

ETA® Thermal Overcurrent Circuit Breaker 1410-L/G...

Description

Single pole press-to-reset thermal circuit breaker with extremely fast overload switching performance (R-type TO CBE to EN 60934). Single hole threadneck, PCB or integral mounting with a choice of designs. Miniaturised construction minimises PCB real estate required. Type 1410-L2 and 1410-G1 versions feature changeover contacts suitable for providing status output signals.

Typical applications

Motors, transformers, solenoids, PCBs, hand-held machines, appliances, instrumentation.

Ordering information

Type No.	
1410	single pole circuit breaker
Configuration	
L	PCB mounting
G	threadneck panel mounting
Mounting	
1	threadneck 3/8-27 UNS-2A (1410-G)
1	PCB 16.3x4.6 grid (1410-L)
2	PCB 10.15x7.62 grid (1410-L)
Number of poles	
1	1 pole, thermally protected
Hardware	
0	without
1	with hex nut and knurled nut (1410-G only) bulk shipped
Terminal design	
L1	solder pins 1.8x0.8 silver-plated (-L1 only)
L2	solder pins 1x0.8 silver-plated (-L2 and -G1 only)
P2	blade terminals A2.8-0.8 silver-plated (-G1 only)
Characteristic curve	
F1	fast acting
Actuator	
S	manual re-set
Actuator colour	
01	black (for -G1.. and -L1..)
02	white (for -L2..)
Current ratings	
0.63 ... 10 A	

1410- L 1 1 0 - L1 F1 - S 01 - 0.8 A ordering example

Standard current ratings and typical internal resistance values

Current rating (A)	Internal resistance (Ω)	Current rating (A)	Internal resistance (Ω)
0.63	1.2	3.15	< 0.1
0.8	1.0	4	< 0.1
1	0.7	4.5	< 0.1
1.25	< 0.8	5	< 0.1
1.5	< 0.8	6.3	< 0.1
1.8	< 0.8	8	< 0.1
2	< 0.8	10	< 0.1
2.5	< 0.5		

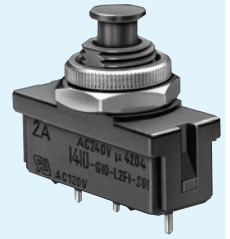
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)



1410-L1...



1410-L2...



1410-G1...

Technical data

Max. voltage rating	AC 250 V; DC 28 V (DC 48 V UL/CSA)	
Current rating range 1-2	0.63...10 A	
Auxiliary circuit 1-3	0.2 x I _N max. 1 A, AC 250 V, cosφ= 1 style -L2 and -G1 only	
Protection class (IEC 730-1)	I (II when mounted to the installation drawing)	
Typical life	300 operations at 2 x I _N (-L2...) 500 operations at 2 x I _N (-L1../-G1..)	
Temperature range	-20...+100 °C	
Creepage resistance	PTI 400 to IEC 112	
Insulation co-ordination (IEC 664 and 664 A) operating area	Rated impulse withstand voltage	Pollution degree
	4 kV	2
Dielectric strength (IEC 664 and 664A) operating area	Test voltage	
	AC 2000 V	
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity	0.63...2.5 A 12 x I _N	3.15...10 A 8 x I _N , max. 50 A, 200 A at AC 125 V
UL 1077/EN 60934 PC1		
Environmental protection (IEC 529/DIN 40050)	operating area IP 40 terminal area IP 00	
Vibration	8 g (57-500 Hz) ±0.61 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	48 hours at 5 % saltspray, to IEC 68-2-11, test Ka	
Humidity	96 hours at 95 % RH to IEC 68-2-3, test Ca	
Mass	approx. 5 g	

Approvals

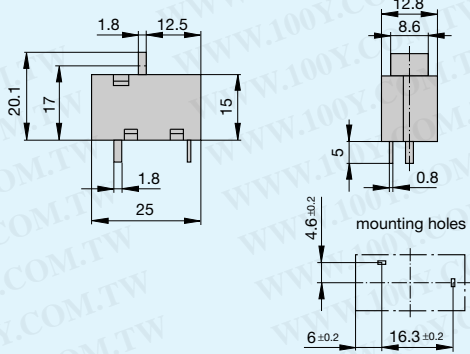
Authority	Voltage rating	Current ratings
VDE	AC 250 V; DC 28 V	0.63...8 A
UL, CSA	AC 125 V; DC 48 V	0.63...8 A

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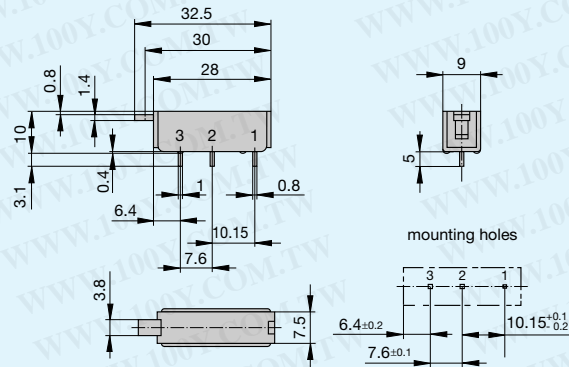
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Dimensions

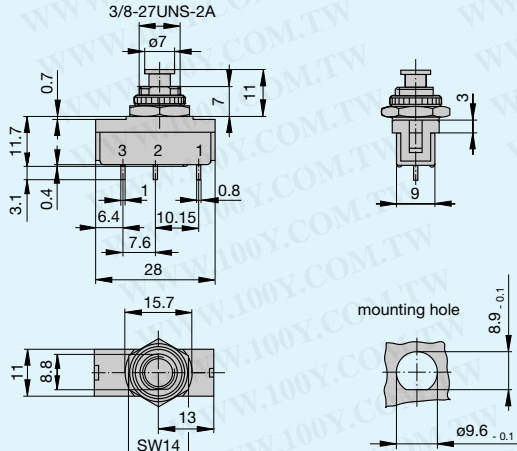
1410-L110-L1F1-S01



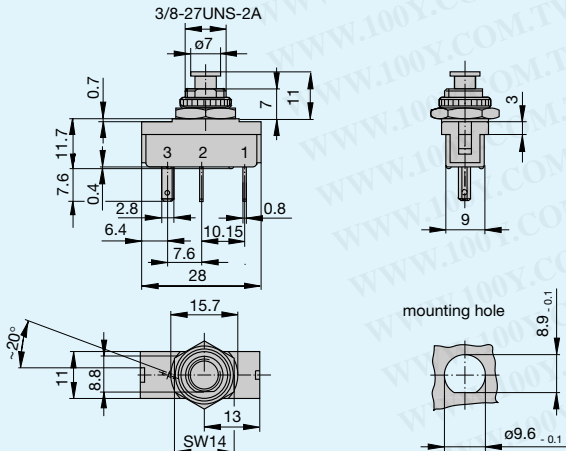
1410-L210-L2F1-S02



1410-G111-L2F1-S01

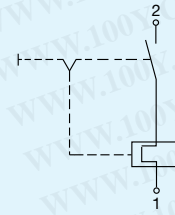


1410-G111-P2F1-S01

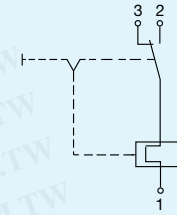


Internal wiring diagrams

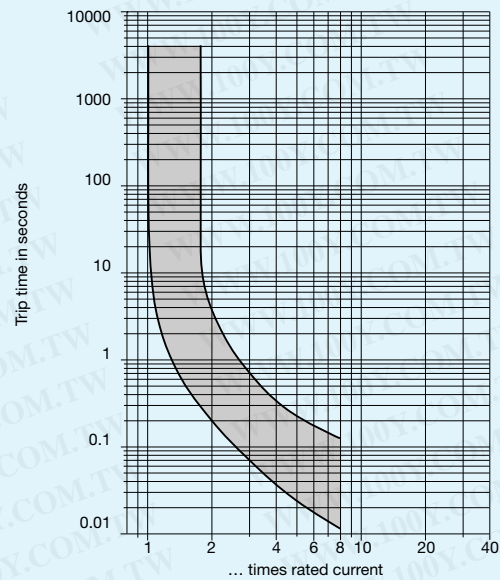
1410-L11...



1410-L21... 1410-G11...

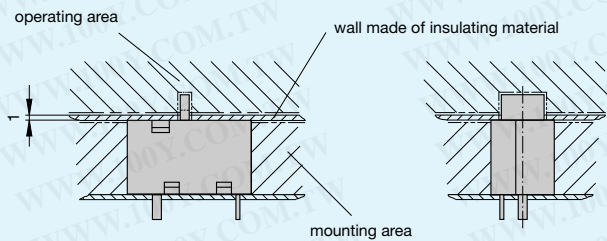


Typical time/current characteristics at 23°C



Installation drawings for protection class II (IEC 730-1/DIN 40014)

1410-L11...



1410-G...

