

Description

Single pole thermal circuit breaker with press-to-reset, tease-free, trip-free, snap action mechanism. Type 2-5000 is available with optional manual release (-H), type 2-5700 can be supplied as a push-push switch/circuit breaker (R-type TO CBE to EN 60934 in press-to-reset configuration; M-type when fitted with manual release -H; S-type with push-push operation). Fitted with flange or threadneck for panel mounting. Options include an additional unprotected circuit tap (-A3). Approved to CBE standard EN 60934 (IEC 60934).

The 2-5700 is also available including a C14 appliance inlet as completely assembled power entry module (optionally with or without line filter).

Typical applications

Motors, transformers, solenoids, battery chargers, power supplies, appliances, machinery, extra low voltage systems.

Ordering information

Type No.

2-5000 flange mounting

2-5700 threadneck panel mounting

Threadneck design - type 2-5700 only

iG1 Plastic threadneck 3/8-27UNS-2A with screwed-on metal hexnut and plastic knurled nut⁽¹⁾

iG2 Plastic threadneck M12x1 with screwed-on hexnut and metal knurled nut

Terminal design

P10 blade terminals according to IEC 61210, 6.3 x 0.8 mm

K10 screw terminals M4x6

Manual release (optional)

H manual release facility (type 2-5000 only)

DD push to release/push to reset (type 2-5700 only)

Current ratings

0.05...25 A

2-5700 - iG1 - P10 - DD - 8 A ordering example

⁽¹⁾ Use this version for configuration with XR38 power entry module

Please be informed that we have minimum ordering quantities to be observed.

Preferred types

Preferred types	Standard current ratings (A)												
	1	2	3	4	5	6	8	10	12	15	16	20	25
2-5700-iG1-P10-	x	x	x	x	x	x	x	x	x	x	x	x	x
2-5700-iG1-P10-DD			x	x	x	x	x	x	x	x	x	x	x
2-5700-iG2-P10-			x	x	x	x	x	x	x	x	x	x	x
2-5700-iG2-P10-DD			x	x	x	x	x	x	x	x	x	x	x

Compliance



Technical data

For further details please see: www.e-t-a.de/ti_e

Voltage rating	AC 250 V; DC 28 V (UL: AC 250 V; DC 50 V)	
Current rating range	0.05...25 A	
Typical life	AC 250 V / DC 28 V: 0.05...16 A 5,000 operations at 2 x I _N , inductive 17...25 A 5,000 operations at 2 x I _N , resistive	
Ambient temperature	-20...+60 °C (-4...+140 °F)	
Insulation coordination (IEC 60664, IEC 60934)	Overvoltage category II (impulse withstand voltage 2,5kV), pollution degree 2	
Dielectric strength	II to operating area, Test voltage AC 3000 V	
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity I _{cn}	0.05...2.5 A	8 x I _N
	3...5 A	20 x I _N
	6...12 A	200 A
	13...25 A	300 A
Interrupting capacity (UL 1077)	I _N	U _N S.C.
	0.05...20 A	AC 250 V 2,000 A, C1a
	0.05...25 A	DC 50 V 2,500 A, C1 ⁽²⁾
	⁽²⁾ Back-up fuse approx. 2 x rated current of the circuit breaker, minimum 15 A	
Degree of protection (IEC 60529)	operating area IP40 terminal area IP00	
Vibration	8 g (57-500 Hz) ± 0.61 mm (10-57 Hz), to IEC 60068-2-6, test Fc, 10 frequency cycles/axis	
Shock	25 g (11 ms) to IEC 60068-2-27, test Ea	
Corrosion	96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka	
Humidity	240 hours at 95 % RH to IEC 60068-2-78, test Cab	
Mass	approx. 29 g	

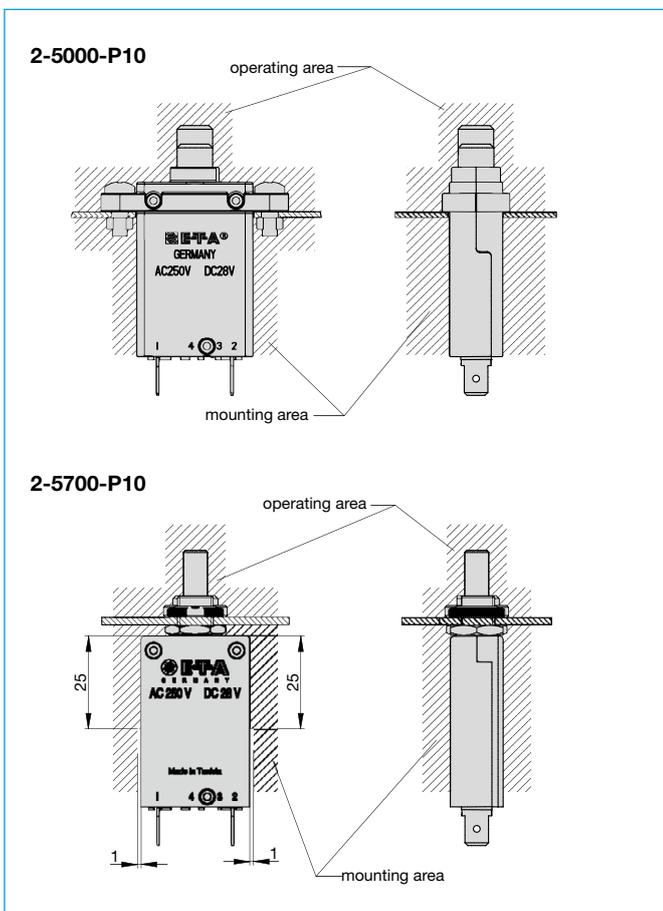
Approvals

Authority	Standard	Rated voltage	Current ratings
VDE	IEC/EN 60934	AC 250 V DC 28 V	0.05 A...25 A 0.05 A...25 A
UL	UL 1077	AC 250 V DC 50 V	0.05 A...20 A 0.05 A...25 A
CSA	C22.2 No 235	AC 250 V DC 50 V	0.05 A...20 A 0.05 A...25 A
CQC	GB 17701	AC 250 V DC 28 V	0.05 A...25 A 0.05 A...25 A

Standard current ratings and typical internal resistance values

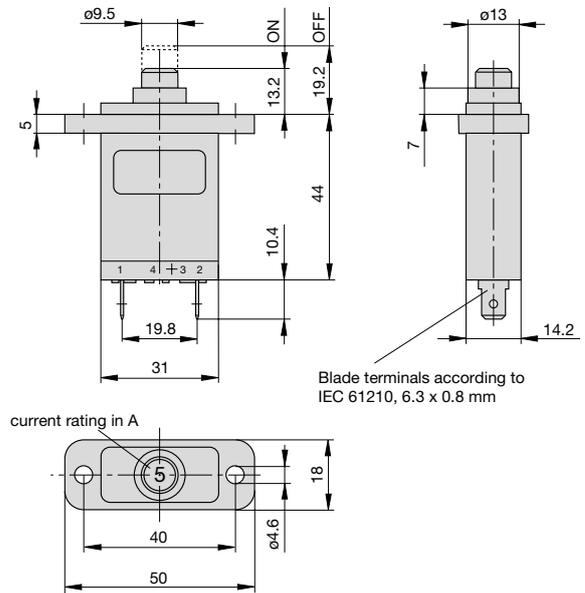
Current rating (A)	Internal resistance (Ω)	Current rating (A)	Internal resistance (Ω)
0.05	280	3	0.1
0.08	100	3.5	0.06
0.1	110	4	0.06
0.2	29	4.5	0.05
0.3	14	5	0.05
0.4	7	6	0.02
0.5	4.9	7	0.02
0.6	3.4	8	0.02
0.7	2.5	10	< 0.02
0.8	1.8	12	< 0.02
1	1.2	13	< 0.02
1.2	0.8	15	< 0.02
1.5	0.6	16	< 0.02
1.8	0.4	20	< 0.02
2	0.3	22	< 0.02
2.5	0.2	25	< 0.02

Installation drawings

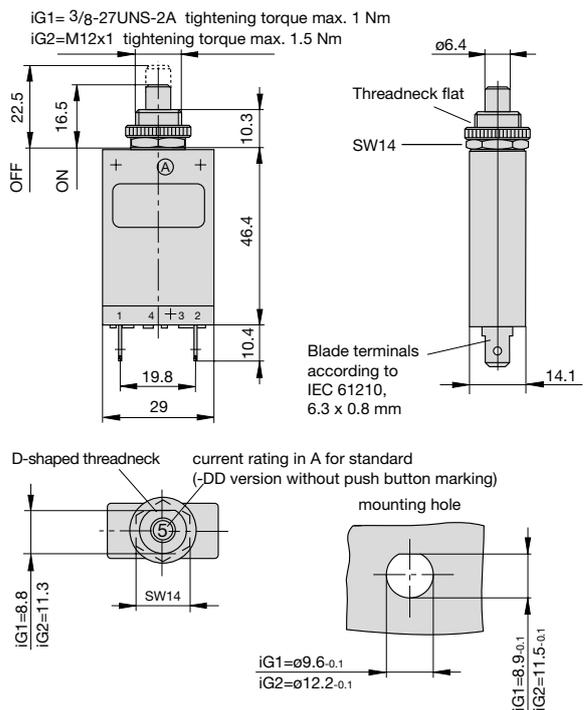


Dimensions

2-5000-P10

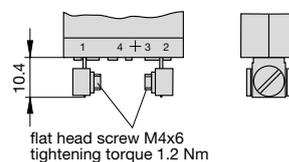


2-5700-P10

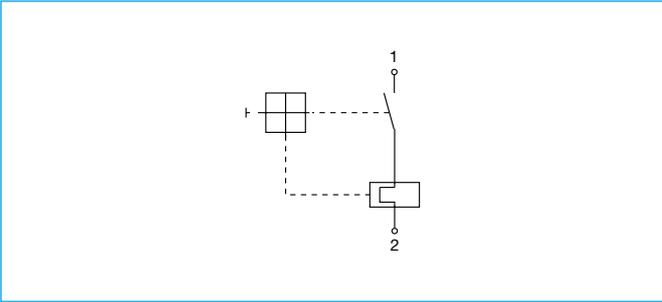


Terminal design

-K10

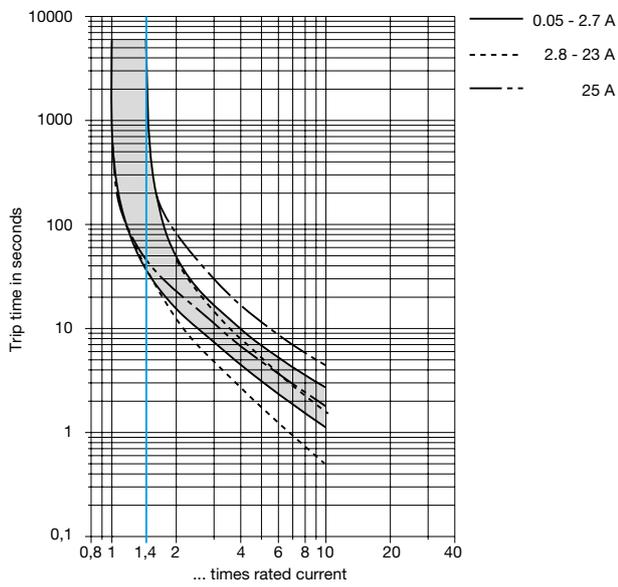


Internal connection diagrams



Typical time/current characteristics

Ambient temperature +23 °C/+73.4 °C

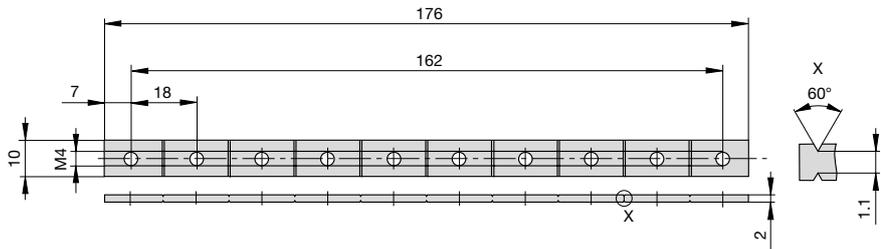


The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section Technical information.

Ambient temperature °F	-4	+14	+32	+73.4	+104	+122	+140
°C	-20	-10	0	+23	+40	+50	+60
Derating factor	0.76	0.84	0.92	1	1.08	1.16	1.24

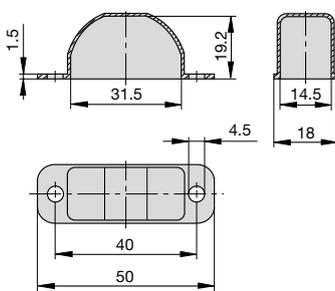
Accessories for types 2-5000 and 2-5700 with screw terminals -K10

**Bus bar
Y 303 563 01**

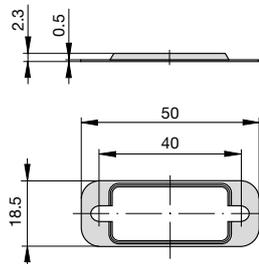


Accessories for type 2-5000

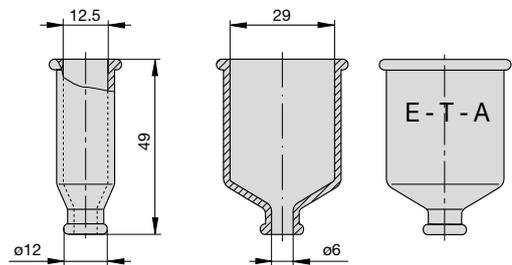
**Water splash cover, transparent
for push button
Y 300 728 01**



**Fixing plate
Y 301 056 02**

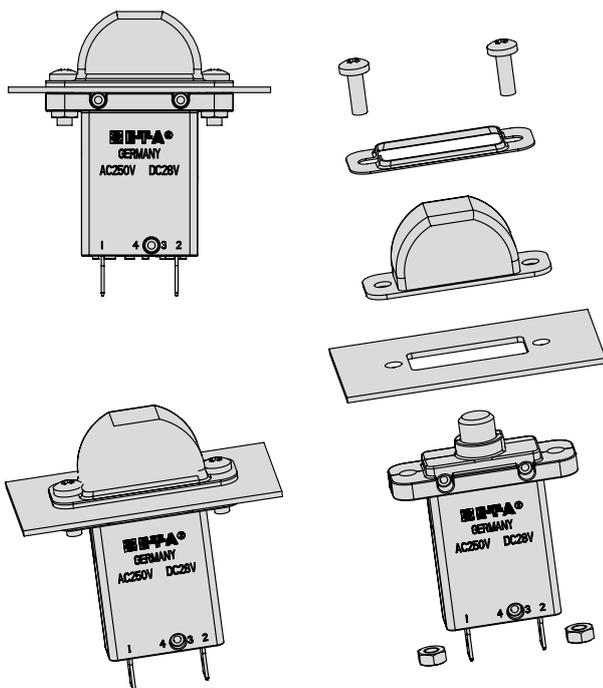


**Rear terminal shroud, transparent (IP20)
Y 300 476 01**

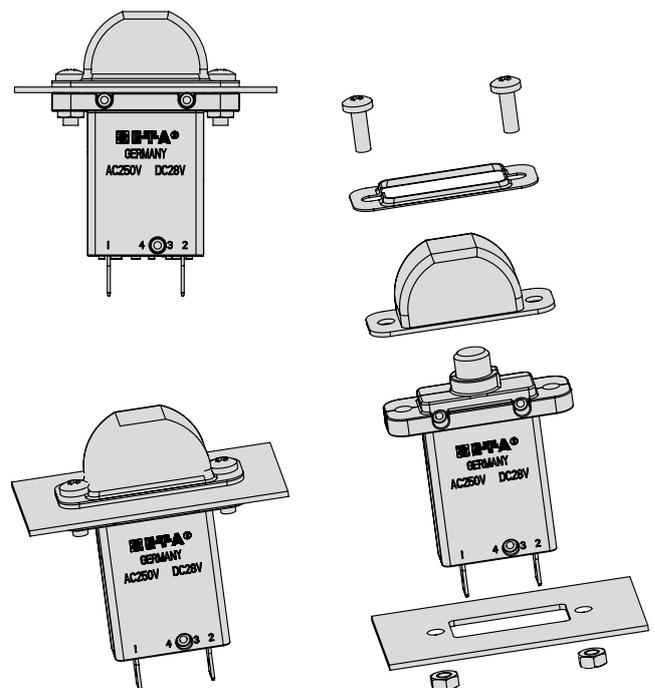


Mounting the protective cover with mounting plate:

Mounting option 1:
admissible for panel thicknesses of up to 1.5 mm



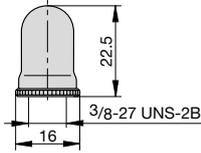
Mounting option 2:
for any panel thicknesses



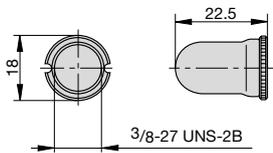
Accessories for type 2-5700

With 3/8" threadneck (-iG1)

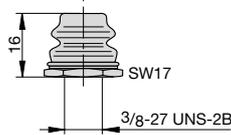
Water splash cover, transparent
X 200 799 01 (IP64)



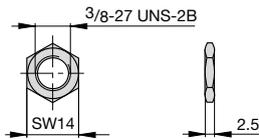
Water splash cover, transparent with special knurled nut
X 200 798 02 (IP64)



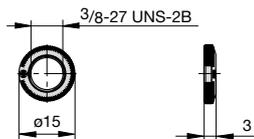
Protective cover with hexnut without O-ring (IP64)
Black:
X 210 739 01
Transparent:
X 201 296 03



Hexnut, nickel-plated
Y 300 192 01

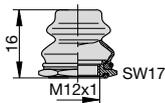


Plastic knurled nut, black
Y 307 117 02

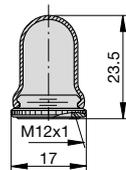


With M12 threadneck (-iG2)

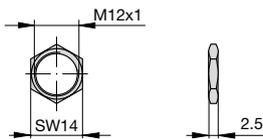
Protective cover with hexnut and O ring (IP66 and IP67)
Black:
X 200 801 03
Transparent:
X 200 801 08



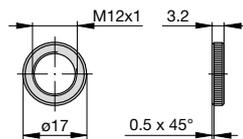
Water splash cover, transparent with knurled nut and O ring (IP64)
X 210 663 01 (IP64)



Hexnut, nickel-plated
Y 300 116 02



Metal knurled nut, nickel-plated
Y 302 065 01



All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.

