

Type: 1140-G



Miniaturised single pole thermal circuit breaker with push-to-reset tease-free, trip-free, snap action mechanism (R-type TO CBE to EN 60934), threadneck mounting.

For lower current ratings see types 106.

Approved to CBE standard EN 60934 (IEC 60934).

Voltage rating:

- AC 240 V
- DC 48 V
- UL/CSA: AC 250 V
- UL/CSA: DC 50 V

Current ratings:

from 3.5 A to 16 A

Number of poles:

single pole

Mounting method:

threadneck

Terminal design:

blade terminals

Actuation:

push button

Auxiliary contacts:

without auxiliary contacts

Water splash protection:

with water splash protection

without water splash protection

Illumination:

without illumination

Typical life:

3.5...8 A: 1,000 operations at $2 \times I_N$, resistive

10...16 A: 100 operations at $2 \times I_N$, inductive

Interrupting capacity I_{cn} :

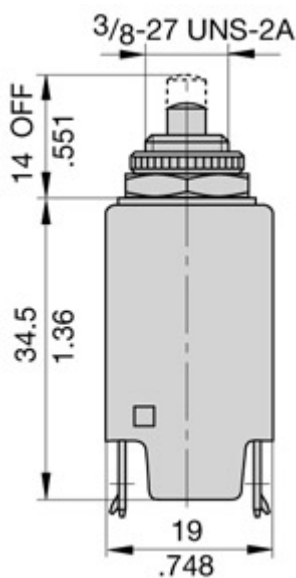
3.5...8 A: $8 \times I_N$

10...16 A: 120 A

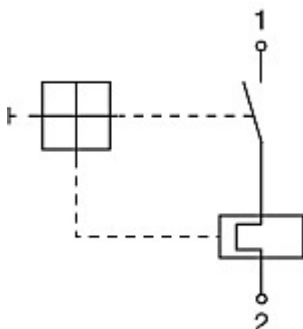
Approvals:

VDE, CSA, UL, Kema

Dimensions



Internal connection diagrams



Description

Miniaturised single pole thermal circuit breaker with push-to-reset tease-free, trip-free, snap action mechanism (R-type TO CBE to EN 60934). Available in versions for panel mounting, snap-in or threadneck, or as an integral type. For lower current ratings see types 104, 105, 106. Approved to CBE standard EN 60934 (IEC 60934).

Typical applications

Motors, transformers, solenoids, hand-held machines and appliances.

Ordering information

Type No.	1140	single pole thermal circuit breaker
Mounting		
E2	integral mounting	
F1	snap-in panel mounting	
G1	threadneck panel mounting 3/8-27UNS with hex nut and knurled nut*	
G4	threadneck panel mounting 3/8-27UNS with knurled nut*	
Number of poles		
1	1-pole protected	
Actuator style		
1	black push button (standard)	
Terminal design		
P1	blade terminals A6.3-0.8 (QC .250)	
Characteristic curve		
M1	medium delay	
Current ratings		
	3.5...16 A	
1140 - F1 1 1 - P1 M1 - 10 A = ordering example		

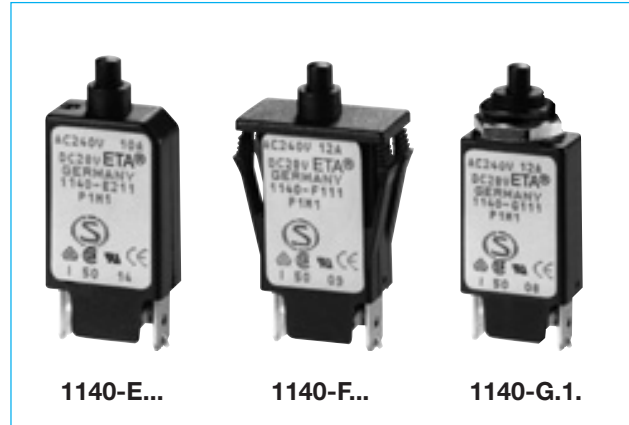
*mounting hardware bulk shipped

Standard current ratings and typical internal resistance values

Current rating (A)	Internal resistance (Ω)	Current rating (A)	Internal resistance (Ω)
3.5	0.06	10	< 0.02
4	0.04	12	< 0.02
5	0.03	13	< 0.02
6	0.02	15	< 0.02
7	< 0.02	16	< 0.02
8	< 0.02		

Approvals

Authority	Voltage ratings	Current ratings
VDE	AC 240 V; DC 48 V	3.5...16 A
CSA, UL	AC 250 V; DC 50 V	3.5...16 A
Kema (EN 60934)	AC 240 V; DC 48 V	3.5...16 A



Technical data

For further details please see chapter: Technical Information

Voltage rating	AC 240 V; DC 48 V (UL: AC 250 V; DC 50 V)	
Current ratings	3.5...16 A	
Typical life	AC + DC 3.5...8 A 200 operations at 2 x I _N , inductive 1,000 operations at 2 x I _N , resistive 9...16 A 100 operations at 2 x I _N , inductive	
Ambient temperature	-20...+60 °C (-4...+140 °F) T 60	
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 60664 A) operating area	test voltage AC 3,000 V	
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity I _{cn}	3.5...8 A 10...16 A	8 x I _N 120 A
Interrupting capacity (UL 10777)	I _N 3.5...16 A 3.5...7A 8...16 A	U _N DC 50 V 200 A AC 250 V 1,000 A AC 250 V 2,000 A
Degree of protection (IEC 60529/DIN 40 050)	operating area IP40 terminal area IP00	
Vibration	10 g (57-500 Hz) ± 0.76 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. 10 g	

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.

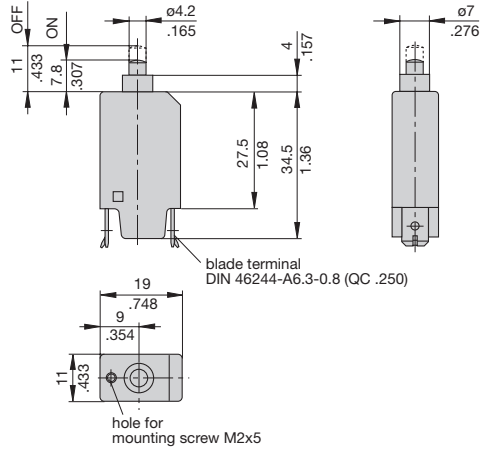


Thermal Overcurrent Circuit Breaker 1140-...

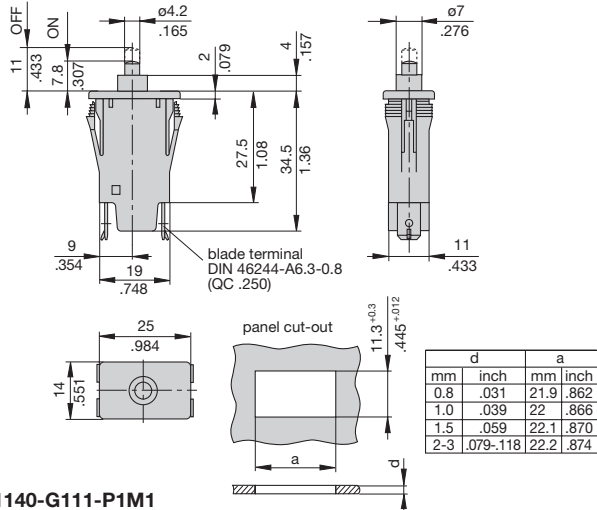
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Dimensions

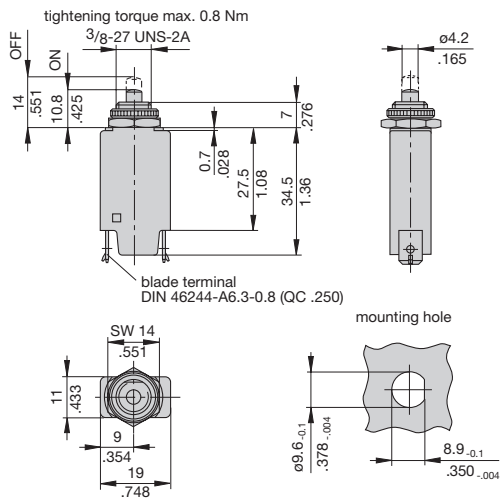
1140-E211-P1M1



1140-F111-P1M1

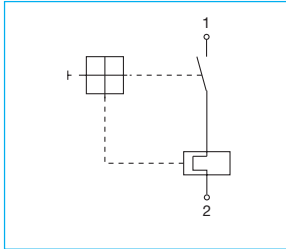


1140-G111-P1M1



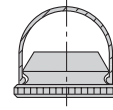
This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

Internal connection diagram

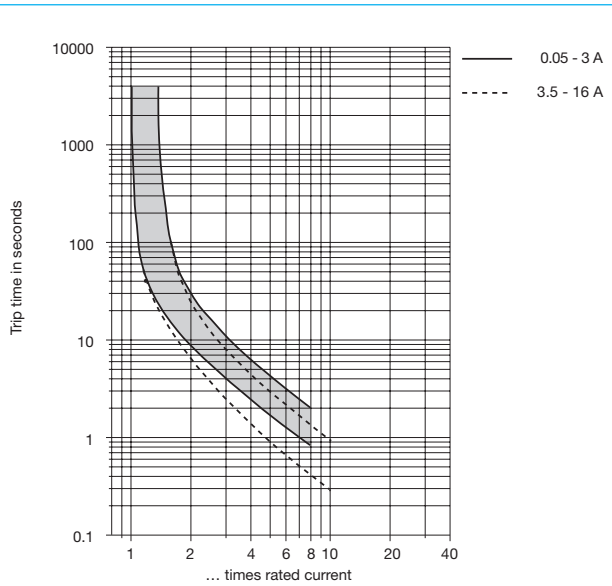


Accessory

Water splash cover/knurled nut assembly, transparent X 201 285 01 (IP64)



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

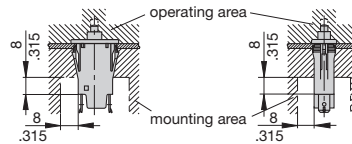


The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section 9 – Technical information.

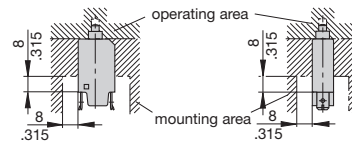
Ambient temperature °F	-4	+14	+32	+73.4	+104	+122	+140
°C	-20	-10	0	+23	+40	+50	+60
Derating factor	0.76	0.84	0.92	1	1.08	1.16	1.24

Installation drawings

1140-F...



1140-E...



1140-G...

