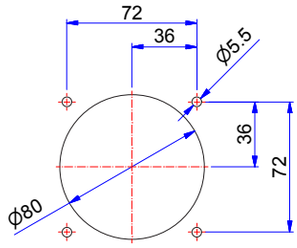


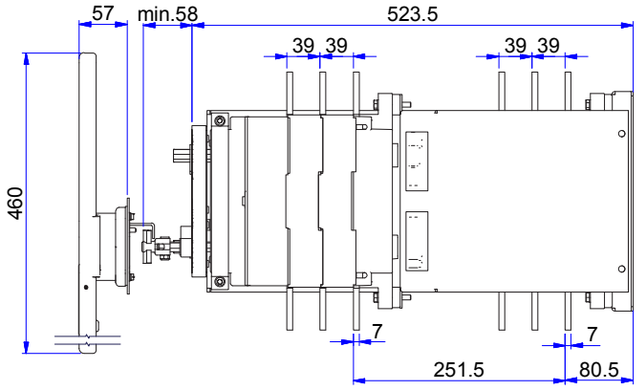
CS5P 2500 ÷ 3150 A



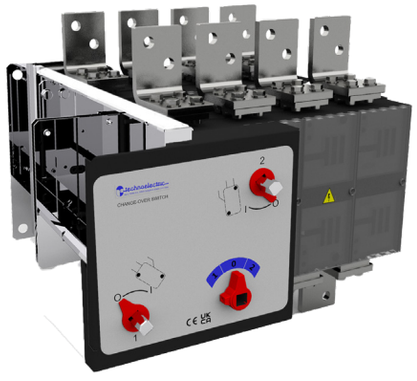


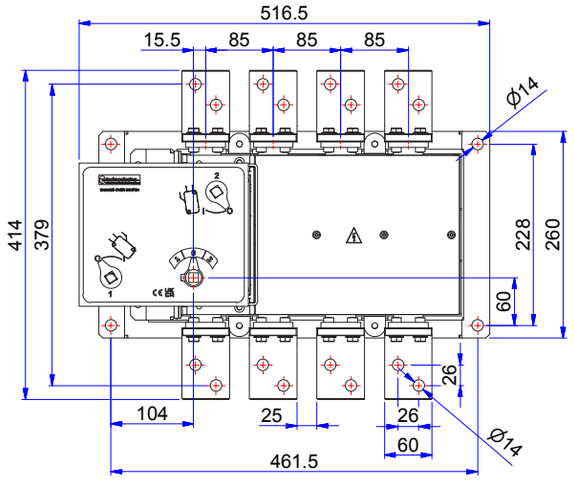
Foratura portella _Door drilling



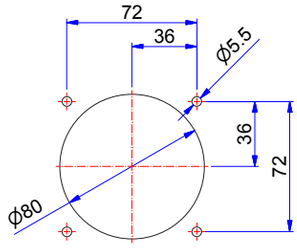


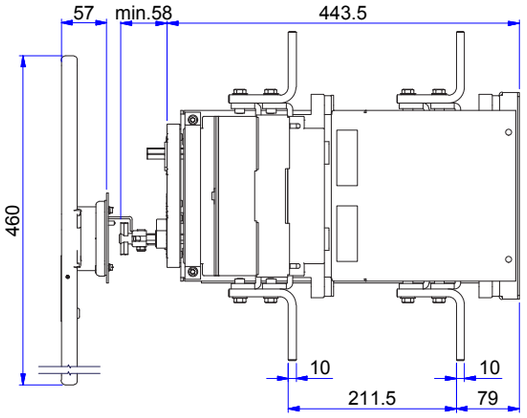
CS6P FN 1600 A



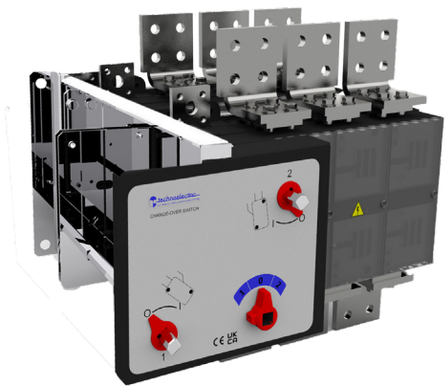


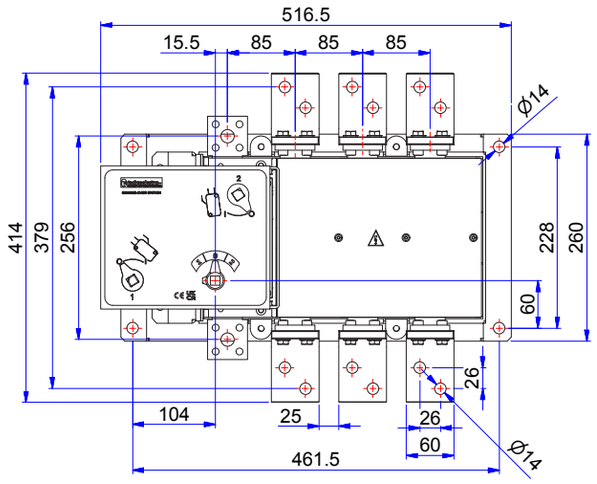
Foratura portella _Door drilling



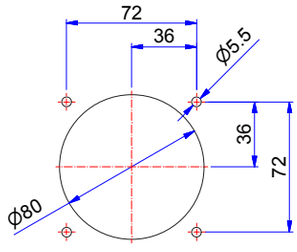


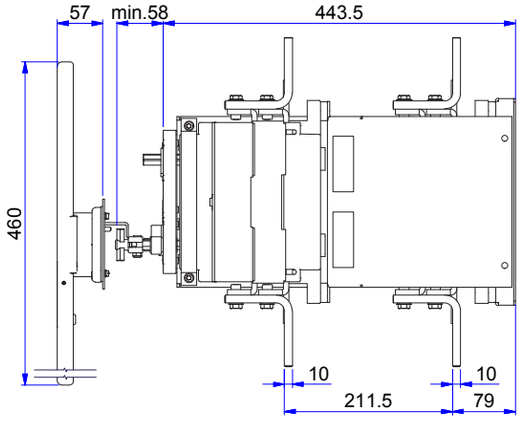
CS6P 1600 A (neutro _neutral 1250 A)



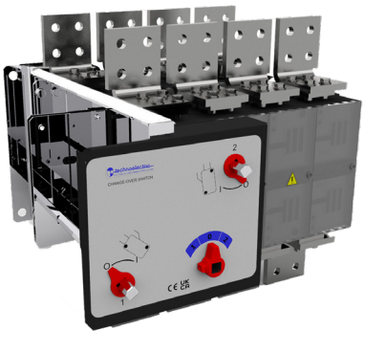


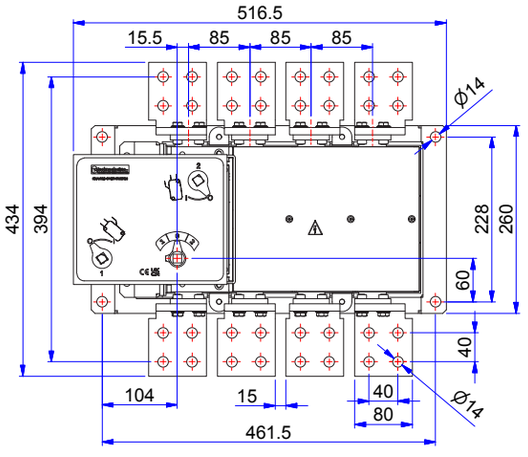
Foratura portella _Door drilling



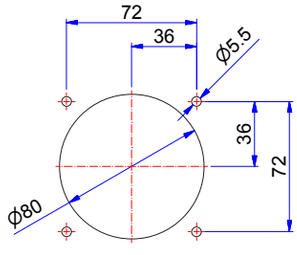


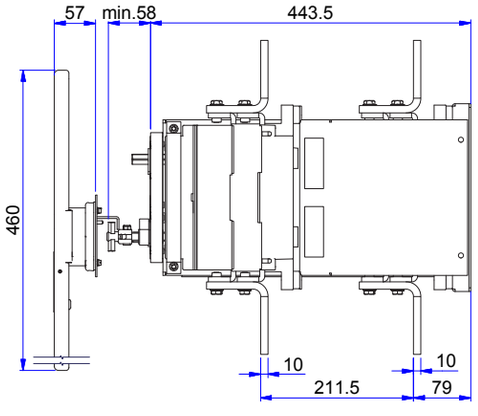
CS6P FN 2000 A



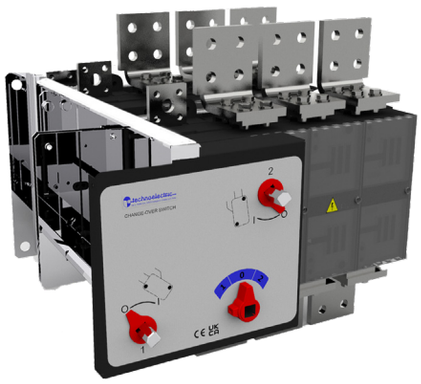


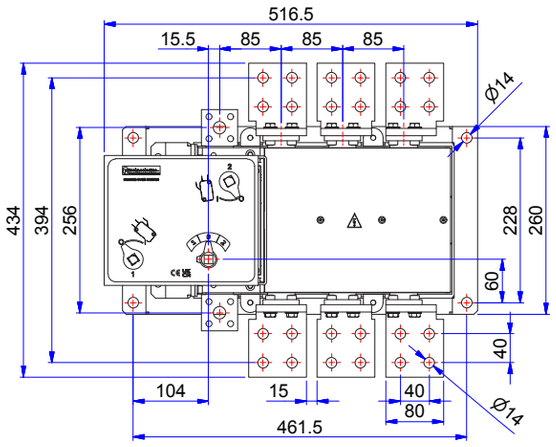
Foratura portella _Door drilling



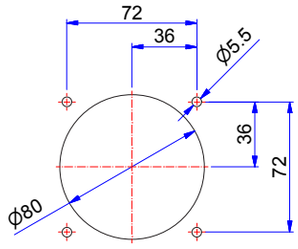


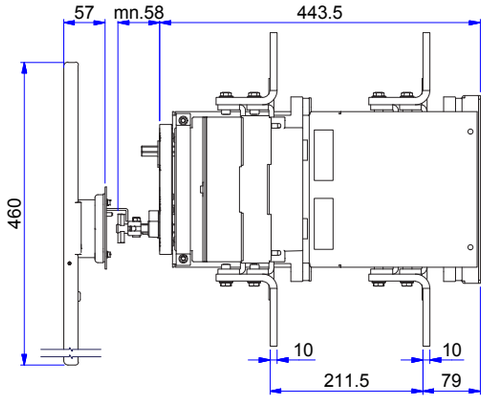
CS6P 2000 A (neutro _neutral 1250 A)



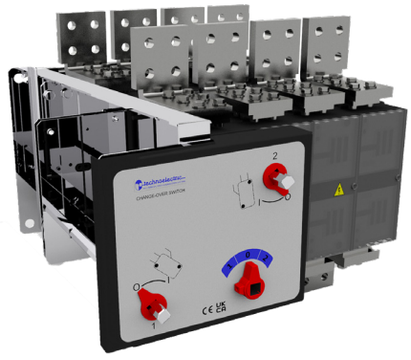


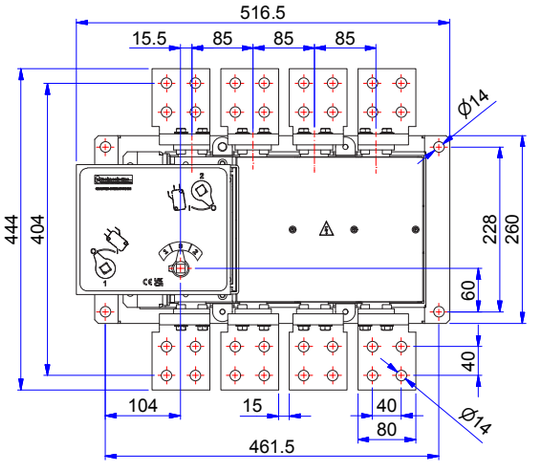
Foratura portella _Door drilling



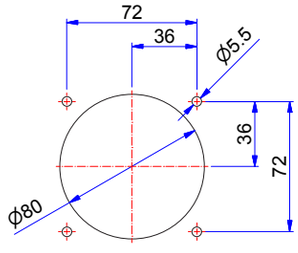


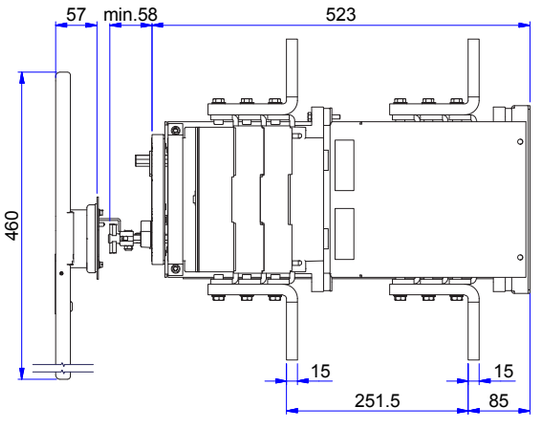
CS6P FN 2500 A



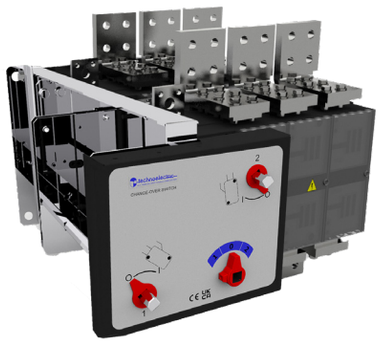


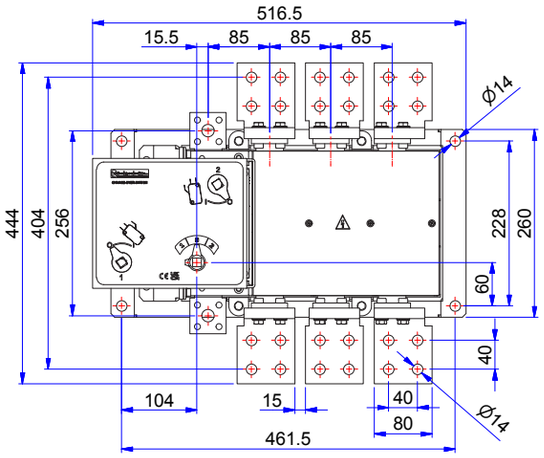
Foratura portella _Door drilling



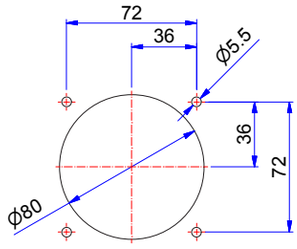


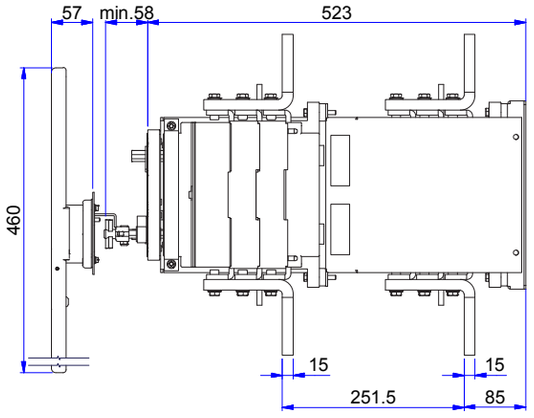
CS6P 2500 A (neutro _neutral 1250 A)



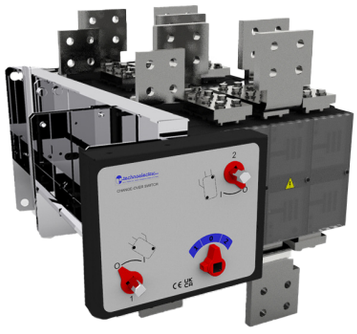


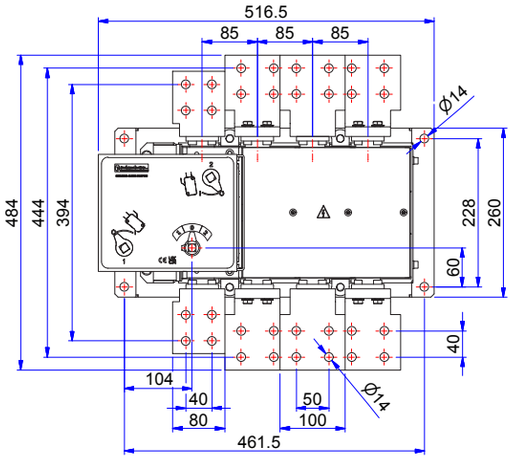
Foratura portella _Door drilling



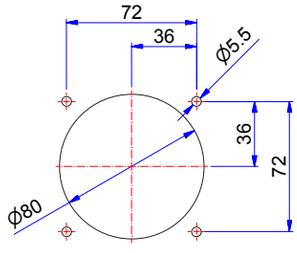


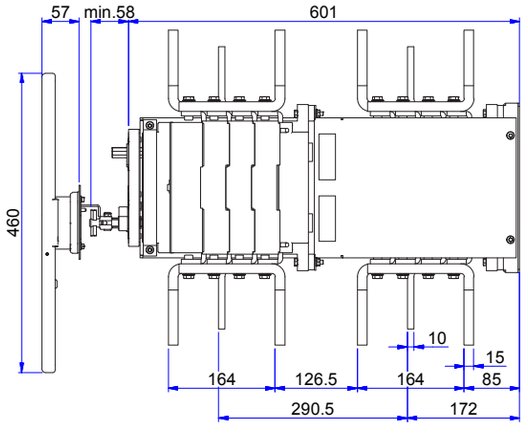
CS6P 3150 A



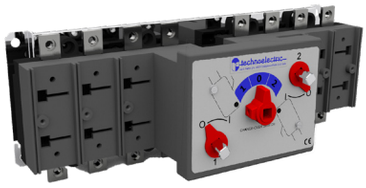


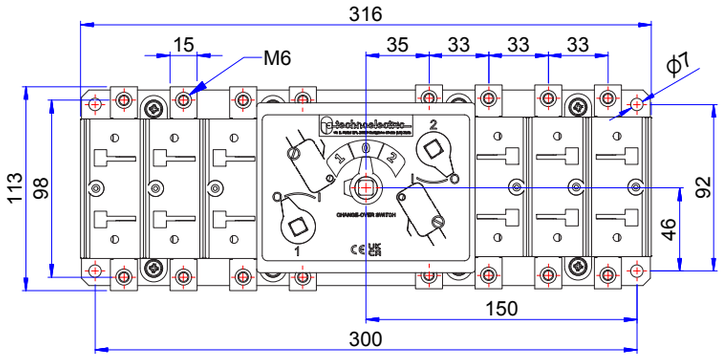
Foratura portella _Door drilling



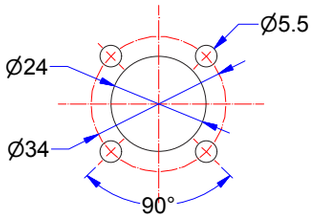


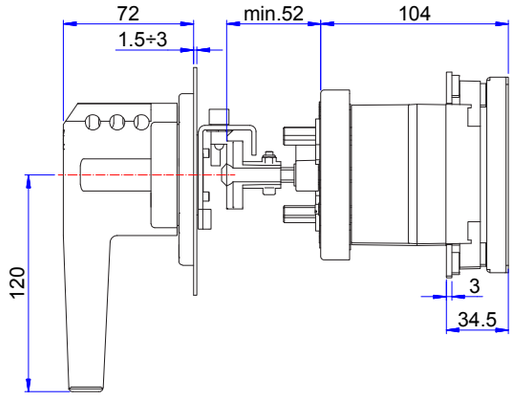
CO1P 32 - 160 A



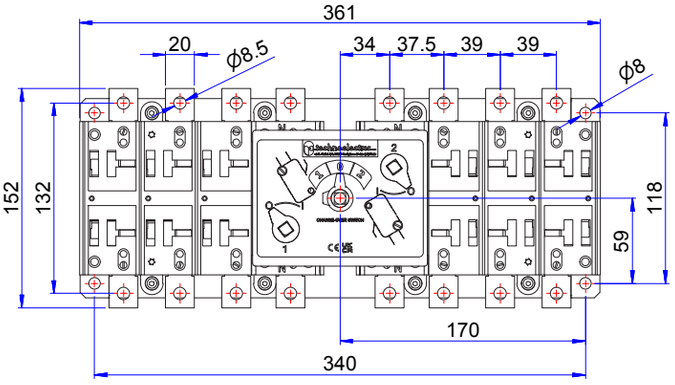


Foratura portella _Door drilling

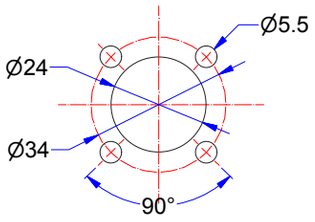


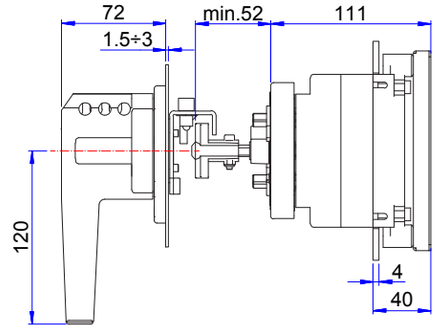


CO2P 160 - 315 A

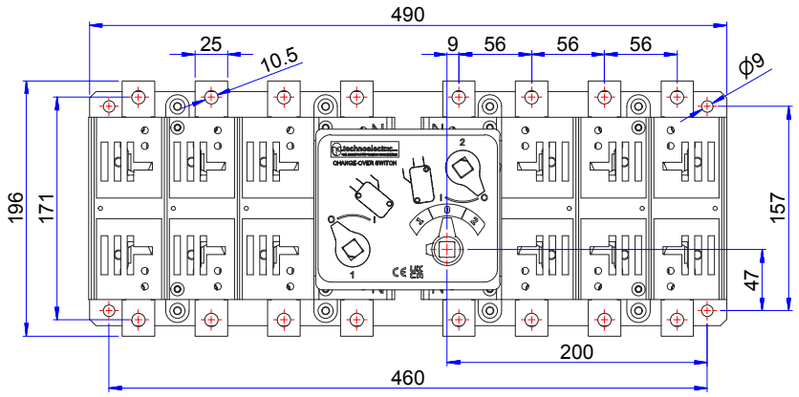


Foratura portella _Door drilling

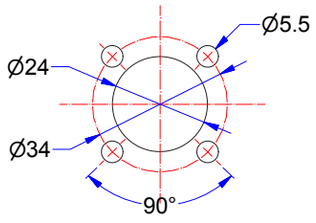


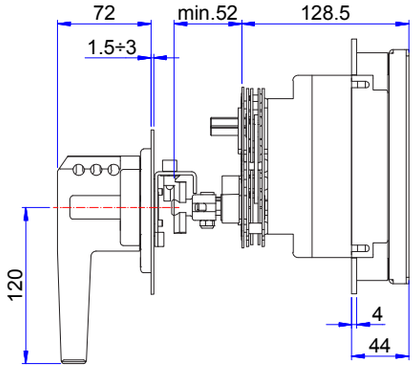


CO3P 315 - 500 A

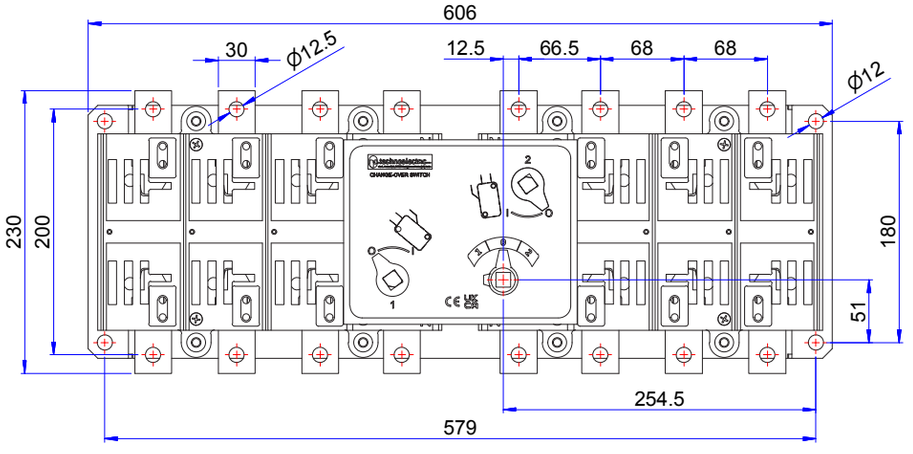


Foratura portella _Door drilling

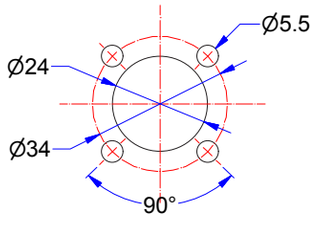


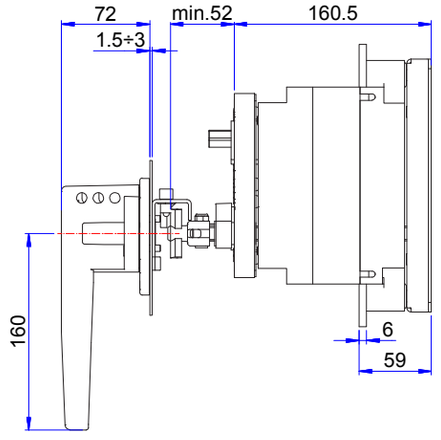


CO4P 630 - 800 A

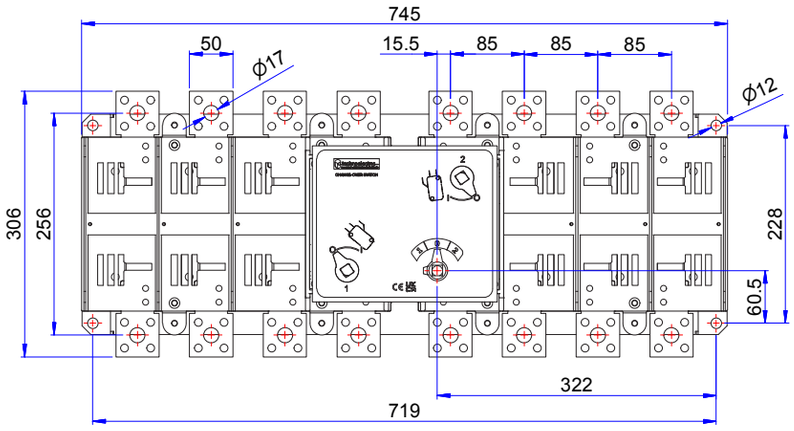


Foratura portella _Door drilling

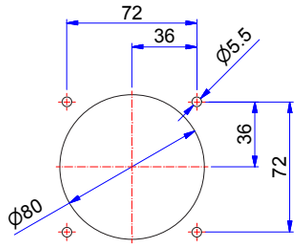


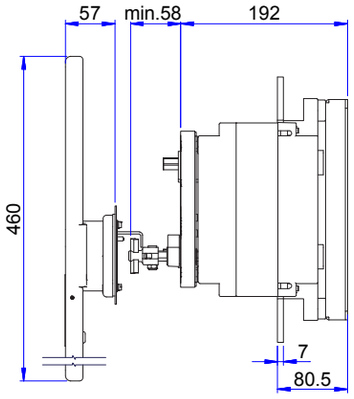


CO5P 800 ÷ 1250 A

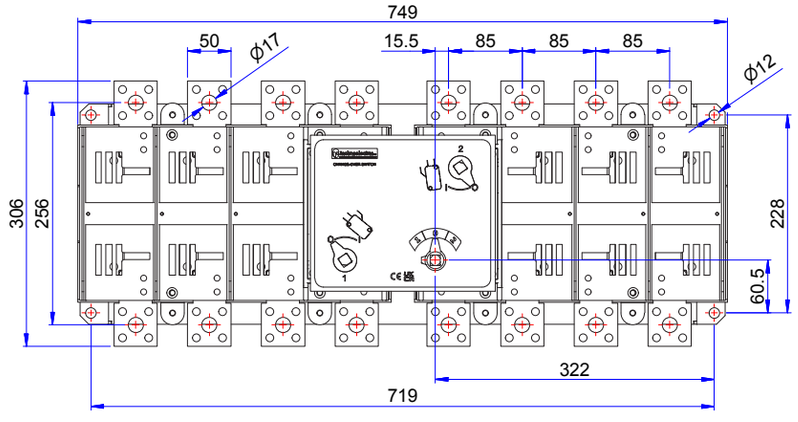


Foratura portella _Door drilling

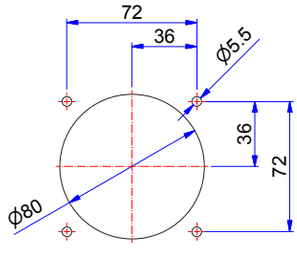


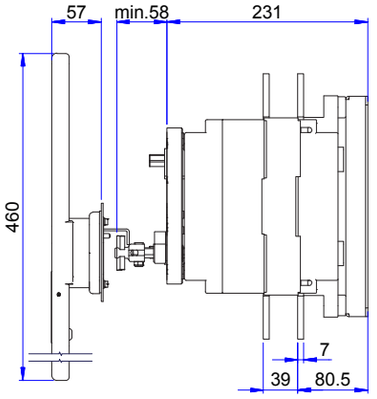


CO5P 1600 ÷ 2000 A

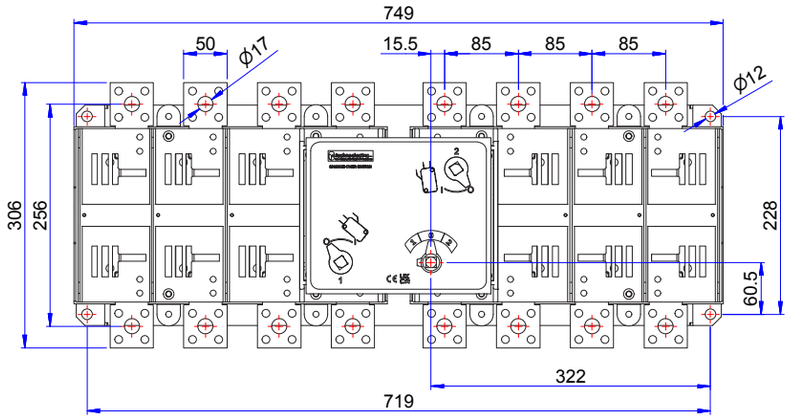


Foratura portella _Door drilling

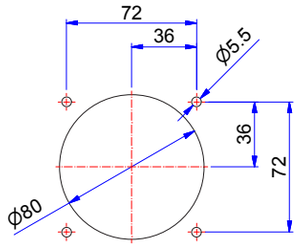


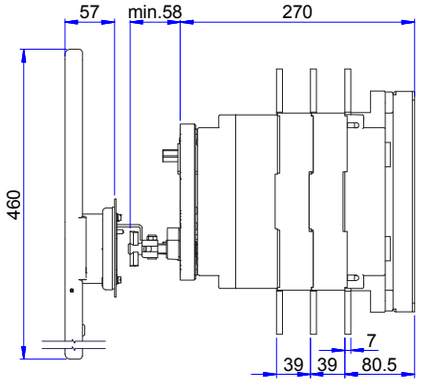


CO5P 2500 ÷ 3150 A

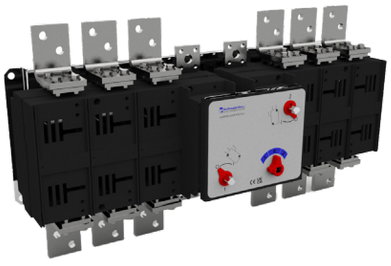


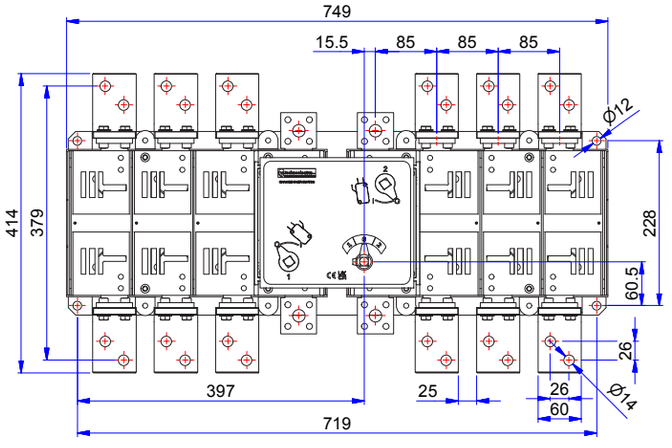
Foratura portella _Door drilling



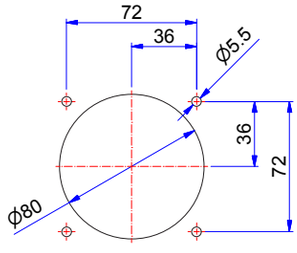


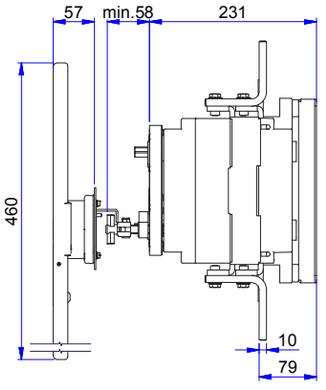
CO6P 1600 A (neutro _neutral 1250 A)



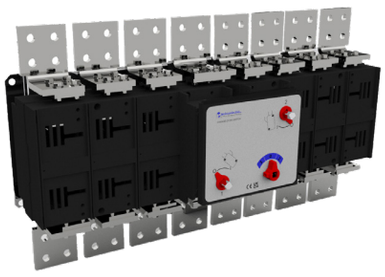


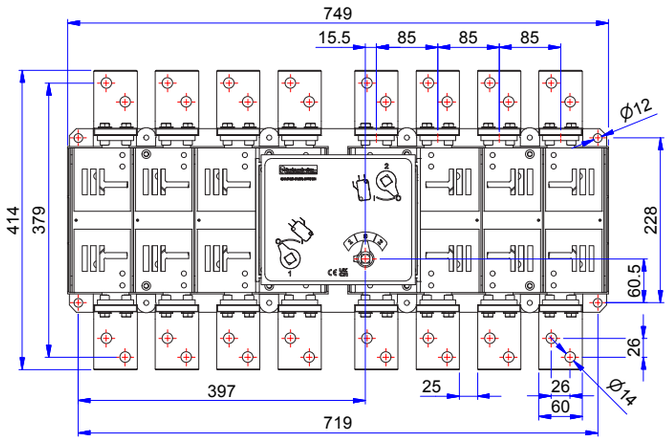
Foratura portella _Door drilling



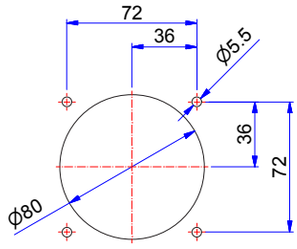


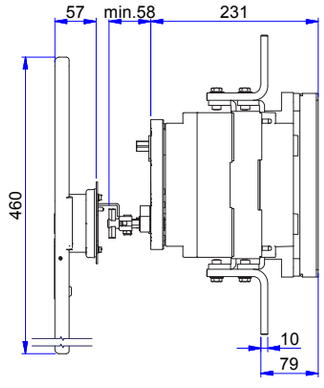
CO6P FN 1600 A



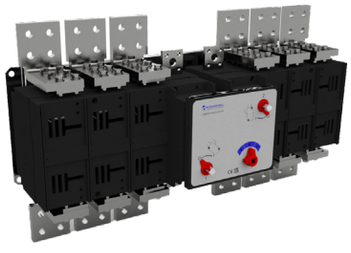


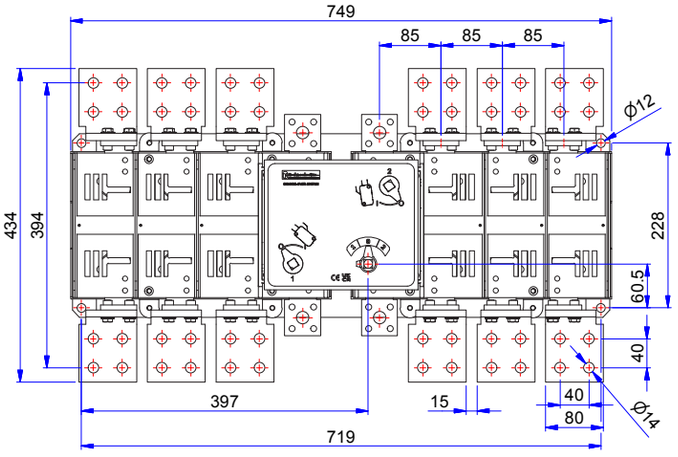
Foratura portella _Door drilling



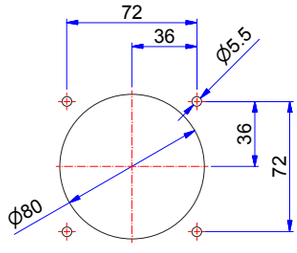


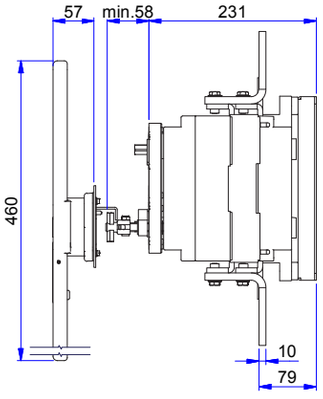
CO6P 2000 A (neutro _neutral 1250 A)



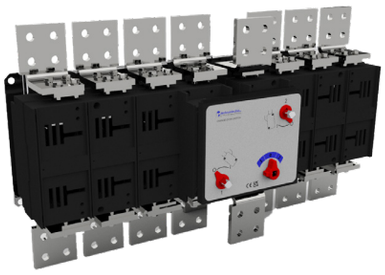


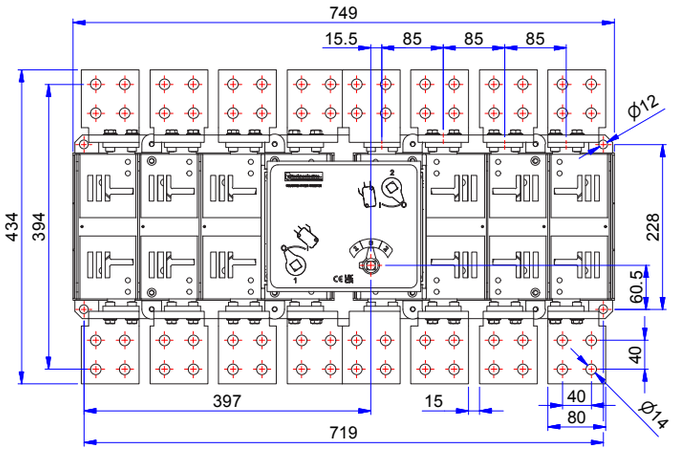
Foratura portella _Door drilling



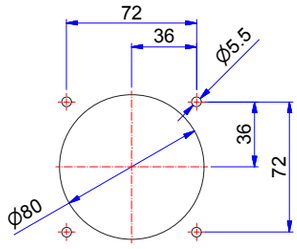


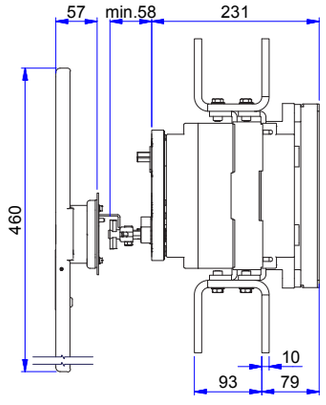
CO6P FN 2000 A



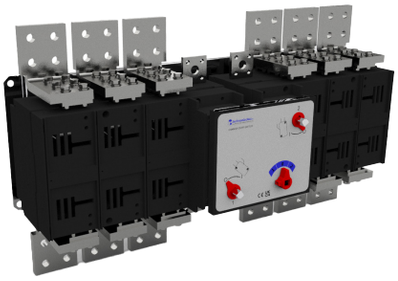


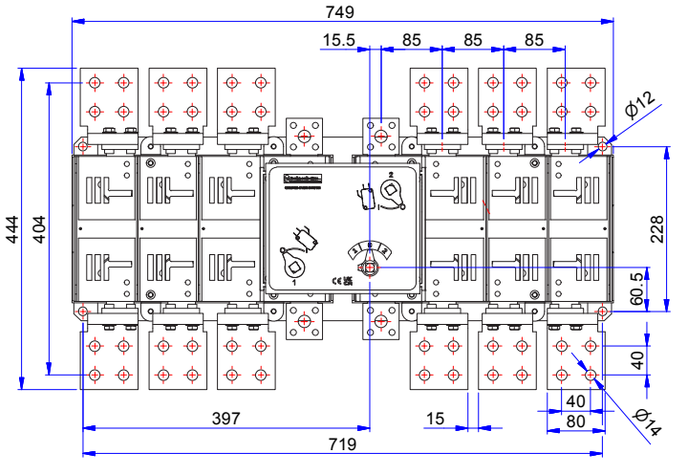
Foratura portella _Door drilling



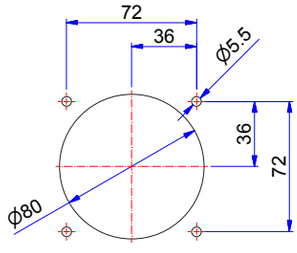


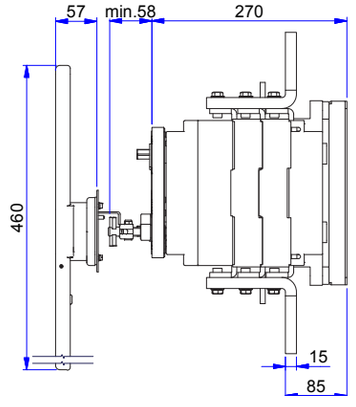
CO6P 2500 A (neutro _neutral 1250 A)



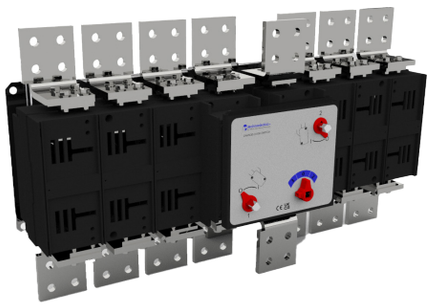


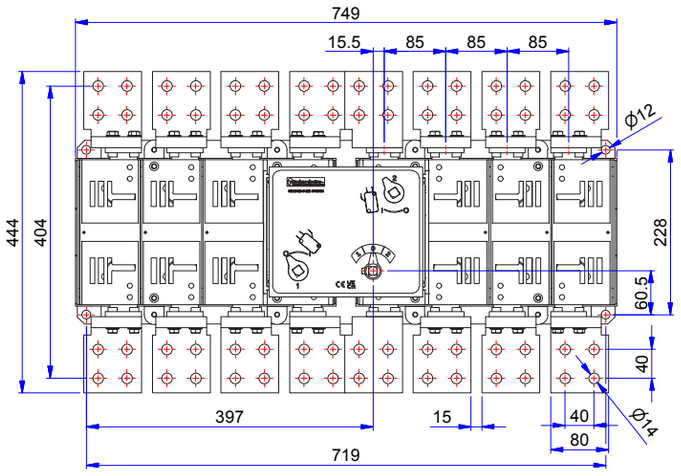
Foratura portella _Door drilling



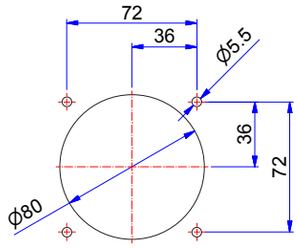


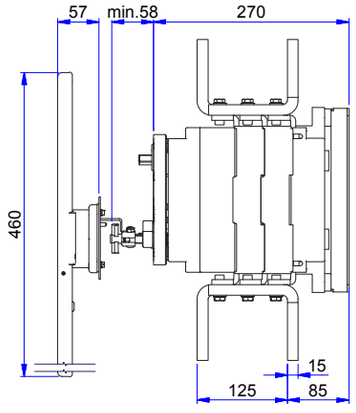
CO6P FN 2500 A



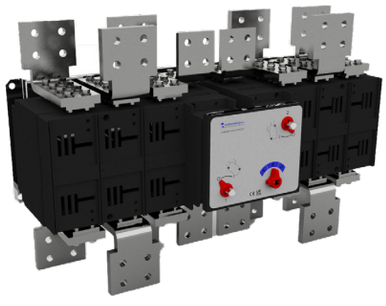


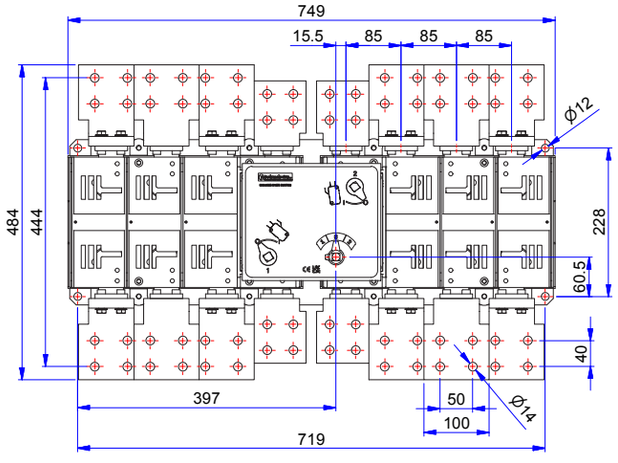
Foratura portella _Door drilling



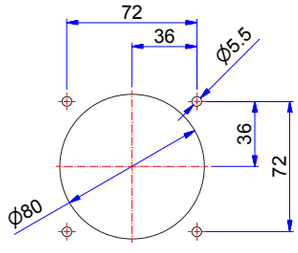


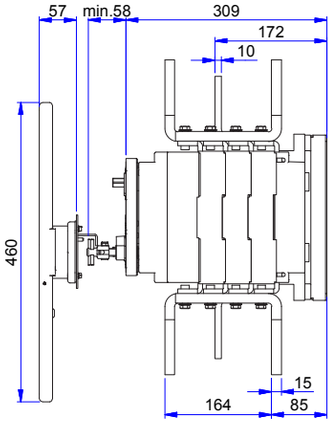
CO6P 3150 A



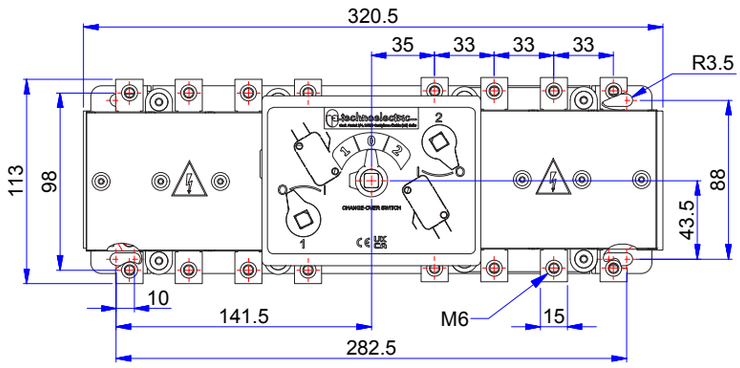


Foratura portella _Door drilling

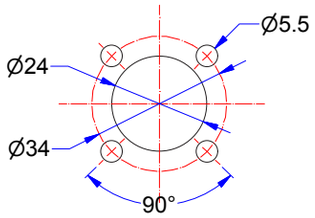


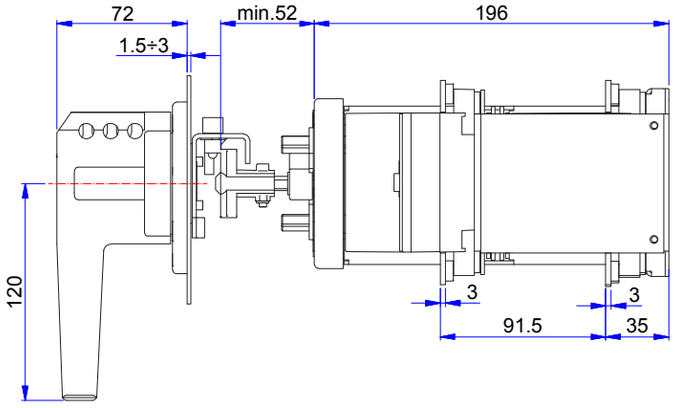


BYP 1P 125 A

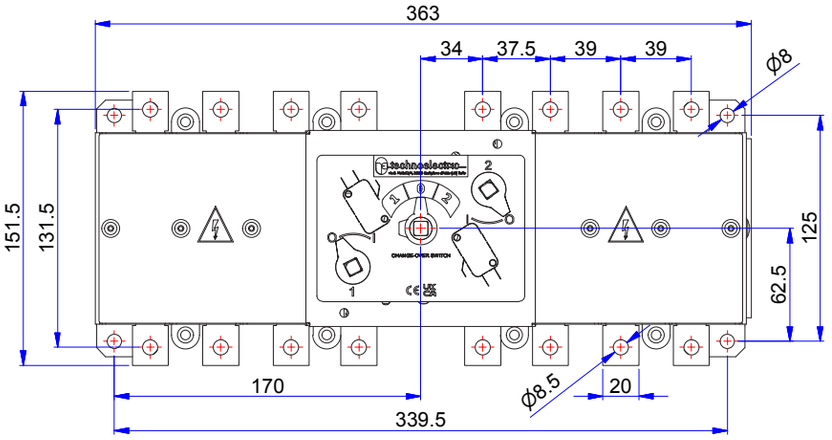


Foratura portella _Door drilling

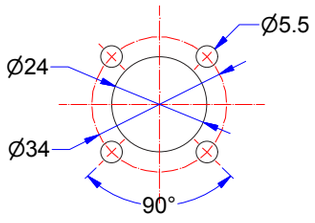


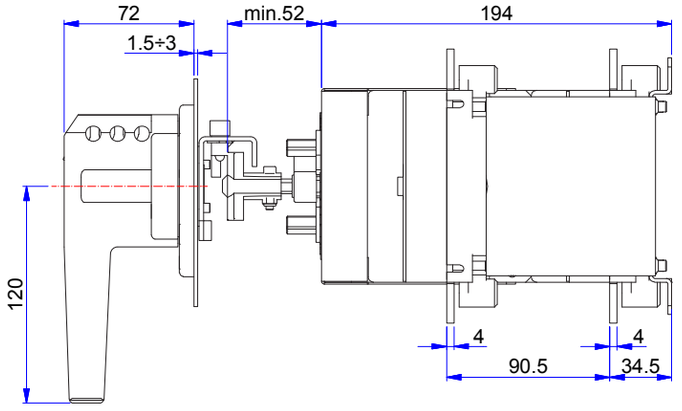


BYP 2P 250 A

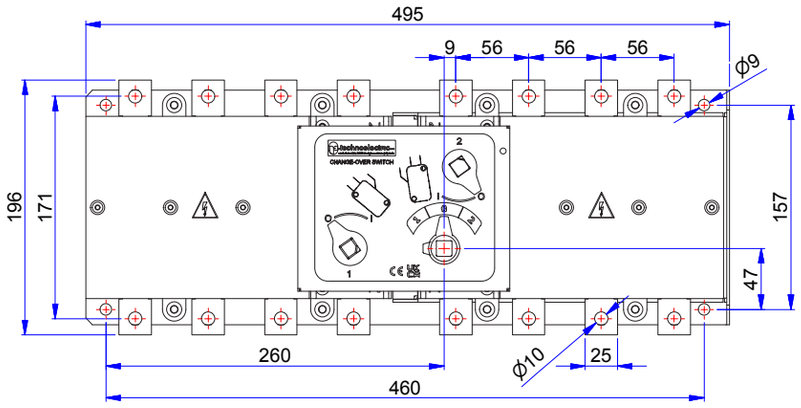


Foratura portella _Door drilling

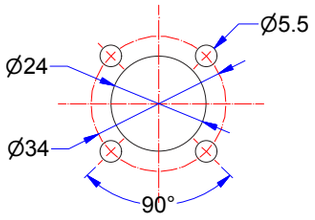


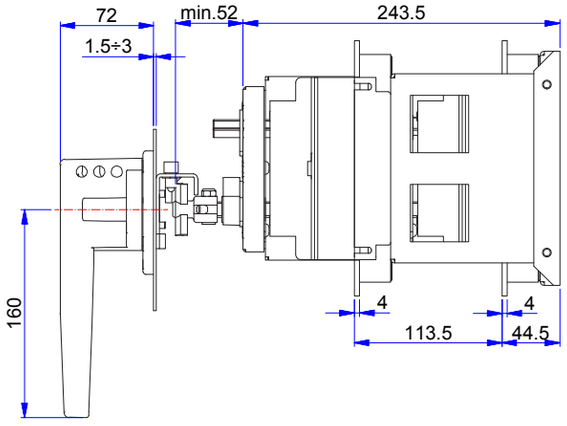


BYP 3P 400 A

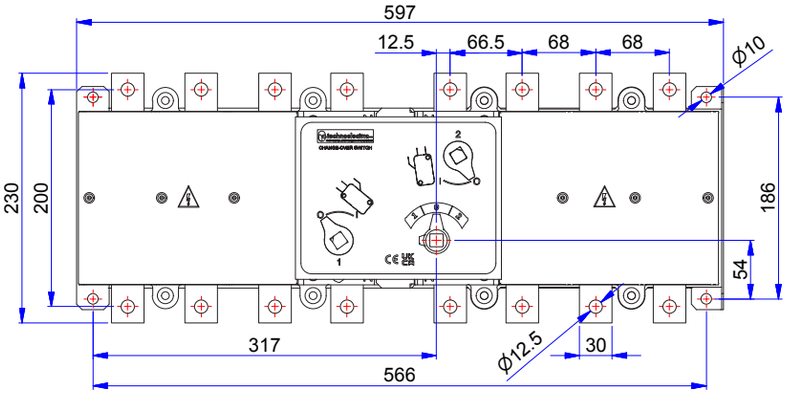


Foratura portella _Door drilling

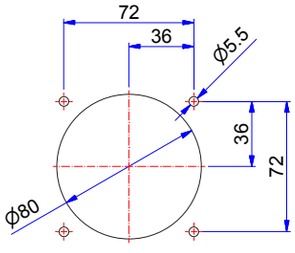


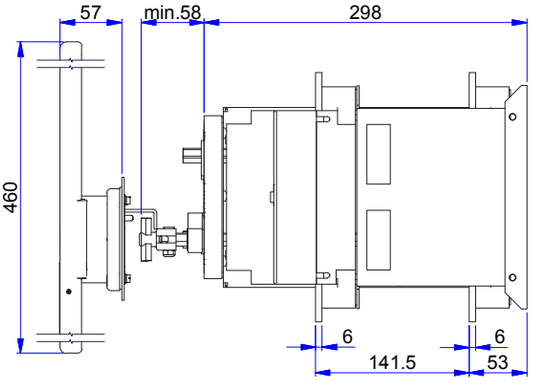


BYP 4P 800 A

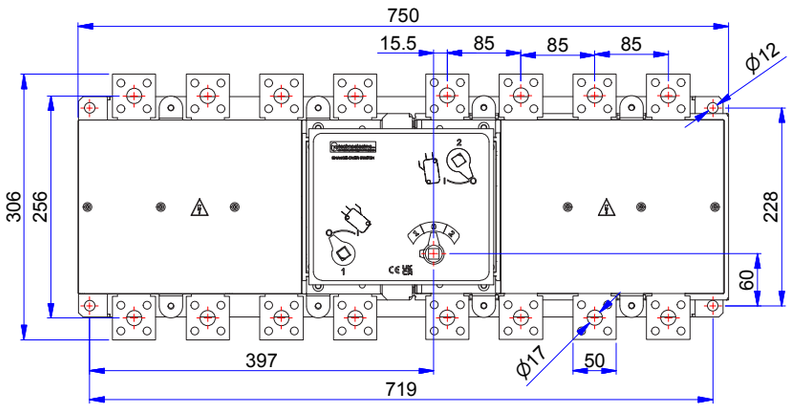


Foratura portella _Door drilling

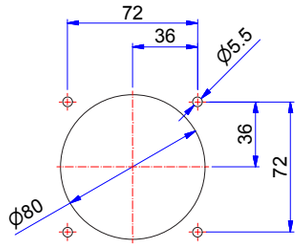


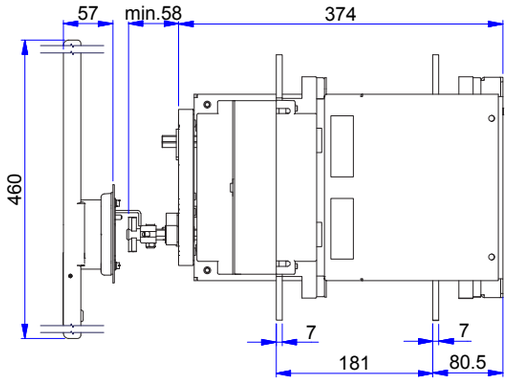


BYP 5P 1250 A



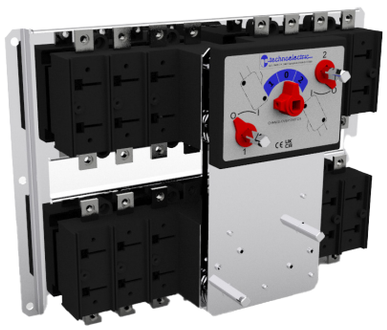
Foratura portella _Door drilling

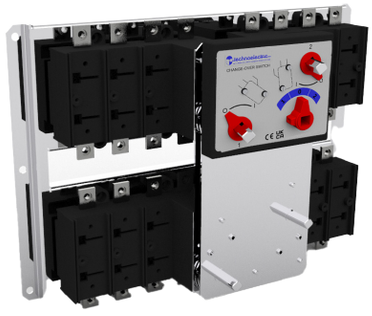




COP

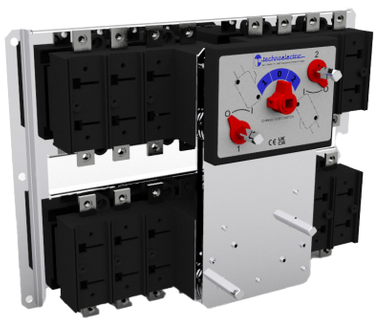
Commutatori 6-8 poli
_6-8 poles change-over switches

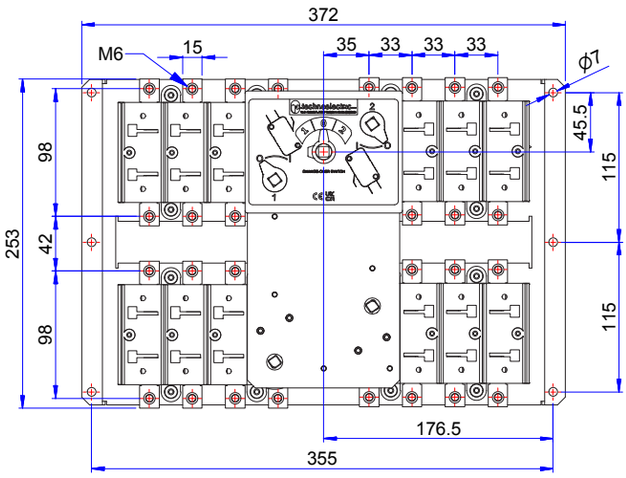




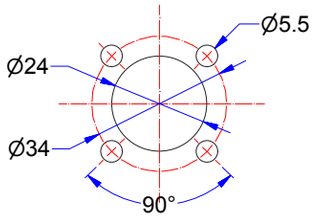
Tipo _type	Corrente nominale _rated current	Senza maniglia _without handle		Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE	POLI _POLES	CODICE _CODE
CO1P	32 A	6	1100032SM	6	1100032
		8	1101032SM	8	1101032
	45A	6	1100132SM	6	1100132
		8	1101132SM	8	1101132
	63A	6	1100232SM	6	1100232
		8	1101232SM	8	1101232
	80A	6	1100332SM	6	1100332
		8	1101332SM	8	1101332
	100A	6	1100432SM	6	1100432
		8	1101432SM	8	1101432
	125A	6	1100532SM	6	1100532
		8	1101532SM	8	1101532
	160A	6	1100632SM	6	1100632
		8	1101632SM	8	1101632
CO2P	160A	6	1200132SM	6	1200132
		8	1201132SM	8	1201132
	200A	6	1200232SM	6	1200232
		8	1201232SM	8	1201232
	250A	6	1200332SM	6	1200332
		8	1201332SM	8	1201332
	315A	6	1200432SM	6	1200432
		8	1201432SM	8	1201432
CO3P	315A	6	1300132SM	6	1300132
		8	1301132SM	8	1301132
	400A	6	1300232SM	6	1300232
		8	1301232SM	8	1301232
	500A	6	1300332SM	6	1300332
		8	1301332SM	8	1301332
CO4P	630A	6	1400332SM	6	1400332
		8	1401332SM	8	1401332
	800A	6	1400432SM	6	1400432
		8	1401432SM	8	1401432
CO5P (35kA)	800A	6	1500032SM	6	1500032
		8	1501032SM	8	1501032
	1000A	6	1500132SM	6	1500132
		8	1501132SM	8	1501132
	1250A	6	1500232SM	6	1500232
		8	1501232SM	8	1501232

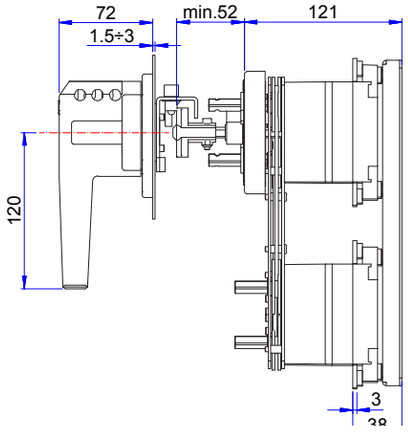
CO1P 32 ÷ 160 A



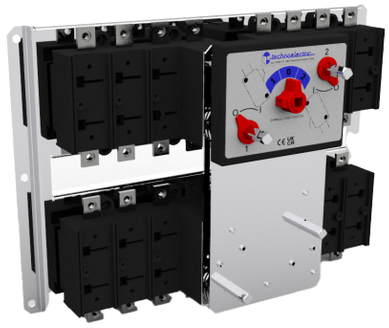


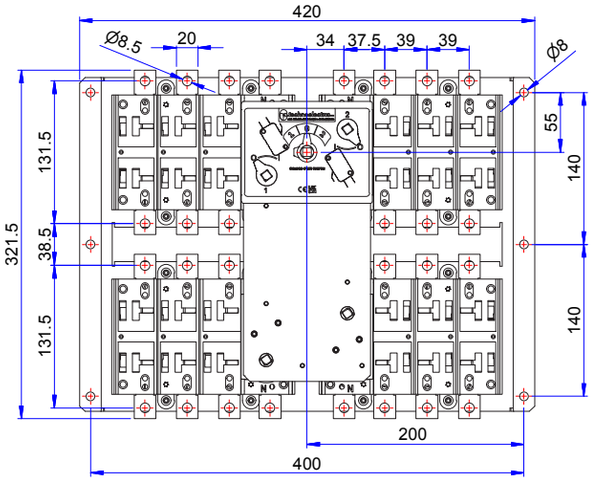
Foratura portella _Door drilling



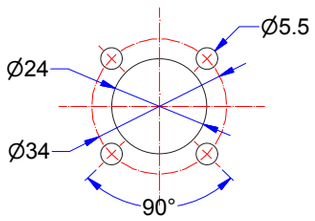


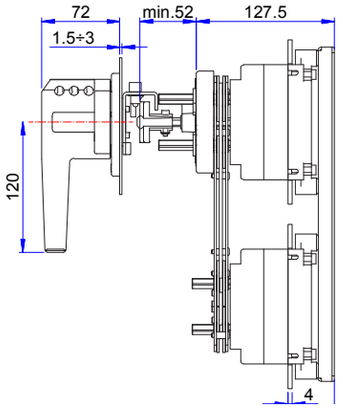
CO2P 160 ÷ 315 A



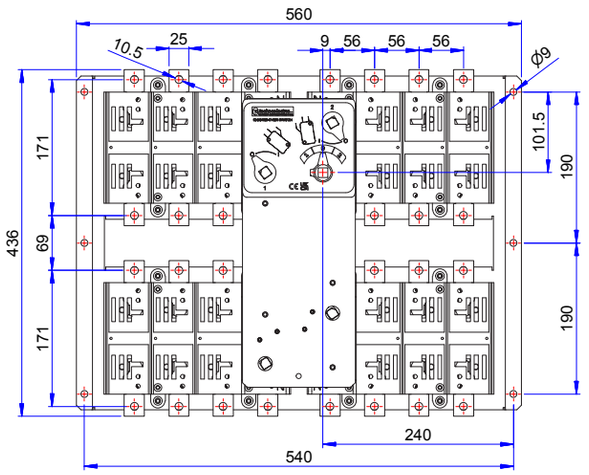


Foratura portella _Door drilling

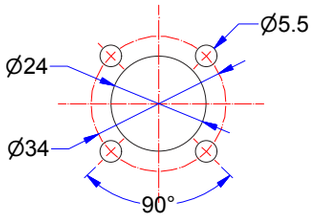


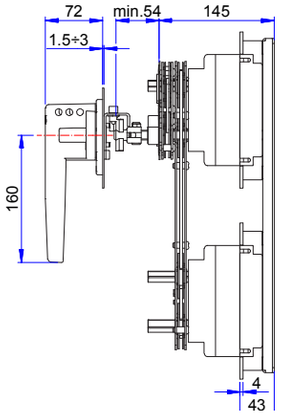


CO3P 315 ÷ 500 A

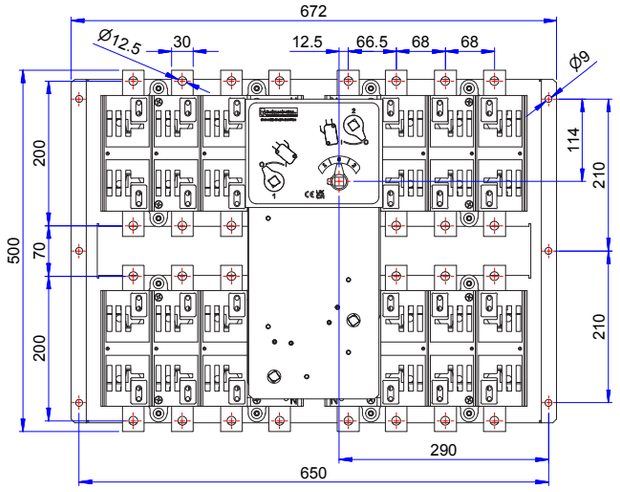


Foratura portella _Door drilling

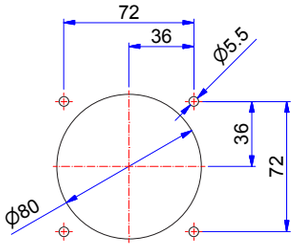


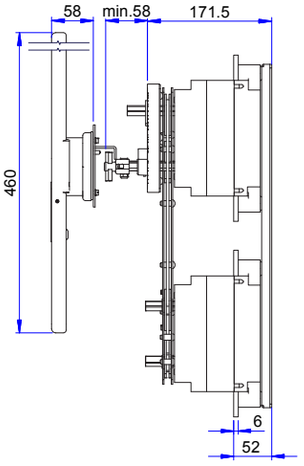


CO4P 630 ÷ 800 A

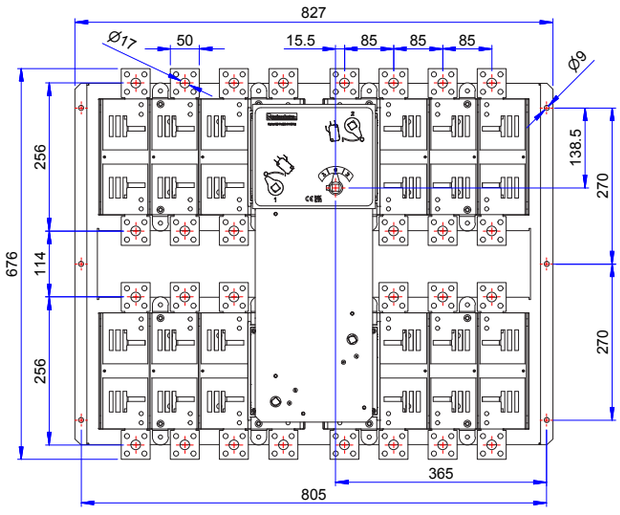


Foratura portella _Door drilling

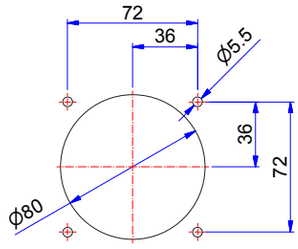


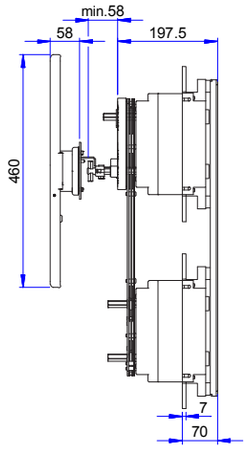


CO5P 800 ÷ 1250 A



Foratura portella _Door drilling

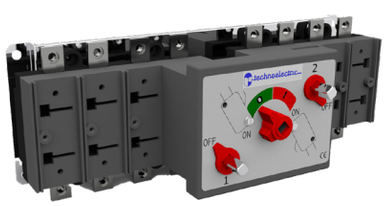




SERIE_SERIES **CMA**

COP overlapping

Commutatori orizzontali senza zero overlapping _overlapping without zero change-over switches horizontal execution



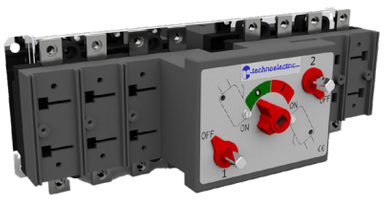
Tipo _type	Corrente nominale _rated current	Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE
CO1P	32 A	3	110003OL
		4	110103OL
	45A	3	110013OL
		4	110113OL
	63A	3	110023OL
		4	110123OL
	80A	3	110033OL
		4	110133OL
	100A	3	110043OL
		4	110143OL
	125A	3	110053OL
		4	110153OL
	160A	3	110063OL
		4	110163OL
CO2P	160A	3	120013OL
		4	120113OL
	200A	3	120023OL
		4	120123OL
	250A	3	120033OL
		4	120133OL
	315A	3	120043OL
		4	120143OL
CO3P	315A	3	130013OL
		4	130113OL
	400A	3	130023OL
		4	130123OL
	500A	3	130033OL
		4	130133OL
CO4P	630A	3	140033OL
		4	140133OL
	800A	3	140043OL
		4	140143OL
CO5P (35kA)	800A	3	150003OL
		4	150103OL
	1000A	3	150013OL
		4	150113OL
	1250A	3	150023OL
		4	150123OL
CO5P (50kA)	800A	3	150073OL
		4	150173OL
	1000A	3	150083OL
		4	150183OL
	1250A	3	150093OL
		4	150193OL
	1600A	3	150033OL
		4	150133OL
	2000A	3	150043OL
		4	150143OL
	2500A	3	150053OL
		4	150153OL
	3150A	3	150063OL
		4	150163OL
CO6P	1600A	3	160003OL
		4	160103OL
	2000A	3	160013OL
		4	160113OL
	2500A	3	160023OL
		4	160123OL
	3150A	3	160033OL
		4	160133OL

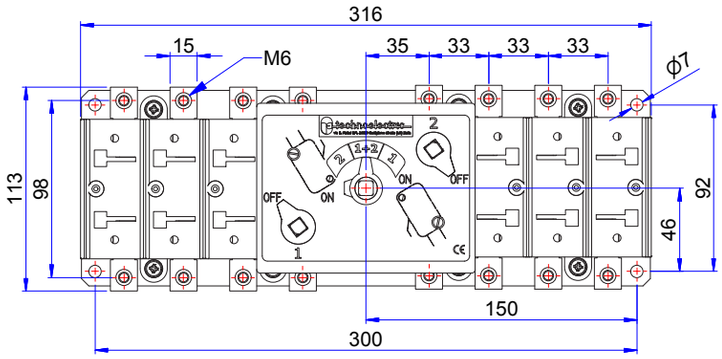
CSP overlapping

Commutatori sovrapposti senza zero overlapping _overlapping whitout zero change-over switches two layers execution

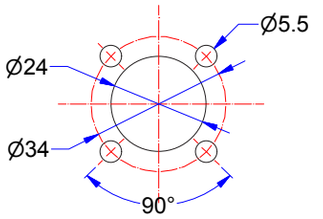
Tipo _type	Corrente nominale _rated current	Maniglia blocco porta _door interlock handle	
		POLI _POLES	CODICE _CODE
CS1P	32 A	3	110008OL
		4	110108OL
	45A	3	110018OL
		4	110118OL
	63A	3	110028OL
		4	110128OL
	80A	3	110038OL
		4	110138OL
	100A	3	110048OL
		4	110148OL
	125A	3	110058OL
		4	110158OL
	160A	3	110068OL
		4	110168OL
CS2P	160A	3	120018OL
		4	120118OL
	200A	3	120028OL
		4	120128OL
	250A	3	120038OL
		4	120138OL
	315A	3	120048OL
		4	120148OL
CS3P	315A	3	130018OL
		4	130118OL
	400A	3	130028OL
		4	130128OL
	500A	3	130038OL
		4	130138OL
CS4P	630A	3	140038OL
		4	140138OL
	800A	3	140048OL
		4	140148OL
CS5P (35kA)	800A	3	150008OL
		4	150108OL
	1000A	3	150018OL
		4	150118OL
	1250A	3	150028OL
		4	150128OL
CS5P (50kA)	800A	3	150078OL
		4	150178OL
	1000A	3	150088OL
		4	150188OL
	1250A	3	150098OL
		4	150198OL
	1600A	3	150038OL
		4	150138OL
	2000A	3	150048OL
		4	150148OL
	2500A	3	150058OL
		4	150158OL
	3150A	3	150068OL
		4	150168OL
CS6P	1600A	3	160008OL
		4	160108OL
	2000A	3	160018OL
		4	160118OL
	2500A	3	160028OL
		4	160128OL
	3150A	3	160038OL
		4	160138OL

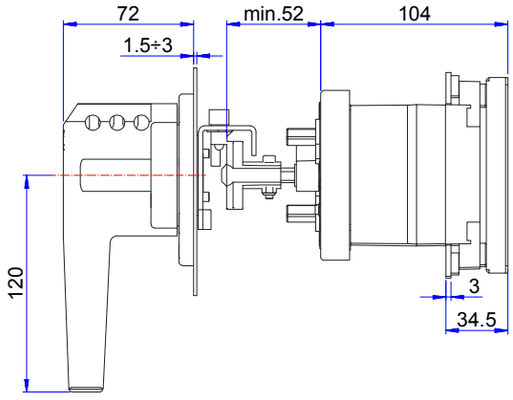
CO1P OL 32 ÷ 160 A



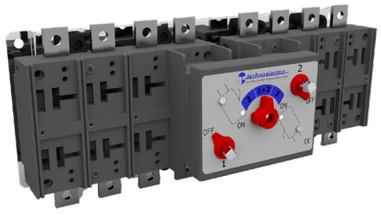


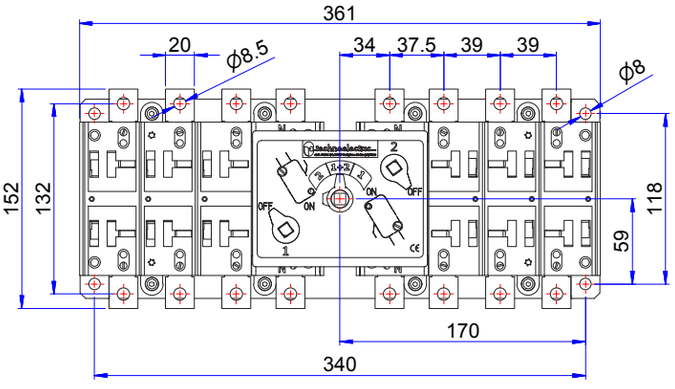
Foratura portella _Door drilling



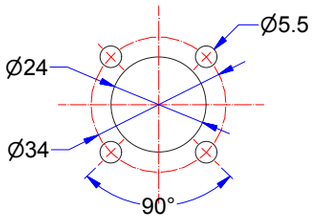


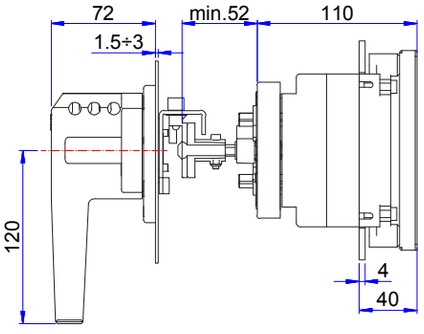
CO2P OL 160 ÷ 315 A



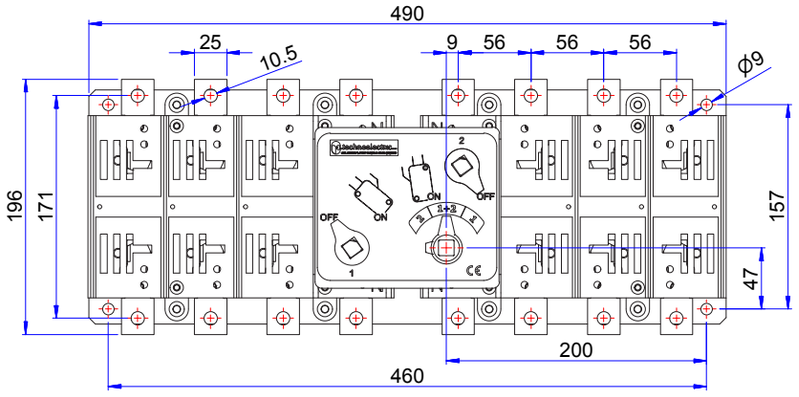


Foratura portella _Door drilling

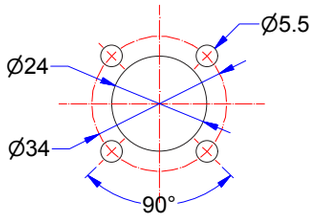


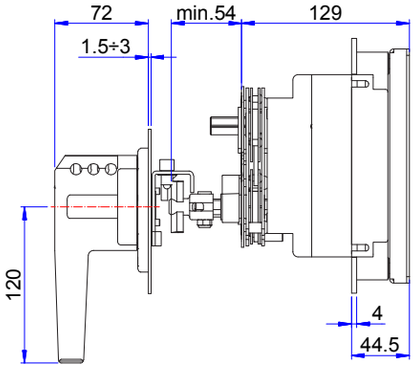


CO3P OL 315 ÷ 500 A

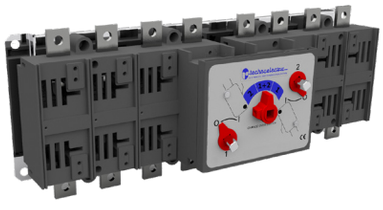


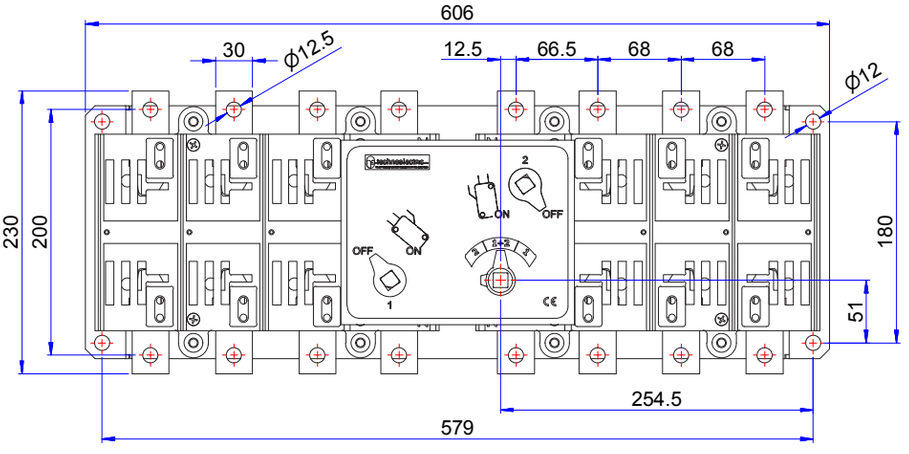
Foratura portella _Door drilling



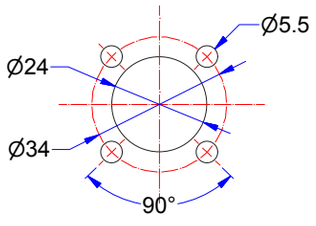


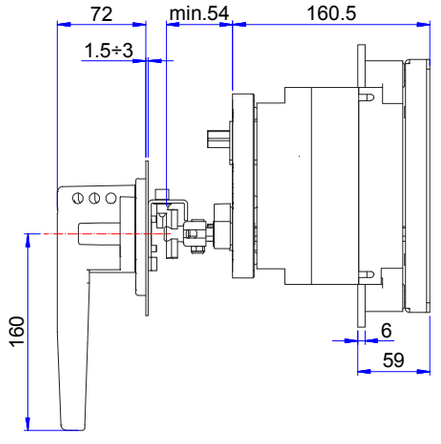
CO4P OL 630 ÷ 800 A



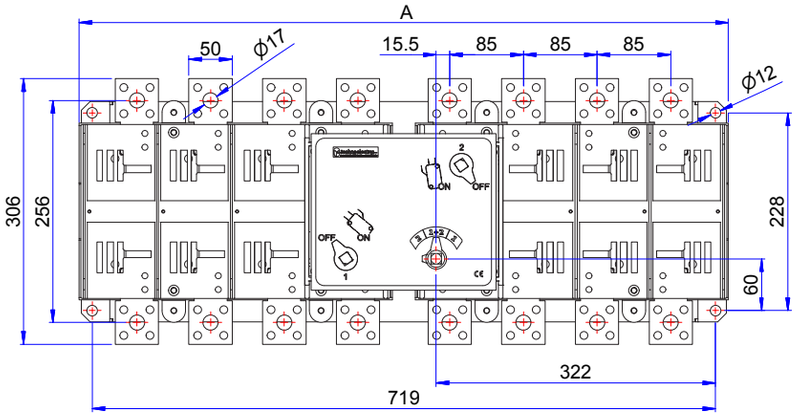


Foratura portella _Door drilling

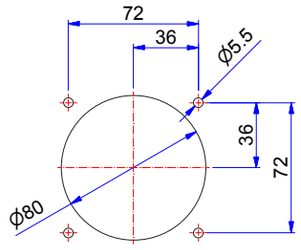




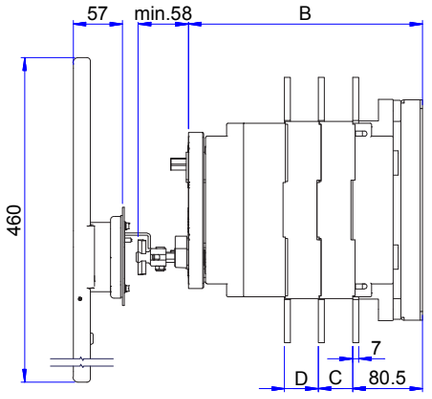
CO5P OL 800 ÷ 1250A 35kA



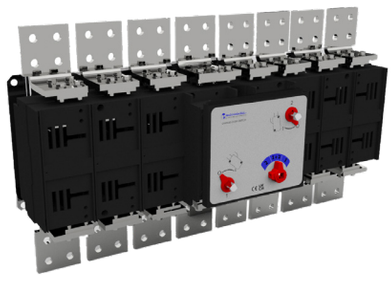
Foratura portella _Door drilling

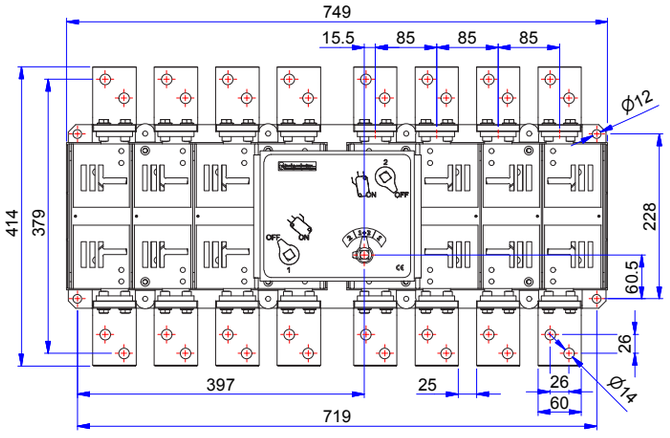


Tipo/Type	A	B	C	D
CO5P OL 800÷1250A	744	192		
CO5P OL 1600÷2000A	749	231	39	
CO5P OL 2500÷3150A	749	270	39	39

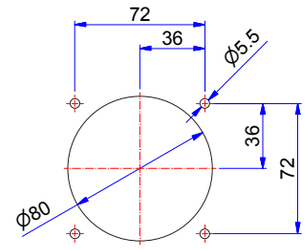


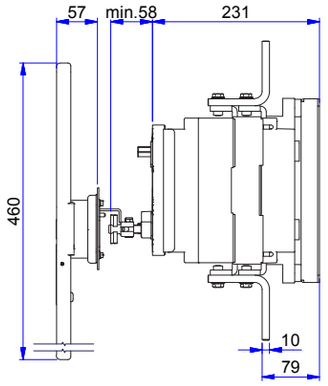
CO6P OL 1600 A





Foratura portella _Door drilling





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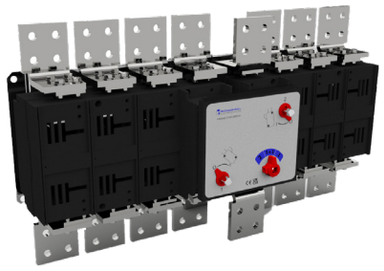
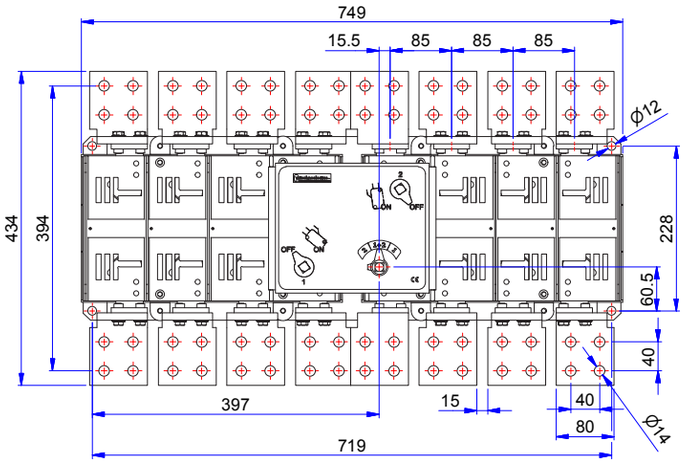
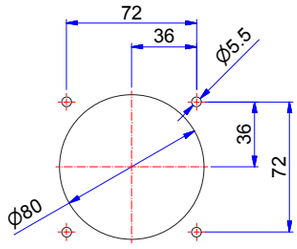
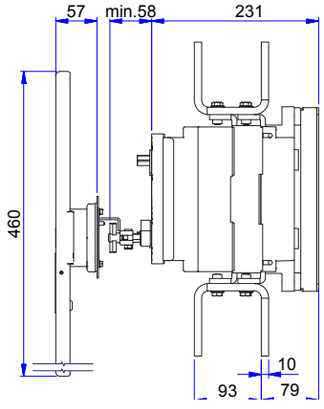


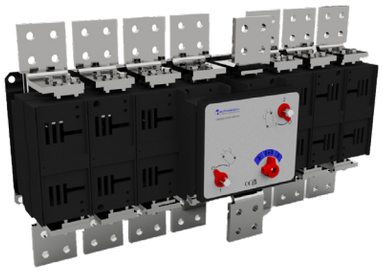


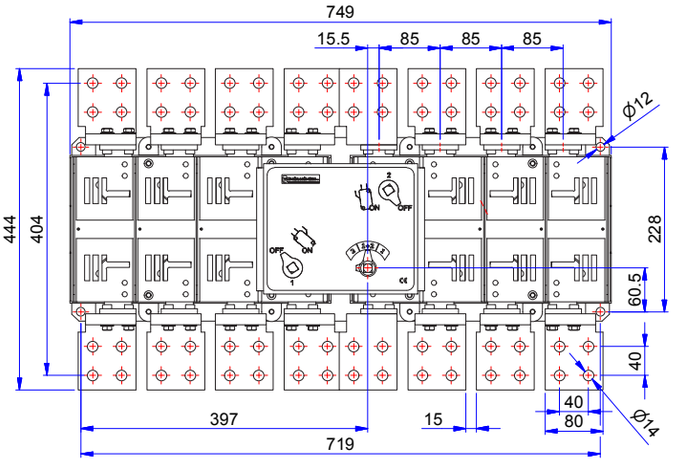
Foratura portella _Door drilling



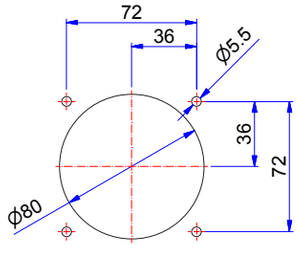


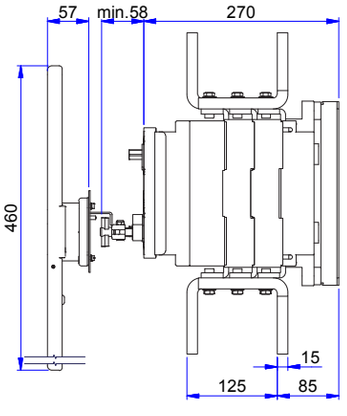
CO6P OL 2500 A



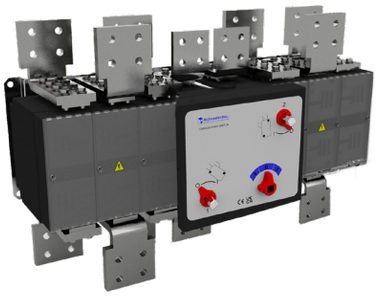


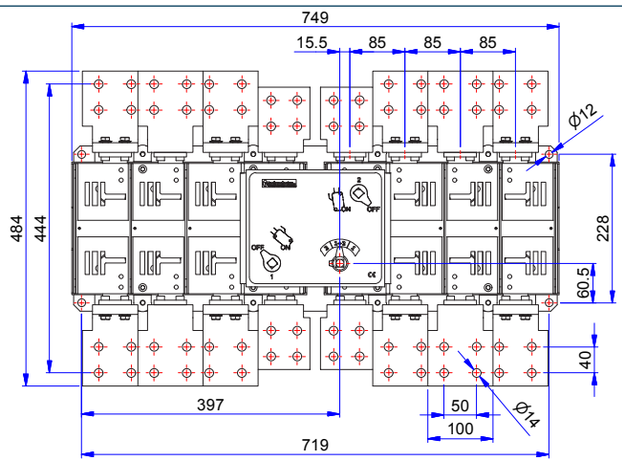
Foratura portella _Door drilling



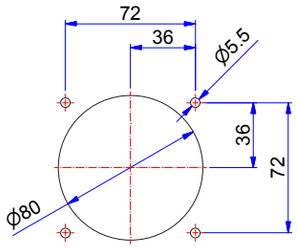


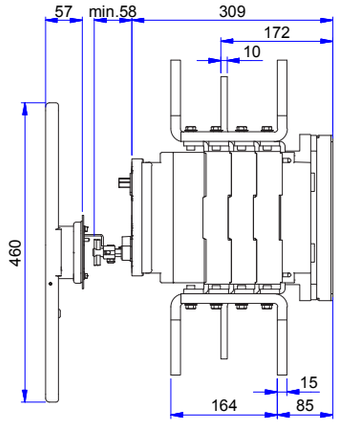
CO6P OL 3150 A



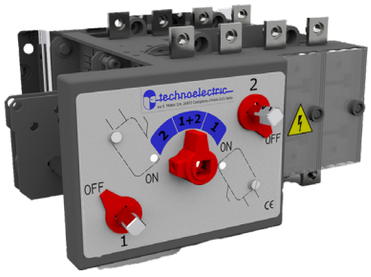


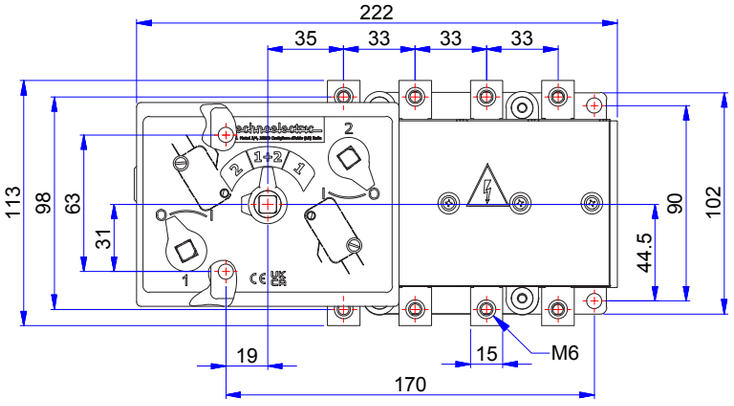
Foratura portella _Door drilling



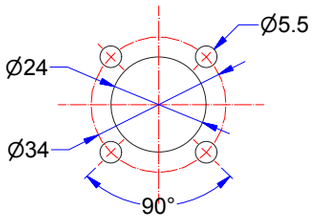


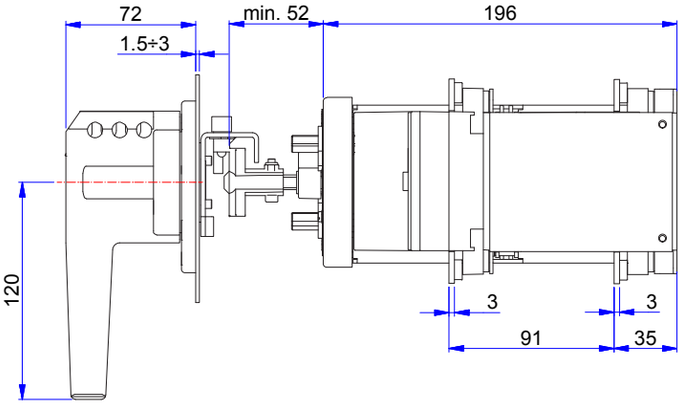
CS1P OL 32 ÷ 160 A



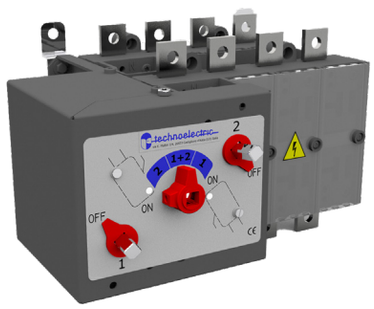


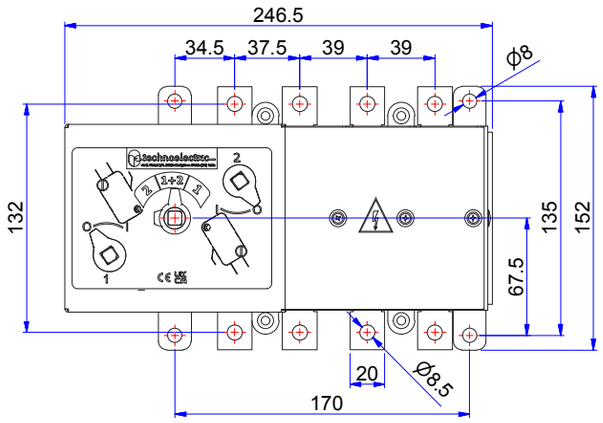
Foratura portella _Door drilling



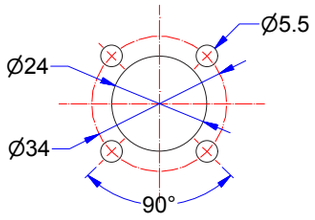


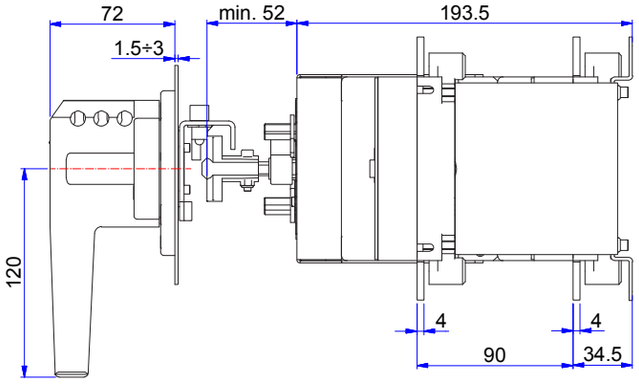
CS2P OL 160 ÷ 315 A



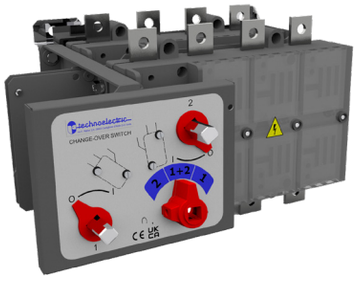


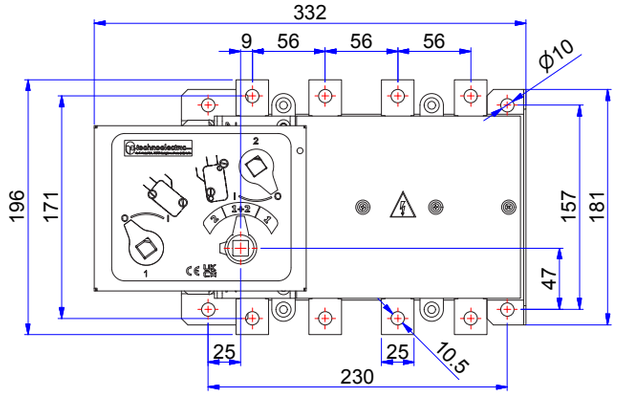
Foratura portella _Door drilling



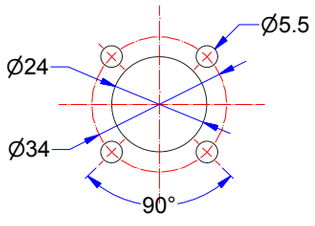


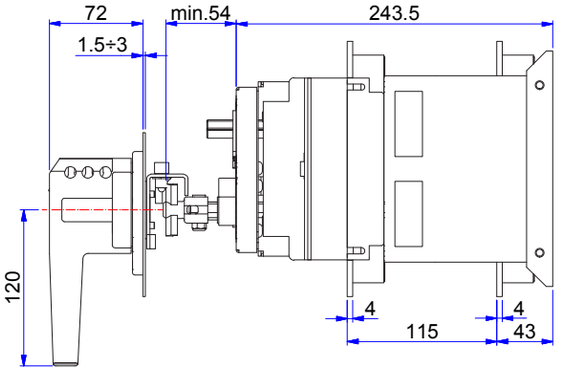
CS3P OL 315 ÷ 500 A



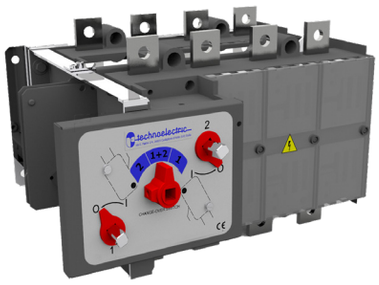


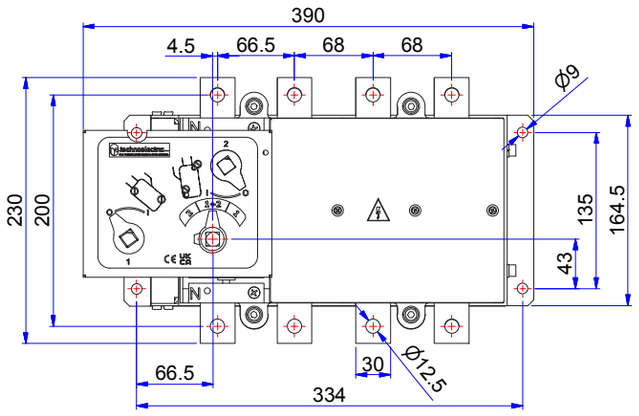
Foratura portella _Door drilling



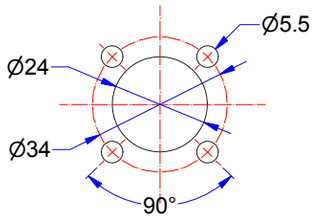


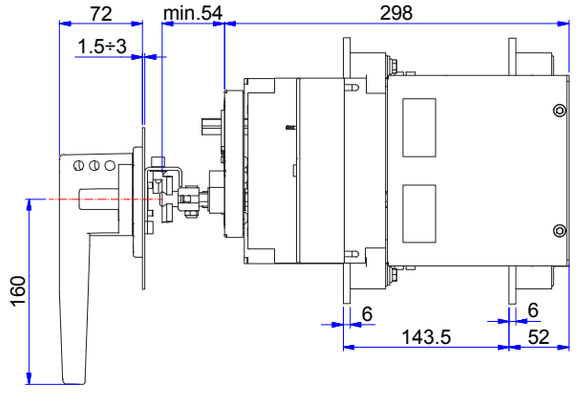
CS4P OL 630 ÷ 800 A



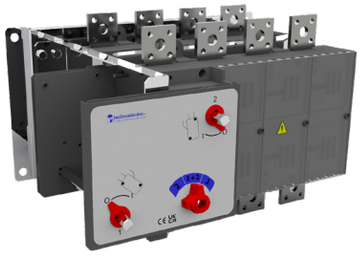


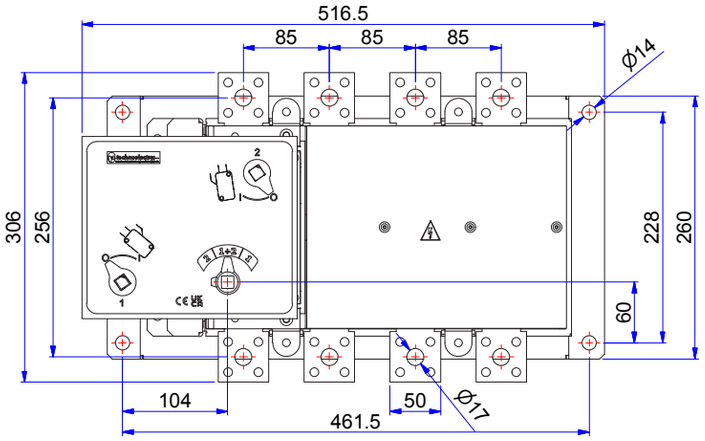
Foratura portella _Door drilling



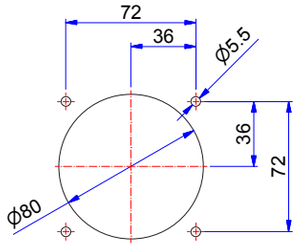


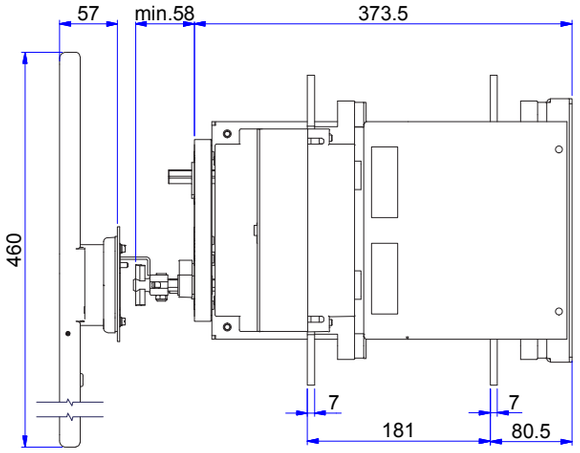
CS5P OL 800 ÷ 1250 A



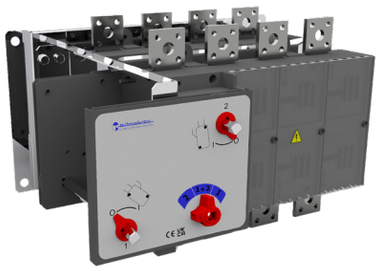


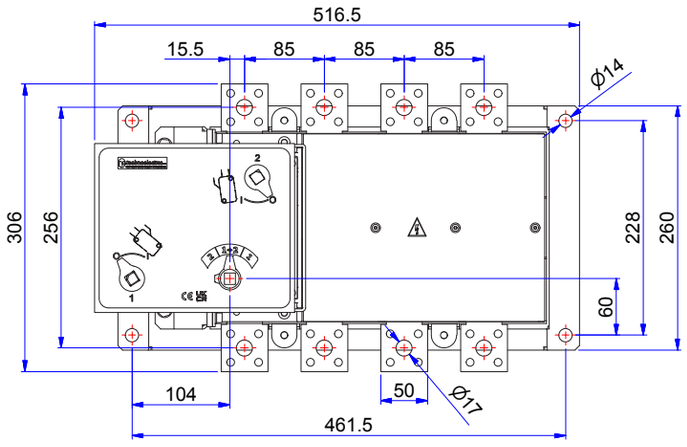
Foratura portella _Door drilling



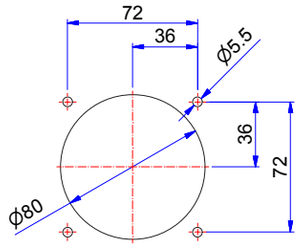


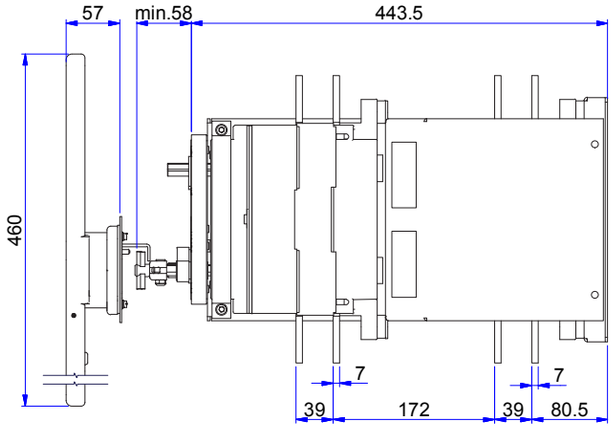
CS5P OL 1600 ÷ 2000 A



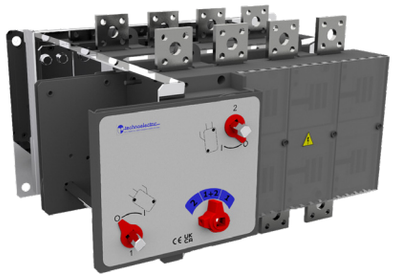


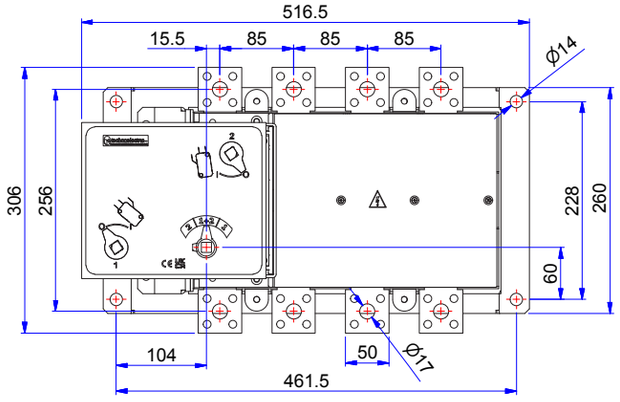
Foratura portella _Door drilling



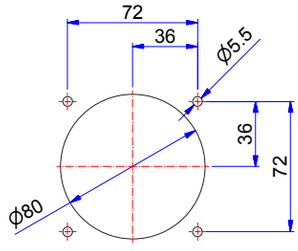


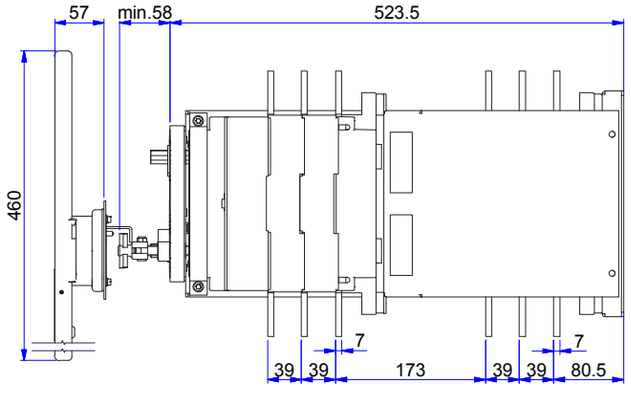
CS5P OL 2500 ÷ 3150 A



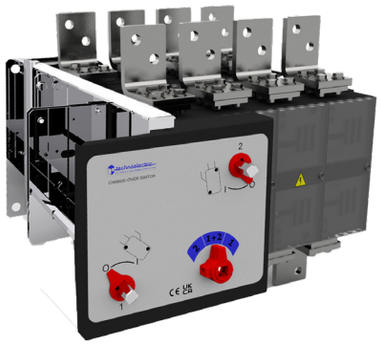


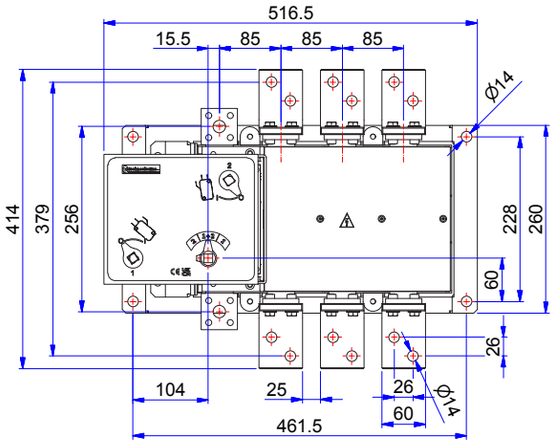
Foratura portella _Door drilling



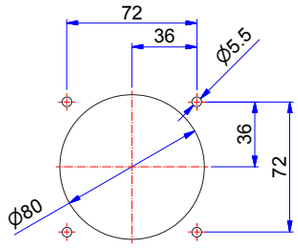


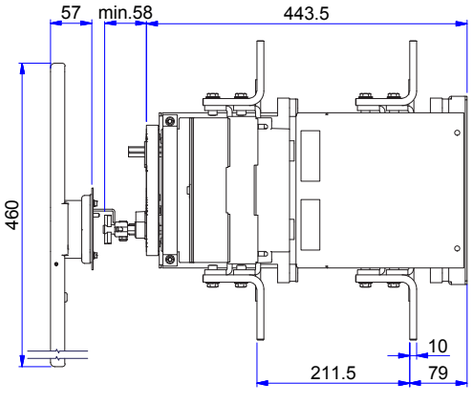
CS6P OL 1600 A



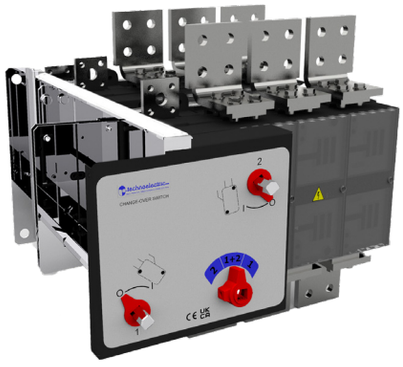


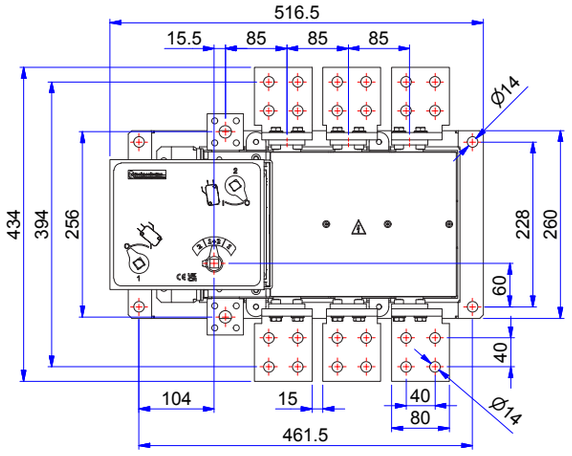
Foratura portella _Door drilling



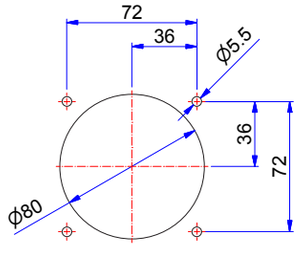


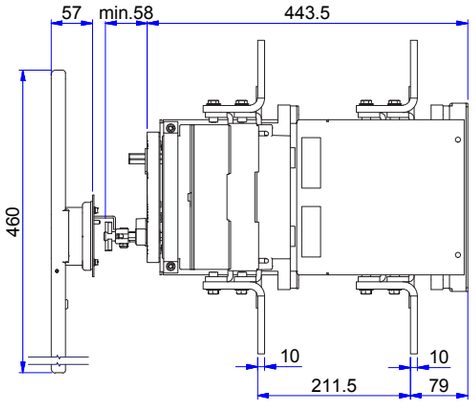
CS6P OL 2000 A



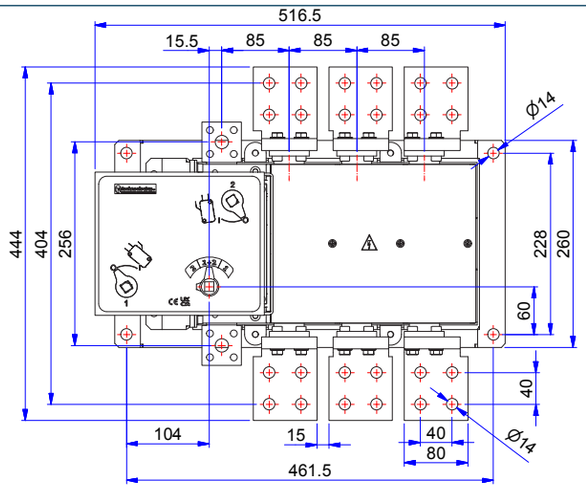


Foratura portella _Door drilling

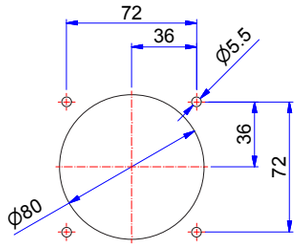


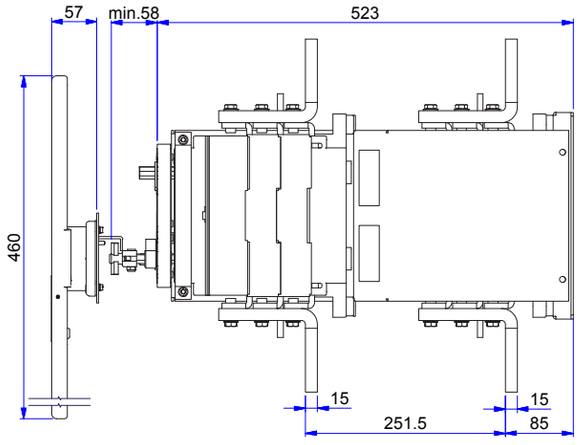


CS6P OL 2500 A

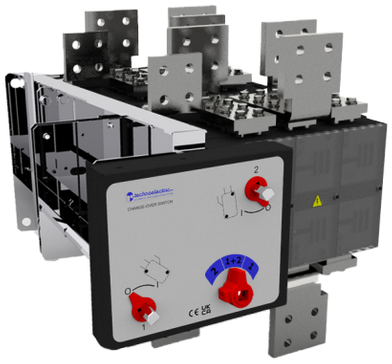


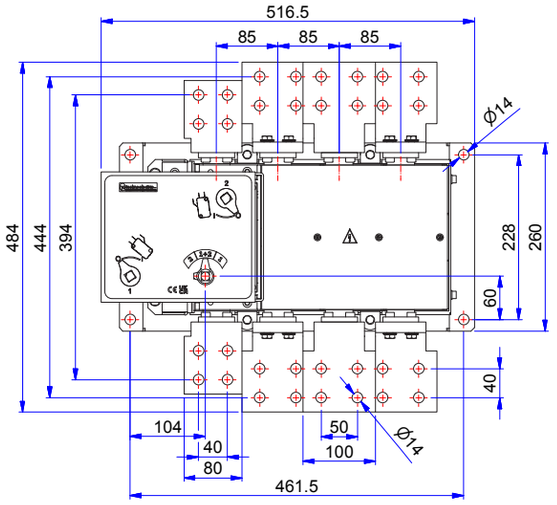
Foratura portella _Door drilling



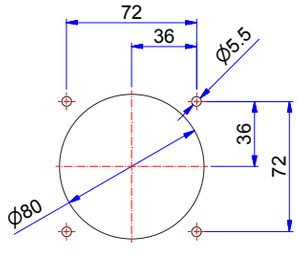


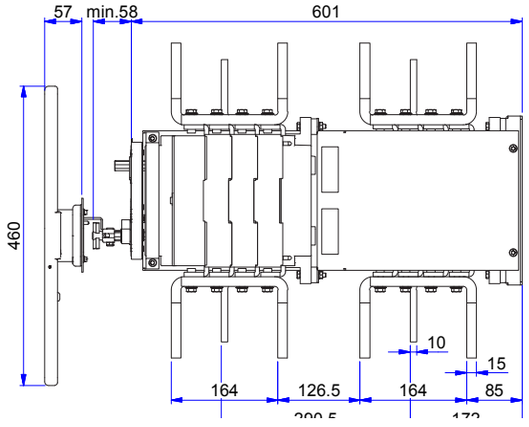
CS6P OL 3150 A





Foratura portella _Door drilling





SERIE_SERIES **CMA**

COF

Commutatori orizzontali con fusibli _Horizontal change-over switches with fuses

Tipo _type	Corrente nominale _rated current	POLI _POLES	Senza maniglia _without handle			Maniglia blocco porta _door interlock handle		
			NFC	DIN	BS	NFC	DIN	BS
			CODICE _CODE					
CO1F	32 A	3	110203SM	110403SM	110603SM	110203	110403	110603
		4	110303SM	110503SM	110703SM	110303	110503	110703
	45A	3	110213SM	110413SM	110613SM	110213	110413	110613
		4	110313SM	110513SM	110713SM	110313	110513	110713
	63A	3	110223SM	110423SM	110623SM	110223	110423	110623
		4	110323SM	110523SM	110723SM	110323	110523	110723
	80A	3	110233SM	110433SM	110633SM	110233	110433	110633
		4	110333SM	110533SM	110733SM	110333	110533	110733
	100A	3	110243SM	110443SM	110643SM	110243	110443	110643
		4	110343SM	110543SM	110743SM	110343	110543	110743
CO2F	100A	3	120213SM	120413SM	120603SM	120213	120413	120603
		4	120313SM	120513SM	120703SM	120313	120513	120703
	125A	3	120223SM	120423SM	120613SM	120223	120423	120613
		4	120323SM	120523SM	120713SM	120323	120523	120713
	160A	3		120433SM	120623SM		120433	120623
		4		120533SM	120723SM		120533	120723
CO3F	200A	3		130413SM	130613SM		130413	130613
		4		130513SM	130713SM		130513	130713
	250A	3		130423SM	130623SM		130423	130623
		4		130523SM	130723SM		130523	130723
CO4F	315A	3		140223SM	140423SM		140223	140423
		4		140323SM	140523SM		140323	140523
	400A	3		140233SM	140433SM		140233	140433
		4		140333SM	140533SM		140333	140533
CO5F	630A	3		150203SM	150403SM		150203	150403
		4		150303SM	150503SM		150303	150503
	800A	3			150413SM			150413
		4			150513SM			150513

Caratteristiche tecniche _Technincal Features	Tipo _Type		CO1F					CO2F		
Corrente nominale _Rated current	In	A	32	45	63	80	100	100	125	160
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	8	8	8	8	8	12	12	12
Corrente nominale termica _Thermal current	Ith	A	32	45	63	80	100	100	125	160
Corrente nominale d' impiego _Rated operational current										
AC-21A	400V	A	32	45	63	80	100	100	125	160
	500V	A	32	45	63	80	100	100	125	160
	690V	A	32	45	63	80	100	100	125	160
AC-22A	400V	A	32	45	63	80	80	100	125	160
	500V	A	32	45	63	80	80	100	125	160
	690V	A	32	45	63	80	80	100	125	160
AC-23A	400V	A	32	45	63	80	80	100	125	160
	500V	A	25	32	45	63	63	80	100	125
	690V	A	20	25	32	45	45	63	80	100
DC-21A*	48V	A	32	50	63	80	100	100	125	160
	220V	A	32	50	63	80	100	100	125	160
	420V	A	32	50	63	80	100	100	125	160
	560V	A	-	-	-	-	-	100	125	160
DC-22A*	48V		32	50	63	80	80	100	125	160
	220V	A	32	50	63	80	80	100	125	160
	420V	A	32	50	63	80	80	100	125	160
	560V	A	-	-	-	-	-	100	125	160
DC-23A*	48V	A	32	50	63	80	80	100	125	160
	220V	A	32	50	50	63	80	100	125	160
	420V	A	32	50	50	50	63	100	125	160
	560V		_	-	-	-	-	100	125	160
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	17	23	33	42	42	52	65	85
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current										
Tipo fusibile _Backup fuse		A	32	45	63	80	80	100	125	160
Valore efficace _R.M.S. value		kA	100	100	100	100	100	50	50	50
Valore di picco _Peak value		kA	6	9	10	12	12	12	15	15
Potere di chiusura nominale 420V c.a. cos 0,35 (0,45*) _ Rated making capacity at 420V AC cos 0,35 (0,45*)		A	320*	450*	630*	800*	800*	1000*	1250	1600
Potere di interruzione nominale 420V cos 0,35 (0,45*) _Rated breaking capacity at 420V cos 0,35 (0,45*)		A	256*	360*	504*	640*	640*	800*	1000	1280
Potere di chiusura, interruzione nominale c.c. (3) _Rated making and breaking capacity DC (3)		A	80	120	140	180	180	252	320	400
Potenza condensatori a 400V Rated capacitor power at 400V		kVAR	15	20	30	40	45	45	50	70
Durata meccanica \ Mechanical endurance		n	10000	10000	10000	10000	10000	8000	8000	8000
Durata elettrica \ Electrical endurance		n	1500	1500	1500	1500	1500	1000	1000	1000
Potenza dissipata per polo \ Power losses for pole**		W	0.3	0.6	1.2	2.0	3.1	2.1	3.3	5.5
Dimensione cavo \ Cable section		mm^2	25	25	25	25	35	70	70	70
Dimensione barre \ Bars dimension		mm	12x3	12x3	12x3	12x3	16x3	16x4	16x4	16x4
Peso netto _Net weight	3P	Kg	2,4	2,4	2,4	2,4	2,4	4	4	4
	4P		2,6	2,6	2,6	2,6	2,6	4,3	4,3	4,3

*Due poli in serie _Two poles in series

**Escluso fusibile _Fuse excluded

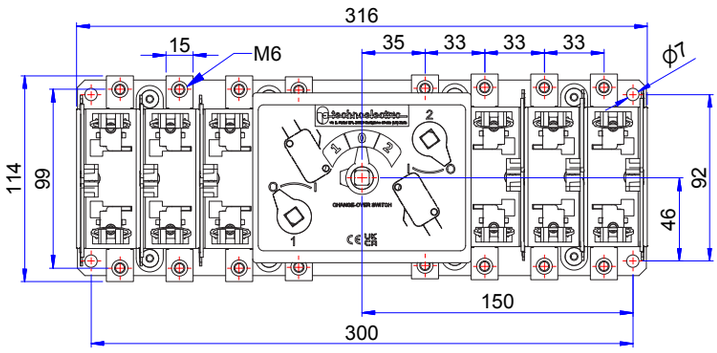
SERIE_SERIES **CMA**

Caratteristiche tecniche _Technincal Features	Tipo _Type		CO3F		CO4F		CO5F	
Corrente nominale _Rated current	In	A	200	250	315	400	630	800
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500
Tensione nominale impulso _Shock resistance	U imp	kV	12	12	12	12	12	12
Corrente nominale termica _Thermal current	Ith	A	200	250	315	400	630	800
Corrente nominale d' impiego _Rated operational current								
AC-21A	400V	A	200	250	315	400	630	800
	500V	A	200	250	315	400	630	800
	690V	A	200	250	315	400	630	800
AC-22A	400V	A	200	250	315	400	630	800
	500V	A	200	250	315	400	630	800
	690V	A	200	250	315	400	630	800
AC-23A	400V	A	200	250	315	400	630	800
	500V	A	160	200	250	315	500	630
	690V	A	125	160	200	250	400	500
DC-21A*	48V	A	200	250	315	400	630	800
	220V	A	200	250	315	400	630	800
	420V	A	200	250	315	400	630	800
	560V	A	-	-	-	-	-	-
DC-22A*	48V		200	250	315	400	630	800
	220V	A	200	250	315	400	630	800
	420V	A	200	250	315	400	630	800
	560V	A	-	-	-	-	-	-
DC-23A*	48V	A	200	250	315	400	630	800
	220V	A	160	200	315	315	500	630
	420V	A	160	250	250	250	400	500
	560V		-	-	-	-	-	-
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	105	130	165	210	330	420
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current								
Tipo fusibile _Backup fuse		A	200	250	315	400	630	800
Valore efficace _R.M.S. value		kA	50	50	50	50	50	50
Valore di picco _Peak value		kA	20	25	25	30	40	40
Potere di chiusura nominale 420V c.a. cos 0,35 (0,45*) _ Rated making capacity at 420V AC cos 0,35 (0,45*)		A	2000	2500	3150	4000	6300	8000
Potere di interruzione nominale 420V cos 0,35 (0,45*) _Rated breaking capacity at 420V cos 0,35 (0,45*)		A	1600	2000	2520	3200	5040	6400
Potere di chiusura, interruzione nominale c.c. (3) _Rated making and breaking capacity DC (3)		A	500	640	800	1000	1600	2000
Potenza condensatori a 400V Rated capacitor power at 400V		kVAR	90	110	140	180	300	370
Durata meccanica \ Mechanical endurance		n	7000	7000	7000	7000	4000	4000
Durata elettrica \ Electrical endurance		n	1000	1000	1000	1000	1000	1000
Potenza dissipata per polo \ Power losses for pole**		W	11.7	17.5	12.9	20.8	52.9	85.3
Dimensione cavo \ Cable section		mm^2	120	120	240	240	2x185	2x185
Dimensione barre \ Bars dimension		mm	25x4	25x4	32x5	32x5	2x40x6	2x40x6
Peso netto _Net weight	3P	Kg	9,5	9,5	16,2	16,2	29,2	29,2
	4P		9,9	9,9	16,8	16,8	30,8	30,8

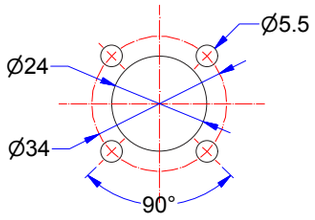
*Due poli in serie _Two poles in series

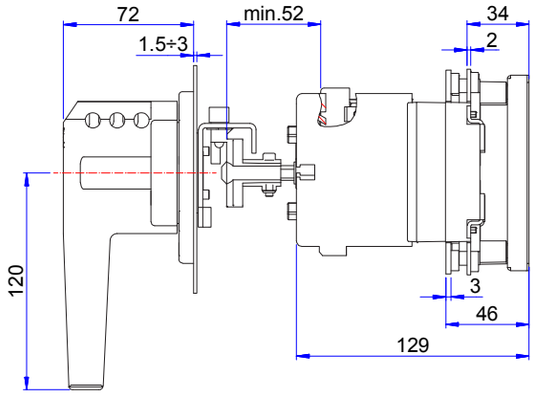
**Escluso fusibile _Fuse excluded

CO1F 32 ÷ 100 A

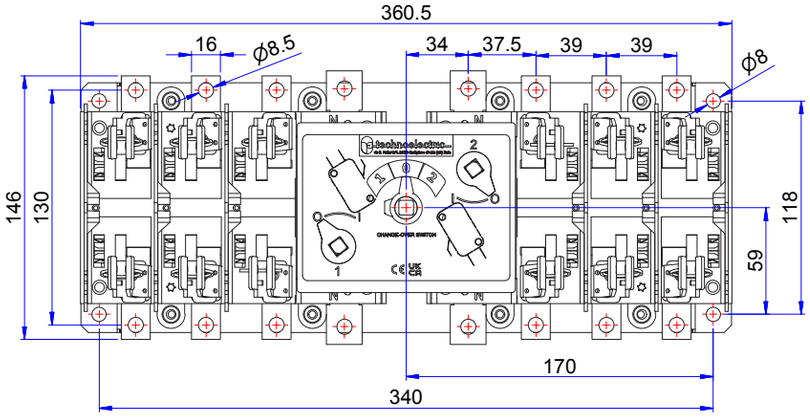


Foratura portella _Door drilling

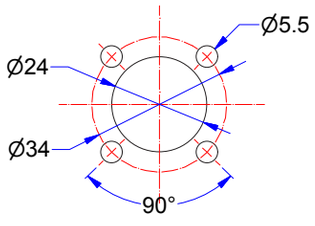


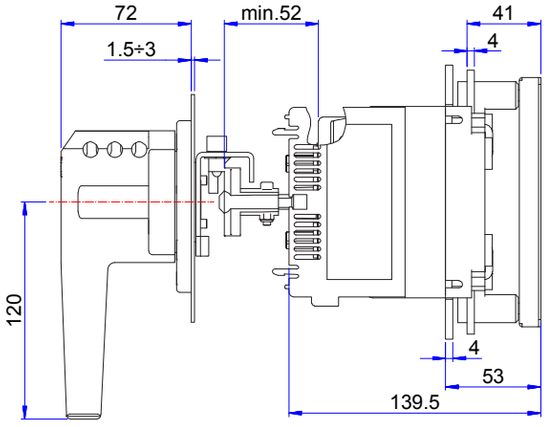


CO2F 100 ÷ 160 A

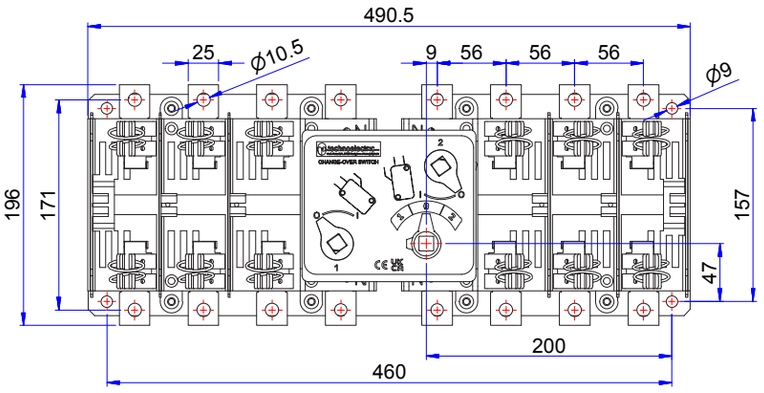


Foratura portella _Door drilling





CO3F 200 ÷ 250 A



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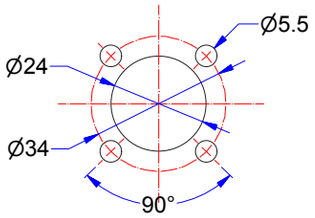
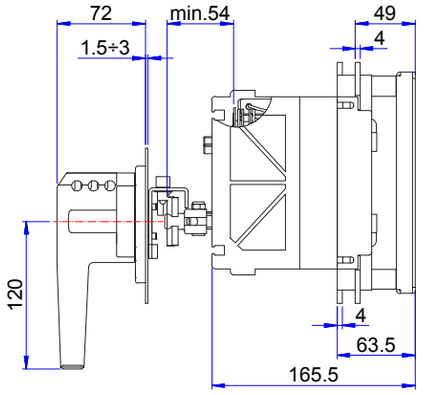
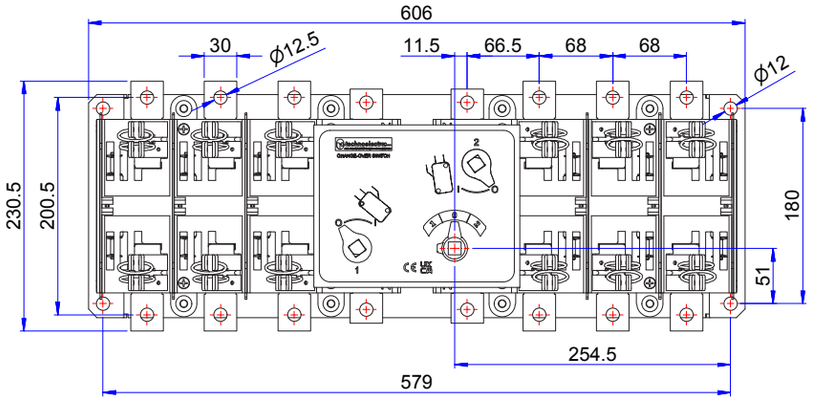




CO4F 315 ÷ 400 A



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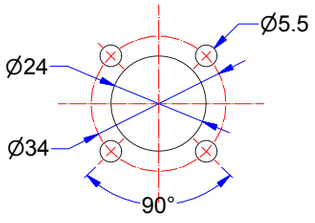
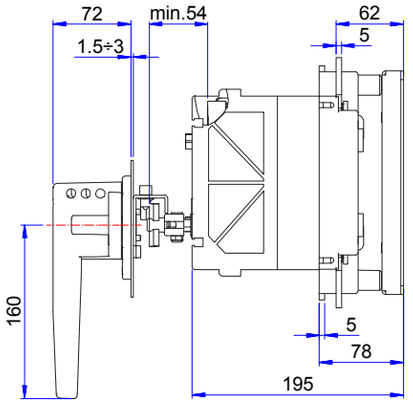
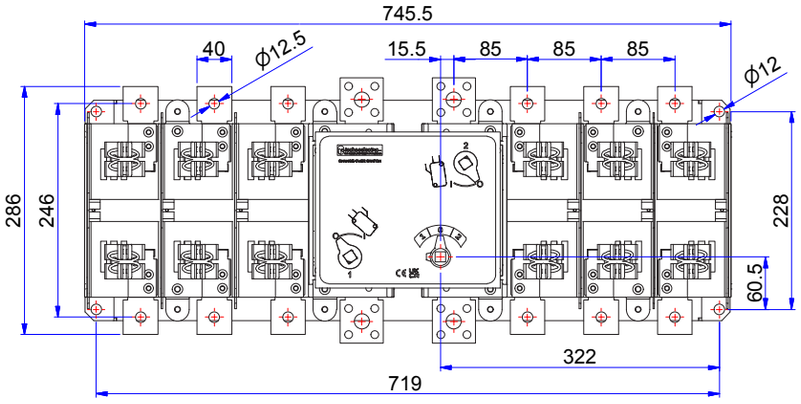
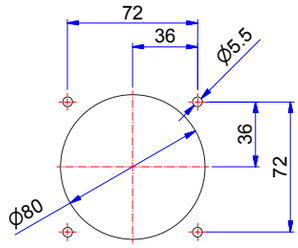


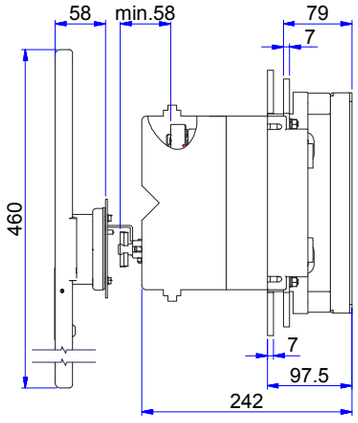


CO5F 630 ÷ 800 A



Foratura portella _Door drilling





COMMUTATORE GT

GENERALITÀ

Serie di commutatori ad azionamento manuale che permettono l'apertura e la commutazione di due circuiti elettrici in bassa tensione. Sono realizzati interbloccando due normali interruttori sezionatori della serie GT.

CARATTERISTICHE GENERALI

3 Posizioni I-O-II
Visibilità diretta, mediante finestrelle, dei contatti fissi e mobili
Manovre a scatto rapido indipendente
Doppia interruzione per ogni polo
Elevata durata meccanica ed elettrica
Adatti per utilizzo in climi tropicali
Comando di tipo rotativo frontale a mezzo di:
Maniglia esterna a doppio isolamento con dispositivo bloccoporta nelle posizioni i e ii

CONDIZIONI NORMALI DI SERVIZIO, MONTAGGIO E TRASPORTO

temperatura ambiente di immagazzinamento e trasporto - 25°C + 55°C
temperatura ambiente di funzionamento - 20°C + 40°C
in caso di temperatura ambiente (t_a) superiore, applicare la seguente formula di declassamento:

$I_{The} = k\ I_{Th}$ dove $\quad K = 1 - \frac{t_a - 40}{100}$

umidità relativa max 95%
frequenza nominale 50 - 60 Hz
altitudine max 2000 m s.l.m.
grado di inquinamento 3 secondo IEC 60947-1
tipo di servizio (secondo IEC 60947-1):
servizio 8 ore
servizio ininterrotto
servizio intermittente 60% classe 30
servizio temporaneo
servizio periodico

Per condizioni di impiego diverse consultare il costruttore.

GT CHANGE-OVER SWITCHES

_GENERALITIES

Change-over switches manually operated suitable for breaking and permutating two low voltage electrical circuits. They are made by two standard switches of GT series mechanically interlocked.

_GENERAL CHARACTERISTICS

3 Positions I-0-II
Visibility of fixed and moving contacts by means of windows
Indipendent fast action operation
Double break contacts
High electrical and mechanical endurance
Resistant to damp heat
Rotary front operation by means of:
External double insulated handle with door-interlock in I and II position

_NORMAL SERVICE, MOUNTING AND TRANSPORT CONDITIONS

storage and transport ambient temperature - 25°C + 55°C
working ambient temperature - 20°C + 40°C
in case of higher ambient temperature (t_a) consider the following derating formula:

$I_{The} = k\ I_{Th}$ dove $\quad K = 1 - \frac{t_a - 40}{100}$

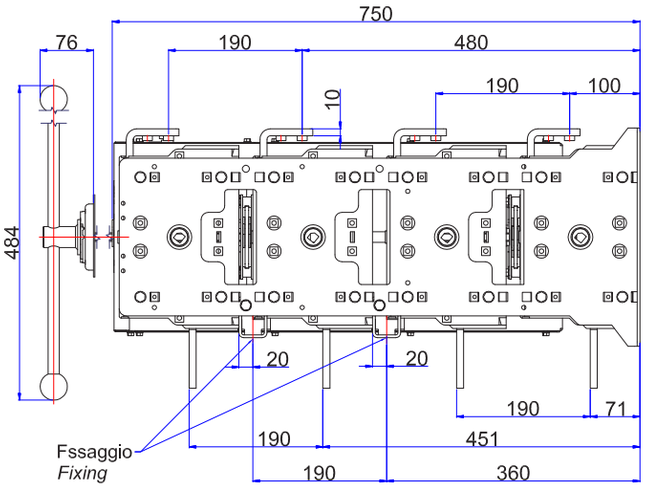
relative humidity max 95%
rated frequency 50 - 60 Hz
altitude max 2000 m a.s.l.
pollution degree 3 according IEC 60947-1
duty (IEC 60947-1):
eight-hour duty
uninterrupted duty
intermittent duty 60% class 30
temporary duty
periodic duty

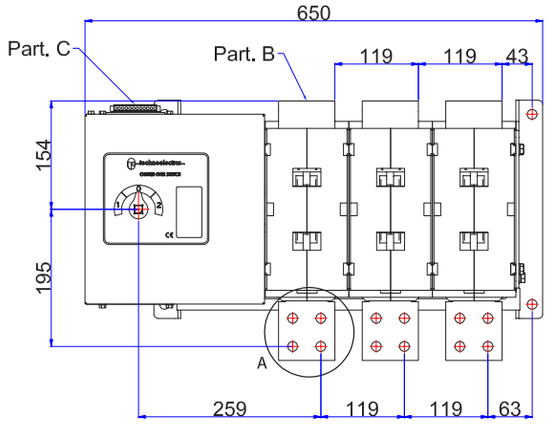
For other operating conditions please contact the manufacturer.

Tipo _type	Corrente nominale _rated current	POLI _POLES	CODICE _CODE
GT6	3150A	3P	GT60038
		4P	GT60138
	4000A	3P	GT60048
		4P	GT60148

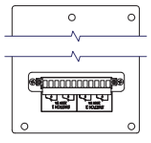
Caratteristiche tecniche _Technincal Features	Tipo _Type		GT 3150	GT 4000
Corrente nominale _Rated current	In	A	3150A	4000A
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500
Corrente nominale termica _Thermal current	Ith	A	3150	4000
Corrente nominale d' impiego _Rated operational current				
AC-21A	420V	A	3150	4000
	500V	A	3150	4000
	690V	A	-	-
AC-22A	420V	A	-	-
	500V	A	-	-
	690V	A	-	-
AC-23A	420V	A	-	-
	500V	A	-	-
	690V	A	-	-
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	50	50
Potere di chiusura in corto circuito _Short-circuit making capacity		kA	105	105
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current				
Tipo fusibile _Backup fuse		A	-	-
Valore efficace _R.M.S. value		kA	-	-
Valore di picco _Peak value		kA	-	-
Durata meccanica _Mechanical endurance		n.	2500	2500
Durata elettrica _Electrical endurance		n.	500	500
Potenza dissipata per polo _Power dissipation per pole		W	170	272
Potenza condensatori a 400V _Rated capacitor power at 400V	400 V	kVAR	1250	1600
Peso netto _Net weight	3P	Kg	180	180
	4P		220	220

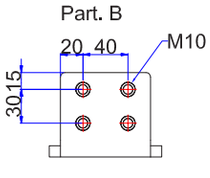
GT 4000A 3P

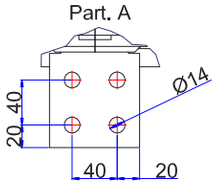


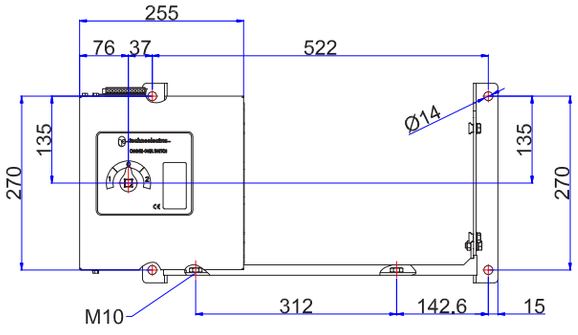


Part. C
Morsettiera CONT. AUX.

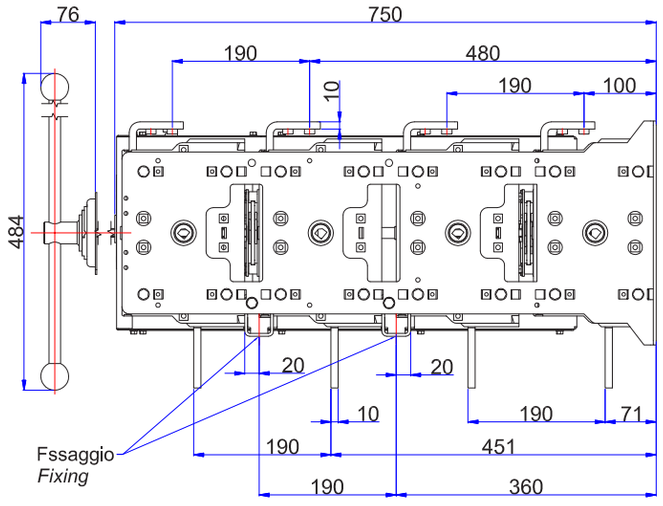


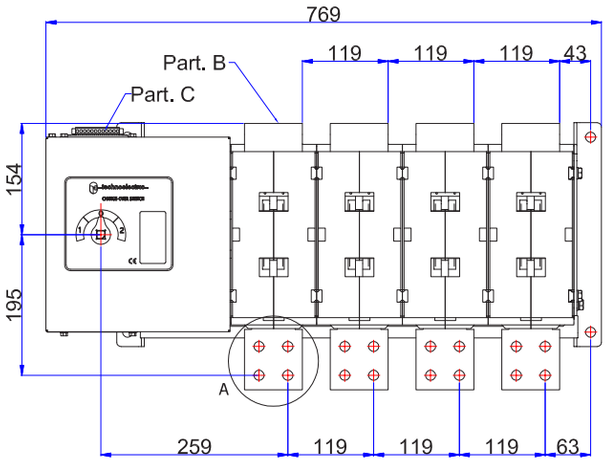




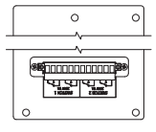


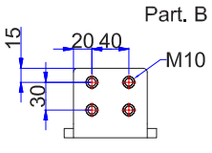
GT 4000A 4P

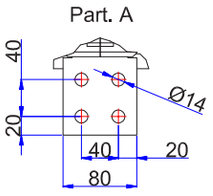


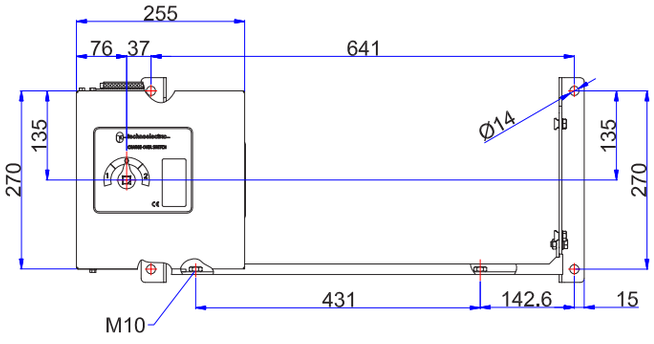


Part. C
Morsettiera CONT. AUX.





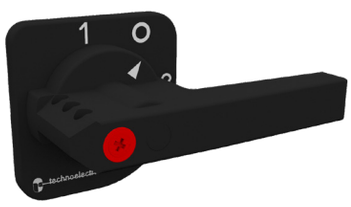


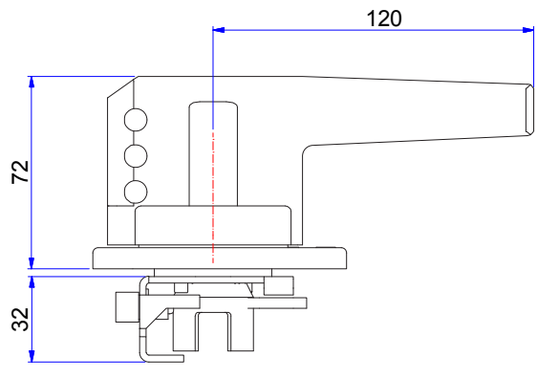


MANIGLIA BLOCCO PORTA_Door interlock handles

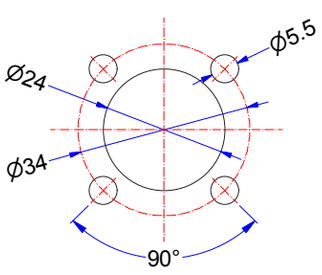
Tipo_type	CO - CS - BYP 1 | 2 | 3	CO - CS - BYP 4	CO - CS - BYP 5 35 kA	CO - CS 5 50kA | CO - CS 6	CO - CS 5 50kA | CO - CS 6
Codice _code	18582	18583	18584	18838	18839

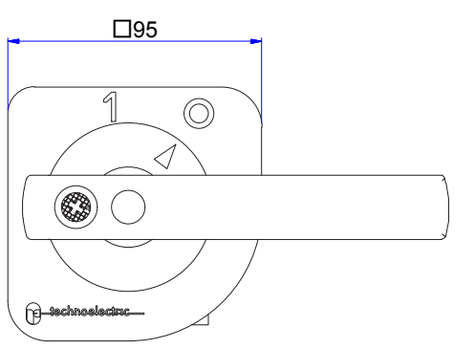
18582



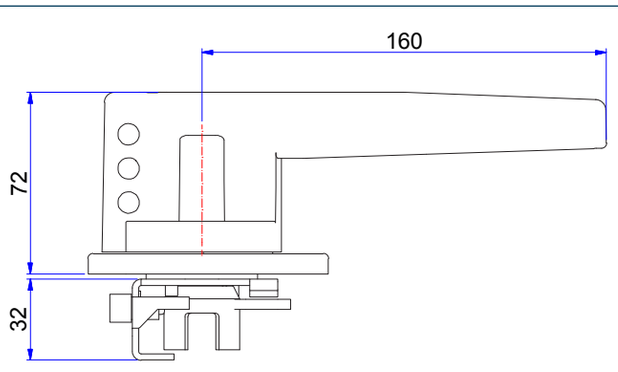


Foratura portella _Door drilling

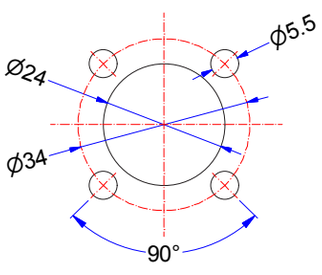


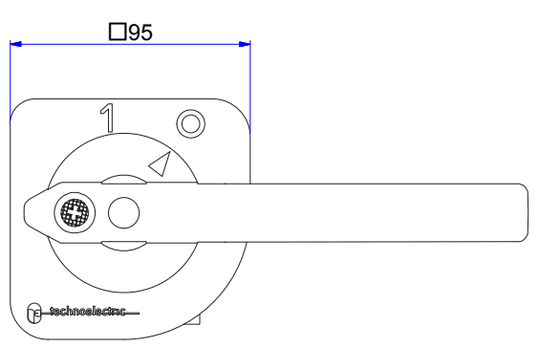


18583

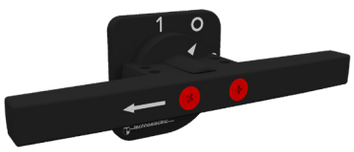


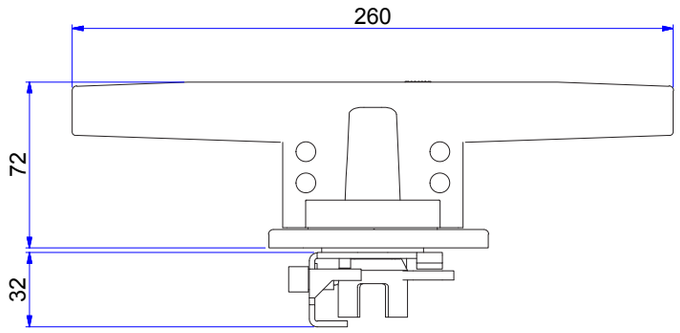
Foratura portella _Door drilling



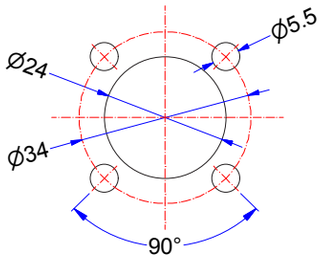


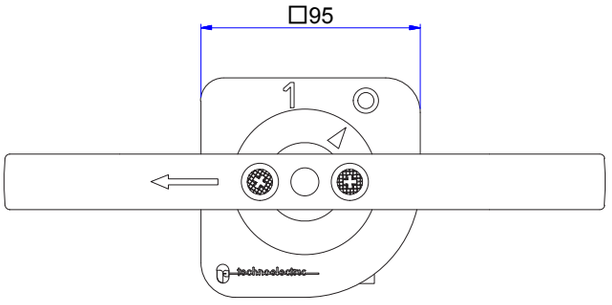
18584



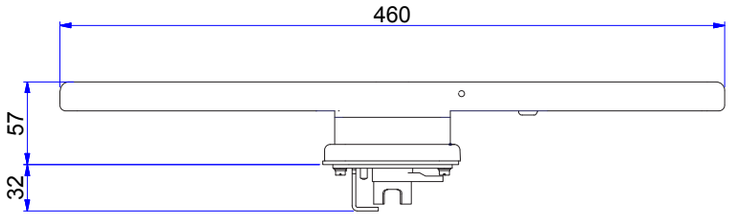


Foratura portella _Door drilling

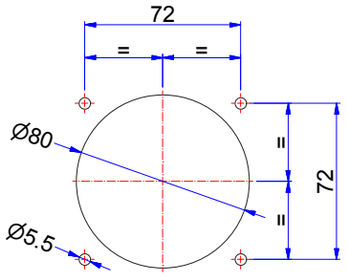


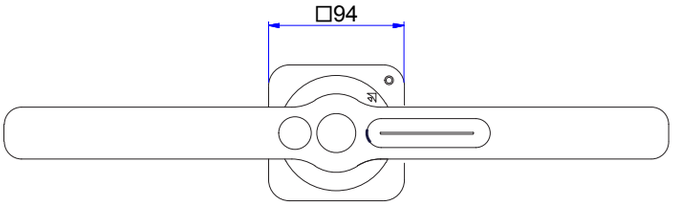


18838



Foratura portella _Door drilling





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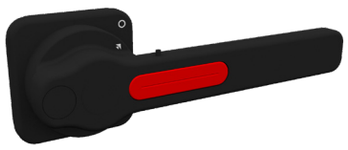
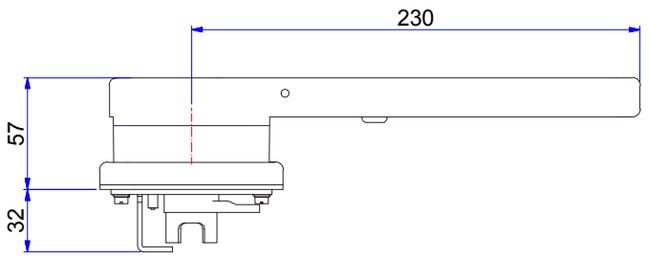
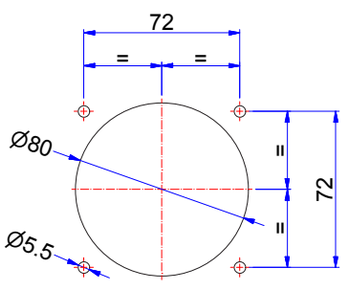
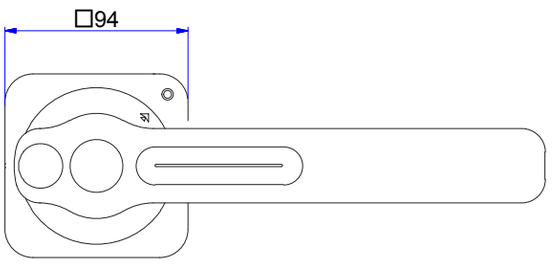




Foratura portella _Door drilling

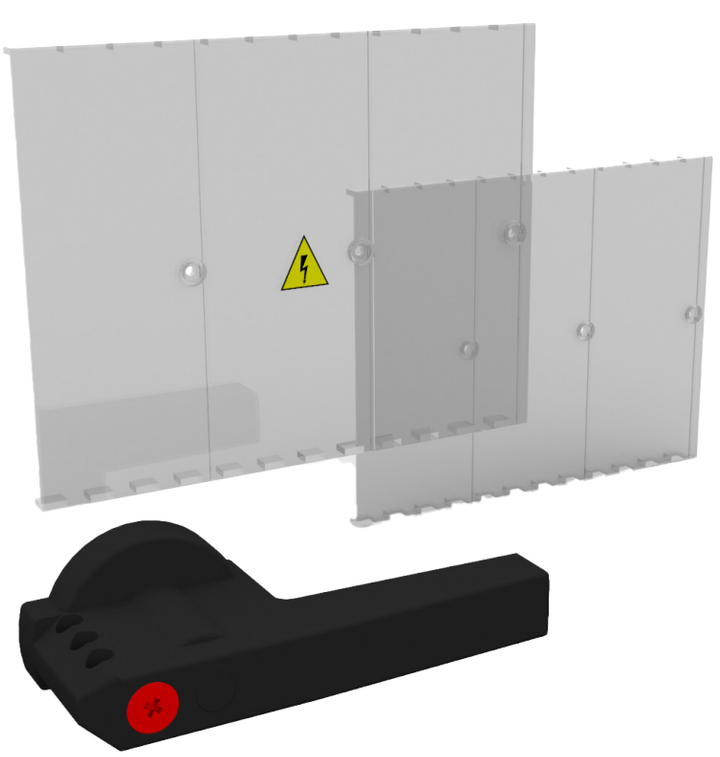




MANIGLIA DIRETTA CON SCHERMI _direct handle with covers

Tipo_type	CO1P	CO2P	CO3P	CO4P	CO5P	CO6P
Codice _code	18588	18589	18590	18591	18853	18853

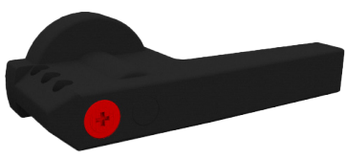
Fornita completa di due schermi copricontatti principali per interruttori di tipo P.
_With two main contact shields covers.

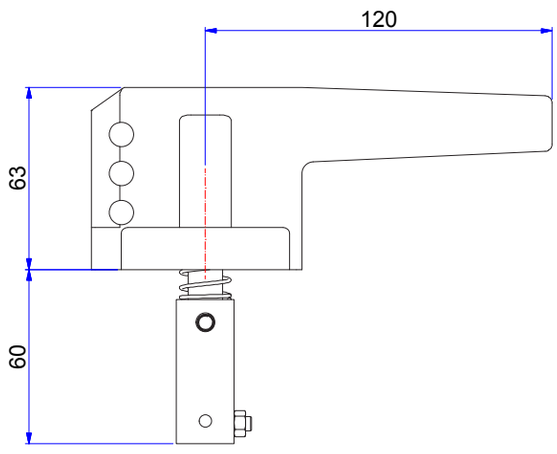


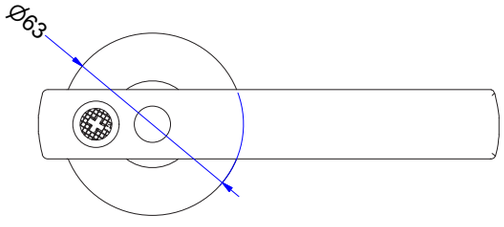
MANIGLIA DIRETTA SENZA SCHERMI _direct handle without covers

Tipo_type	CS1-CS2	CS3	CS4	CS5 35kA	CS5 50kA - CS6
Codice _code	18187	18083	18084	18188	18189

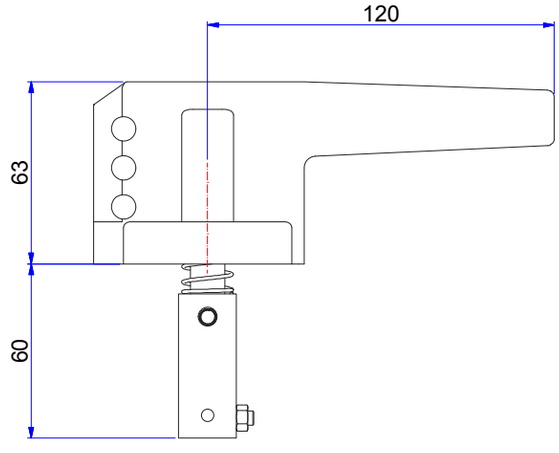
18187

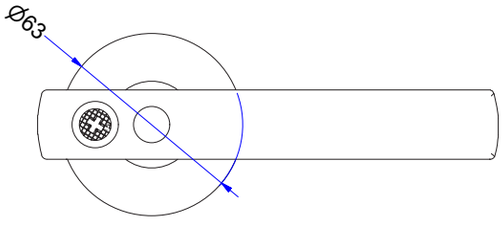




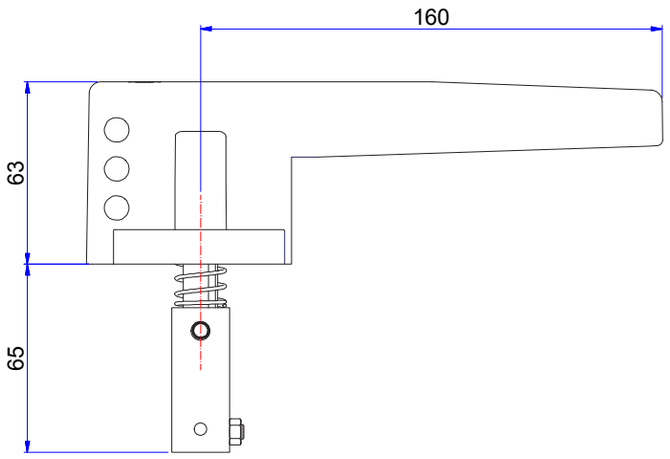


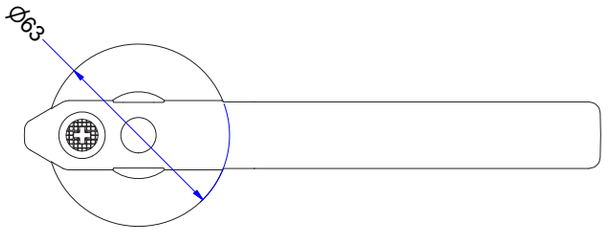
18083



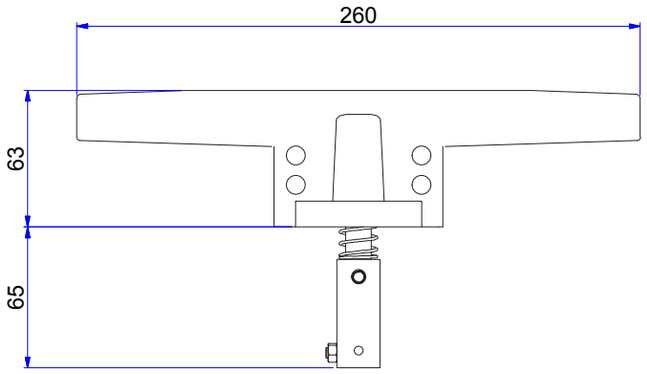


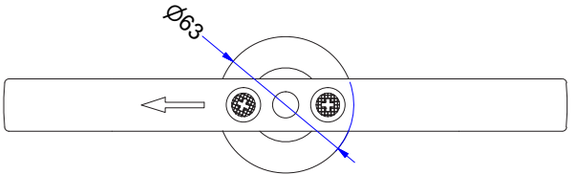
18084



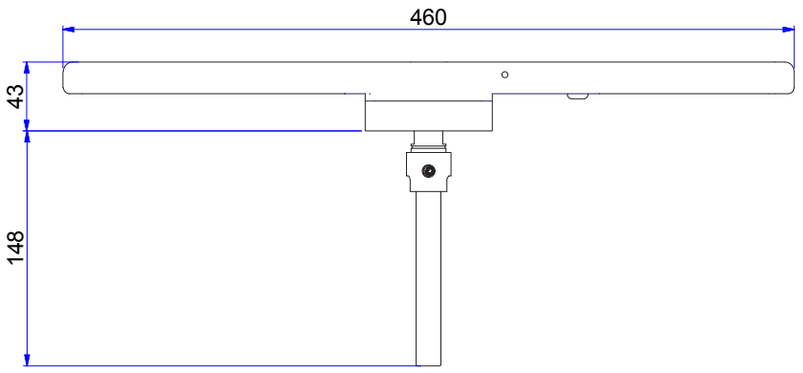


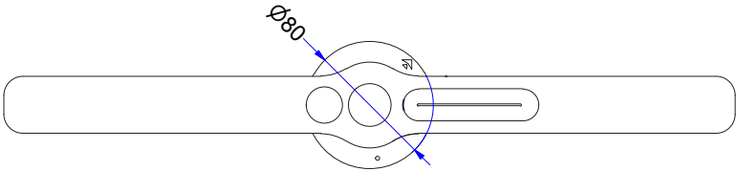
18188





18189

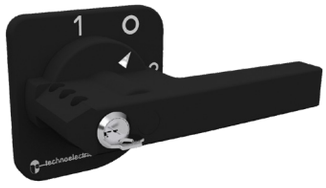


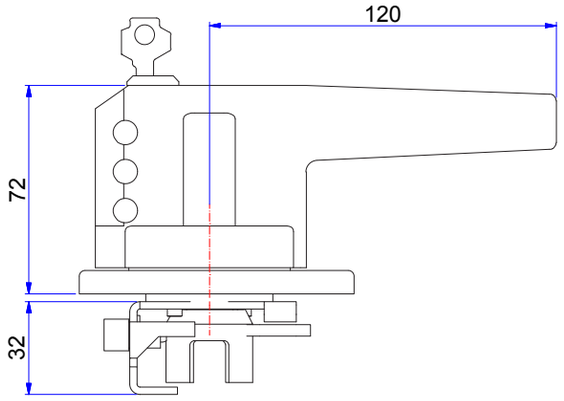


MANIGLIA BLOCCO PORTA CON BLOCCO CHIAVE IN POSIZIONE 0
_door interlock handle with key lock 0 position

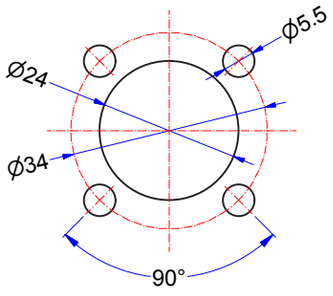
Tipo_type	CO - CS - CC - BYP 1 | 2| 3	CO - CS - CC - BYP 4	CO - CS - C BYP5 35 kA
Codice _code	18500	18501	18502

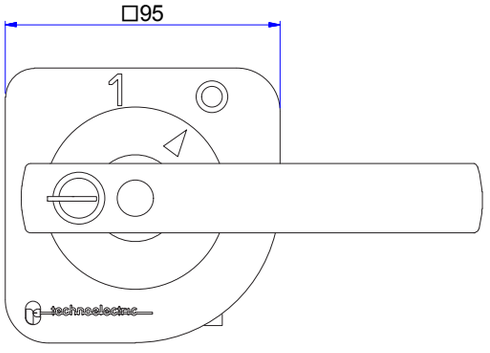
18500



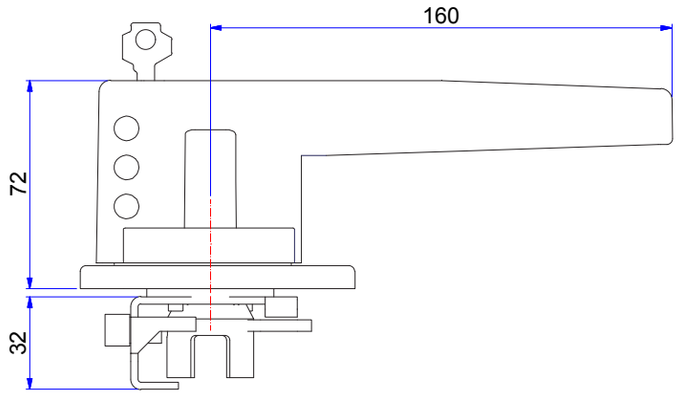


Foratura portella _Door drilling

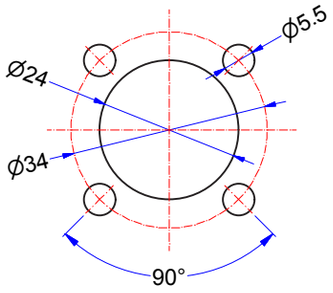


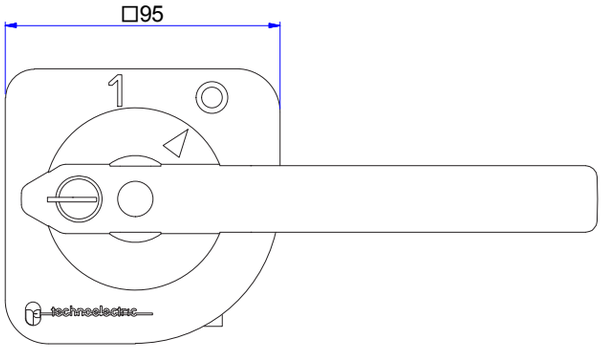


18501

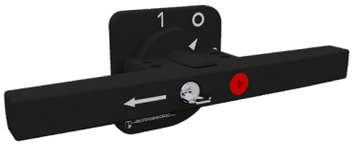


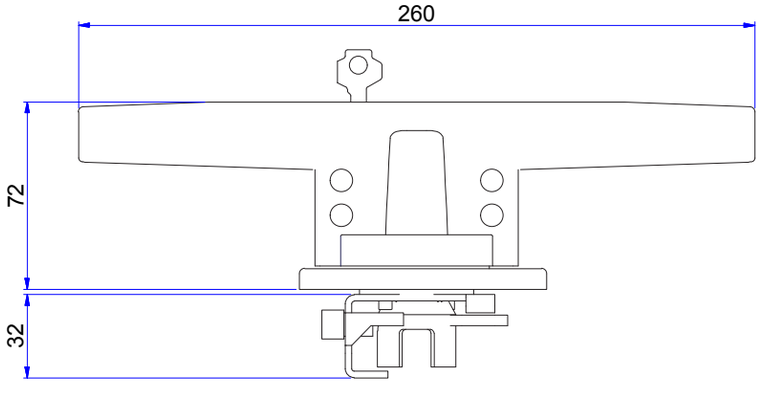
Foratura portella _Door drilling



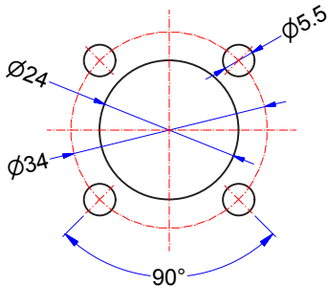


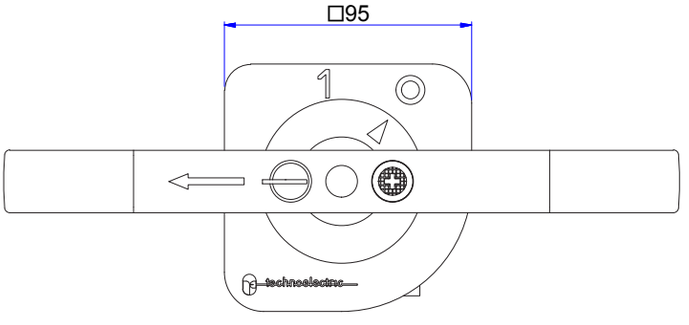
18502





Foratura portella _Door drilling





PROLUNGA ALBERO COMANDO
_extension shaft

100 MM

Tipo _type	CO - CS - BYP 1	2	CO - CS - BYP 3	4	5 CO - CS 6
Codice _code	18571	18573

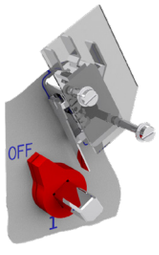
200 MM

Tipo _type	CO - CS - BYP 1	2	CO - CS - BYP 3	4	5 CO - CS 6
Codice _code	18574	18576

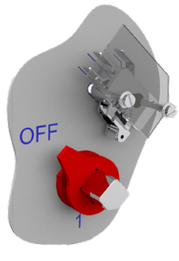
ALBERO COMANDO 300 MM
_300mm Shaft

Tipo _type	CO - CS - BYP 1	2	CO - CS - BYP 3	4	5 CO - CS 6
Codice _code	18575	18578

CONTATTI AUSILIARI IN SCAMBIO 1NA+1NC
_auxiliary contacts 1NO+1NC



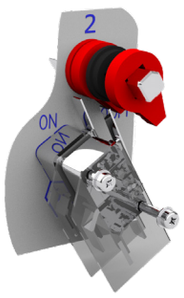
18566



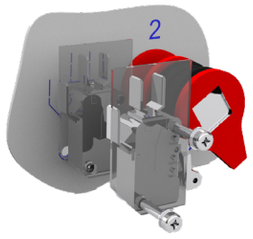
18560

Tipo _type	CO - CS - BYP 1	2	CO - CS - BYP 3	4	5 CO - CS 6
Codice _code	18566	18560

CONTATTI AUSILIARI IN SCAMBIO 2NA+2NC
_auxiliary contacts 2NO+2NC



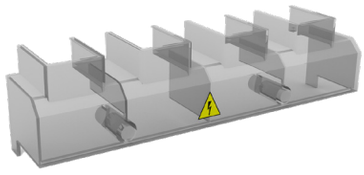
18568



18567

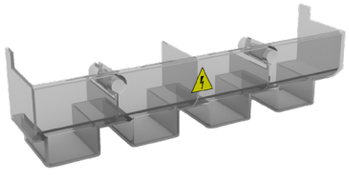
Tipo _type	CO - CS - BYP 1	2	CO - CS - BYP 3	4	5 CO - CS 6
Codice _code	18568		18567	

CALOTTA PROTEZIONE TERMINALI SUPERIORI
_upper terminal cover



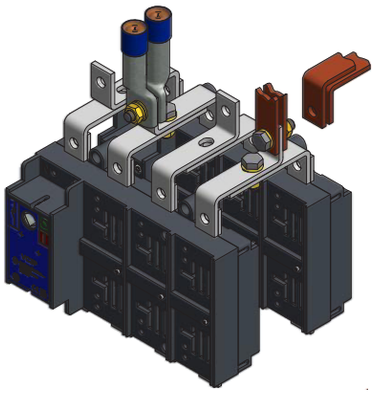
Tipo _type	CO1P	CO2P	CO3P	CO4P	CO5P	CO5P 1600 A
Codice _code	18050	18052	18350	18054	18056	18058

CALOTTA PROTEZIONE TERMINALI INFERIORI
_lower terminal cover



Tipo _type	CO1P	CO2P	CO3P	CO4P	CO5P	CO5P 1600 A
Codice _code	18051	18053	18351	18055	18057	18059

CONNESSIONI A PONTE
_Connecting bridges

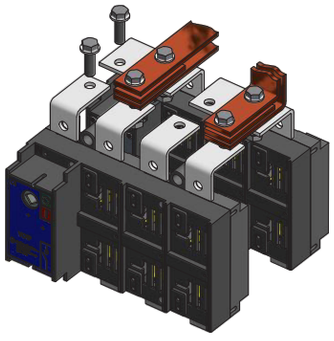


COLLEGAMENTO CAVO\SBARRA _connection cable\bar

Tipo _type	CS1 32-160A		CS2 160-315A		CS3 315-500A		CS4 630-800A	
Poli _poles	3	4	3	4	3	4	3	4
Codice _code	18411	18410	18408	18409	18419	18412	18417	18418

COLLEGAMENTO SBARRA _connection bar

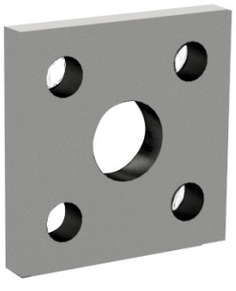
Tipo _type	CS5 800-1250A	
Poli _poles	3	4
Codice _code	18424	18414



COLLEGAMENTO CAVO _connection cable

Tipo _type	CS5 1600-2000A		CS5 1600-2000A
Poli _poles	3	4	4 FN
Codice _code	18438	18439	18440

PIATTO PER TERMINALI SEZIONATORI
_terminal plate for switches



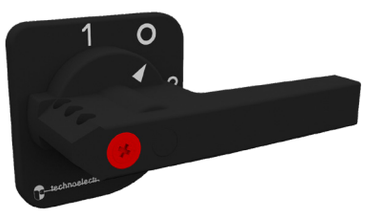
Tipo _type Piatto _plate	CO - CS 5 4mm	CO - CS 5 6mm
Codice _code	18138	18139

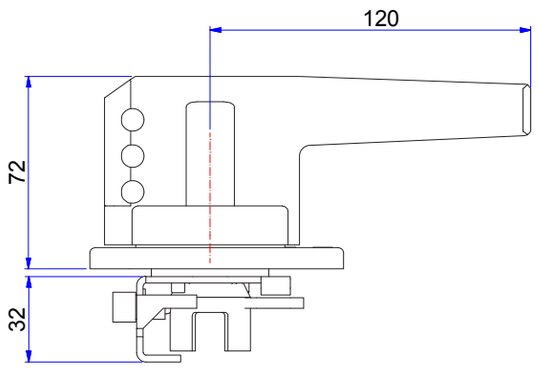
La confezione contiene 1 piatto per terminale
_Each box contain a terminal plate

MANIGLIA BLOCCO PORTA_Door interlock handles

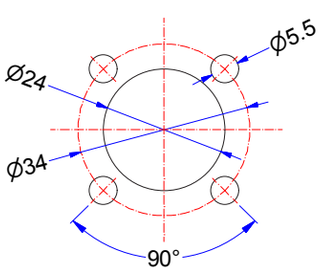
Tipo_type	CO 1F	CO 2F	CO 3F	CO 4F	CO 5F
Codice _code	18582	18582	18582	18583	18584

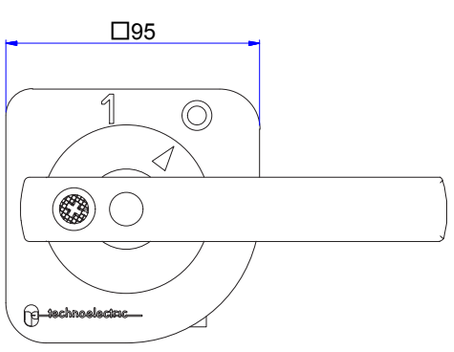
18582



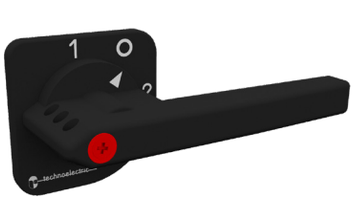


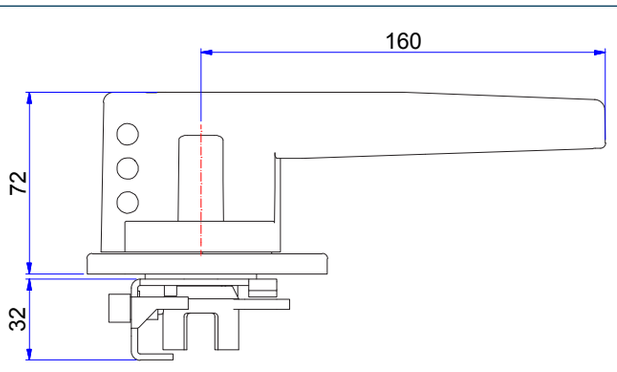
Foratura portella _Door drilling



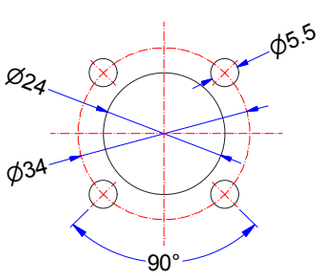


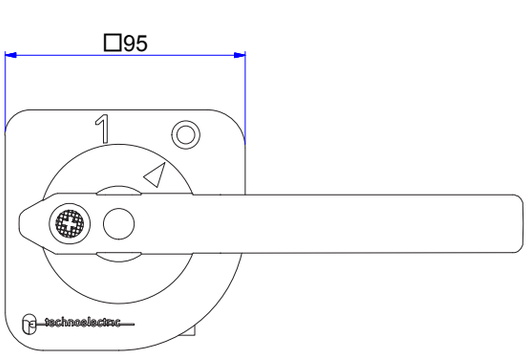
18583





Foratura portella _Door drilling





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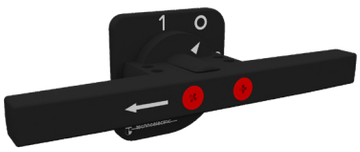
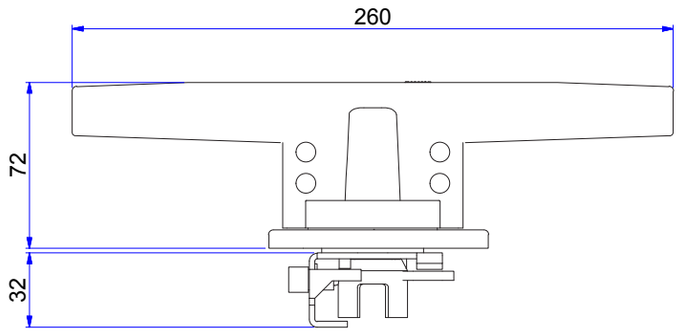
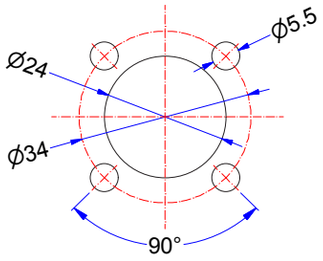
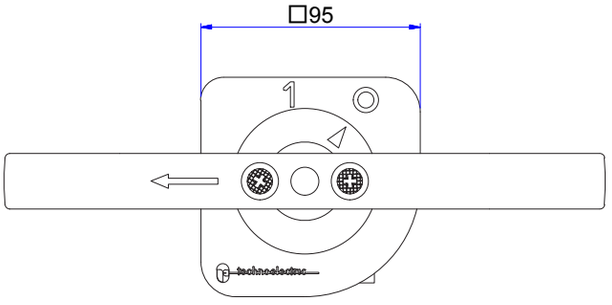




Foratura portella _Door drilling

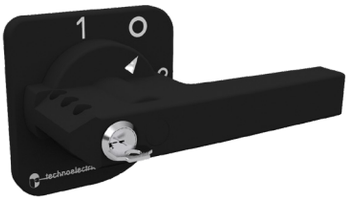


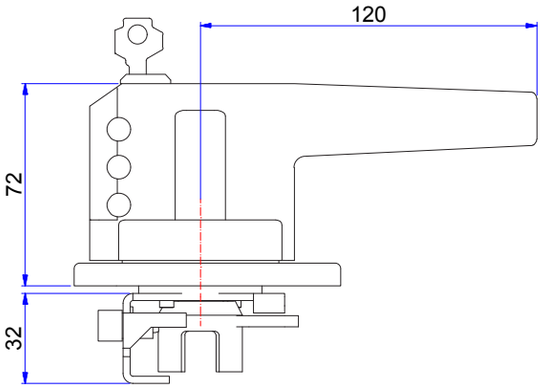


MANIGLIA BLOCCO PORTA CON BLOCCO CHIAVE _Door interlock handles with key lock

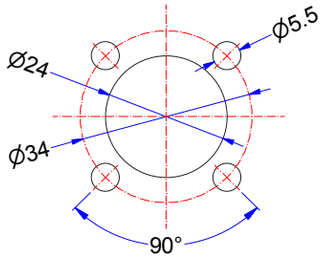
Tipo_type	CO 1F	CO 2F	CO 3F	CO 4F	CO 5F
Codice _code	18500	18500	18500	18501	18502

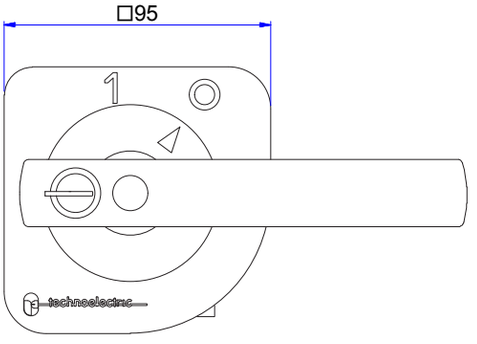
18500



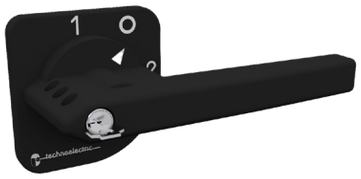


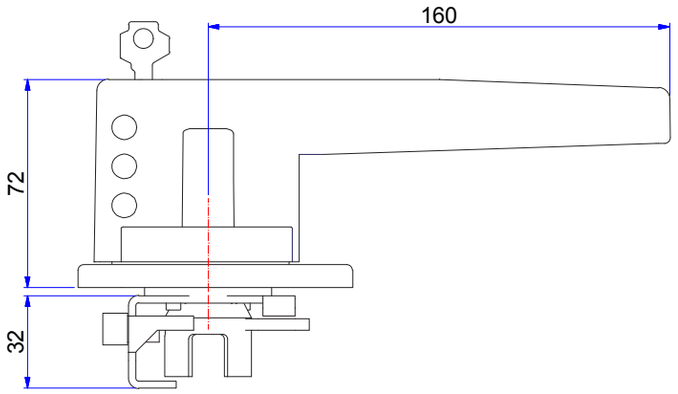
Foratura portella _Door drilling



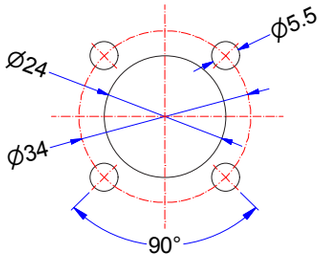


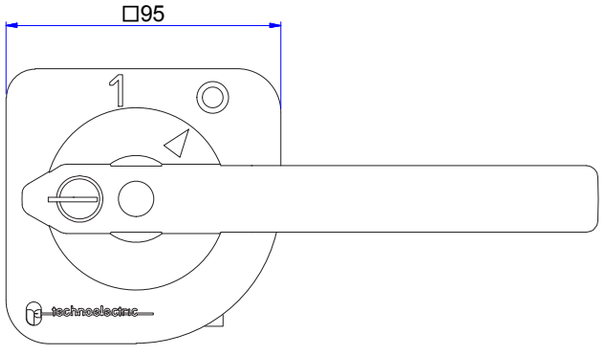
18501



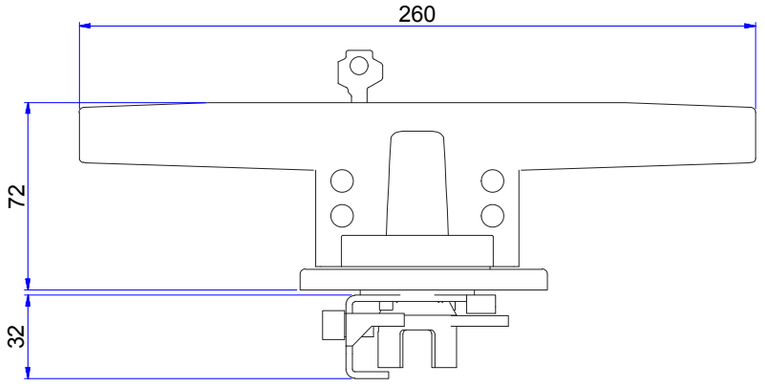


Foratura portella _Door drilling

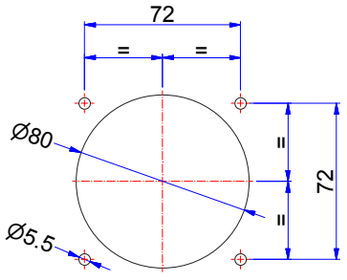


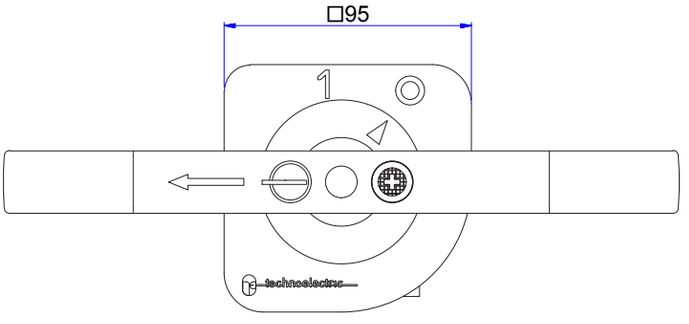


18502

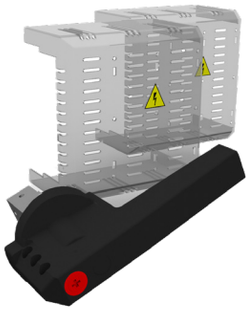


Foratura portella _Door drilling



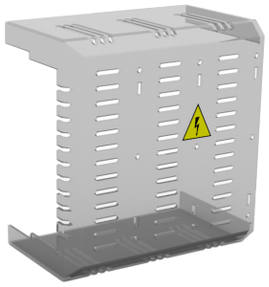


MANIGLIA DIRETTA
_direct handle



Tipo _type	CO 1F	CO 2F	CO 3F	CO 4F	CO 5F
Codice _code	18594	18595	18597	18598	18599

SCHERMO PROTEZIONE FUSIBILI
_fuse cover



Tipo _type	CO 1F	CO 2F	CO 3F	CO 4F	CO 5F
Codice _code	18660	18661	18663	18664	18665

PROLUNGA ALBERO COMANDO
_extension shaft

100 mm

Tipo _type	COF 1 | 2	COF 3 | 4 | 5
Codice _code	18571	18573

200 mm

Tipo _type	COF 1 | 2	COF 3 | 4 | 5
Codice _code	18574	18576

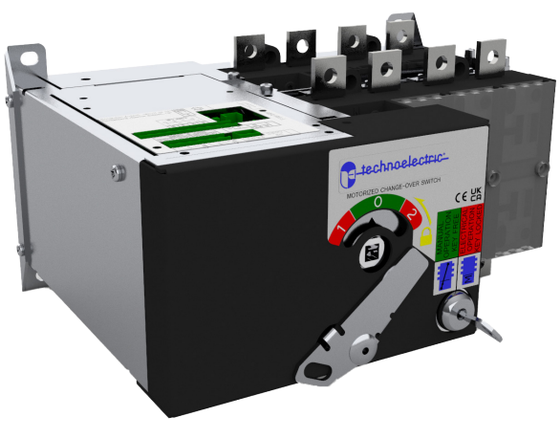
300 mm

Tipo _type	COF 1 | 2	COF 3 | 4 | 5
Codice _code	18575	18578

COMMUTATORI MOTORIZZATI

_MOTORIZED CHANGE-OVER SWITCHES

CMO 160 ÷ 4000 A



GENERALITÀ

Le apparecchiature di commutazione con comando motorizzato, tripolari e tetrapolari consentono manovre a distanza di commutazione/interruzione/sezionamento sottocarico di linee di potenza in sistemi di bassa tensione.

GAMMA

La gamma di commutatori motorizzati è costituita da 15 taglie con portate amperometriche da 160A a 4000A, 3 e 4 poli, disponibile la serie CS (versione sovrapposta) e la serie CO (versione orizzontale).
La serie CS è costituita da 4 famiglie: MSX1, MSX, MSY, MS differenziate tra loro principalmente per le diverse tensioni di alimentazione e per la visualizzazione della posizione del commutatore.
La serie CO è realizzata nella sola versione MS.

CARATTERISTICHE GENERALI

I commutatori motorizzati sono realizzati impiegando due interruttori di manovra-sezionatori della serie Visualcompact e della serie Globe Technics interbloccati meccanicamente tra di loro.

- Commutazione automatica sotto carico (ac-22, ac-23) da e per qualsiasi delle posizioni “1”, “0”, “2” sia elettrica che manuale (commutazione d’emergenza) funzione deviatore con passaggio diretto da “1” a “2” e viceversa
- Visualizzazione frontale delle posizioni “1”, “0”, “2” a mezzo display (per la versione MS) e indice meccanico.
- Sicurezza: blocco lucchettabile che interdice ogni manovra elettrica o manuale, blocco a chiave per la selezione della manovra elettrica o manuale (solo su serie MS-CO)
- Segnalazioni esterne delle posizioni “1”, “0”, “2” tramite contatto pulito (non alimentato)
- Tempi rapidi di manovra da “1” a “2” e viceversa
- Collegamenti facili ed immediati a mezzo morsettiera ad aggancio rapido
- Alimentazioni 12-24v cc, 110/220v ca, altre a richiesta

Dimensioni compatte
Scelta della logica funzionamento per mezzo di un micro-interruttore posto sulla scheda di comando facilmente accessibile per le seguenti logiche:

A) impulso (min. 150ms)
B) contattore (contatto mantenuto)

_GENERALITIES

The three and four pole change-over switches, with motorized operation, allow remote control of change-over/breaking/disconnection under load of power circuits in low voltage systems.

_RANGE

The range of motorized change-over switches is made by 15 sizes of switches of current rating from 160A to 4000A, 3 and 4 poles are available in the CS series with switch disconnectors laid one upon the other and in the “CO” series with switch disconnectors horizontally interlocked.
The CS series is made by 4 families: MSX1, MSX, MSY, MS differentiated among them mainly by the supply voltage and by the display of the position of the change-over switch.
The horizontal CO series is made in the MS version only.

_GENERAL CHARACTERISTICS

The motorized change-over switches are made by means of two switch disconnectors of Visualcompact and Globe Technics series mechanically interlocked.

- Automatic under-load change-over (ac-22, ac-23) from and to any of positions “1”, “0”, “2” both electrical and manual (emergency changeover), transfer function with direct transition from position “1” to position “2” and viceversa
- Front display of positions “1”, “0”, “2” by digital display (for MS version) and mechanical indicator.
- Safety: locking by padlock preventing any electrical or manual operation, key lock for the selection of electrical or manual operation (for MS series only)
- External signalisation of positions “1”, “0” and “2” by a clean contact (no voltage supply)
- Quick operating time from pos. “1” To “2” and back
- Easy and fast electrical connections by means of terminal blocks of quick connection type
- Power supply voltage 12-24v dc, 110/220v ac, others on request

Compact dimensions
Selection of operating logic by a micro switch on the pc board and easily accessible for the following logic:

A) impulse (150ms min)
B) contactor (maintained contact)

Commutatori sovrapposti serie MSX tipo CS 2-3-4-5 da 160A a 1250A, alimentazione 24V dc, visualizzazione a indice meccanico.

Commutatori sovrapposti serie MSX1 tipo CS 2-3-4 da 160A a 800A, alimentazione 12V dc, visualizzazione a indice meccanico.

Commutatori sovrapposti serie MSY tipo CS 2-3-4-5 da 160A a 1250A, alimentazione 220V ac, visualizzazione a indice meccanico.

Commutatori sovrapposti serie MS tipo CS 3-4-5-6 da 315A a 3150A e serie GT da 4000A, alimentazione multipla 24V dc, 110/220 ac, visualizzazione a mezzo display ed indice meccanico.

Commutatori orizzontali serie MS tipo CO 4-5-6 da 630A a 3150A, alimentazione multipla 24V dc, 110/220 ac, visualizzazione a mezzo display e indice meccanico.

ACCESSORI

Connessioni a ponte per commutatori sovrapposti della serie CS2, CS3, CS4 e CS5.

Esecuzioni speciali e tensioni di alimentazione speciali a richiesta.

Maniglia per la manovra manuale di emergenza sempre inclusa

Two layers change-over switches MSX series types CS 2-3-4-5 from 160A to 1250A, power supply 24V DC, display by mechanical indicator.

Two layers change-over switches MSX1 series type CS 2-3-4 from 160A to 800A, power supply 12V DC, display by mechanical indicator.

Two layers change-over switches MSY series types CS 2-3-4-5 from 160A to 1250A, power supply 220V AC, display by mechanical indicator.

Two layers change-over switches MS series type CS 3-4-5-6 from 315A to 3150A and GT series 4000A, multiple power supply voltage 24V DC, 110/220 AC, visualisation by display and mechanical indicator.

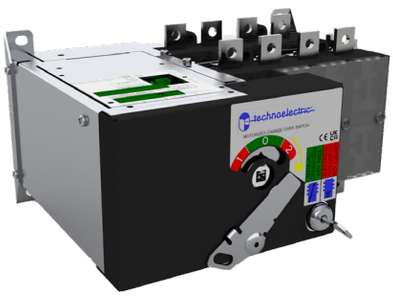
Horizontal change-over switches MS series type CO 4-5-6 from 630A to 3150A, multiple power supply 24V DC, 110/220 AC, display by digital display and mechanical indicator.

_ACCESSORIES

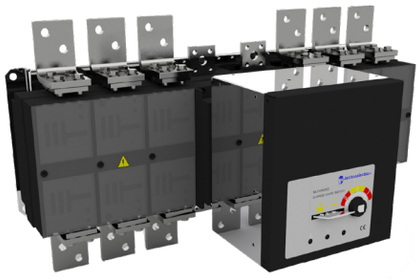
Bridge connections for two layers change-over switches of CS2, CS3, CS4 e CS5 series.

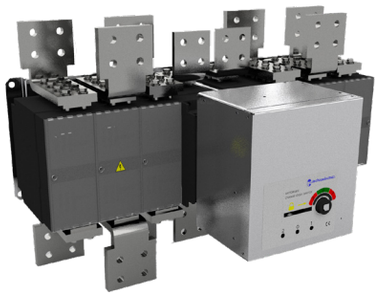
Special executions and special power supply voltages on request.

Handle for emergency manual operation supplied with the change over switch



Alimentazione _electrical feeding			12 V DC	24 V DC	110/220 V AC	multitensione _multiple power supply
Tipo _type	**Corrente nominale _rated current**	**POLI _POLES**	**CODICE _CODE**	**CODICE _CODE**	**CODICE _CODE**	**CODICE _CODE**
CS2	160A	3	120018MSX1	120018MSX	120018MSY	-
		4	120118MSX1	120118MSX	120118MSY	-
	200A	3	120028MSX1	120028MSX	120028MSY	-
		4	120128MSX1	120128MSX	120128MSY	-
	250A	3	120038MSX1	120038MSX	120038MSY	-
		4	120138MSX1	120138MSX	120138MSY	-
	315A	3	120048MSX1	120048MSX	120028MSY	-
		4	120148MSX1	120148MSX	120148MSY	-
CS3	315A	3	-	130018MSX	130018MSY	130018MS
		4	-	130118MSX	130118MSY	130118MS
	400A	3	-	130028MSX	130028MSY	130028MS
		4	-	130128MSX	130128MSY	130128MS
	500A	3	-	130038MSX	130038MSY	130038MS
		4	-	130138MSX	130138MSY	130138MS
CS4	630A	3	-	140038MSX	140038MSY	140038MS
		4	-	140138MSX	140138MSY	140138MS
	800A	3	-	140048MSX	140048MSY	140048MS
		4	-	140148MSX	140148MSY	140148MS
CS5	800A	3	-	150008MSX	150008MSY	150008MS
		4	-	150108MSX	150108MSY	150108MS
	1000A	3	-	150018MSX	150018MSY	150018MS
		4	-	150118MSX	150118MSY	150118MS
	1250A	3	-	150028MSX	150028MSY	150028MS
		4	-	150128MSX	150128MSY	150128MS
	1600A	3	-	-	-	150038MS
		4	-	-	-	150138MS
		F.N.	-	-	-	15013FN8MS
	2000A	3	-	-	-	150048MS
		4	-	-	-	150148MS
		F.N.	-	-	-	15014FN8MS
	2500A	3	-	-	-	150058MS
		4	-	-	-	150158MS
		F.N.	-	-	-	15015FN8MS
	3150A	3	-	-	-	150068MS
		4	-	-	-	150168MS
		F.N.	-	-	-	15016FN8MS
CS6	1600A	3	-	-	-	160008MS
		4	-	-	-	160108MS
		F.N.	-	-	-	16010FN8MS
	2000A	3	-	-	-	160018MS
		4	-	-	-	160118MS
		F.N.	-	-	-	16011FN8MS
	2500A	3	-	-	-	160028MS
		4	-	-	-	160128MS
		F.N.	-	-	-	16012FN8MS
	3150A	3	-	-	-	160038MS
		4	-	-	-	160138MS
GT6	4000A	3	-	-	-	GT60048MS
		4	-	-	-	GT60148MS





Alimentazione _electrical feeding			multitensione _multiple power supply
Tipo _type	**Corrente nominale _rated current**	**Poli _poles**	**Codice _code**
CO4	630A	3	140033MS
		4	140133MS
	800A	3	140043MS
		4	140143MS
CO5	800A	3	150003MS
		4	150103MS
	1000A	3	150013MS
		4	150113MS
	1250A	3	150023MS
		4	150123MS
	1600A	3	150033MS
		4	150133MS
		F.N.	15013FN3MS
	2000A	3	150043MS
		4	150143MS
		F.N.	15014FN3MS
	2500A	3	150053MS
		4	150153MS
		F.N.	15015FN3MS
	3150A	3	150063MS
		4	150163MS
		F.N.	15016FN3MS
CO6	1600A	3	160003MS
		4	160103MS
		F.N.	16010FN3MS
	2000A	3	160013MS
		4	160113MS
		F.N.	16011FN3MS
	2500A	3	160023MS
		4	160123MS
		F.N.	16012FN3MS
	3150A	3	160033MS
		4	160133MS

Caratteristiche tecniche _Technincal Features	Tipo _Type		CS2			
Corrente nominale _Rated current	In	A	160	200	250	315
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500
Corrente nominale termica _Thermal current	Ith	A	160	200	250	315
Corrente nominale d' impiego _Rated operational current						
AC-21A/B	400V	A	160	200	250	250/315
	500V	A	160	200	250	250/315
	690V	A	160	200	250	250/315
AC-22A/B	400V	A	160	200	250	250/315
	500V	A	160	200	250	250/250
	690V	A	160	200	250	250/250
AC-23A/B	400V	A	160	200	250	250/250
	500V	A	125	160	200	200/200
	690V	A	100	125	160	160/160
DC-21A/B*	220V	A	160	200	250	250/315
	420V	A	160	200	250	250/315
	560V	A	-	-	-	-
DC-22A/B*	220V	A	160	200	250	250/315
	420V	A	160	200	250	250/250
	560V	A	-			
DC-23A/B*	220V	A	160	200	250	250/250
	420V	A	160	200	250	250/250
	560V	A	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	1600	2000	2500	2500
Potere di interruzione _Breaking capacity	400V AC23	A	1280	1600	2000	2000
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	8	8	8	8
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	16	16	16	16
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	13,5	13,5	13,5	13,5
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	85	105	130	130
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current						
Tipo fusibile _Backup fuse		A	160	200	250	315
Valore efficace _R.M.S. value		kA	50	50	50	50
Valore di picco _Peak value		kA	16	20	25	27
Durata meccanica _Mechanical endurance		n.	10000	10000	10000	10000
Durata elettrica _Electrical endurance		n.	2000	2000	2000	2000/200
Potenza dissipata per polo ** _Power losses for pole		W	1,6	2,4	3,8	6,1
Dimensione cavo _Cable section		mm^2	70	95	120	185
Dimensione barre _Bars dimension		mm	20x4	20x5	20x6	22x8
Tempi di commutazione _ Change over time	[I-II o II-I]	sec	1,8	1,8	1,8	1,8
Tensione di alimentazione c.c. _DC voltage supply	± 10%		12/24	12/24	12/24	12/24
	min		18	18	18	18
Tensione di alimentazione c.a. _AC voltage supply	± 10%		-	-	-	-
Consumo comando elettrico _Power motor consumption	A		3	3	3	3
Peso netto _Net weight	3P	Kg	6,4	6,4	6,4	6,4
	4P		6,6	6,6	6,6	6,6

*Due poli in serie _Two poles in series

**Escluso fusibile _Fuse excluded

Caratteristiche tecniche _Technincal Features	Tipo _Type		CS3			CS4/CO4	
Corrente nominale _Rated current	In	A	315	400	500	630	800
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Corrente nominale termica _Thermal current	Ith	A	315	400	500	630	800
Corrente nominale d' impiego _Rated operational current							
AC-21A/B	400V	A	315	400	500/500	630	630/800
	500V	A	315	400	400/500	630	630/800
	690V	A	315	400	400/500	630	630/800
AC-22A/B	400V	A	315	400	400/500	630	630/800
	500V	A	315	400	500/500	630	630/630
	690V	A	315	400	400/400	630	630/630
AC-23A/B	400V	A	315	400	500/500	630	630/630
	500V	A	250	315	315/315	500	500/500
	690V	A	200	250	250/250	400	400/400
DC-21A/B*	220V	A	315	400	400/500	630	630/800
	420V	A	315	400	400/500	630	630/800
	560V	A	315	400	400/500	630	630/800
DC-22A/B*	220V	A	315	400	400/500	630	630/800
	420V	A	315	400	400/400	630	630/630
	560V	A	315	400	400/400	630	630/630
DC-23A/B*	220V	A	315	400	400/400	630	630/800
	420V	A	315	400	400/400	630	630/800
	560V	A	315	400	400/400	630	630/800
Potere di chiusura _Rated making capacity	400V AC23	A	3150	4000	5000	6300	6300
Potere di interruzione _Breaking capacity	400V AC23	A	2520	3200	4000	5040	5040
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	13	13	13	26,6	26,6
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	26	26	26	53	53
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	26	26	26	30	30
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	165	210	210	330	330
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current							
Tipo fusibile _Backup fuse		A	315	400	500	630	800
Valore efficace _R.M.S. value		kA	50	50	50	50	50
Valore di picco _Peak value		kA	27	30	37	40	50
Durata meccanica _Mechanical endurance		n.	8000	8000	8000	8000	8000
Durata elettrica _Electrical endurance		n.	1500	1500	1500/200	1500	1500/200
Potenza dissipata per polo ** _Power losses for pole		W	5,9	9,4	14,8	15,6	25,7
Dimensione cavo _Cable section		mm^2	185	2x120	2x150	2x185	2x240
Dimensione barre _Bars dimension		mm	30x6	2x25x5	2x30x5	2x40x5	2x40x6
Tempi di commutazione _ Change over time	[I-I] o [I-I]	sec	1,8	1,8	1,8	2,8	2,8
Tensione di alimentazione c.c. _DC voltage supply	± 10%		24	24	24	24	24
	min		18	18	18	18	18
Tensione di alimentazione c.a. _AC voltage supply	± 10%		230	230	230	230	230
Consumo comando elettrico _Power motor consumption	A		4	4	4	4	4
Peso netto _Net weight	3P	Kg	16	16	16	21/20,8	21/20,8
	4P		16,5	16,5	16,5	22/21,5	22/21,5

*Due poli in serie _Two poles in series

**Escluso fusibile _Fuse excluded

SERIE_SERIES **CMO**

Caratteristiche tecniche _Technincal Features	Tipo _Type		CS5/CO5						
Corrente nominale _Rated current	In	A	800	1000	1250	1600	2000	2500	3150
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500
Corrente nominale termica _Thermal current	Ith	A	800	1000	1250	1600	2000	2500	3150
Corrente nominale d' impiego _Rated operational current									
AC-21A/B	400V	A	800	1000	1250	1600	2000	2500	3150
	500V	A	800	1000	1250	1250	1600	2000	2500
	690V	A	800	1000	1250	1250	1250	1250	1250
AC-22A/B	400V	A	800	1000	1250	1250	1250	-	-
	500V	A	800	1000	1250	-	-	-	-
	690V	A	800	1000	1250	-	-	-	-
AC-23A/B	400V	A	800	1000	1250	-	-	-	-
	500V	A	630	800	1000	-	-	-	-
	690V	A	500	630	800	-	-	-	-
DC-21A/B*	220V	A	800	1000	1250	1600	-	-	-
	420V	A	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-
DC-22A/B*	220V	A	800	1000	1250	-	-	-	-
	420V	A	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-
DC-23A/B*	220V	A	800	630	800	-	-	-	-
	420V	A	-	-	-	-	-	-	-
	560V	A	-	-	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	8000	10000	12500	-	-	-	-
Potere di interruzione _Breaking capacity	400V AC23	A	6400	8000	10000	-	-	-	-
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	50	50	50	50	50	50	50
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	100	100	100	100	100	100	100
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	105	105	105	105	105	105	105
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	420	525	630	630	630	-	-
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current									
Tipo fusibile _Backup fuse		A	800	1000	1250	-	-	-	-
Valore efficace _R.M.S. value		kA	100	100	100	-	-	-	-
Valore di picco _Peak value		kA	50	60	70	-	-	-	-
Durata meccanica _Mechanical endurance		n.	4000	4000	4000	4000	4000	2500	2500
Durata elettrica _Electrical endurance		n.	1000	1000	1000	500	500	500	500
Potenza dissipata per polo ** _Power losses for pole		W	15,6	24,3	38	38,3	61,3	91,3	145,5
Dimensione cavo _Cable section		mm^2	2x240	-	-	-	-	-	-
Dimensione barre _Bars dimension		mm	2x50x5	2x50x8	3x50x8	3x50x12	4x50x12	6x50x12	2x80x10
Tempi di commutazione _ Change over time	[I-II o II-I]	sec	3	3	3	3,8	3,8	3,8	3,8
Tensione di alimentazione c.c. _DC voltage supply	± 10%		24	24	24	24	24	24	24
	min		18	18	18	18	18	18	18
Tensione di alimentazione c.a. _AC voltage supply	± 10%		230	230	230	230	230	230	230
Consumo comando elettrico _Power motor consumption	A		5÷6	5÷6	5÷6	5÷6	5÷6	5÷6	5÷6
Peso netto _Net weight	3P	Kg	35/35,8	35/35,8	35/35,8	46/43,8	46/43,8	56/53,8	56/53,8
	4P		37/37,8	37/37,8	37/37,8	48,5/46,2	48,5/46,2	58,5/57,8	58,5/57,8

*Due poli in serie _Two poles in series

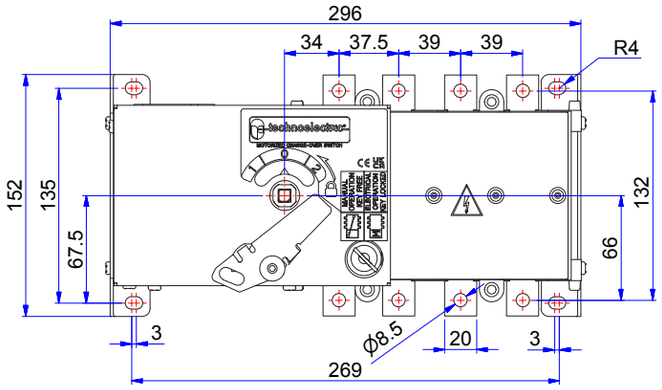
**Escluso fusibile _Fuse excluded

Caratteristiche tecniche _Technincal Features	Tipo _Type		CS6/CO6				GT
Corrente nominale _Rated current	In	A	1600	2000	2500	3150	4000
Tensione nominale d'isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Corrente nominale termica _Thermal current	Ith	A	1600	2000	2500	3150	4000
Corrente nominale d' impiego _Rated operational current							
AC-21A/B	400V	A	1600	2000	2500	3150	4000
	500V	A	1600	2000	2500	3150	4000
	690V	A	1250	1250	1250	1250	-
AC-22A/B	400V	A	1600	2000	2500	1600	-
	500V	A	1250	1250	1250	-	-
	690V	A	400	400	800	-	-
AC-23A/B	400V	A	1250	1250	-	-	-
	500V	A	800	800	-	-	-
	690V	A	400	400	-	-	-
DC-21A/B*	220V	A	1600	2000	-	-	-
	420V	A	-	-	-	-	-
	560V	A	-	-	-	-	-
DC-22A/B*	220V	A	-	-	-	-	-
	420V	A	-	-	-	-	-
	560V	A	-	-	-	-	-
DC-23A/B*	220V	A	-	-	-	-	-
	420V	A	-	-	-	-	-
	560V	A	-	-	-	-	-
Potere di chiusura _Rated making capacity	400V AC23	A	12500	12500	-	-	-
Potere di interruzione _Breaking capacity	400V AC23	A	10000	10000	-	-	-
Corrente di breve durata _Short-circuit withstand current	1 sec	kA	60	60	70	70	50
Corrente di breve durata _Short-circuit withstand current	0,25 sec	kA	120	120	140	140	
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	105	105	105	105	100
Potenza nominale d'impiego _Rated operational power	400V AC23	kW	630	630	-	-	-
Corrente di corto circuito condizionata da fusibile _Rated fuse short-circuit current							
Tipo fusibile _Backup fuse		A	-	-	-	-	-
Valore efficace _R.M.S. value		kA	-	-	-	-	-
Valore di picco _Peak value		kA	-	-	-	-	-
Durata meccanica _Mechanical endurance		n.	4000	2500	2500	2500	2500
Durata elettrica _Electrical endurance		n.	1000	500	500	500	500
Potenza dissipata per polo ** _Power losses for pole		W	47,8	74,7	85,4	118,1	272
Dimensione cavo _Cable section		mm^2	-	-	-	-	-
Dimensione barre _Bars dimension		mm	2x80x10	2x80x10	3x80x10	3x100x10	-
Tempi di commutazione _ Change over time	[I-I1 o I1-I]	sec	3,8	3,8	3,8	3,8	22
Tensione di alimentazione c.c. _DC voltage supply	± 10%		24	24	24	24	24
	min		18	18	18	18	18
Tensione di alimentazione c.a. _AC voltage supply	± 10%		230	230	230	230	230
Consumo comando elettrico _Power motor consumption	A		5÷6	5÷6	5÷6	5÷6	3,8
Peso netto _Net weight	3P	Kg	51/54	52,5/56,8	78/77,3	98/96	196
	4P		53,5/57,2	54,5/60	80/79,3	104/102	230

*Due poli in serie _Two poles in series

**Escluso fusibile _Fuse excluded

CS2P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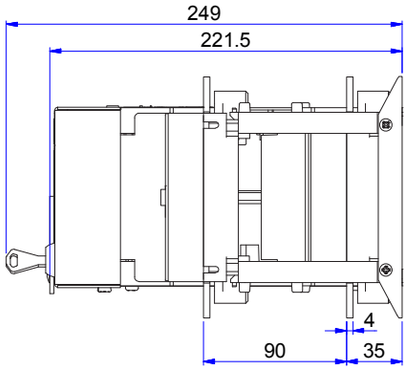
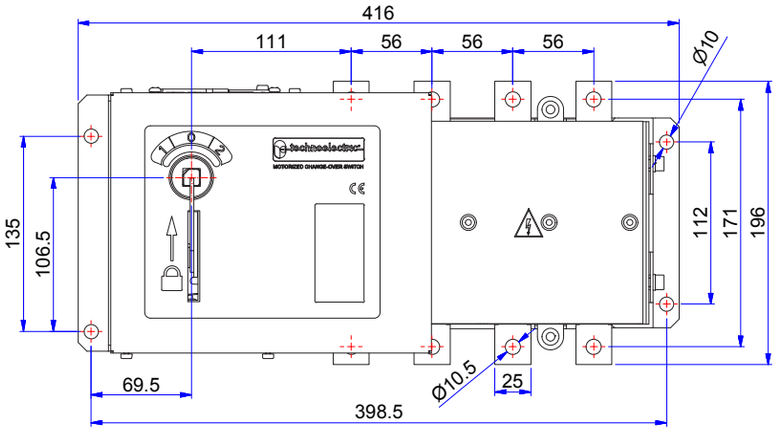
37.5
39
39
R4
152
135
67.5
132
66
3
ϕ8.5
20
3
269


249
221.5
4
90
35

CS3P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56
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56
Ø10
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112
171
196
69.5
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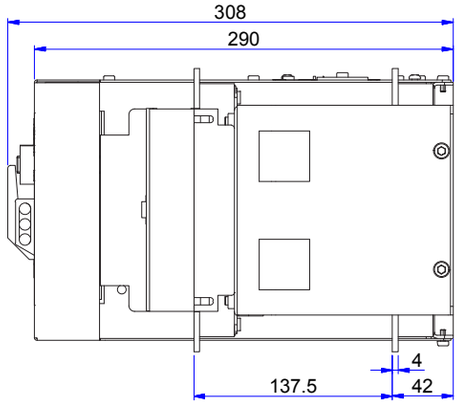
25
398.5


308
290
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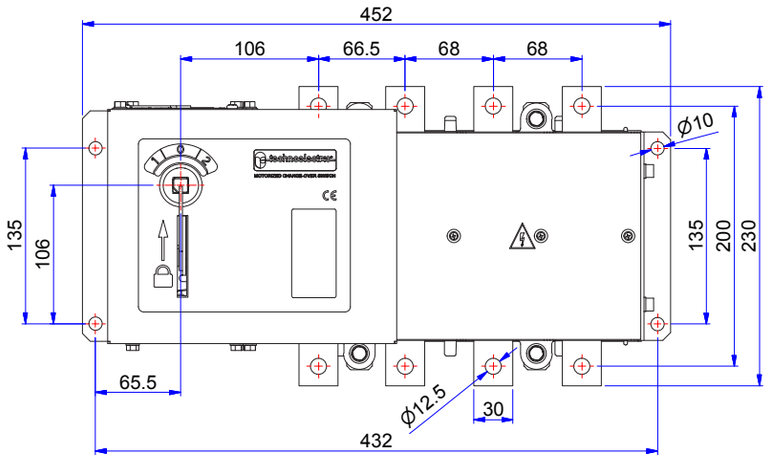
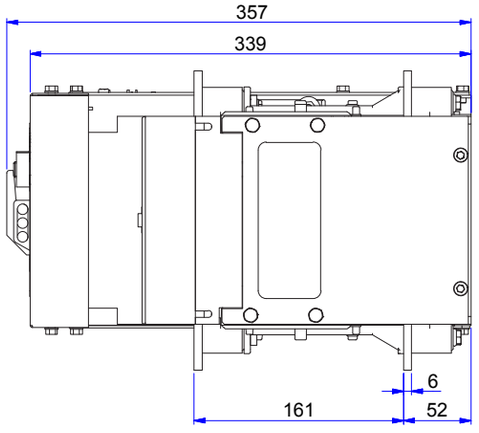
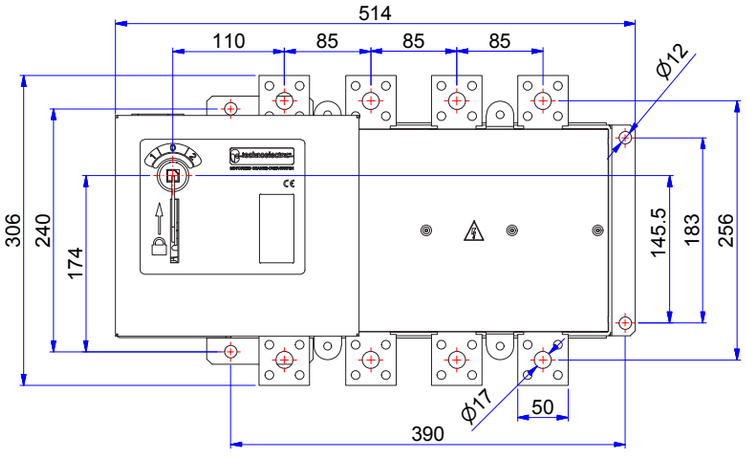
137.5
42

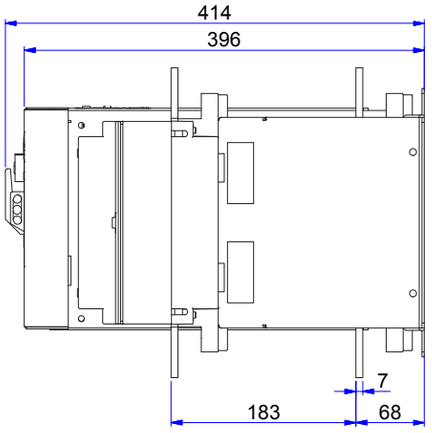
CS4P



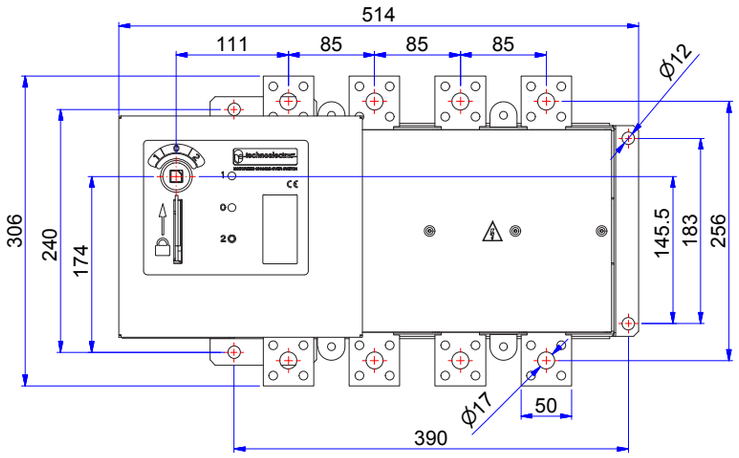


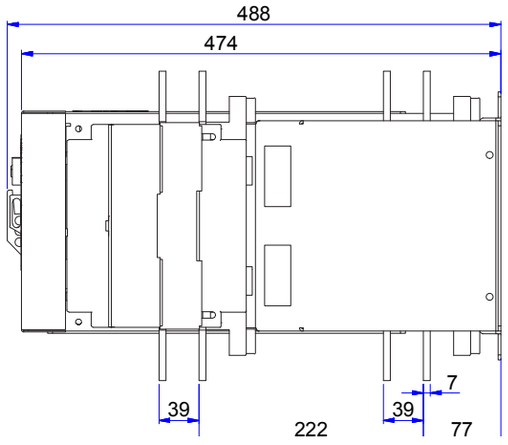
CS5P 800 ÷ 1250 A



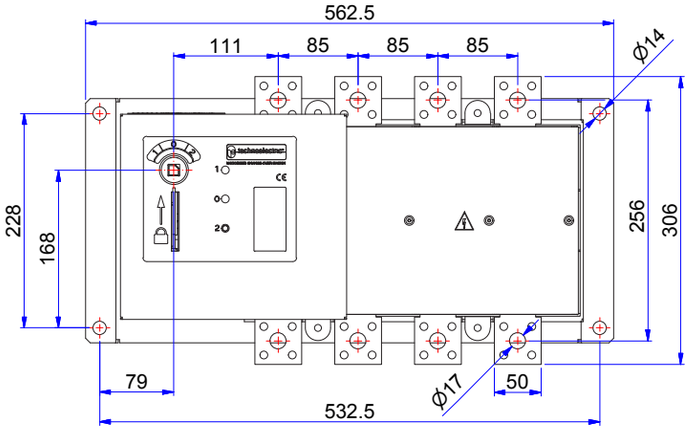


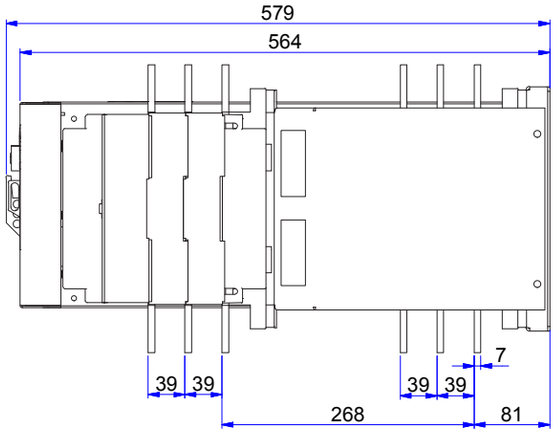
CS5P 1600 ÷ 2000 A



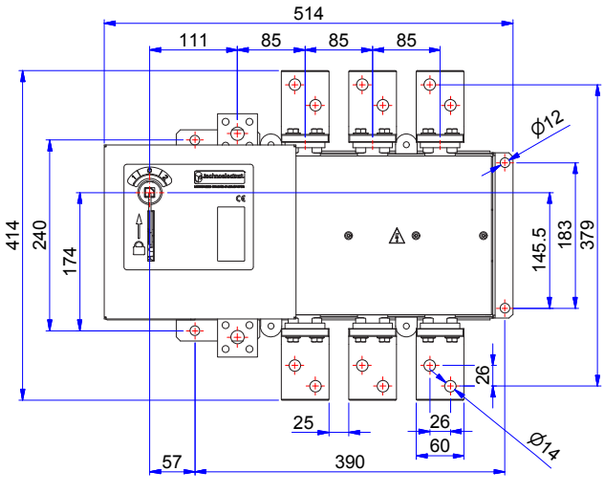


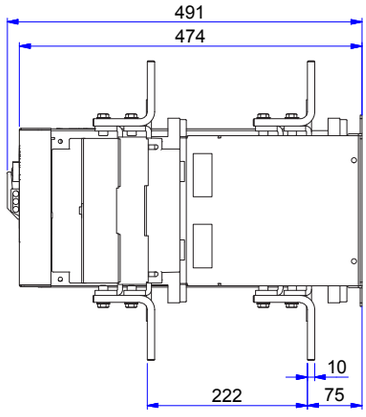
CS5P 2500 ÷ 3150 A



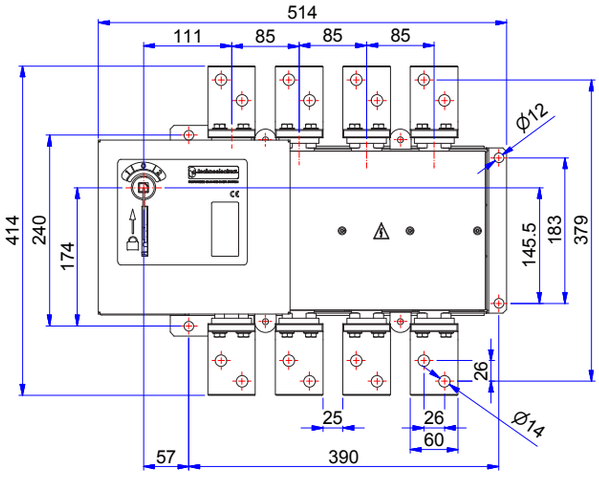


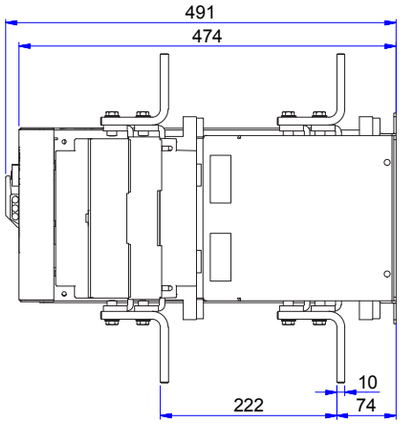
CS6P 1600 A (neutro _neutral) 1250 A



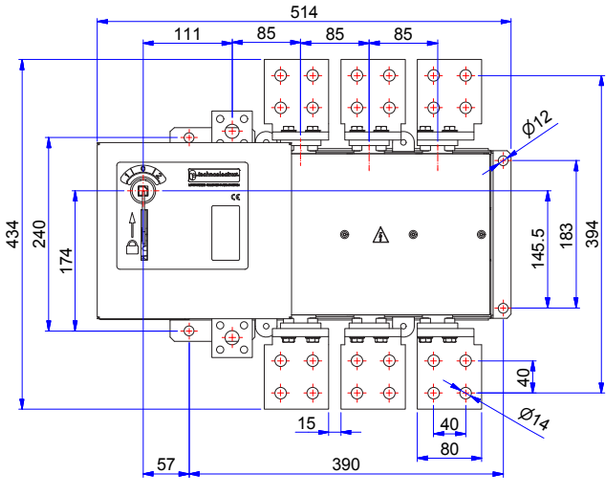


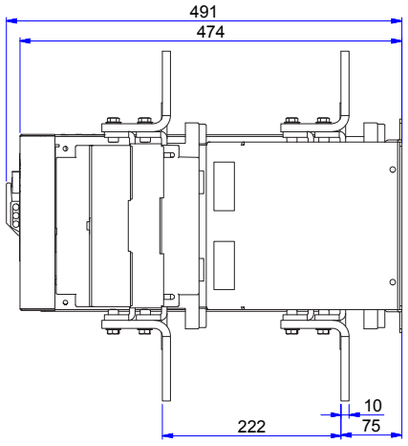
CS6P FN 1600 A



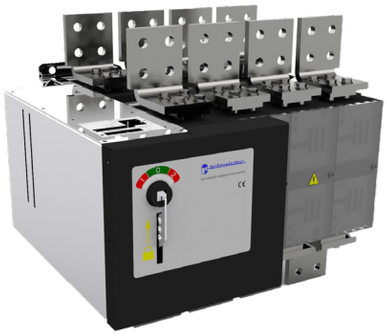


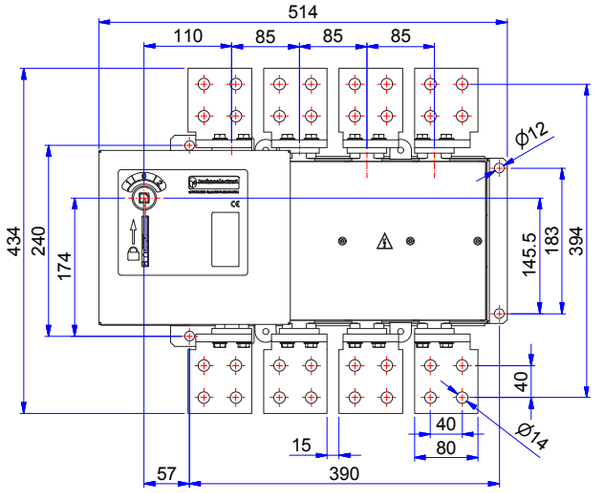
CS6P 2000 A (neutro _neutral) 1250 A

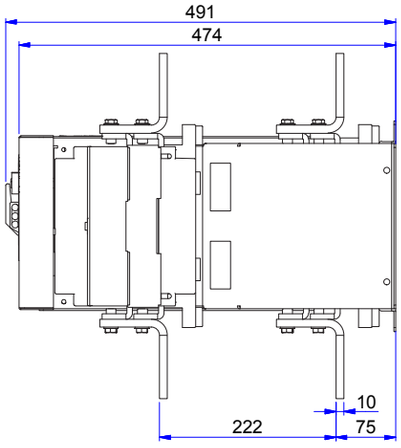




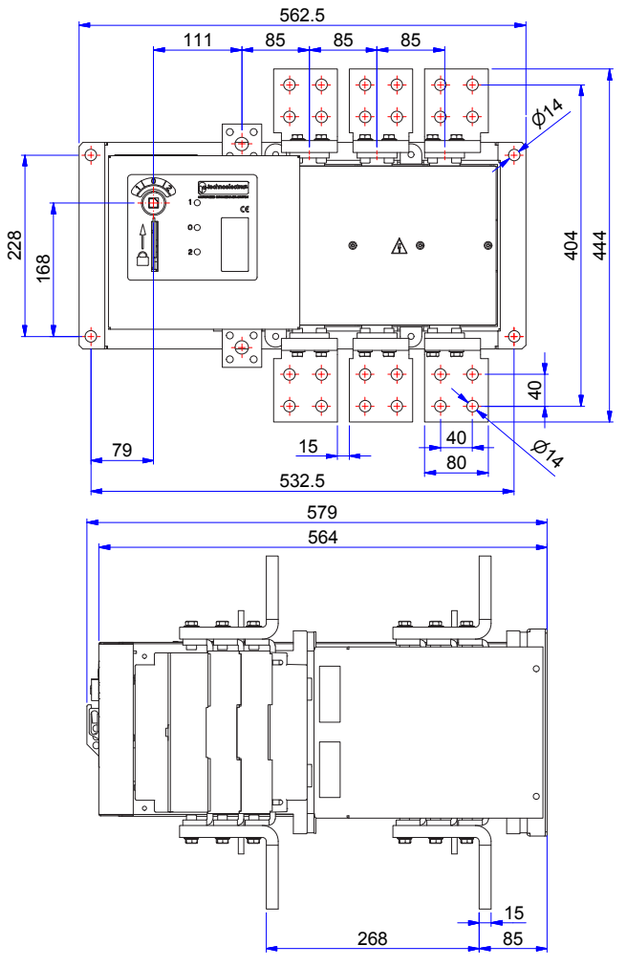
CS6P FN 2000 A



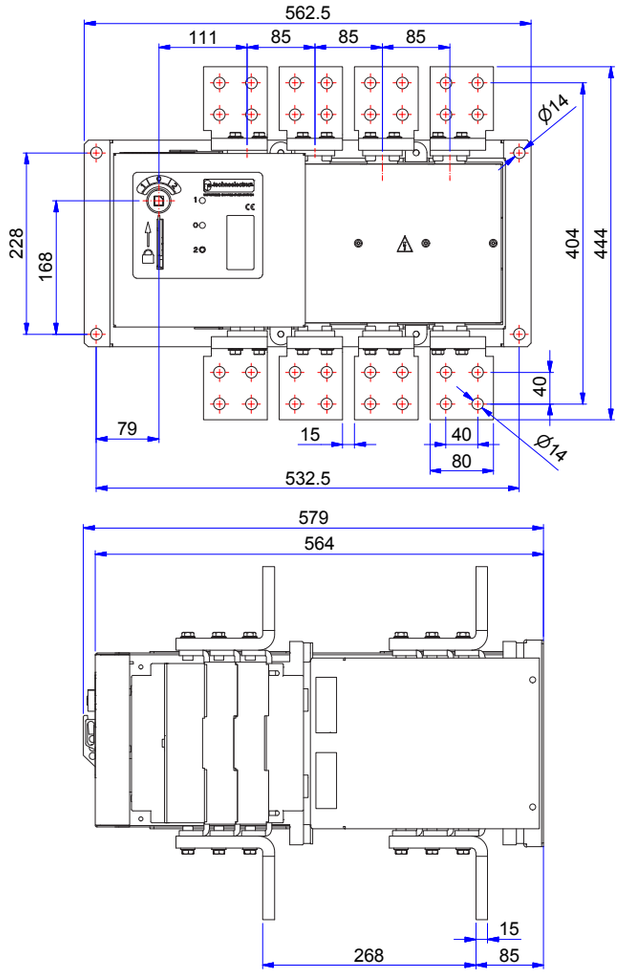




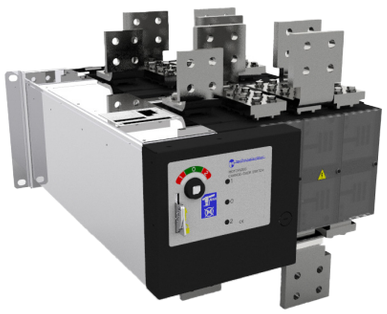
CS6P 2500 A (neutro _neutral) 1250 A

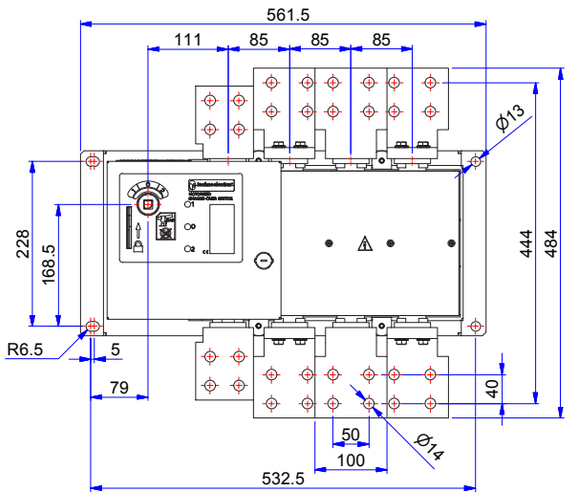


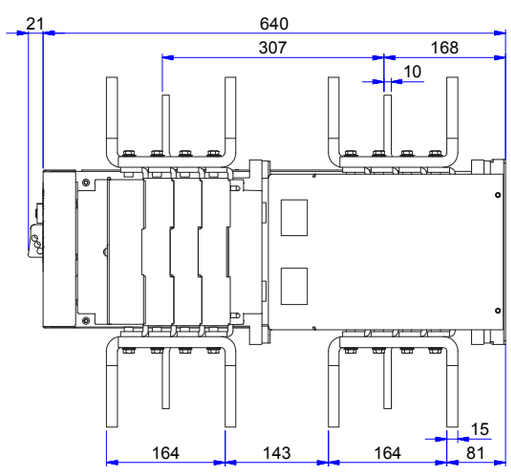
CS6P FN 2500 A



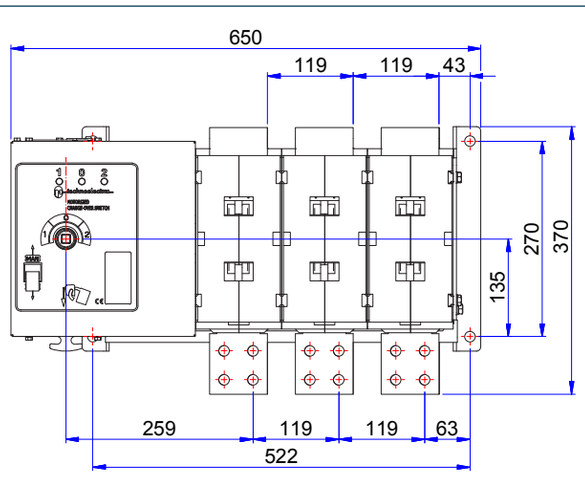
CS6P 3150 A

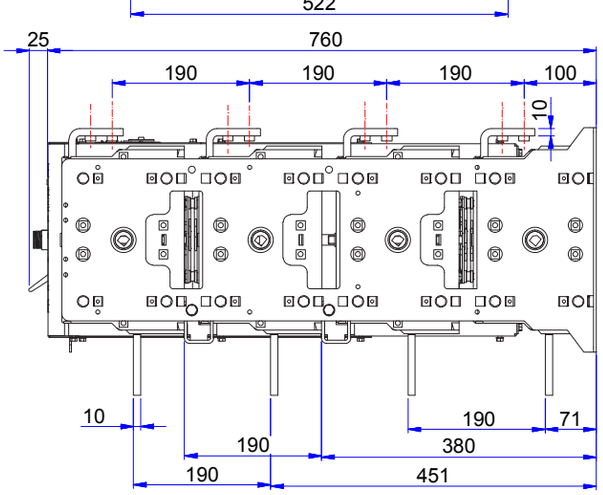




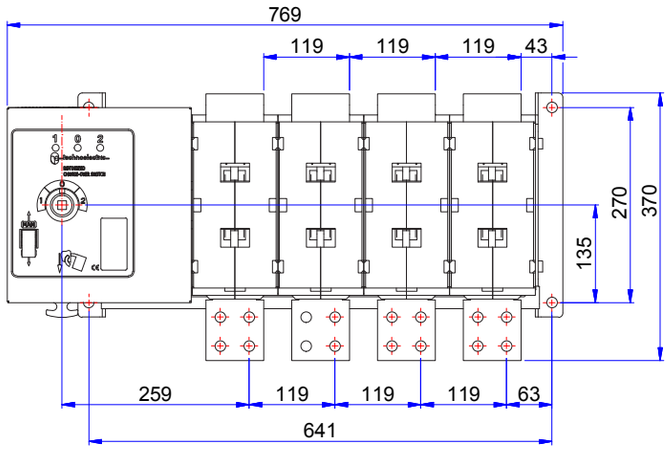


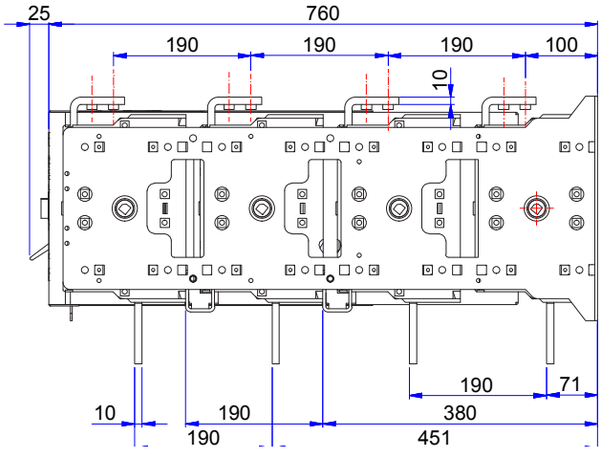
GT 4000 A 3P



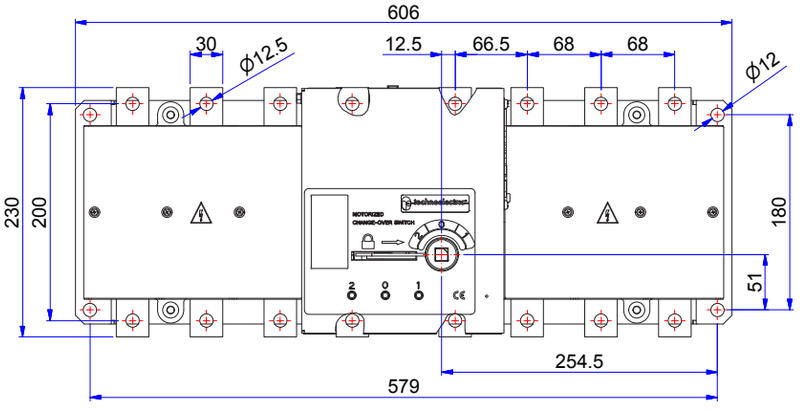


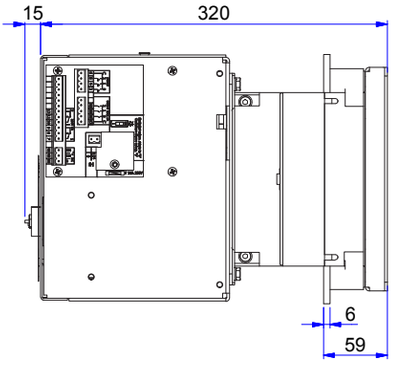
GT 4000 A 4P



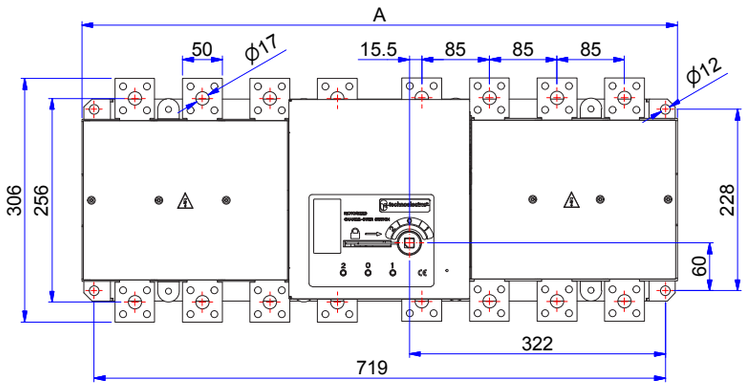


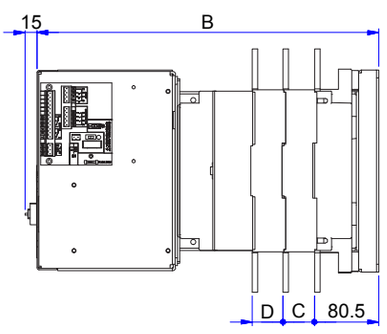
CO4P



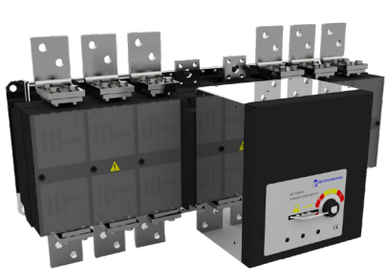


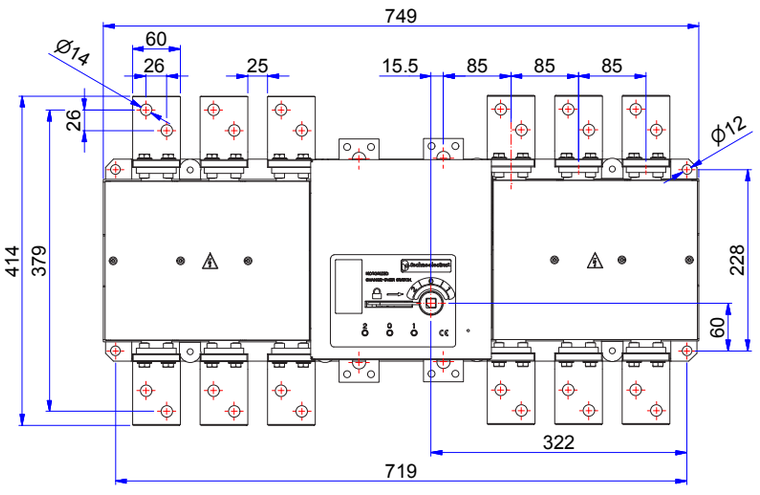
CO5P 800 ÷ 3150 A

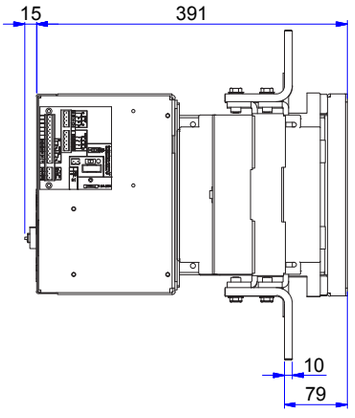




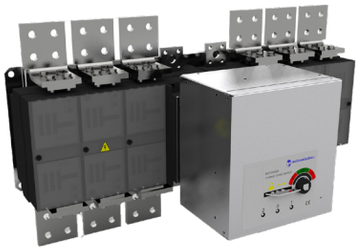
CO6P 1600 A

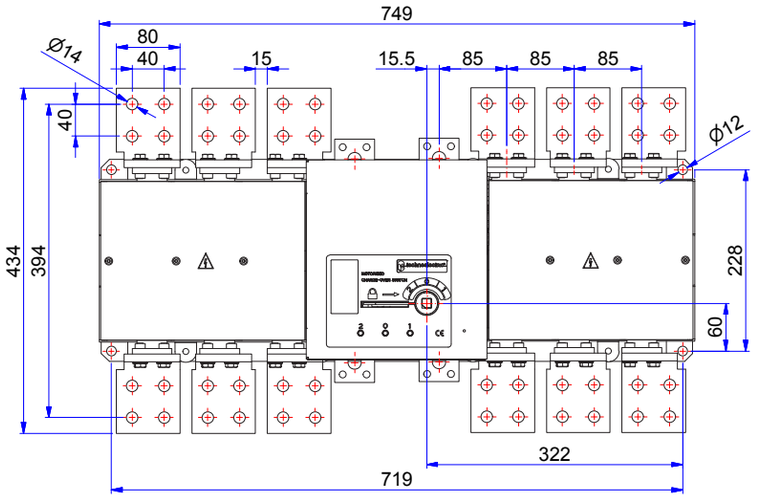


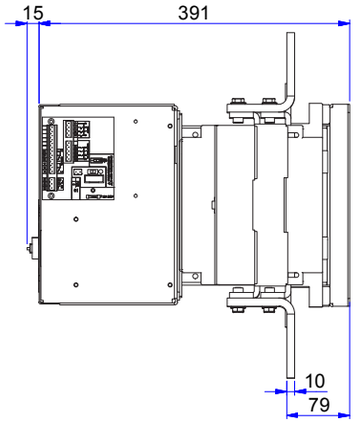




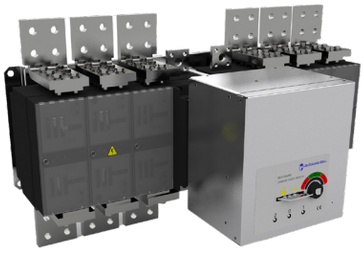
CO6P 2000 A

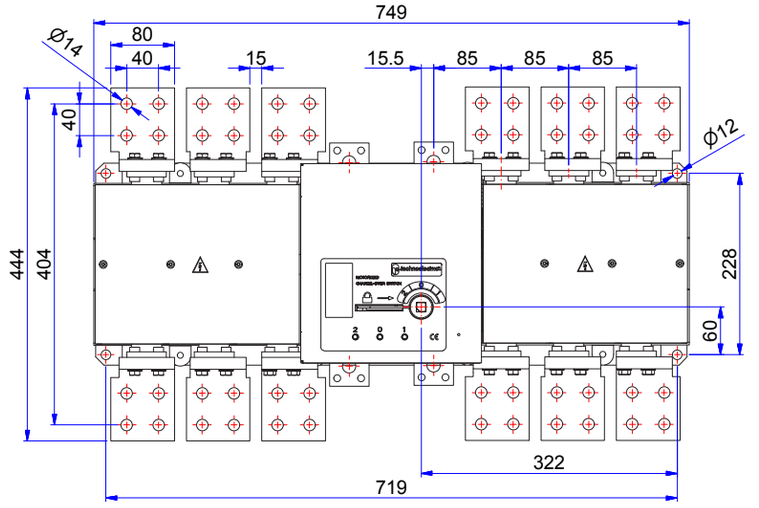


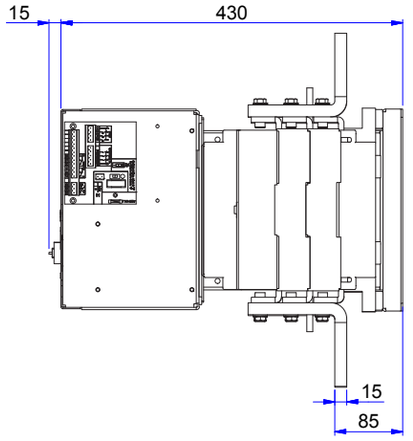




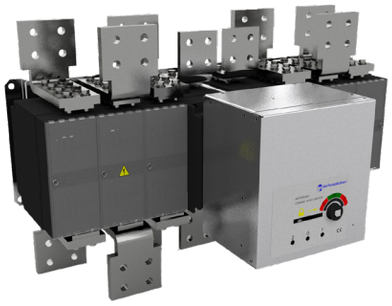
CO6P 2500 A

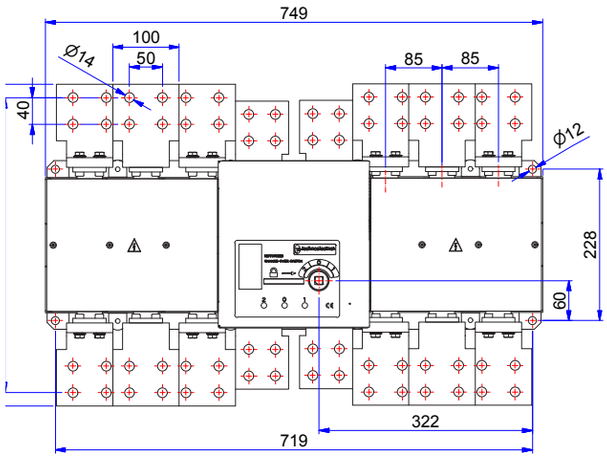


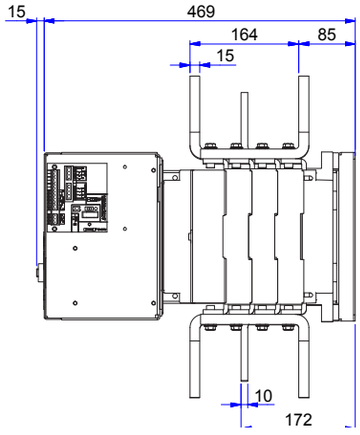




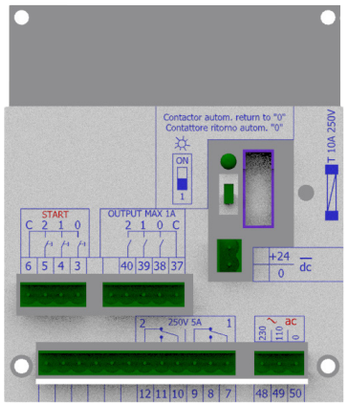
COP 3150 A



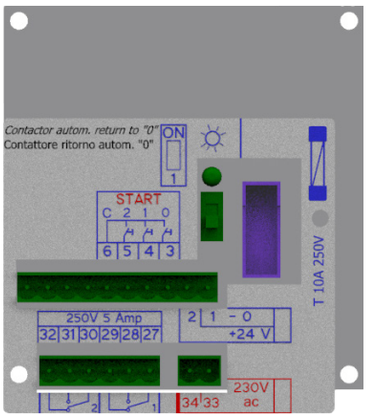




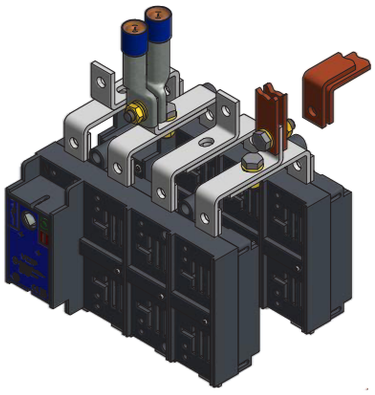
SCHEMA MORSETTIERA 24V DC - 110 ÷ 220V AC PER CS MS | CO MS | GT MS _terminal board diagram 24V dc - 100 ÷ 220V AC rating type CS MS | CO MS | GT MS



SCHEMA MORSETTIERA 24V DC | 220V AC PER CS MS X-Y _terminal board diagram 24V dc | 220V ac rating type CS MS X-Y



CONNESSIONI A PONTE
_Connecting bridges

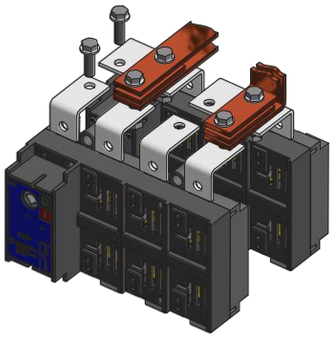


COLLEGAMENTO CAVO\SBARRA _Connection cable\bar

Tipo _type	CS2 160-315A		CS3 315-500A		CS4 630-800A	
Poli _poles	3	4	3	4	3	4
Codice _code	18408	18409	18419	18412	18417	18418

COLLEGAMENTO SBARRA _Connection bar

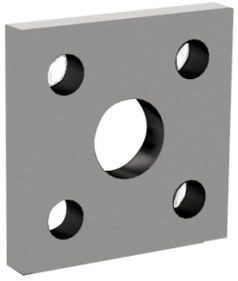
Tipo _type	CS4 630-800A		CS5 800-1250A	
Poli _poles	3	4	3	4
Codice _code	18427	18428	18424	18414



COLLEGAMENTO SBARRA _Connection bar

Tipo _type	CS5 1600-2000A		CS5 1600-2000A
Poli _poles	3	4	4 FN
Codice _code	18438	18439	18440

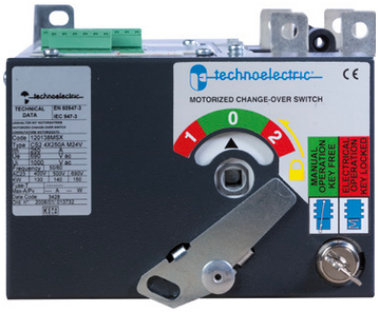
N°1 PIATTO PER TERMINALI SEZIONATORI
_n° 1 terminal plate for switches



CODICE CAVO_Code cable

Tipo _type Piatto _plate	CO - CS 5 4 mm	CO - CS 5 6 mm
Codice _code	18138	18139

La confezione contiene 1 piatto per terminale
_Each box contain 1 terminal plate

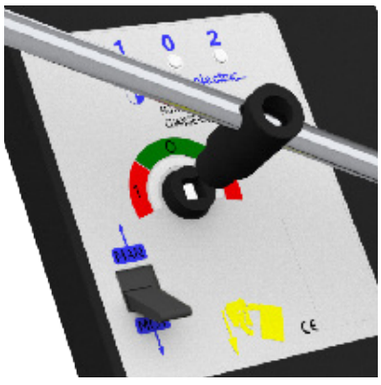


Visualizzazione delle posizioni “1”, “0”, “2”, a indice meccanico, blocco a lucchetto (max. 3 lucchetti). Con il blocco lucchetto inserito sono interdette le manovre manuali e elettriche.
Commutatore tipo CS2 MSX MSX1 MSY

_Display of position “1”, “0”, “2” by mechanical indicator, padlock (max. 3), with the padlock on both manual and electrical operations are prevented.
Change-over type CS2 MSX MSX1 MSY

Visualizzazione delle posizioni “1”, “0”, “2” a mezzo display e indice meccanico, con il blocco lucchetto inserito sono interdette le manovre manuali e elettriche.
Commutatore tipo CO MS - CS MS.

_Display of position “1”, “0”, “2” by means of digital display and mechanical indicator, with the padlock on both manual and electrical operations are prevented.
Change-over type CO MS - CS MS.

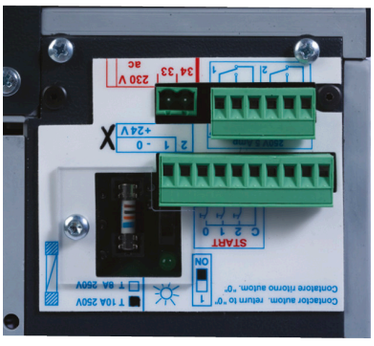


Visualizzazione delle posizioni “1”, “0”, “2” a mezzo display e indice meccanico, con il blocco lucchetto inserito sono interdette le manovre manuali e elettriche.
Commutatore tipo GT MS.

_Display of position “1”, “0”, “2” by means of digital display and mechanical indicator, with the padlock on both manual and electrical operations are prevented.
Change-over type GT MS.

Blocco elettrico a chiave per la selezione della manovra manuale o elettrica.

_Electrical key lock for selection of manual or electrical operation.

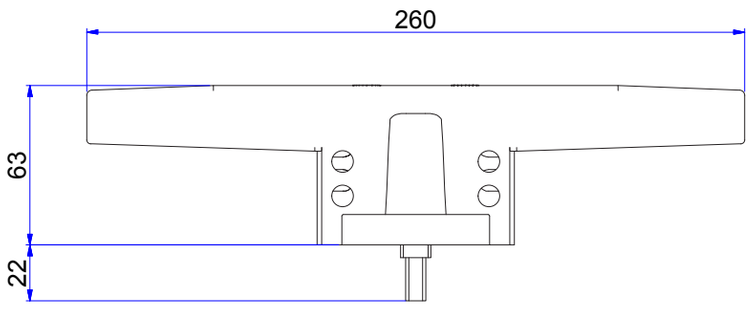


Vano fusibile; sulla scheda di alimentazione è posto il microinterruttore per la scelta della logica di funzionamento:
1. funzionamento ad impulso (min. 150ms)
ON. funzionamento CONTATTORE, (contatto mantenuto) ritorno automatico in “0”, led acceso.

_Fuse block; on the supply board there is the micro switch to select the logic of the operation:
1. operation by impulse (min. 150ms)
ON. operation type CONTACTOR (maintained contact), automatic return to “0”, led switch-on.

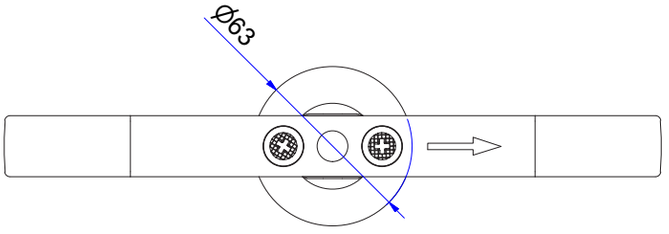
RICAMBI
_replacement

18049

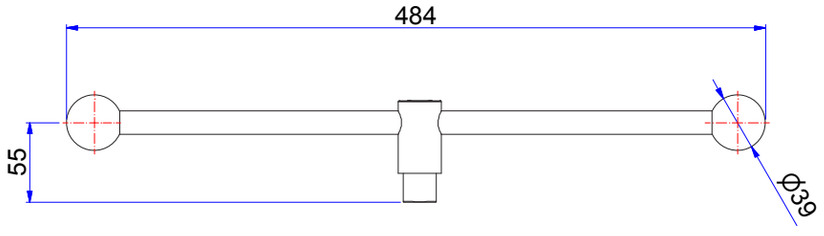


Maniglia per la manovra manuale di emergenza. Commutatore tipo CS MSX/Y, taglia 2 codice 18048, taglie 3 e 4 codice 18049
_Handle for emergency manual operation. Change-over switch type MSX/Y size 2 code 18048, size 3 and 4 code
18049

Maniglia per il comando manuale d'emergenza in dotazione standard
_Handle is supplied with the change over switch

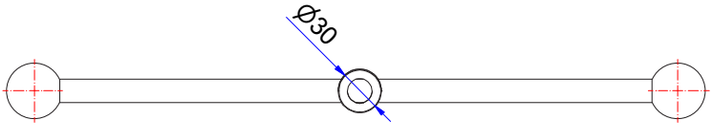


18072



Maniglia per la manovra manuale di emergenza con impugnatura scorrevole. Commutatore tipo CS - CO - GT, taglie 5 e 6 codice 18072
_Handle for emergency manual operation with sliding grip suitable. Change-over switch type CS - CO - GT size 5 and
6 code 18072

Maniglia per il comando manuale d'emergenza in dotazione standard
_Handle is supplied with the change over switch



CENTRALINA TMC
_CHANGEOVER CONTROL UNIT TMC

Realizzata per allestire quadri di commutazione rete/gruppo elettrogeno.
Svolge la funzione di controllo e comando di un gruppo elettrogeno ed inserisce l'utenza alla rete o al generatore.

COMPLETA DI DISPLAY RETROILLUMINATO PER VISUALIZZARE:
- Tre voltmetri rete.
- Tre voltmetri generatore.
- Tre amperometri rete/generatore.
- Frequenzimetro rete/generatore.
- Potenze kVA (apparenti) rete/generatore.
- Voltmetro batteria.

Con la semplice pressione del tasto freccia, vengono visualizzati tutti gli strumenti elettrici della rete, del generatore. In caso di anomalia, il display indica il messaggio dell'anomalia intervenuta.

FUNZIONI:
- Sorveglianza automatica delle anomalie con messaggi sul display.
- Controllo completo voltmetrico trifase della rete e del gruppo elettrogeno (sottotensione, sovratensione, asimmetria fasi, errata sequenza fasi, sottofrequenza e sovrafrequenza).
- Pulsanti manuali di avviamento e arresto del gruppo elettrogeno.
- Pulsante per deviare la rete o il generatore sull'utenza.
- Spie presenza rete e generatore.
- Spie di commutazione avvenuta.
- Testi in 6 lingue: Italiano, Inglese, Francese, Tedesco, Spagnolo, Portoghese.
- Porta seriale RS485.
- Protocollo MOD Bus RTU.
- Comandi remoti (avviamento, blocco, EJP).
- Orologio per programmare l'avviamento e il blocco del gruppo elettrogeno

_Made to set up grid/generator switching panels.
It performs the control and command function of a generator and connects the user to the network or generator.

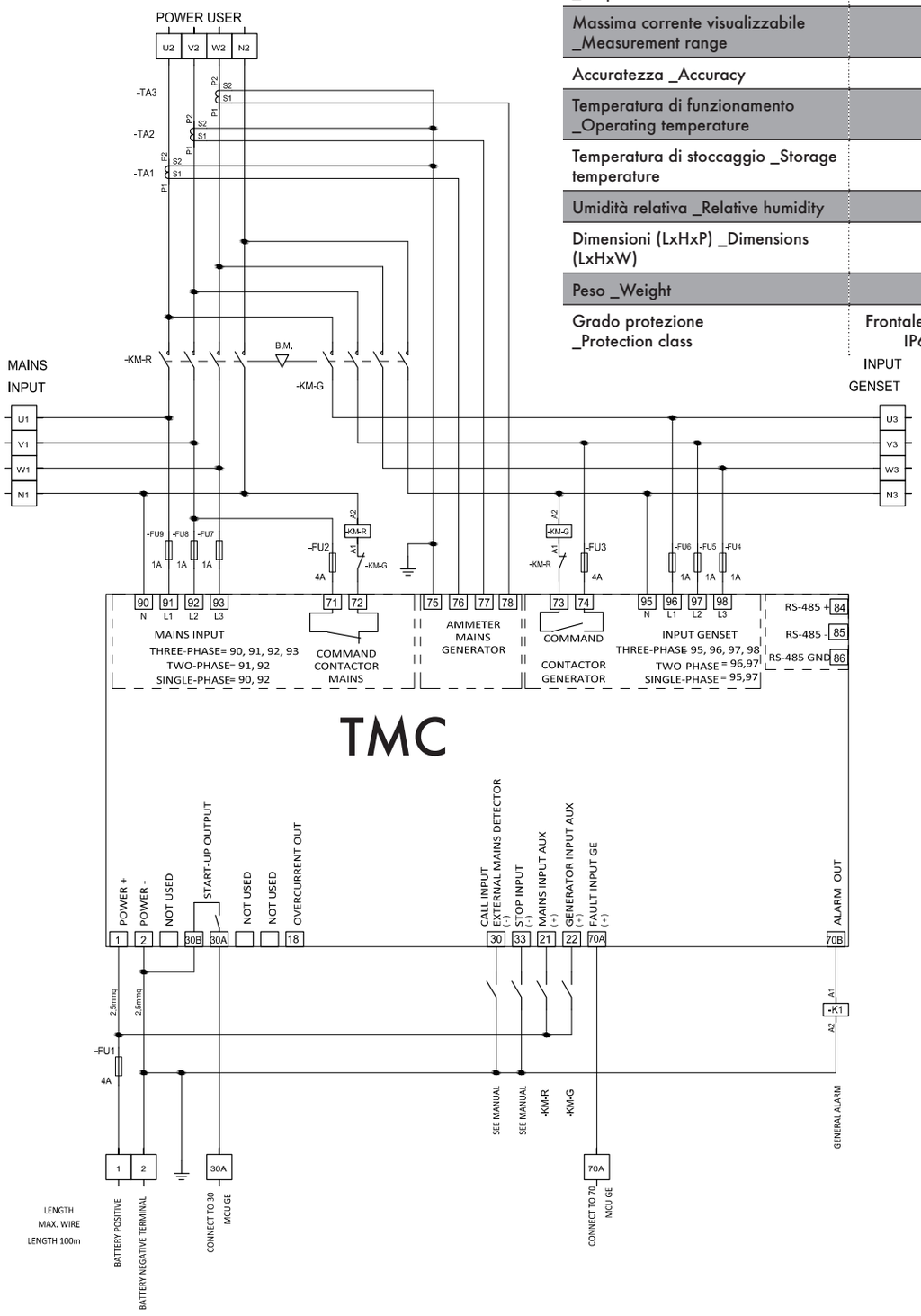
_COMPLETE WITH BACKLIT DISPLAY TO VIEW:
- Three mains voltmeters
- Three generator voltmeters.
- Three mains / generator ammeters.
- Mains / generator frequency meter.
- Power kVA (apparent) mains / generator.
- Battery voltmeter.

By simply pressing the arrow key, all the electrical instruments of the network and of the generator are displayed. In the event of an anomaly, the display indicates the message of the anomaly occurred.

_FUNCTIONS:
- Automatic monitoring of anomalies with display messages.
- Complete three-phase voltmetric control of mains and genset (undervoltage, overvoltage, phase asymmetry, incorrect phase sequence, underfrequency and overfrequency).
- Genset start-up and stop buttons.
- Button to deviate power user to the mains or generator.
- Mains and generator indicators.
- Switching indicators.
- Texts in 6 languages: Italian, English, French, German, Spanish and Portuguese.
- RS485 serial port.
- MOD Bus RTU Protocol.
- Remote controls (start, stop, EJP).
- Clock for programming genset starting or stopping.

Dati tecnici
_Technical Data

Adatta per batterie _Suitable for batteries	12Vdc	24Vdc
Campo di funzionament _Operating range	8 ÷ 48Vdc	
Assorbimento _Absorption	130mA a 12Vdc	70mA a 24Vdc
Buco di tensione sull'alimentazione da batteri _Voltage dip on battery power supply	Da 10Vdc a 0Vdc per 250ms	
Tensione di tenuta dielettrica _Dielectric strength voltage between battery voltage circuits and mains/ generator voltage circuits	3750Vac 50Hz 1sec	
Campo di misura _Measurement range	80 ÷ 570Vac trifase _three-phase	45 ÷ 340Vac monofase _single-phase
Accuratezza _Accuracy	±1%	
Campo di misura _Measurement range	20mA ÷ 6Aac	
Rapporto trasformatore amperometrico _Amperometric transformer ratio	/5	
Massima corrente visualizzabile _Measurement range	4800Aac	
Accuratezza _Accuracy	±1%	
Temperatura di funzionamento _Operating temperature	-20 ÷ 60°C	
Temperatura di stoccaggio _Storage temperature	-20 ÷ 60°C	
Umidità relativa _Relative humidity	≤ 80%	
Dimensioni (LxHxP) _Dimensions (LxHxW)	157x109x74 mm	
Peso _Weight	450 g	
Grado protezione _Protection class	Frontale _Front IP64	Posteriore _Back IP20



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