

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).

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
(hardware bulk shipped)

Threadneck design – type 2-5700 only

iG1 moulded threadneck 3/8"-27UNS-2A

iG2 moulded threadneck M12x1

Terminal design

P10 blade terminals 6.3-0.8 mm (QC .250)

K10 screw terminals M4x6

Shunt terminal (optional) -P10 only

A3 shunt terminal (up to I_N 2.5 A/6 A max. load)

Manual release (optional)

H manual release facility (type 2-5000 only)

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

Current ratings

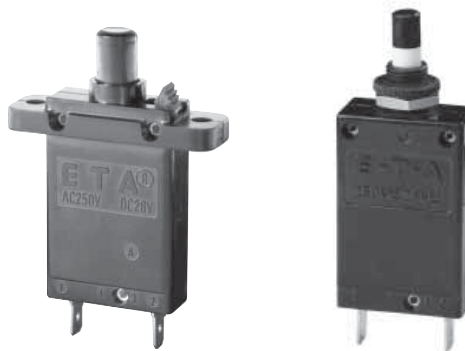
0.05...25 A

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

The exact part number required can be built up from the table of choices shown above. Ordering references for optional features should be omitted if not required.

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



2-5000-...

2-5700-...

Technical data

For further details please see chapter: Technical Information

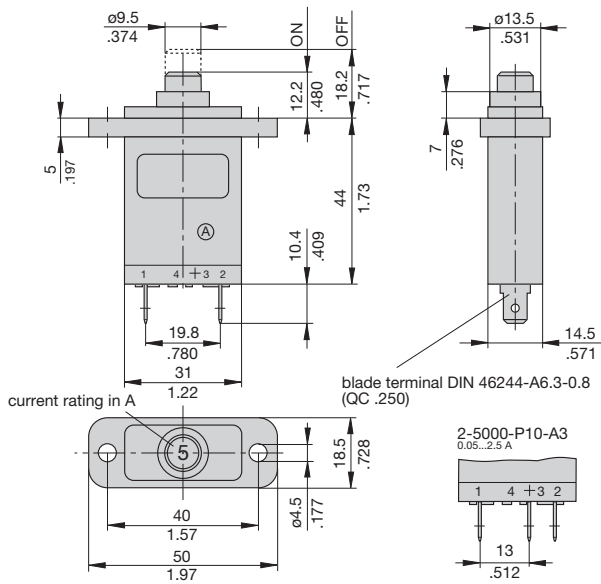
Voltage rating	AC 250 V; DC 28 V (UL: AC 250 V; DC 50 V)	
Current rating range	0.05...25 A	
Typical life	AC 250 V / DC 28 V: 0.05...16 A 5,000 operations at $2 \times I_N$, inductive 17...25 A 5,000 operations at $2 \times I_N$, resistive	
Ambient temperature	-20...+60 °C (-4...+140 °F)	
Insulation co-ordination (IEC 60664 and 60664 A)	rated impulse withstand voltage 2.5 kV	pollution degree 2 reinforced insulation in operating area
Dielectric strength (IEC 60664 and 60664A) operating area	test voltage AC 3,000 V	
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity I_{cn}	0.05...2.5 A 3...5 A 6...12 A 13...25 A	$8 \times I_N$ $20 \times I_N$ 200 A 400 A (higher interrupting capacity available to special order)
Interrupting capacity (UL 1077)	I_N 0.05...20 A 0.05...25 A	U_N AC 250 V 2,000 A DC 50 V 2,500 A (higher values upon request)
Degree of protection (IEC 60529/DIN 40050)	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

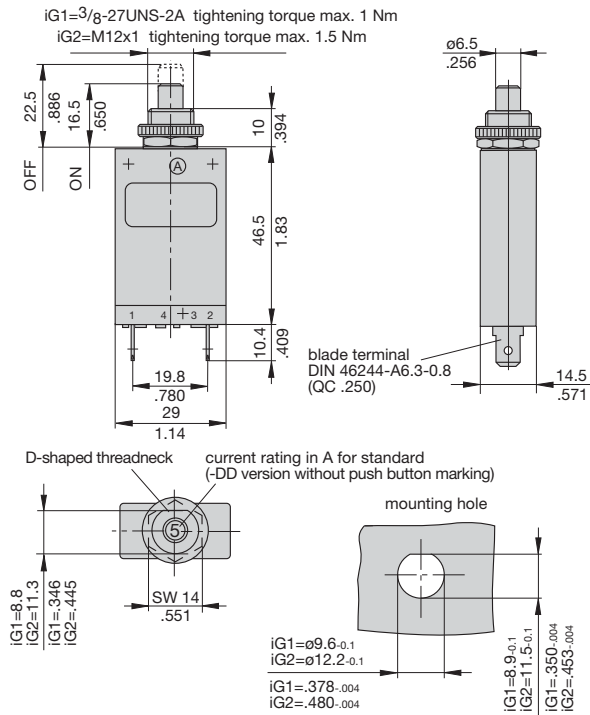
Authority	Voltage ratings	Current ratings
VDE (EN 60934)	AC 250 V; DC 28 V	0.05...25 A
CSA/ UL	AC 250 V; DC 50 V	0.05...20 A
SEV	AC 250 V; DC 28 V	0,05...25 A

Dimensions

2-5000-P10

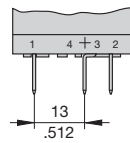


2-5700-P10
3/8

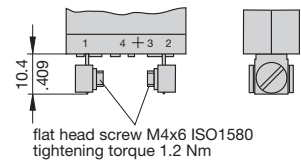


Terminal design

-P10-A3
0.05...2.5 A

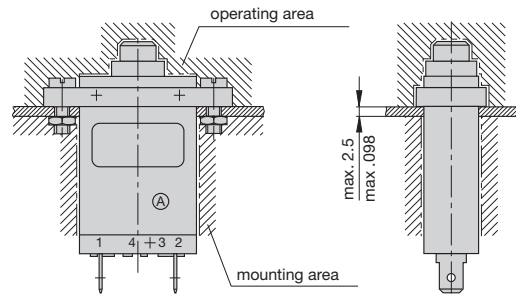


-K10

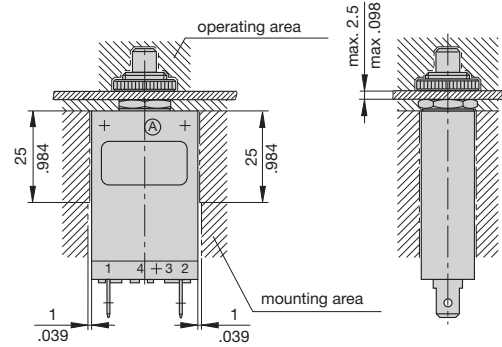


Installation drawings

2-5000-P10

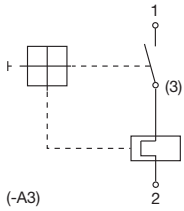


2-5700-P10

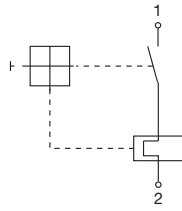


Internal connection diagrams

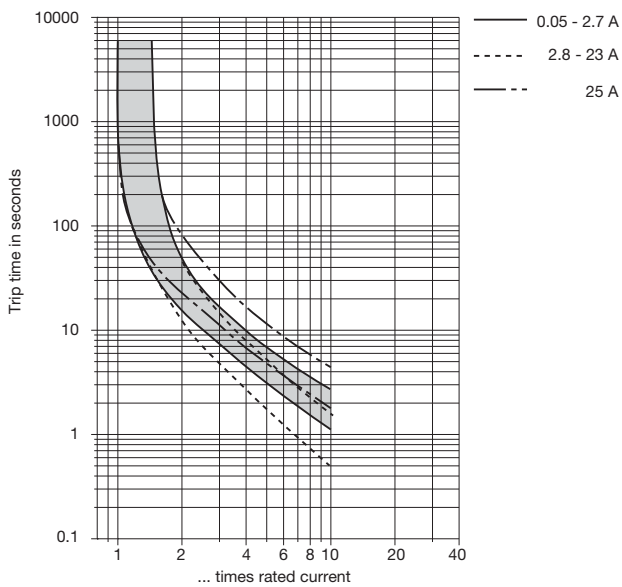
0.05...2.5 A
(with or without shunt terminal)



3...25 A
(without shunt terminal)



Typical time/current characteristics at +23 °C/+73.4 °F



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



