

ETA Thermal Overcurrent Circuit Breaker 3140

Description

Four pole switch or three pole switch/thermal circuit breaker (S-type TO CBE to EN 60934) with trip-free, snap action mechanism and red/green two button operation. Designed for snap-in panel mounting. Integral splash water protection to meet protection degree IP 66 in the operating area (option).

Optional with under voltage release module.

Please enquire for versions with auxiliary contact module, mechanical slide interlock, or magnetic trip coil.

Complies with CBE standard EN 60934 (IEC 934).

Typical applications

High-pressure cleaners, shredders, pumps, power saws, electric tools, motors, processing systems

Ordering information

Type No.	
3140	four pole switch or three pole switch/circuit breaker
Mounting	
F	snap in frame
Frame	
1	standard
2	splash water protected version
Number of poles	
3	3 pole, thermally protected
7	4 pole, thermally protected on 3 poles only
C	3 pole, unprotected
D	4 pole, unprotected
Frame mounting	
0	panel thickness .04-.25 in
Terminal design	
P7	quick connect terminals 2x.11in (2x2.8x0.8mm)
N7	as P7, but for switch only
H7	as P7, but for terminals x.1 terminal screws M3.5
G7	as H7, but for switch only
Characteristic curve	
T1	thermal, 1.01-1.4 I _N
Q1	switch only
Actuator style	
S	2 push buttons (ON/OFF)
Actuator color	
GRX	green/red
Current ratings	
	0.1...16 A

3140 - F 1 3 0 - P7 T1 - S GRX - 10 A

Standard current ratings and typical internal resistance values

Current rating (A)	Internal resistance per pole (Ω)	Current rating (A)	Internal resistance per pole (Ω)
0.1	94	3	0.0595
0.2	24	3.5	0.0565
0.3	12	4	0.0435
0.4	5.30	4.5	0.0435
0.5	4.20	5	0.0325
0.6	2.90	6	0.0215
0.8	1.50	7	0.0165
1	0.9	8	0.0165
1.2	0.80	10	<0.02
1.5	0.45	12	<0.02
2	0.27	14	<0.02
2.5	0.0785	16	<0.02

NEW



3140

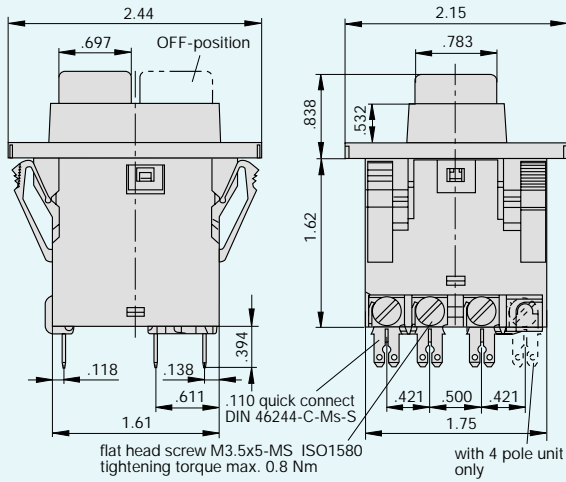
Technical data

Voltage rating	AC 240/415 V
Current rating range	0.1...16 A
Typical life	10,000 operations
Ambient temperature	-30...+60 °C (-22...+140 °F)
Insulation co-ordination (IEC 664 and 664A)	Rated impulse withstand voltage 2.5 kV Pollution degree 2 reinforced insulation in operating area
Dielectric strength (IEC 664 and 664A) operating area between poles (3 pole)	Test voltage AC 3000 V AC 1500 V
Insulation resistance	> 100 MΩ (DC 500 V)
Interrupting capacity I _{cn}	0.1... 2 A 10 x I _N 2.5...16 A 150 A
Interrupting capacity (UL 1077)	I _N U _N 3 pole 0.1...16 A 3 AC 250 V 3500 A
Degree of protection (IEC 529/DIN 40050)	operating area IP 40 (IP 66 with water splash protection) terminal area IP 00
Vibration	5 g (57-500 Hz), ±0.38 mm (10-57 Hz) to IEC 68-2-6, test Fc, 10 frequency cycles/axis
Shock	20 g (11 ms) to IEC 68-2-27, test Ea
Corrosion	96 hours at 5 % salt mist, to IEC 68-2-11, test Ka
Humidity	240 hours at 95 % RH, to IEC 68-2-3, test Ca
Weight	approx. 68 g

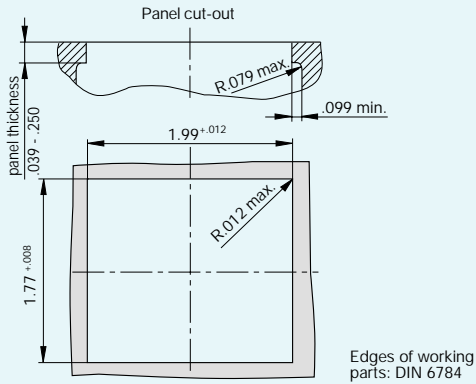
Approvals

Authority	Voltage rating	Current rating
VDE (EN 60934)	AC 240/415 V	0.1...16 A

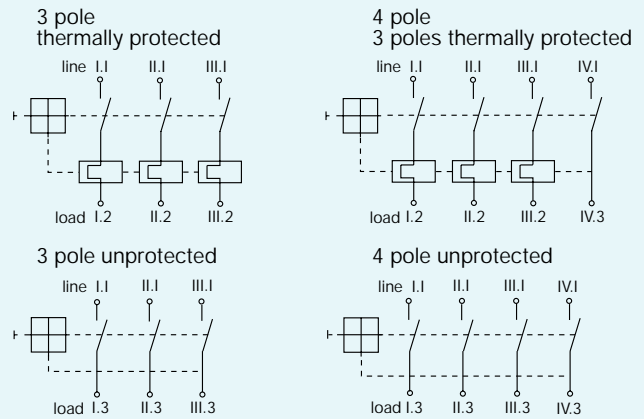
Dimensions



flat head screw M3.5x5-MS ISO1580
tightening torque max. 0.8 Nm
with 4 pole unit only

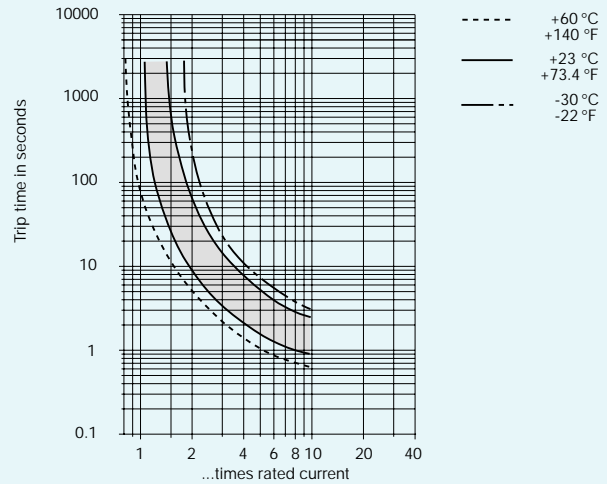


Internal connection diagram

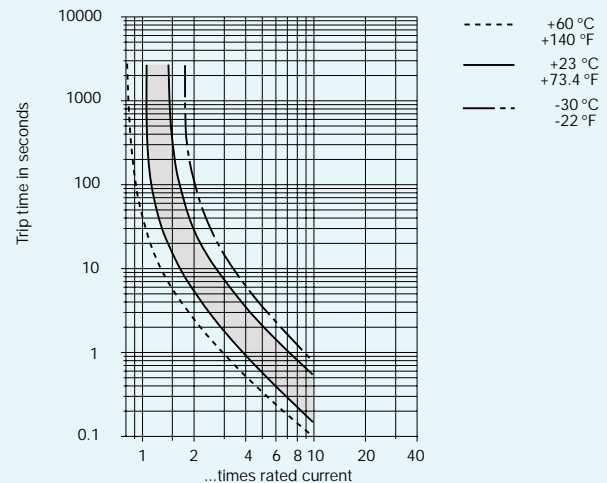


Typical time/current characteristics

0.1...2 A



2.5...16 A



Installation drawing

