

Cam switches

series
T|TB|TF|TP

Cam switches available in different construction models over a wide current range with a large variety of accessories.

According to:
IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14
RoHS

Testing and approvals:



Cam switches are manufactured in different series under strict quality controls to provide a reliable product that meets the most demanding requirements.

They consist of chambers, each containing up to two double break contacts of positive opening. These contacts silver alloy plated providing a long electromechanical life.

In sizes 0 - 1 and 2, the terminals are equipped with captive clamp screws to facilitate installation work, and all the connections themselves are covered to provide an IP20 protection rating.

The different configurations of contacts available provide flexible, faster and safer solutions for several electrical operations at a highly competitive cost.

series
T



Wide range of sizes and ratings.
Supplied with IP20 removable terminals protection on sizes 0 - 1 - 2 (except T175).
Wide range of devices and accessories.

series
TB



Side access to all terminal screws (up and down).
Two different bodies depending on mounting type: door or base mounting.
Wide range of devices and accessories.

series
TF



Square body, smooth sides, axial access to terminal screws.
Two different bodies depending on mounting type: door or base mounting.
Wide range of devices and accessories.

series
TP



Reduce-sized body. Door mounting only.
Wide range of devices and accessories.

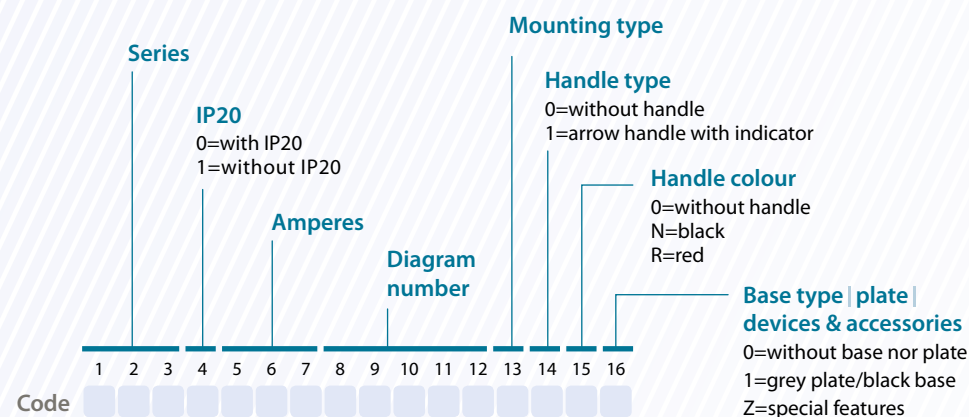
Range codification:

Standard products

They are listed in this section and are encoded according to the 16-digit bar logic explained below. This descriptive method will be used on all pages in the cam switches range for your convenience and better understanding.

Special products

They are made according to customer specifications or to comply with a diagram or special scheme. In these cases, the code is formed by the corresponding series (T-TB-TF-TP), the amperage and an order number assigned to the scheme (see blank diagrams form).



Example **T-0010000012E1N1**
T series | 100 amperes | 012 diagram | E fixing | Standard handle | Black colour | Grey plate/black base |

series | type
TIP



- > Cam switch in plastic enclosure for gland entry.
- > From 12 up to 40 A.
- > Padlockable handle under request.

series | type
T-TFIR



- > Cam switch in plastic enclosure for gland entry.
- > From 25 up to 100 A.
- > Padlockable handle under request.

series | type
T-TBIA-C



- > Cam switch in metal enclosure of cast aluminium
 - ⁴A From 12 up to 63 A.
- > In sheet steel enclosure
 - ⁴C From 100 A upwards.
- > Gland entry.
- > Several enclosure sizes.
- > Padlockable handle under request.

>> Ask for more information about these applications with enclosure.

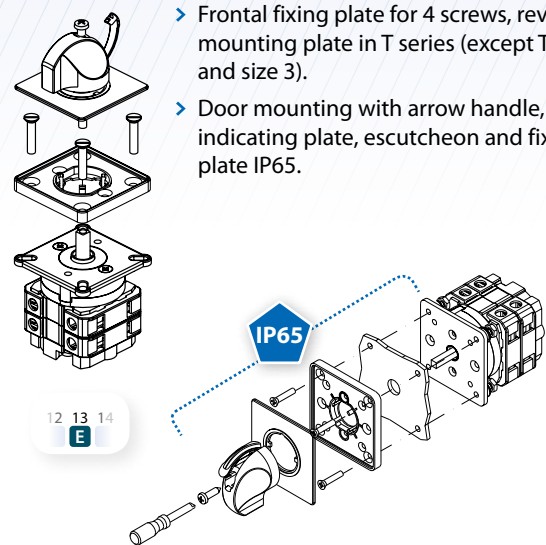
TP | T | TB | TF

Door mounting

Fixing with screws | E type

For T - TB - TF - TP series

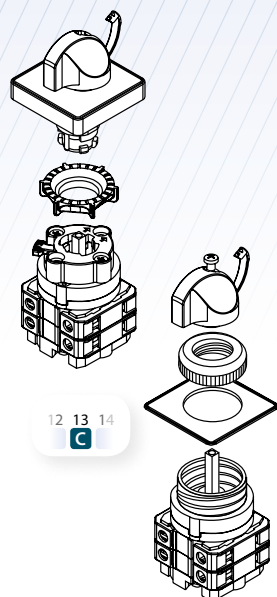
- > Frontal fixing plate for 4 screws, reversible mounting plate in T series (except T175 and size 3).
- > Door mounting with arrow handle, indicating plate, escutcheon and fixing plate IP65.



Central quick fixing Ø 22 | C type

For T - TB - TF series

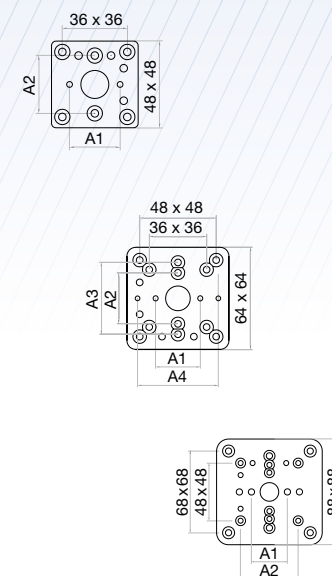
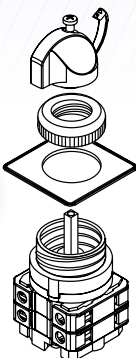
- > Door mounting for Ø 22 mm available for sizes 0 and 1.
- > For arrow handle with indicator or padlockable handle.
- > Maximum number of chambers supported
Size 0 = 6
Size 1 = 4



Central fixing with metal nut Ø 22 | Z type

For T - TF series

- > Door mounting for metal nut Ø 22 mm available for sizes 0 and 1.
(also Ø 30 mm under request).



Size	Models		13
0	A1 = 28 mm	A2 = 32 mm	M
	A1 = 30 mm	A2 = 34 mm	N
	A1 = 35 mm	A2 = 38 mm	O
1	A1 = 28 mm A4 = 46 mm	A2 = 32 mm	M
	A1 = 33 mm A3 = 47 mm	A4 = 50 mm	N
	A1 = 32 mm A3 = 45 mm	A4 = 45 mm	P
2	A1 = 38 mm	A3 = 40 mm	M
	A1 = 30 mm	A2 = 50 mm	P

Multi-distance fixing plates with screws

For T - TB - TF series

- > Multidrill plates for different fixing distances.
- > Fixing with two screws for mounting without base nor indicating plate.
- > Available for sizes 0 - 1 - 2.
(size 0 also supports multi-fixing plate size 1).

Base mounting

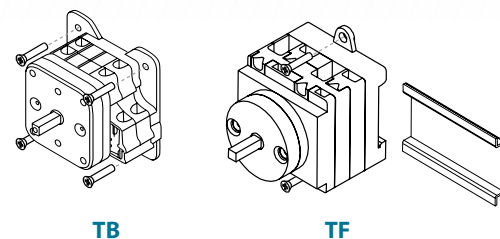
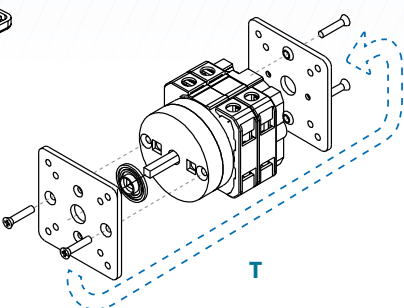
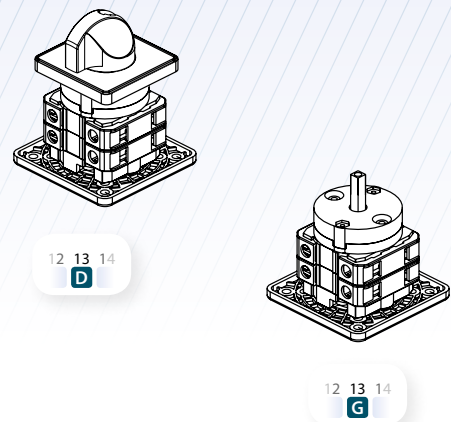
Base mounting by screws with direct handle | D type Base mounting by screws without plate and handle | G type

For T series

- > Rear fixing plate for 4 screws, reversible mounting plate in T serie (except T175 and size 3).

For TB - TF series

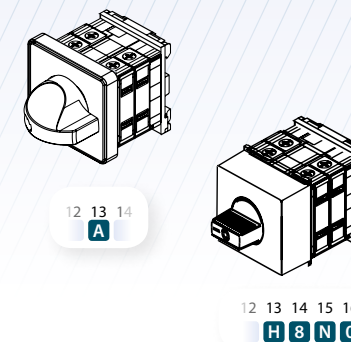
- > Fixed rear support plate as standard.
- > Serie TB for 4 screws.
- > Serie TF for two screws (also DIN rail).



DIN rail mounting with direct handle | A type

For T series

- > Rear fixing support (D904) for T series sizes 0 and 1.
- > DIN rail is included in TF series.



DIN rail mounting with modular handle | H type

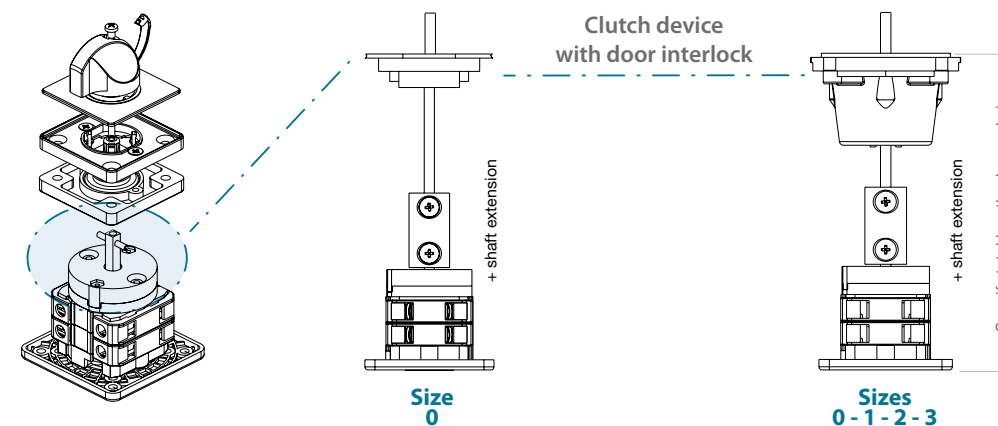
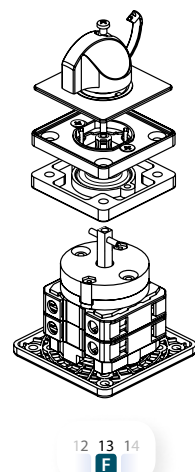
For TF series

- > Rear fixing support and modular handle tape (D905) for T - TF series size 0.

Base mounting with clutch device and door handle | F type

For T - TB - TF series

- > Rear fixing plate for 4 screws in T - TB series or two screws and DIN rail in TF serie.
- > With clutch device and door lock, according to series and sizes.
- > The clutch device (D501) for size 0, if it is combined with other accessory, must be size 1.
- > The clutch device (D501) and shaft extension are supplied separately (as accessories) or incorporated with the cam switch (size 3 is always incorporated with the cam switch).
- > Specify useful depth of the space available when ordering.



On-Off switches

010 1 pole 1 chamber	010/5 5 poles 010/6 6 poles 010/7 7 poles 010/8 8 poles 010/9 9 poles	011 2 poles 1 chamber	010/10 10 poles 010/11 11 poles 010/12 12 poles 010/13 13 poles 010/14 14 poles	012 3 poles 2 chambers	010/15 15 poles 010/16 16 poles 010/17 17 poles 010/18 18 poles 010/19 19 poles	013 4 poles 2 chambers	010/20 20 poles 010/21 21 poles 010/22 22 poles 010/23 23 poles 010/24 24 poles
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To view these wiring diagrams please visit our download area on www.telergon.com

On-Off switches with contacts leading when making

020 3 poles 1 preclosed pole 2 chambers	021 4 poles 1 preclosed pole 2 chambers	022 4 poles 3 preclosed poles 2 chambers
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Reversing switches

101 2 poles 2 chambers

Reversing switches

102 3 poles 3 chambers	103 3 poles 3 chambers
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Reversing switches with spring return

111 2 poles 2 chambers	112 3 poles 2 chambers	113 3 poles for use with reserving contactors 4 chambers
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Control switches with spring return

201 Start switch 1 pole 1 chamber	202 Stop switch 1 pole 1 chamber	203 Start switch 2 poles 1 chamber	204 Stop switch 2 poles 1 chamber
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Stop-Start switches

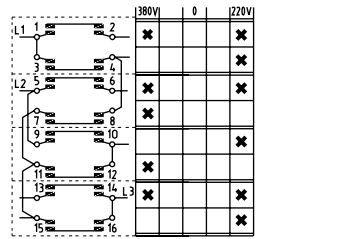
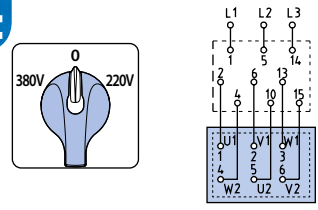
205 With contactor 1 chamber	206 With contactor and spring return 1 chamber	207 With spring return to run for 2 units 2 chambers
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Start delta switches

300 Normal type 4 chambers	301 Auxiliary contact closed in "0" 5 chambers	302 Reversing 5 chambers	303 Rotary 0-λ-Δ-0-λ-Δ-0 5 chambers	304 Position λ return to 0 0-λ-Δ 4 chambers	305 Reversing. Return from λ to 0 Δ-λ-0-λ-Δ 5 chambers	308 Use with contactor 0-λ-Δ 4 chambers	309 Reversing for use with contactor Δ-λ-0-λ-Δ 7 chambers
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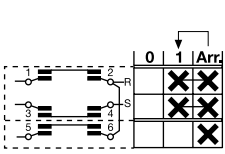
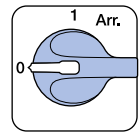
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Start delta switches

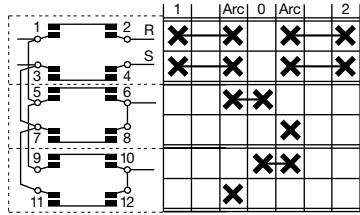
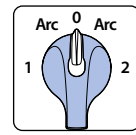


310
Selector $\lambda - \Delta$
380 - 0 - 220
4 chambers

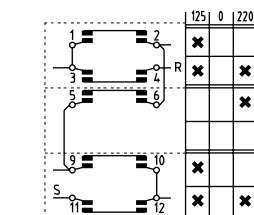
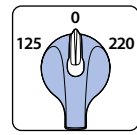
Split phase starting switches



315
Start return to 1
2 chambers

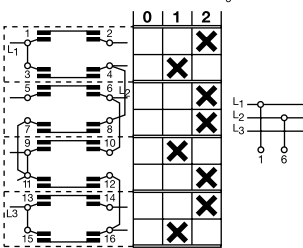
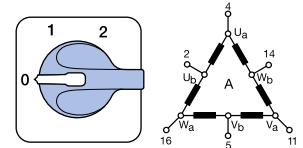


316
Reversing type of T315
1 - ARR - 0 - ARR - 2
3 chambers

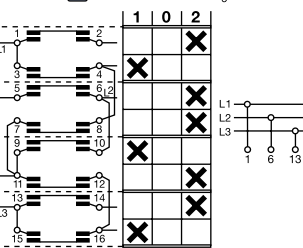
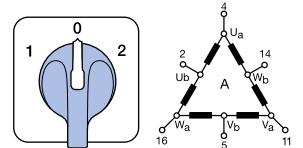


317
Start single phase 2 voltages
3 chambers

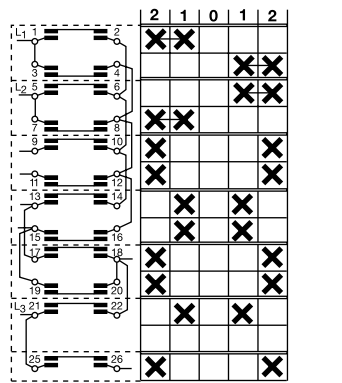
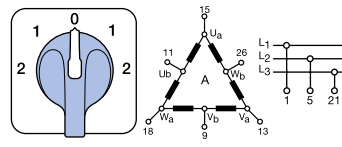
Dahlander multi-step switches



330
Dahlander $0 - \Delta_A - \lambda \lambda_A$
4 chambers



331
Dahlander $\Delta_A - 0 - \lambda \lambda_A$
4 chambers



332
Reversing type of T330
7 chambers

333
Dahlander $0 - \Delta_A - \lambda \lambda_A - 0 - \Delta_A - \lambda \lambda_A - 0$
0 - 1 - 2 - 0 - 1 - 2
5 chambers

334
For use with contactor
0 - 1 - 2
5 chambers

335
Selector Dahlander
 $0 - \lambda - \Delta_A - \lambda \lambda_A$
6 chambers

336
Reversing Dahlander
 $\lambda \lambda_A - \Delta_A - \lambda - 0 - \lambda - \Delta_A - \lambda \lambda_A$
2 - 1 - λ - 0 - λ - 1 - 2
8 chambers

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Separate winding to speed

340
 $0 - \lambda_A - \Delta - \lambda_B$
 $0 - \lambda - 1 - 2$
6 chambers

341
 $0 - \Delta_A - \lambda_B$
 $0 - 1 - 2$
4 chambers

342
 $0 - A - B$ en λ or Δ
 $0 - 1 - 2$
3 chambers

343
Reversing del 342
 $2 - 1 - 0 - 1 - 2$
5 chambers

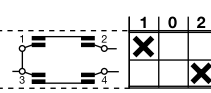
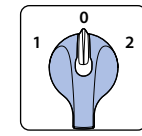
344
 $\Delta_B - \lambda_B - 0 - \lambda_A - \Delta_A$
 $1 - \lambda - 0 - \lambda - 2$
8 chambers

350
 $0 - \lambda_A - \Delta_B - \lambda \lambda_B$
 $0 - 1 - 2 - 3$
6 chambers

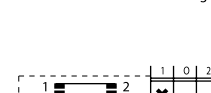
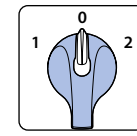
351
Reversing type of T350
 $3 - 2 - 1 - 0 - 1 - 2 - 3$
9 chambers

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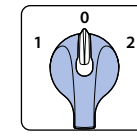
Changeover switches with center "Off"



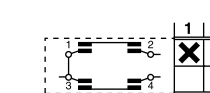
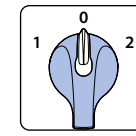
400
1 pole
1 chamber



401
2 poles
2 chambers



402
3 poles
3 chambers



403
4 poles
4 chambers

	Poles	Positions	Chambers
400/5	5	3	5
400/6	6	3	6

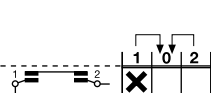
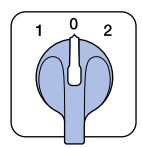
	Poles	Positions	Chambers
400/7	7	3	7
400/8	8	3	8

	Poles	Positions	Chambers
400/9	9	3	9
400/10	10	3	10

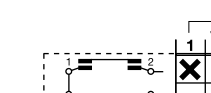
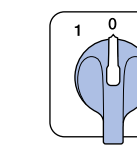
	Poles	Positions	Chambers
400/11	11	3	11
400/12	12	3	12

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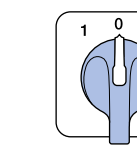
Changeover switches with spring return to center



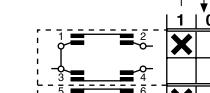
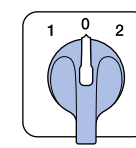
405
1 pole
1 chamber



406
2 poles
2 chambers

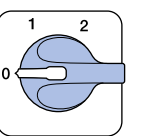


407
3 poles
3 chambers

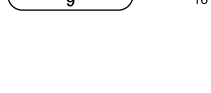
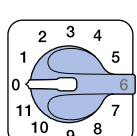


408
4 poles
4 chambers

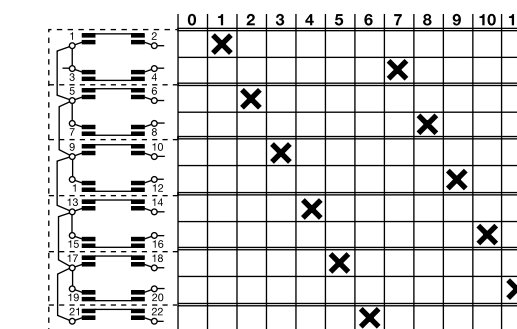
Multi-step switches with "Off" position



410
1 pole 2 positions
1 chamber



419
1 pole 11 positions
6 chambers

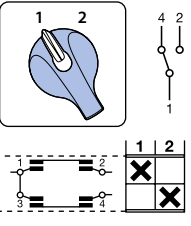


Multi-step switches with "Off" position

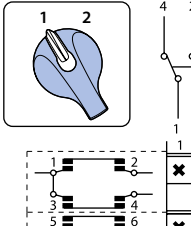
	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
411	1	3	2	422	2	4	4	432	3	4	6	452	5	4	10
412	1	4	2	423	2	5	5	433	3	5	9	460	6	2	6
413	1	5	3	424	2	6	7	434	3	6	12	461	6	3	9
414	1	6	4	425	2	7	8	435	3	7	12	462	6	4	12
415	1	7	4	426	2	8	9	440	4	2	4	470	7	2	7
416	1	8	5	427	2	9	10	441	4	3	6	471	7	3	11
417	1	9	5	428	2	10	11	442	4	4	8	480	8	2	8
418	1	10	6	429	2	11	12	443	4	5	10	481	8	3	12
420	2	2	2	430	3	2	3	450	5	2	5	490	9	2	9
421	2	3	3	431	3	3	5	451	5	3	8				

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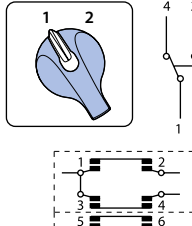
Changeover switches without "Off"



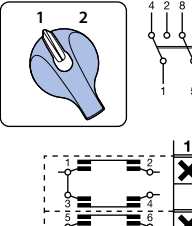
500
1 pole
1 chamber



501
2 poles
2 chambers



502
3 poles
3 chambers

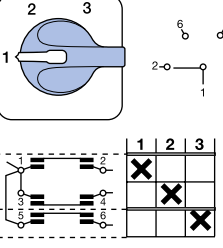


503
4 poles
4 chambers

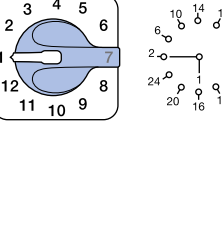
Poles	Positions	Chambers	Poles	Positions	Chambers	Poles	Positions	Chambers	Poles	Positions	Chambers
500/5	5	2	5	500/7	7	2	7	500/9	9	2	9
500/6	6	2	6	500/8	8	2	8	500/10	10	2	10
500/11	11	2	11	500/12	12	2	12				

To view these wiring diagrams please visit our download area on www.telergon.com

Multi-step switches without "Off" position



510
1 pole 3 positions
2 chambers



519
1 pole 12 positions
6 chambers

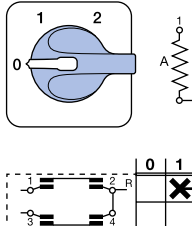
Poles	Positions	Chambers	Poles	Positions	Chambers
510	3	2	519	12	6

Multi-step switches without "Off" position

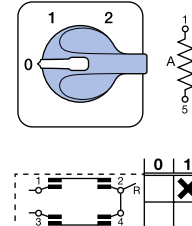
	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
511	1	4	2	521	2	4	4	530	3	3	5	543	4	6	12
512	1	5	3	522	2	5	5	531	3	4	6	550	5	3	8
513	1	6	3	523	2	6	6	532	3	5	8	551	5	4	10
514	1	7	4	524	2	7	7	533	3	6	9	552	5	5	13
515	1	8	4	525	2	8	8	534	3	7	11	560	6	3	9
516	1	9	5	526	2	9	9	535	3	8	12	561	6	4	12
517	1	10	5	527	2	10	10	540	4	3	6	570	7	3	11
518	1	11	6	528	2	11	11	541	4	4	8	580	8	3	12
520	2	3	3	529	2	12	12	542	4	5	10				

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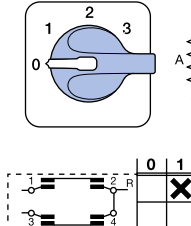
Gang switches



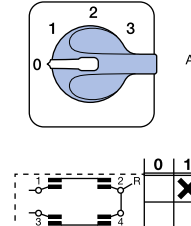
601
1 pole switching sequence
0 - A - (A+B)
1 chamber



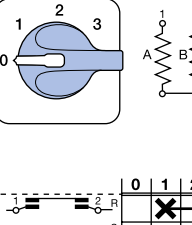
602
2 poles switching sequence
0 - A - B
2 chambers



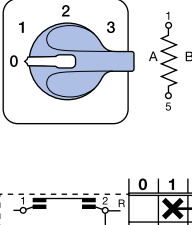
603
1 pole switching sequence
0 - A - B - (A+B)
1 chamber



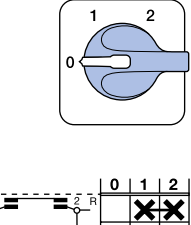
604
2 poles switching sequence
0 - A - B - (A+B)
2 chambers



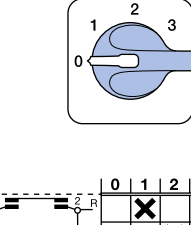
605
1 pole switching sequence
0 - A - (A+B) - (A+B+C)
2 chambers



606
2 poles switching sequence
0 - A - (A+B) - (A+B+C)
3 chambers



607
3 poles switching sequence
0 - A - (A+B)
3 chambers



608
3 poles switching sequence
0 - A - B - (A + B)
3 chambers

Gang switches

609
3 poles switching sequence
0 - A - (A+B) - (A+B+C)
5 chambers

610
Switching sequence
 λ 0 - A - (A+B) - (A+B+C)
2 chambers

611
Switching sequence
 Δ 0 - A - (A+B) - (A+B+C)
2 chambers

612
Switching sequence 0 - A + B series
A - B - (A + B) paralell
2 chambers

626
3 phases, 6 points
5 chambers

630
Switching sequence
0 - A - (A+B) - (A+B+C)
2 chambers

631
Switching sequence
0 - A - (A+B) - (A+B+C) - (A+B+C+D)
2 chambers

632
Switching sequence
0 - A - (A+B) - (A+B+C) - (A+B+C+D) - (A+B+C+D+E)
3 chambers

Kitchen and heating switches

613
3 positions switching sequence
0-A+B paralell; A or B-A+B series -0
3 chambers

614
3 positions switching sequence
0-A+B series; A or B-A+B paralell
2 chambers

Voltmeter switches

700
2 phases C.A. or 2 poles C.C.
2 chambers

701
3 phases
2 chambers

702
3 phases to neutral
2 chambers

704
3 phases and 1 phase to neutral
3 chambers

Resistance elimination switches

620
3 phases, 3 points
2 chambers

621
3 phases, 3 points
3 chambers
With auxiliary contact

622
3 phases, 4 points
3 chambers

624
3 phases, 5 points
4 chambers

705
3 phases to phase and 3 phases to neutral
3 chambers

706
2 three-phase lines (phase to phase)
4 chambers/chambers

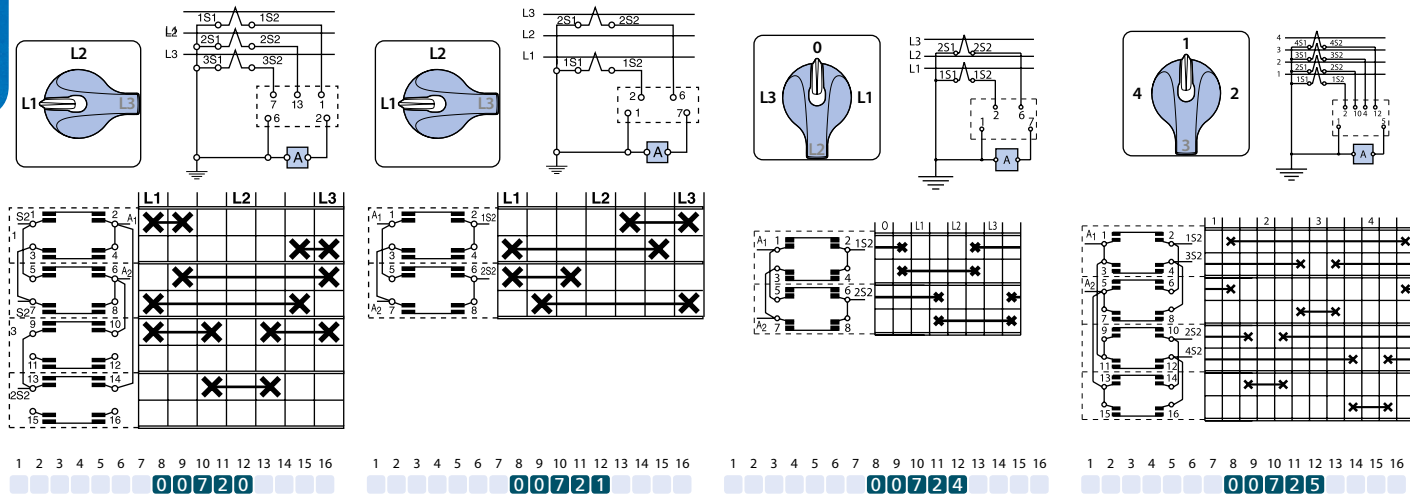
Tabla equivalencias
11=1L1
12=1L2
13=1L3
21=2L1
22=2L2
23=2L3

703
4 lines with 2 wires C.A. o C.C.
4 chambers

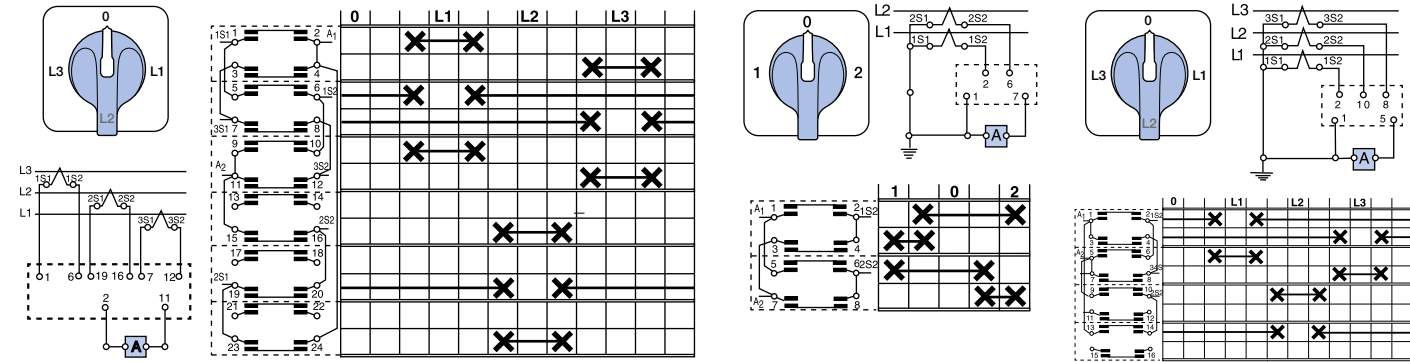
708
3 phases, 2 potential transformers
1 pole
2 chambers

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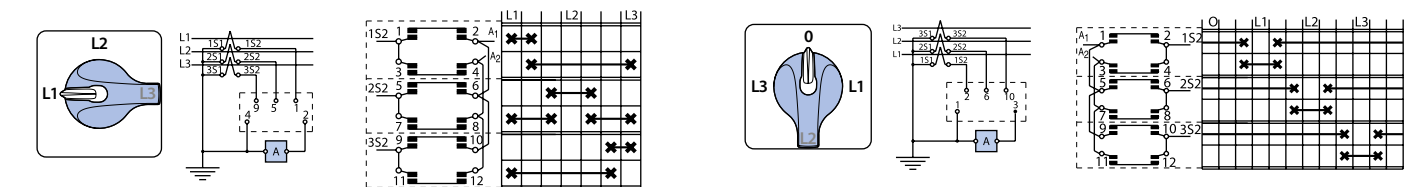
Ammeter switches



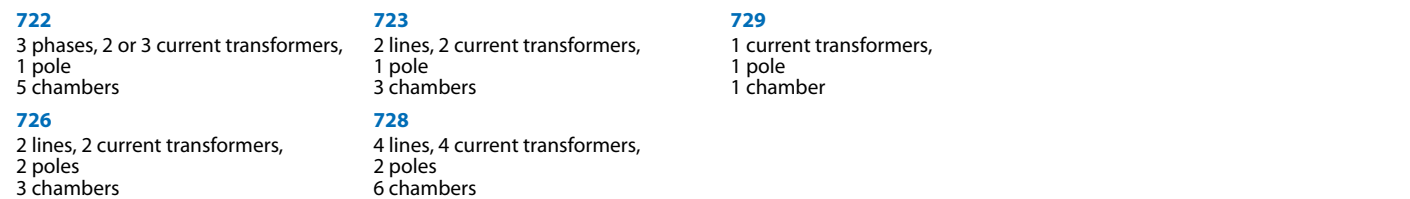
00720 00721 00724 00725



00727 00730 00731

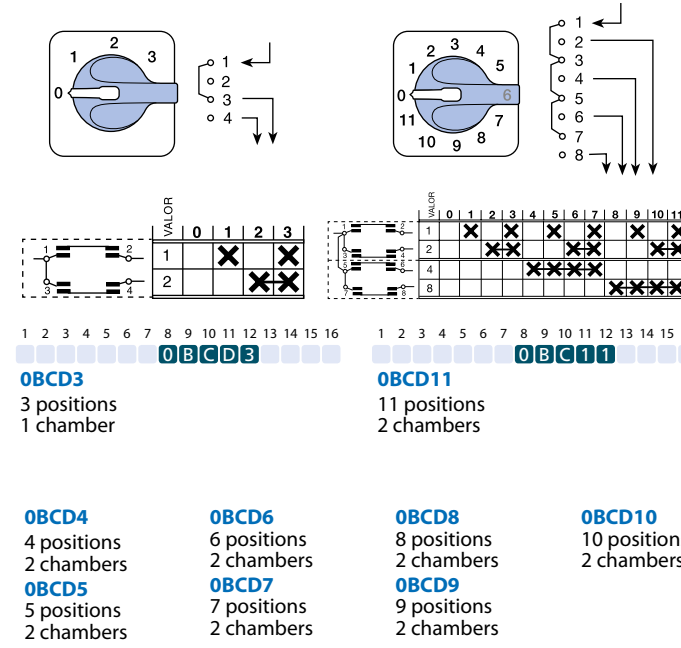


00732 00733 00733



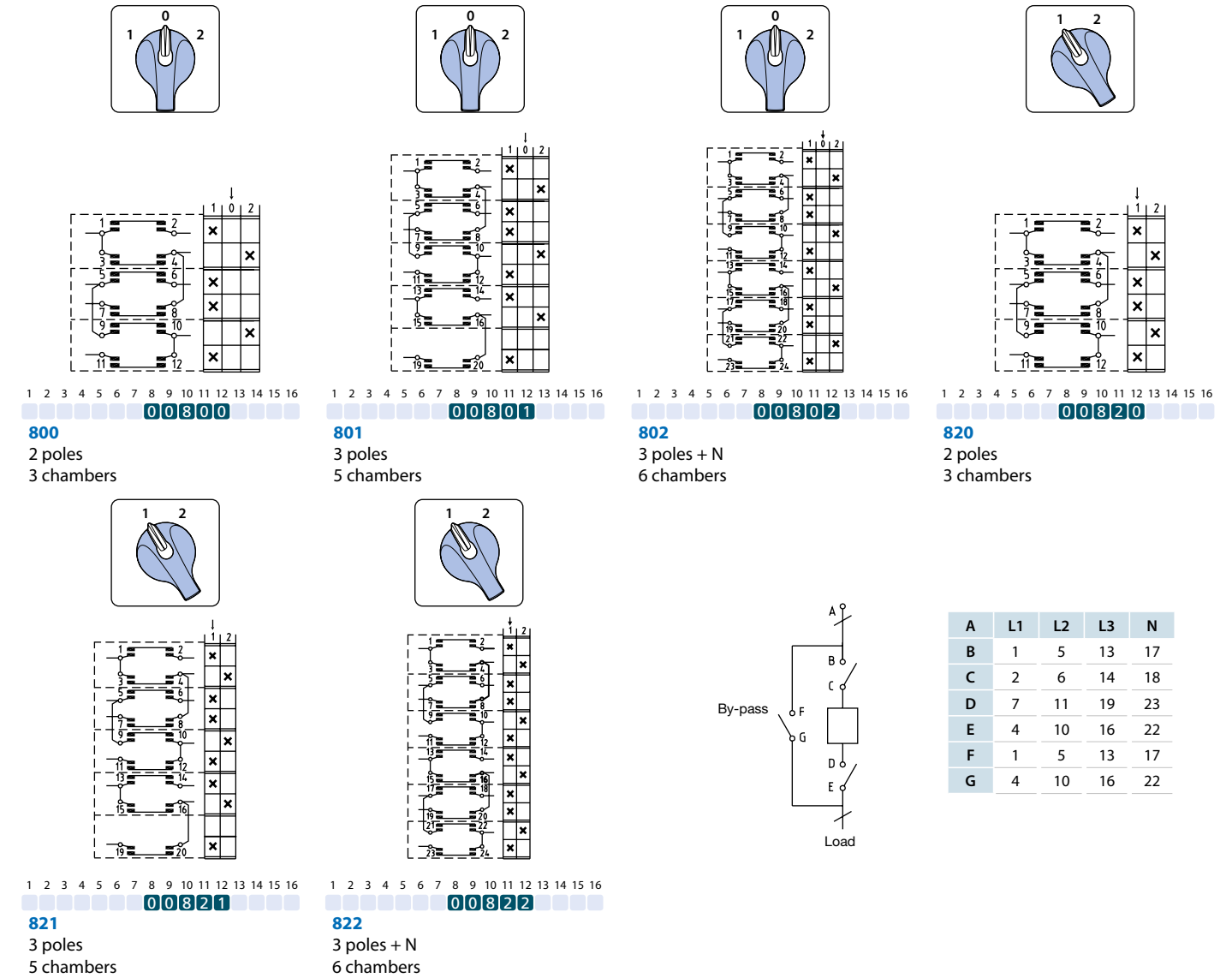
To view these wiring diagrams please visit our download area on www.telergon.com

Switches for B.C.D. codification with "Off"

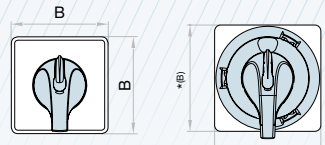


To view these wiring diagrams please visit our download area on www.telergon.com

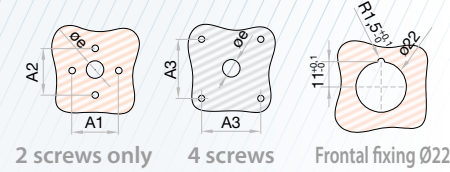
By-pass switches



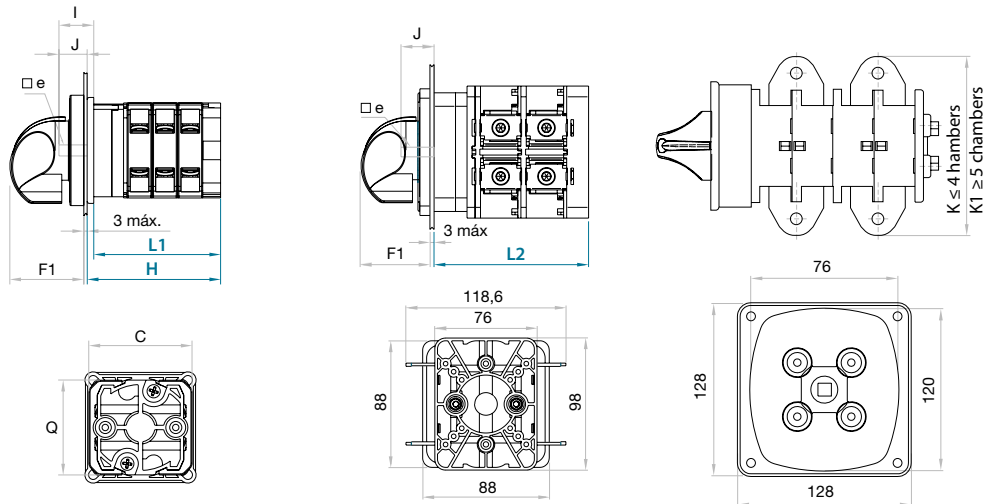
T Door mounting



Door mounting drilling



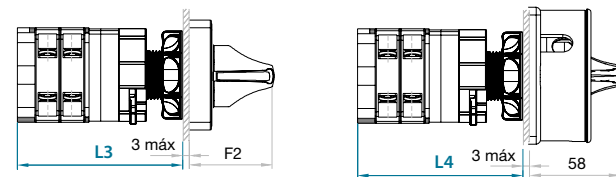
Note:
The cam switches allow a construction up to 12 chambers (24 contacts).
It's necessary to distribute in several columns (maximum three of 12 chambers each) when the number of contacts is higher than 24, so we use the tandem drives D200 or D201.
Depending on the number of contacts to be switched simultaneously, it's possible to supply up to 14 chambers switches in size 0.



Size	Series	A1	øA1	A2	øA2	A3	øA3	B	C	øe	□e	Q	F1	I	J	K	K1
0	T12 T20	32	4,5	-	4,5	36	4,5	50	46,5	12	5	46	33,5	18	15	-	-
1	T16 T25 T32 T40	45	4,5	-	4,5	48	4,5	65	60,5	12	5	57,5 64,5	36	20	16,8	-	-
2	T50 T63 T80 T100 T125 T175	-	-	60	5,5	68	5,5	94	66 84,5	12	7	80 89	45	24,5	20,5	-	-
3	T200 T250 T315 T400 T500 T630 T800	-	-	-	-	108	6,5	128	76	16	10	120	67	-	40	150 176 218	-

Size	Series	Chambers														
		1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□	13□	14□	
0	T12 T20	L1	34,5	46	57,5	69	80,5	92	103,5	115	126,5	138	149,5	161	172,5	184
		H	37,5	49	60,5	72	83,5	95	106,5	118	129,5	141	152,5	164	175,5	187
1	T16 T25 T32 T40	L1	46,4	60,6	74,8	89	103,2	117,4	131,6	145,8	160	174,2	188,4	202,6	*(1)	*(1)
		H	49,6	63,8	78	92,2	106,4	120,6	134,8	149	163,2	177,4	191,6	205,8	*(1)	*(1)
2	T50 T63 T80 T100 T125 T175	L1	49,8	67,3	84,8	102,3	119,8	137,3	154,8	172,3	189,8	207,3	224,8	242,3	*(1)	*(1)
		H	53	70,5	88	105,5	123	140,5	158	175,5	193	210,5	228	245,5	*(1)	*(1)
3	T200 T250 T315 T400 T500 T630 T800	L1	58,5	78,5	98,5	118,5	138,5	158,5	178,5	198,5	218,5	238,5	258,5	278,5	*(1)	*(1)
		H	62,5	82,5	102,5	122,5	142,5	162,5	182,5	202,5	222,5	242,5	262,5	282,5	*(1)	*(1)
1	T100 T125 T175	L1	67	94	121	147,5	174	201	227,5	254	281	307,5	334	361	*(1)	*(1)
		H	71	98	125	151,5	178	205	231,5	258	285	311,5	338	365	*(1)	*(1)
2	T200 T250 T315 T400 T500 T630 T800	L1	80,8	114,8	148,8	182,8	216,8	250,8	284,8	318,8	352,8	386,8	420,8	454,8	*(1)	*(1)
		H	95	135	175	215	255	295	335	375	415	455	495	535	*(1)	*(1)
3	T400 T500 T630 T800	L1	135	215	295	375	455	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)
		H	175	295	415	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)

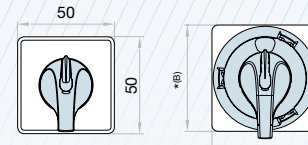
*(1) Tandem drive D200/D201



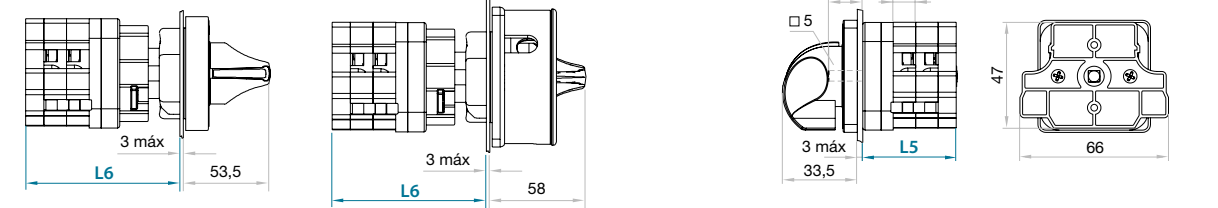
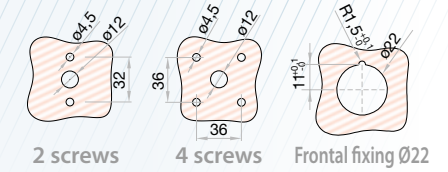
Size	Series	Chambers *(ch)							
		1□	2□	3□	4□	5□	6□	F2	
0	T12 T20	L3	63,5	75	86,5	98	109,5	121	53,5
1	T16 T25 T32 T40	L4	75,5	89,5	103,8	118	-	-	55,5
		H	78,8	96,3	116,8	131,3	-	-	55,5

*(ch) Central quick fixing ø22 - maximum number of chambers supported.

TB Door mounting

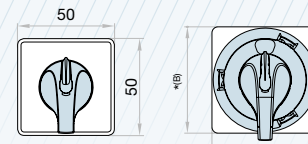


Door mounting drilling

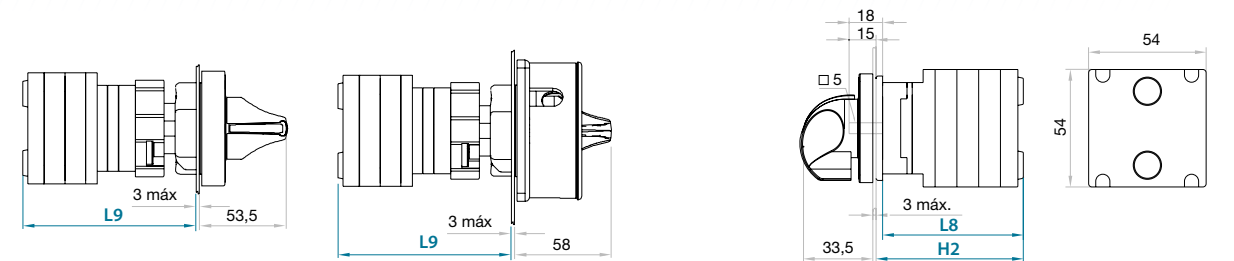
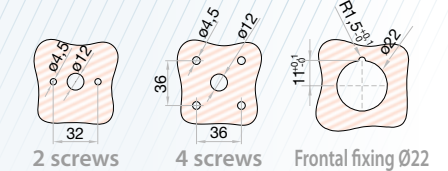


L5	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L6	31,5	41,5	51,5	61,5	71,5	81,5	91,5	101,5	111,5	121,5	131,5	141,5
	60,5	70,5	80,5	90,5	100,5	110,5	-	-	-	-	-	-

TF Door mounting

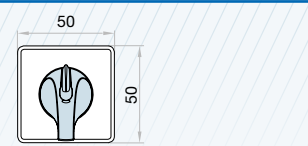


Door mounting drilling

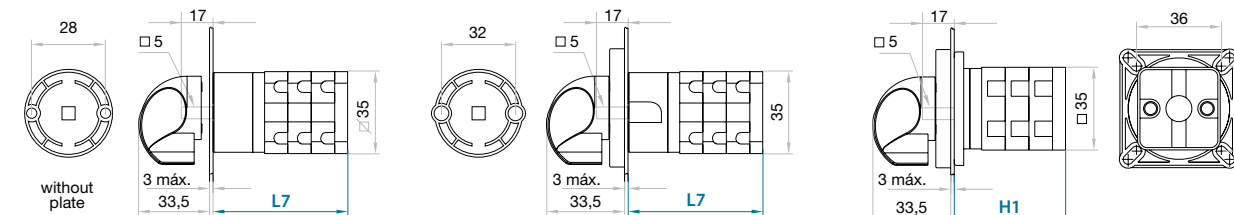
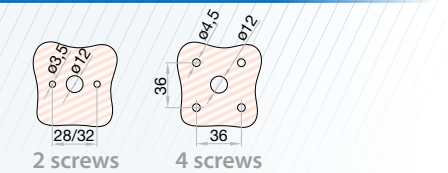


L8	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L9	45	55	65	75	85	95	105	115	125	135	145	155
H2	73,5	83,5	93,5	103,5	113,5	123,5	-	-	-	-	-	-
	48	58	68	78	88	98	108	118	128	138	148	158

TP Door mounting

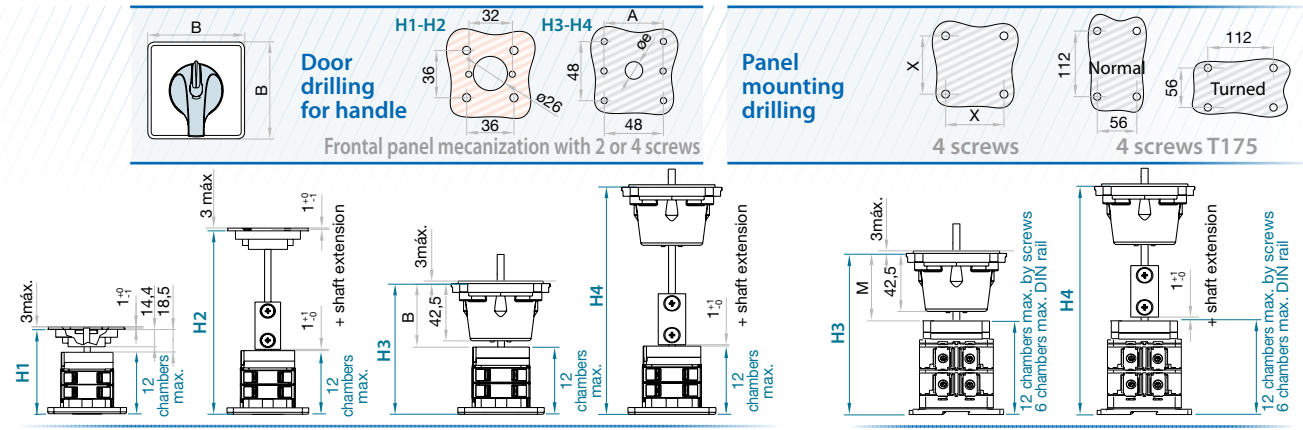


Door mounting drilling



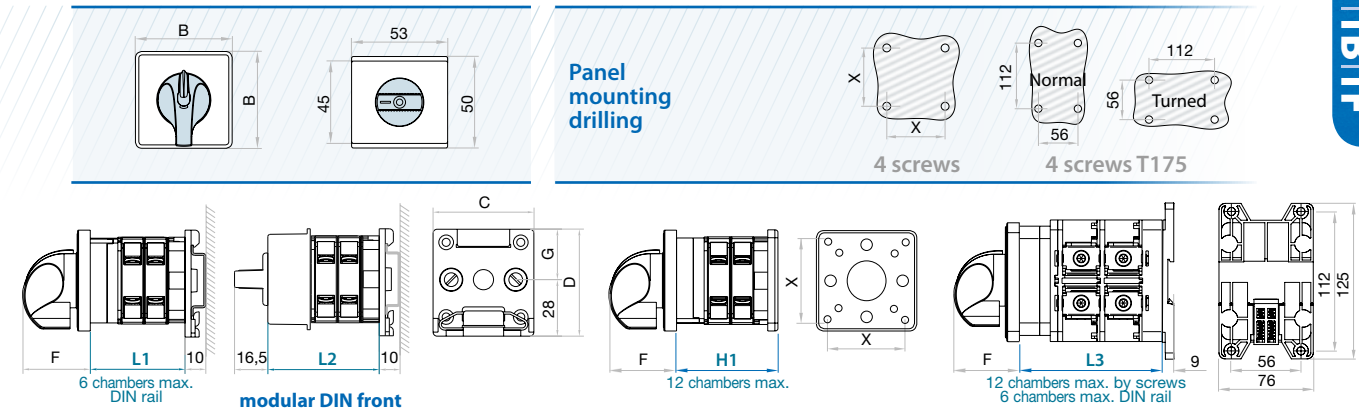
L7	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
H1	37,5	47	56,5	66	75,5	85	94,5	104	113,5	123	132,5	142
	26,5	36	45,5	55	64,5	74	83,5	93	102,5	112	121,5	131

T Base mounting with clutch device



Size	Series	Chambers				A	B	øe	M	X	
		H1	H2	H3	H4						
0	T12 T20	min	56	+11,5	94	+11,5	32	50	12	45,5	36
		max	-	-	256	-	283	-	-	-	-
1	T16 T25	min	-	-	97,1	+14,2	32	65	12	47,5	48
		max	-	-	297,1	-	32	65	12	47,5	48
2	T50 T63 T80	min	-	-	100,5	+17,5	32	65	12	47,5	48
		max	-	-	300,5	-	32	65	12	47,5	48
3	T100 T125	min	-	-	114,5	+20	60	94	12	52	68
		max	-	-	314,5	-	60	94	12	52	68
3	T175	min	-	-	123	+27	60	94	12	52	68
		max	-	-	323	-	60	94	12	52	68
3	T200	min	-	-	141,8	+34	60	94	12	52	-
		max	-	-	341,8	-	60	94	12	52	-

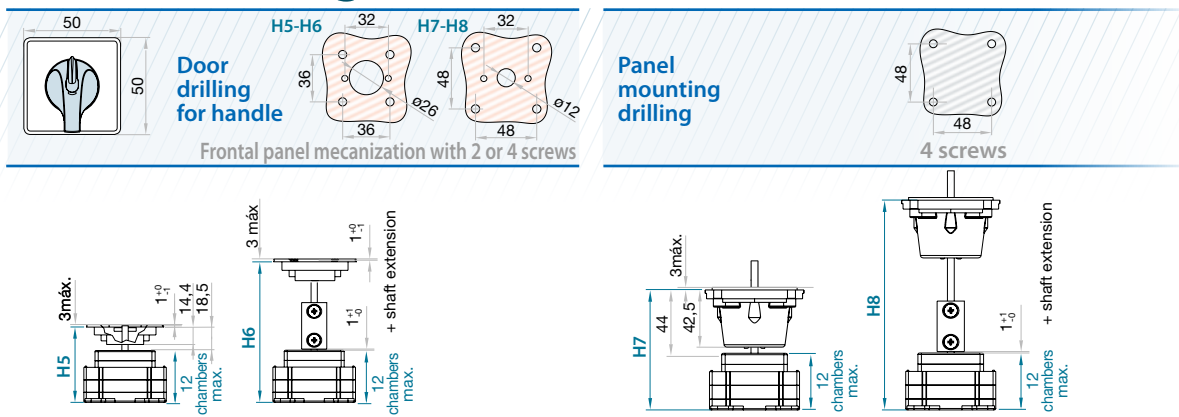
T Base mounting with screws or DIN rail (direct handle)



Size	Series	Chambers						B	C	D	F	G	X	
		1	2	3	4	5	6							
0	T12 T20	L1	34,5	46	57,5	69	80,5	92	50	50	53	33,5	25	-
		L2	-	53,5	65	76,5 ^(*)	-	-	+11,5	-	50	53	-	25
		H1	37,5	49	60,5	72	83,5	95	50	-	-	33,5	-	36
1	T16 T25	L1	46,4	60,6	74,8	89	-	-	+14,2	65	50	53	36	25
		H1	49,6	63,8	78	92,2	106,4	120,6	65	-	-	36	-	48
		L1	49,8	67,3	84,8	102,3	-	-	+17,5	65	-	-	36	-
2	T32 T40	H1	53	70,5	88	105,5	123	140,5	65	-	-	36	-	48
		H1	62,5	82,5	102,5	122,5	142,5	162,5	+20	94	-	-	45,5	-
		H1	71	98	125	152	179	206	+27	94	-	-	45,5	-
3	T100 T125	L3	80,8	114,8	148,8	-	-	-	+34	94	-	-	45,5	-
		H1	95	135	175	215	255	295	+40	132	-	-	67	-
		H1	95	135	175	215	255	295	+40	132	-	-	67	-

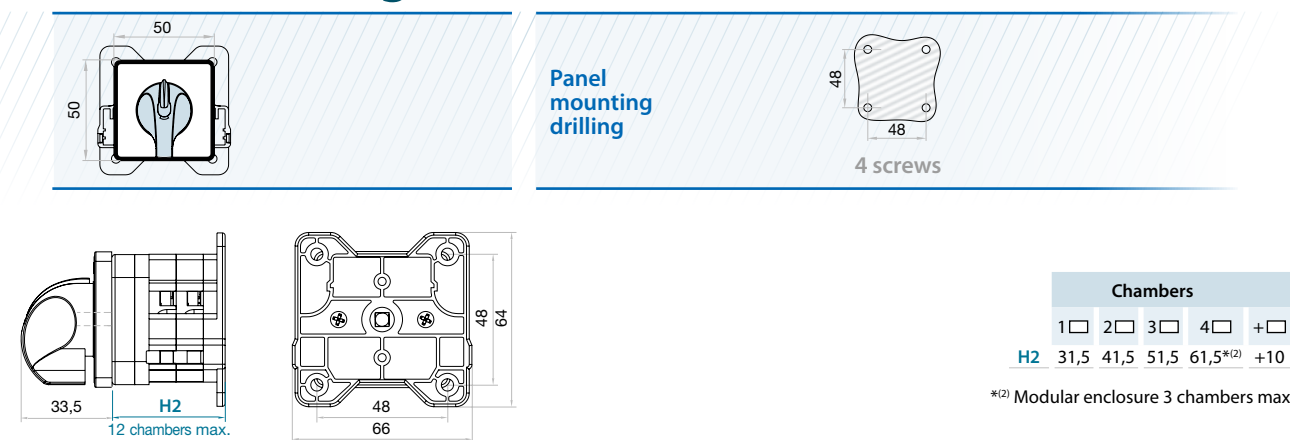
^(*) Modular enclosure 3 chambers max

TB Base mounting with clutch device



Size	Series	Chambers				A	B	øe	M	X
		H5	H6	H7	H8					
0	TB20 TB25 TB32	min	46	+10	84	+10	75,5	113	275,5	+10
		max	-	-	246	-	75,5	113	275,5	+10

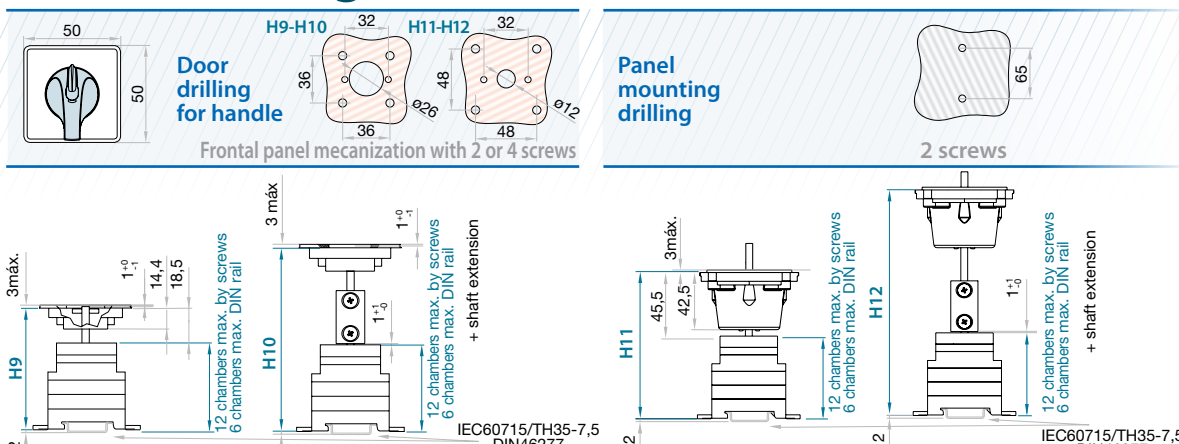
TB Base mounting with screws (direct handle)



Chambers	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
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57	58
59	60
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63	64
65	66
67	68
69	70
71	72
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79	80
81	82
83	84
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89	90
91	92
93	94
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197	198
199	200

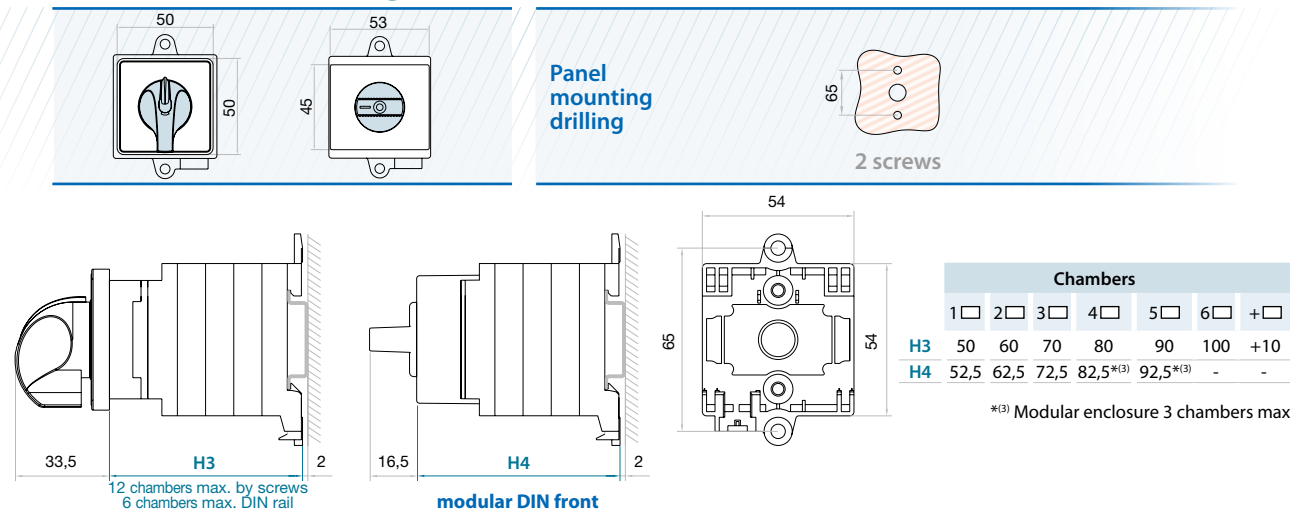
^(*) Modular enclosure 3 chambers max

TF Base mounting with clutch device



Size	Series	Chambers				A	B	øe	M	X
		H9	H10	H11	H12					
0	TF12 TF16 TF25	min	65,5	+10	103,5	+10	92,5	130,5	292,5	+10
		max	-	-	265,5	-	92,5	130,5	292,5	+10

TF Base mounting with screws or DIN rail (direct handle)



Chambers	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
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189	190
191	192
193	194
195	196
197	198
199	200

^(*) Modular enclosure 3 chambers max



Technical specifications

According to IEC 60947-3			Size 0				Size 1				Size 2				Size 3									
			T12	T20	T16	T25	T32	T40	T50	T63	T80	T100	T125	T175	T200	T250	T315	T400	T630	T800	T1250	T1600		
Rated thermal current	Ith	A	16	25	25	32	40	50	63	80	80	125	125	200	200	250	315	400	630	800	1000	1600		
Rated insulation voltage	Ui	V	500	500	690	690	690	690	690	690	690	690	1000	690	690	690	690	690	690	690	690	690		
Rated impulse withstand voltage	Uimp	kV	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
			Ue																					
AC rated operational current	Ie	Ue 415V AC21A	A	16	25	25	32	40	50	63	80	80	125	125	200	200	250	315	315	315	400	500	500	
		Ue 415V AC22A	A	16	20	25	32	40	50	63	80	80	115	115	200	200	250	315	250	315	315	315	400	
AC rated operational power (Rated operational frequency 50/60 Hz)	Pe	3x240V AC23A	kW	4	4	5,5	7,5	11	15	18,5	22	22	30	30	55	55	67	75	55	55	55	55	55	
		3x240V AC3	kW	3	4	5,5	5,5	7,5	11	15	18,5	18,5	30	30	37	45	54	61	45	45	45	45	45	
		3x240V AC4	kW	1,1	1,5	2,2	3	4	4	5,5	7,5	7,5	11	11	15	15	18	20	15	15	15	15	15	
		1x240V AC3	kW	1,5	2,2	3	4	5,5	5,5	7,5	11	11	15	15	18,5	22	22	22	22	22	22	22	22	
		1x240V AC4	kW	0,37	0,55	0,75	1,1	1,5	2,2	3	3	3	4	4	5,5	7,5	9	10	7,5	7,5	7,5	7,5	7,5	
		3x415V AC23A	kW	5,5	7,5	11	11	15	18,5	30	37	37	45	45	90	90	115	130	90	90	90	90	90	90
		3x415V AC3	kW	4	5,5	7,5	7,5	11	15	22	30	30	37	37	75	75	95	108	75	75	75	75	75	75
		3x415V AC4	kW	2,2	3	4	5,5	5,5	7,5	11	11	11	15	15	18,5	22	28	31	22	22	22	22	22	22
		1x400V AC3	kW	2,2	3	4	5,5	7,5	7,5	15	18,5	18,5	18,5	20	37	47	53	37	37	37	37	37	37	37
		1x400V AC4	kW	0,75	1,1	1,5	1,5	2,2	3	4	5,5	5,5	7,5	7,5	11	11	14	16	11	11	11	11	11	11
Rated conditional short-circuit current		kA	10	10	10	10	10	10	15	15	15	15	15	15	15	15	15	15	10	10	10	10		
Rated maximum current	gL-gG	A	25	25	32	32	50	50	80	80	80	125	125	160	200	250	315	400	630	800	1000	2x800		
Rated breaking capacity	400V; cos φ=0,45	A	80	100	160	200	256	320	504	504	504	640	640	1600	1450	2000	2240	1450	1450	1450	1450	1450		
Rated short-time withstand current (1 sec)		A	240	400	500	650	725	800	1600	1600	1600	2500	2500	3500	4400	4400	4400	6000	7000	7600	8000	8200		
Mechanical durability (thousand of operations)			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	-	-	-	-	-	-	-	-	-		
Mechanical durability (number of operations)			-	-	-	-	-	-	-	-	-	-	-	30000	30000	30000	30000	30000	30000	30000	30000	30000		
Maximum connection capacity																								
Rigid copper conductor		mm ²	2x4	2x4	2x6	2x6	2x10	2x10	16/25 ^{*(2)}	16/25 ^{*(2)}	16/25 ^{*(2)}	35/50 ^{*(2)}	35/50 ^{*(2)}	95	95	120	185	-	-	-	-	-		
Flexible copper conductors		mm ²	2x2,5	2x2,5	2x4	2x4	2x6	2x6	10/16 ^{*(2)}	10/16 ^{*(2)}	10/16 ^{*(2)}	16/35 ^{*(2)}	16/35 ^{*(2)}	95	95	120	185	-	-	-	-	-		

According to UL508 - CAN / CSA C22.2 N° 14			Size 0				Size 1				Size 2				Size 3							
			T12	T20	T16	T25	T32	T40	T50	T63	T80	T100	T125	T175	T200	T250	T315	T400	T630	T800	T1250	T1600
Rated thermal current	Ith	A	12	20	16	25	32	40	63	63	63	100	100	200	200	200	400	630	800	-	-	
General use rating		A	12	20	16	25	32	40	63	63	63	100	100	200	200	200	200	200	200	-	-	
		Vac	300	300	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	-	-
AC rated operational power	3x240V	HP	2	5	5	7,5	10	15	20	20	20	30	30	25	60	60	60	60	60	-	-	
	3x480V	HP	-	-	10	15	20	25	40	40	40	50	50	60	75	75	75	75	75	-	-	
	3x600V	HP	-	-	10	15	20	25	40	40	40	50	50	50	60	60	60	60	60	-	-	

*(1) 500V size "0" *(2) With extension terminals *(3) With phase barriers

Normal service conditions*

- Ambient air temperature (°C): -5°...+40°.
- Maximum altitude: 2.000 m.
- Maximum humidity: 90%.
- Pollution degree: 3 (standard for industrial applications).
- Rated frequency at AC utilization categories: 50/60 Hz.

- Rated duties at utilization categories AC21A, AC22A y AC23A: Continuing (8 hours); uninterrupted.
- Rated duties at utilization categories AC3 and AC4: Intermittent; temporary
- Switching direct currents: For L/R<50msg, rated operational current (Ie) can be dealt with up to 30Vdc. With higher voltages, several contacts have to be connected in series.

* Please consult for other service conditions.



According to IEC 60947-3			Size 0						
			TB20	TB25	TB32	TF12	TF16	TF25	
Rated thermal current	Ith	A	20	25	32	20	25	32	
Rated insulation voltage	Ui	V	500	500	500	690	690	690	
Rated impulse withstand voltage	Uimp	kV	6	6	6	6	6	6	
			Ue						
AC rated operational current	Ie	Ue 415V AC21A	A	20	25	32	20	25	32
		Ue 415V AC22A	A	20	25	32	20	25	32
		Ue 415V AC23A	A	20	25	32	-	-	-
AC rated operational power (Rated operational frequency 50/60 Hz)	Pe	3x240V AC23A	kW	5,4	6,7	8,6	4	5,5	7,5
		3x240V AC3	kW	3,7	4,6	5,9	4	5,5	5,5
		3x240V AC4	kW	2,9	3,7	4,6	1,5	2,2	3
		1x240V AC3	kW	2,1	2,7	4	2,2	3	4
		1x240V AC4	kW	1	1,25	1,5	0,55	0,75	1,1
		3x415V AC23A	kW	9,3	11,7	15	7,5	11	11
		3x415V AC3	kW	6,4	8	10,3	5,5	7,5	7,5
		3x415V AC4	kW	3,1	3,8	5,5	3	4	5,5
		1x400V AC3	kW	3,6	4,5	5,7	3	4	5,5
		1x400V AC4	kW	1,7	2,2	3	1,1	1,5	1,5
Rated conditional short-circuit current		kA	5	5	5	5	5	5	
Rated maximum current	gL-gG	A	35	35	35	20	25	32	
Rated breaking capacity	400V; cos φ=0,45	A	160	200	256	100	160	200	
Rated short-time withstand current (1 sec)		A	240	400	500	350	400	500	
Mechanical durability (thousand of operations)			1000	1000	1000	1000	1000	1000	
Maximum connection capacity									
Rigid copper conductor		mm ²	1x10	1x10	1x10	1x10	1x10	1x10	
Flexible copper conductors		mm ²	1x6	2x4	1x6	2x4	1x6	1x6	

According to UL508 - CAN / CSA C22.2 N° 14			Size 0					
			TF12	TF16	TF25			
Rated thermal current	Ith	A	-	-	-	16	20	25
General use rating		A	-	-	-	16	20	25
		Vac	-	-	-	600	600	600
AC rated operational power	3x240V	HP	-	-	-	2	5	7,5
	3x480V	HP	-	-	-	5	10	12
	3x600V	HP	-	-	-	5	10	15

Approvals TB:



Approvals TF:



Approvals TP:

