

## 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<sup>(1)</sup>

**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

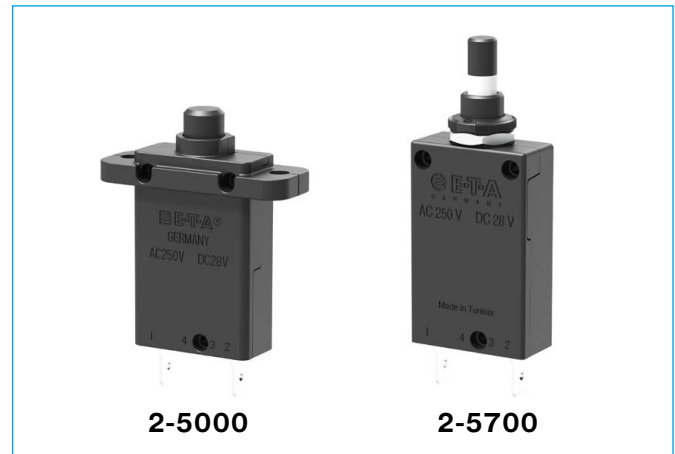
<sup>(1)</sup> Use this version for configuration with XR38 power entry module

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](http://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 <sub>N</sub> , inductive 17...25 A 5,000 operations at 2 x I <sub>N</sub> , 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 <sub>cn</sub>	0.05...2.5 A	8 x I <sub>N</sub>	
	3...5 A	20 x I <sub>N</sub>	
	6...12 A	200 A	
	13...25 A	300 A	
Interrupting capacity (UL 1077)	I <sub>N</sub>	U <sub>N</sub>	S.C.
	0.05...20 A	AC 250 V	2,000 A, C1a
	0.05...25 A	DC 50 V	2,500 A, C1 <sup>(2)</sup>
	<sup>(2)</sup> 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		

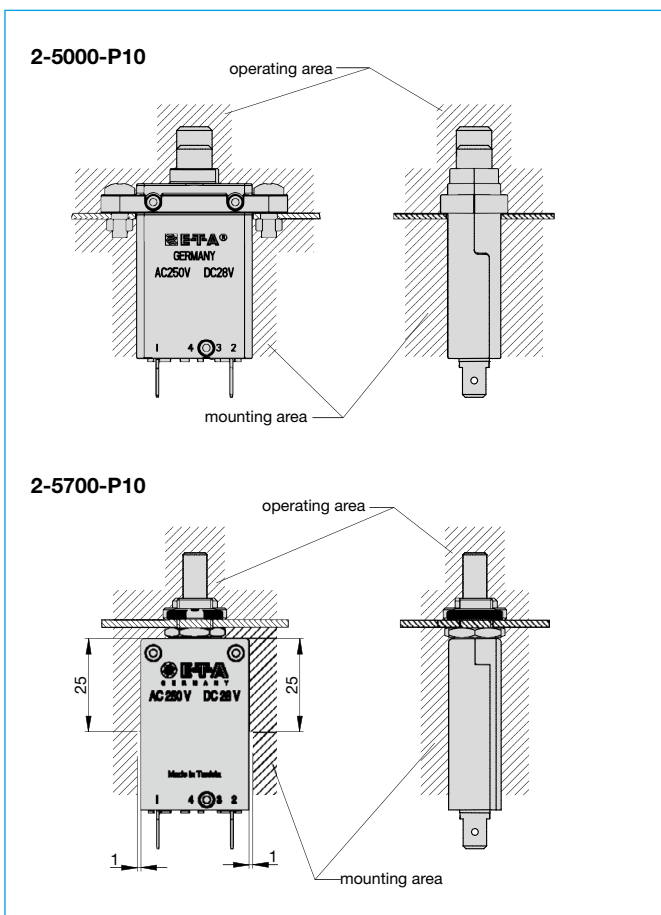
## Approvals

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

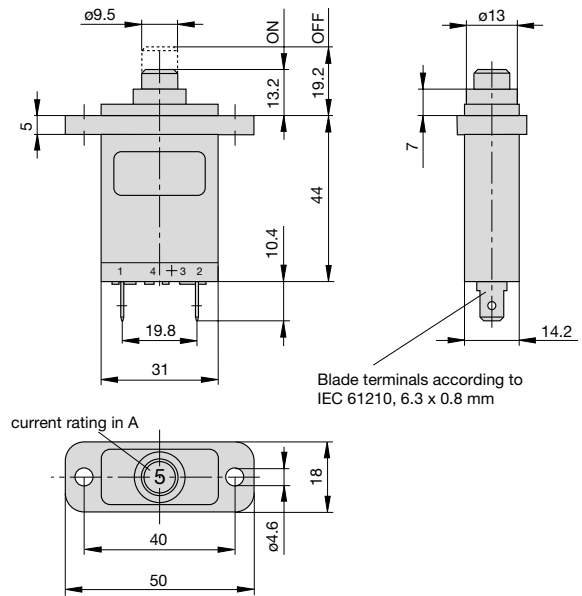
Current rating (A)	Internal resistance ( $\Omega$ )	Current rating (A)	Internal resistance ( $\Omega$ )
0.05	280	3	0.1
0.08	100	3.5	0.06
0.1	110	4	0.06
0.2	29	4.5	0.05
0.3	14	5	0.05
0.4	7	6	0.02
0.5	4.9	7	0.02
0.6	3.4	8	0.02
0.7	2.5	10	< 0.02
0.8	1.8	12	< 0.02
1	1.2	13	< 0.02
1.2	0.8	15	< 0.02
1.5	0.6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

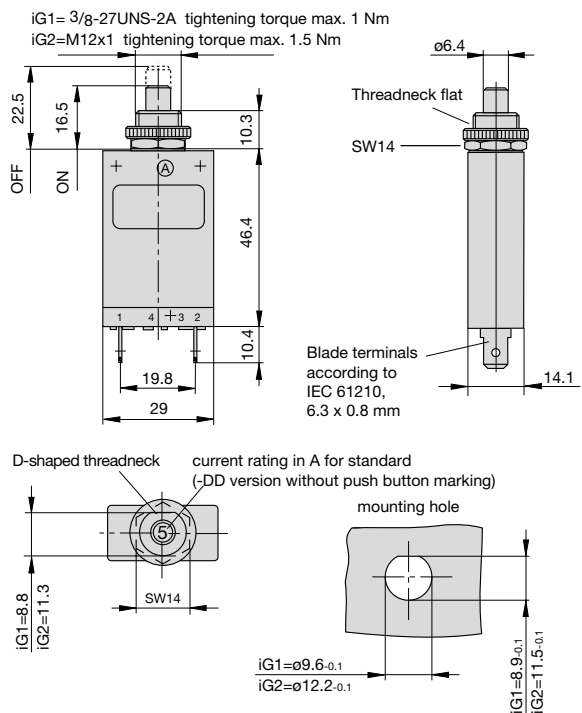


## Dimensions

### 2-5000-P10

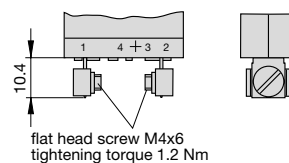


### 2-5700-P10

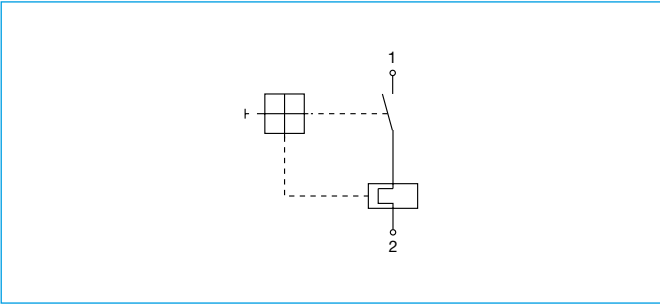


## Terminal design

### -K10

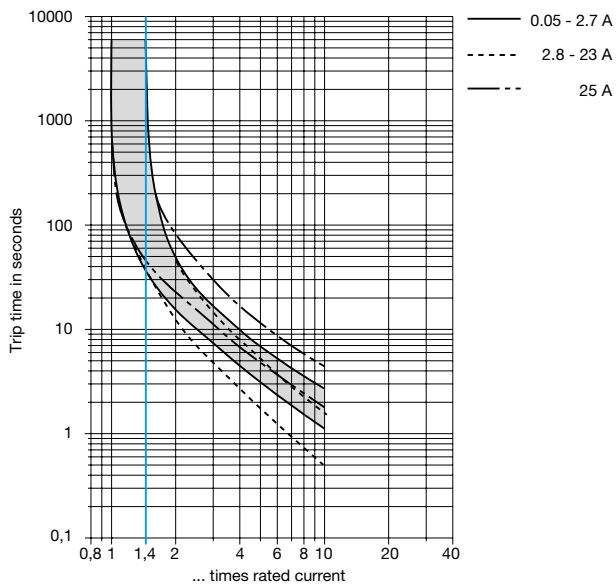


**Internal connection diagrams**



**Typical time/current characteristics**

Ambient temperature +23 °C/+73.4 °C

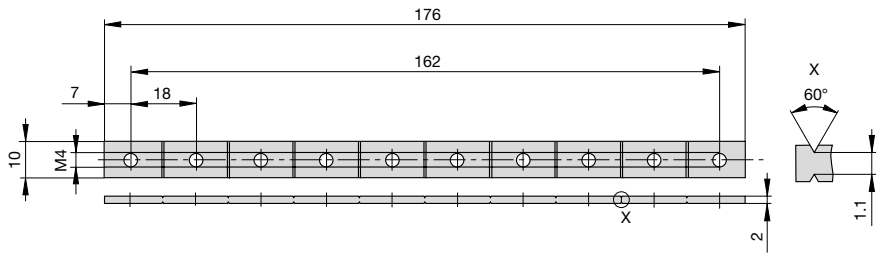


The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section Technical information.

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

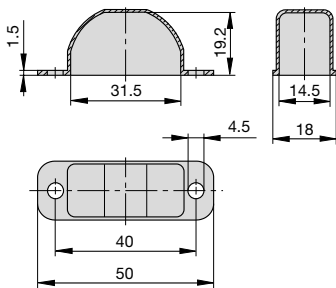
**Accessories for types 2-5000 and 2-5700 with screw terminals -K10**

**Bus bar  
Y 303 563 01**

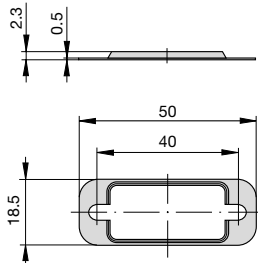


**Accessories for type 2-5000**

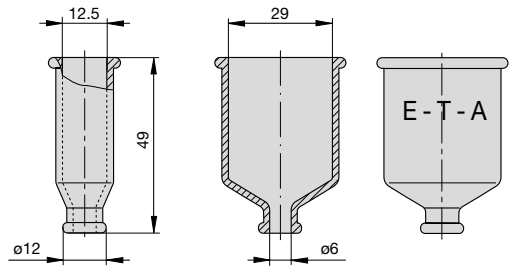
**Water splash cover, transparent  
for push button  
Y 300 728 01**



**Fixing plate  
Y 301 056 02**

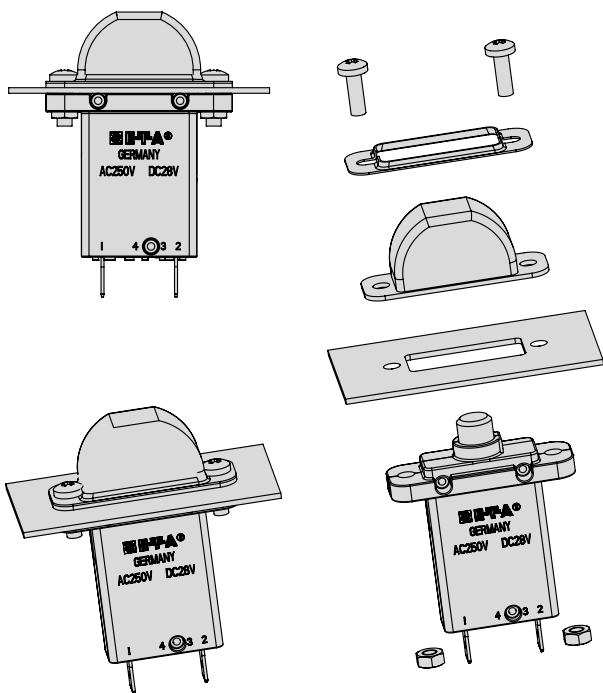


**Rear terminal shroud, transparent (IP20)  
Y 300 476 01**



**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

