

## 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 ( $\Omega$ )	Current rating (A)	Internal resistance ( $\Omega$ )
0.05	280	3	0.1
0.08	100	3.5	0.065
0.1	110	4	0.065
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	0.85	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



## Technical data

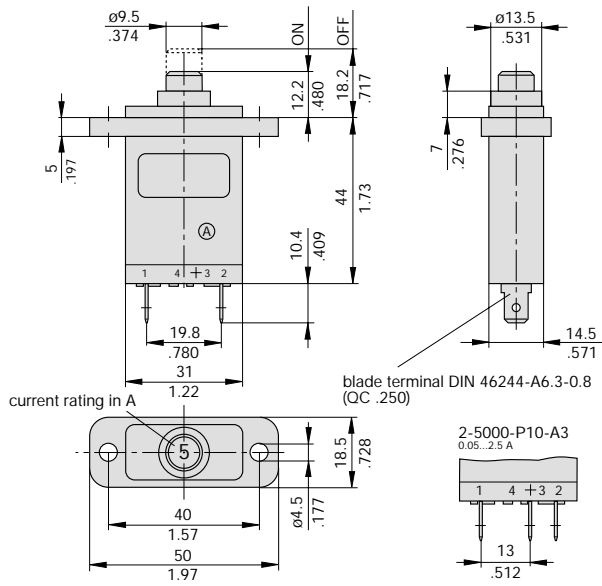
Voltage rating	AC 250 V; DC 28 V (UL: DC 50 V)		
Current rating range	0.05...25 A		
Typical life	5,000 operations at $2 \times I_N$		
Ambient temperature	-20...+60 °C (-4...+140 °F)		
Insulation co-ordination (IEC 60664 and 60664 A)	Rated impulse withstand voltage 2.5 kV	Pollution degree 2	reinforced insulation in operating area
Dielectric strength (IEC 60664 and 60664A) operating area	Test voltage AC 3,000 V		
Insulation resistance	> 100 M $\Omega$ (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	(higher interrupting capacity available to special order)
	13...25 A	400 A	
Interrupting capacity (UL 1077)	$I_N$ 0.05...20 A	$U_N$ AC 250 V	2,000 A
	0.05...25 A	DC 50 V	2,000 A
Degree of protection (IEC 60529/DIN 40050)	operating area IP 40 terminal area IP 00		
Vibration	8 g (57-500 Hz) $\pm 0.61$ 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 60068-2-3, test Ca		
Mass	approx. 29 g		

## Approvals

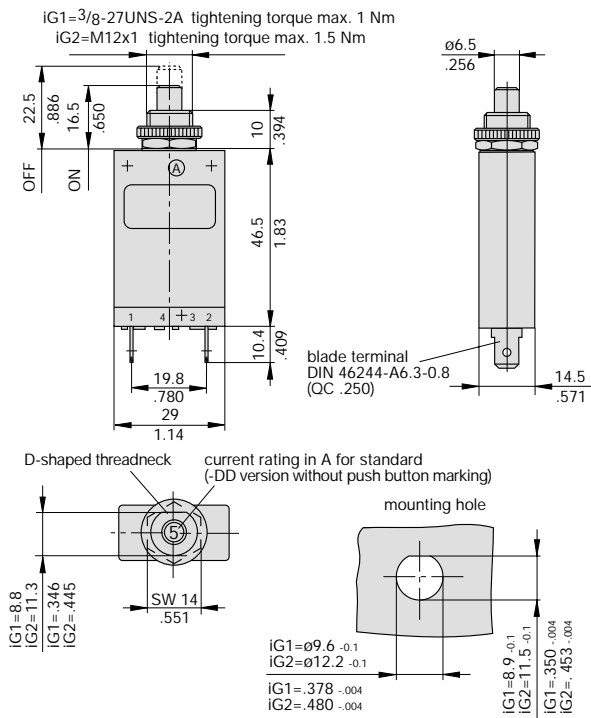
Authority	Voltage ratings	Current ratings
VDE (EN 60934)	AC 250 V; DC 28 V	0.05...25 A
CSA/ UL	AC 250 V; DC 50 V	0.05...20 A
CSA/UL	DC 50 V	0.05...25 A
Semko (EN 60934)	AC 250 V; DC 28 V	0.05...25 A
SEV	AC 250 V; DC 28 V	0.05...25 A
LRoS (type 2-5700 only)	AC 250 V; DC 28 V	0.1 ...25 A
BV (type 2-5700 only)	AC 250 V; DC 28 V	0.2 ...25 A

## Dimensions

### 2-5000-P10

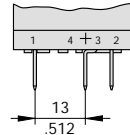


### 2-5700-P10

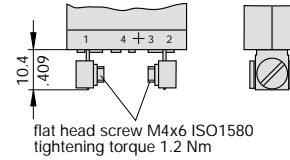


## Terminal design

### -P10-A3 0.05...2.5 A

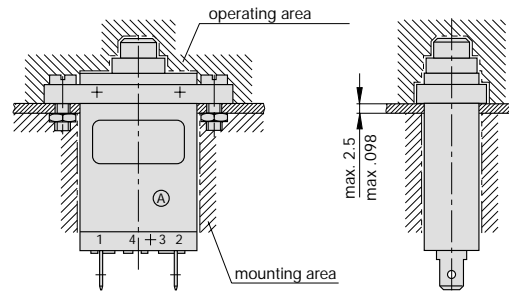


### -K10

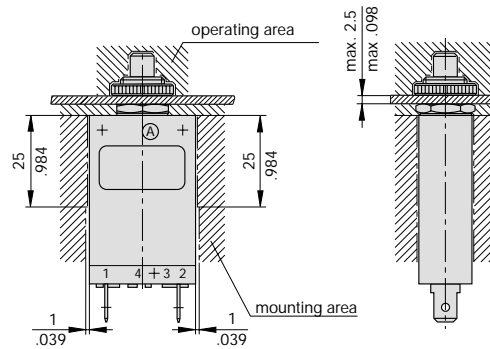


## Installation drawings

### 2-5000-...



### 2-5700-...

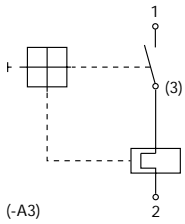


This is a metric design and millimeter dimensions take precedence ( $\frac{mm}{inch}$ )

**Internal connection diagrams**

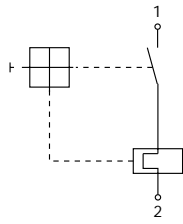
**0.05...2.5 A**

(with or without shunt terminal)

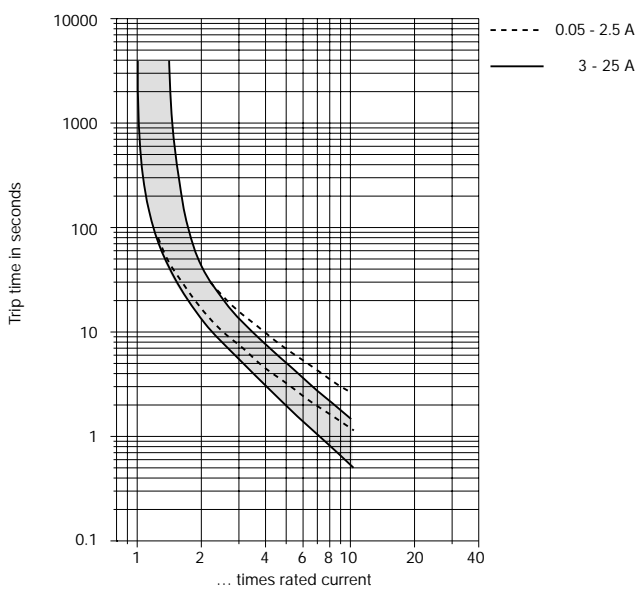


**3...25 A**

(without shunt terminal)



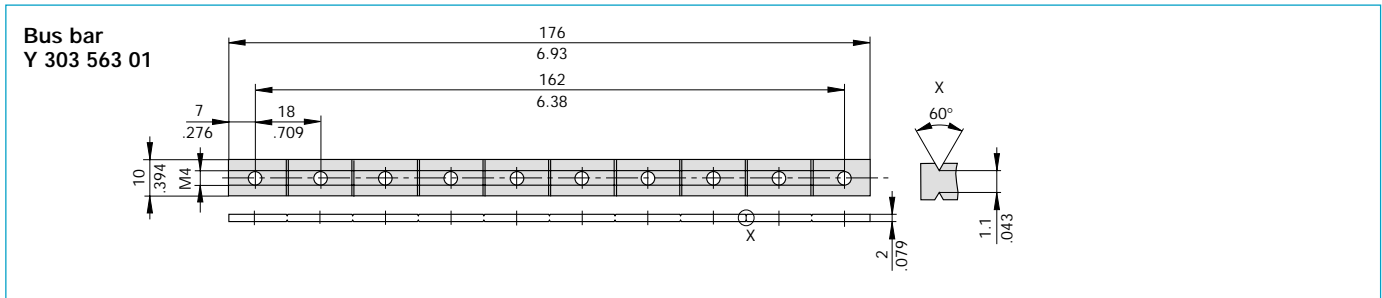
**Typical time/current characteristics at +23°C/+73.4°F**



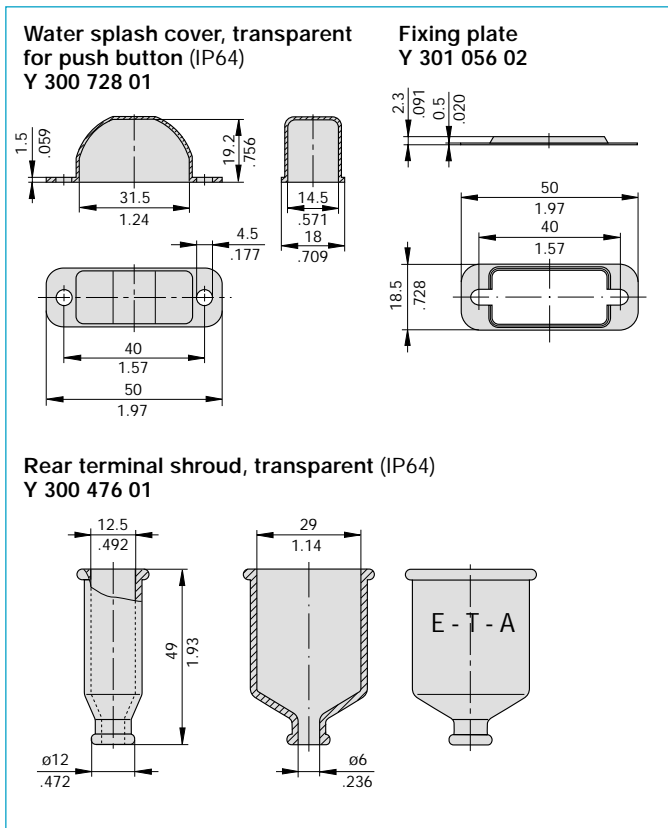
The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section 9 – Technical information.

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

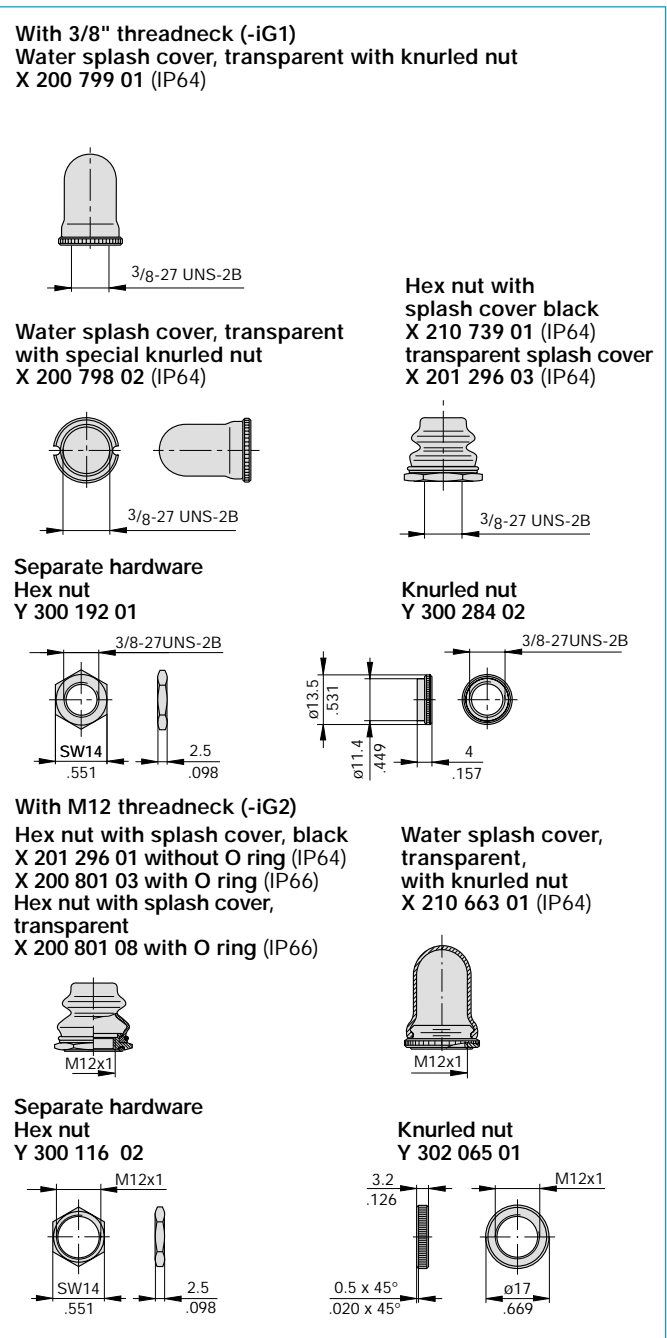
## Accessories for types 2-5000 and 2-5700 with screw terminals -K10



## Accessories for type 2-5000-...



## Accessories for type 2-5700-...



This is a metric design and millimeter dimensions take precedence (mm/inch)

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.