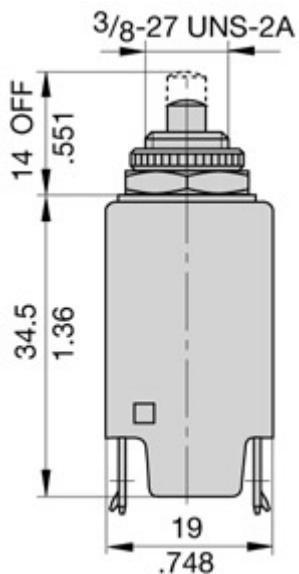


Type: 1140-G

Dimensions


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:

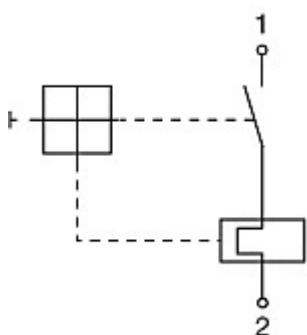
3.5...8 A: 1,000 operations at $2 \times I_N$, resistive
10...16 A: 100 operations at $2 \times I_N$, inductive

Interrupting capacity I_{cn} :

3.5...8 A: $8 \times I_N$
10...16 A: 120 A

Approvals:

VDE, CSA, UL, Kema

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

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 $2 \times I_N$, inductive
		9...16 A	1,000 operations at $2 \times I_N$, resistive 100 operations at $2 \times I_N$, 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 60664A) operating area		test voltage AC 3,000 V	
Insulation resistance		> 100 MΩ (DC 500 V)	
Interrupting capacity I_{cn}	3.5...8 A	8 × I_N	
	10...16 A	120 A	
Interrupting capacity (UL 10777)	I_N 3.5...16 A 3.5...7 A 8...16 A	U_N DC 50 V AC 250 V AC 250 V	200 A 1,000 A 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	

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		

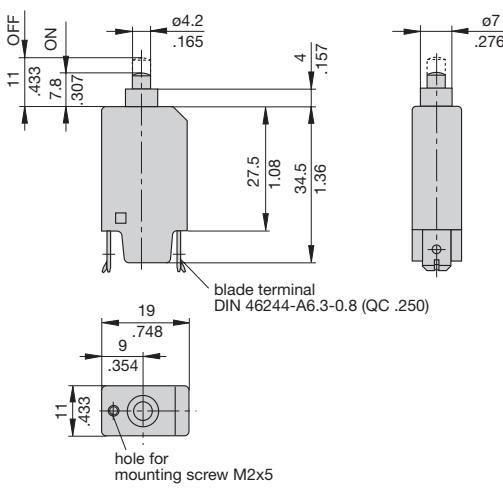
Approvals

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

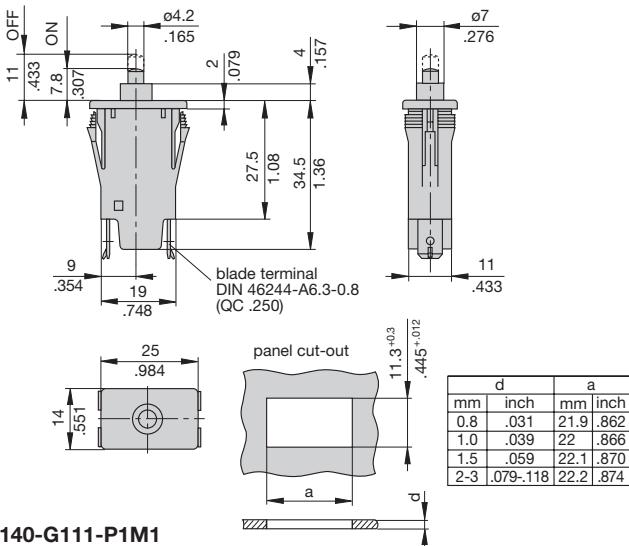
All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.

Dimensions

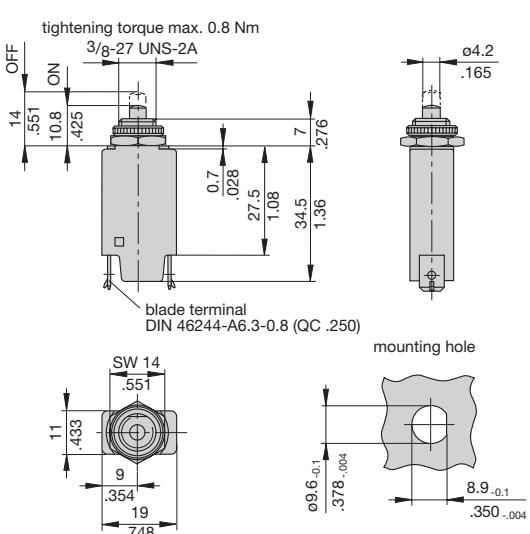
1140-E211-P1M1



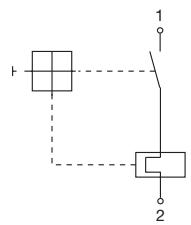
1140-F111-P1M1



1140-G111-P1M1

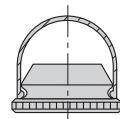


Internal connection diagram

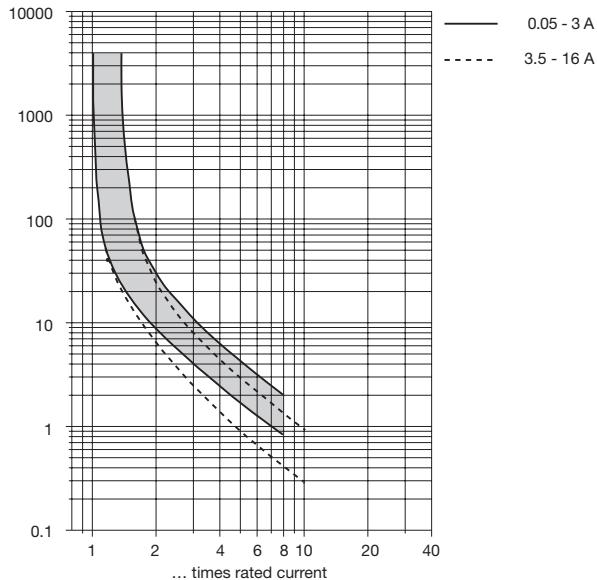


Accessory

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



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

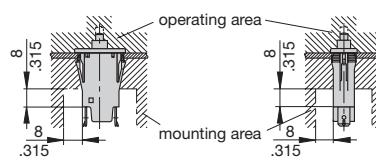


The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section 9 – Technical information.

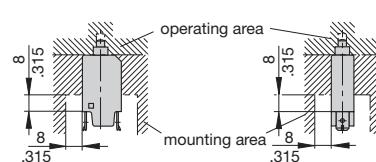
Ambient temperature °F °C	-4 -20	+14 -10	+32 0	+73.4 +23	+104 +40	+122 +50	+140 +60
Derating factor	0.76	0.84	0.92	1	1.08	1.16	1.24

Installation drawings

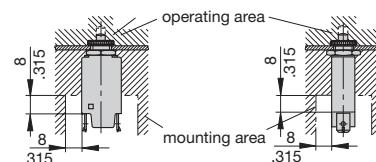
1140-F...



1140-E...



1140-G...



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