

Description

Very cost effective design to meet international requirements. No exposed metal parts which are, or could become, current-carrying except for terminals.

- Manual reset, trip free mechanism
- Extremely small and lightweight
- UL, CSA, VDE approved

Typical applications

Battery chargers, consumer products, power supplies, motors, any situation where cost is a major factor.

Accessories

X 201 285 01	Reset Button Seal (-G21)
Y 303 051 01	Black Plastic Knurled Nut (-G21)
Y 301 059 02	Press to Reset Plate (-G21)
Y 302 732 10	Press to Reset Plate (-G41)
RBS 71 628	Reset Button Seal (-G41)
RBS 71 628 08N	Reset Button Seal -long
RBS 71 628 16N	Reset Button Seal -short

Ordering information

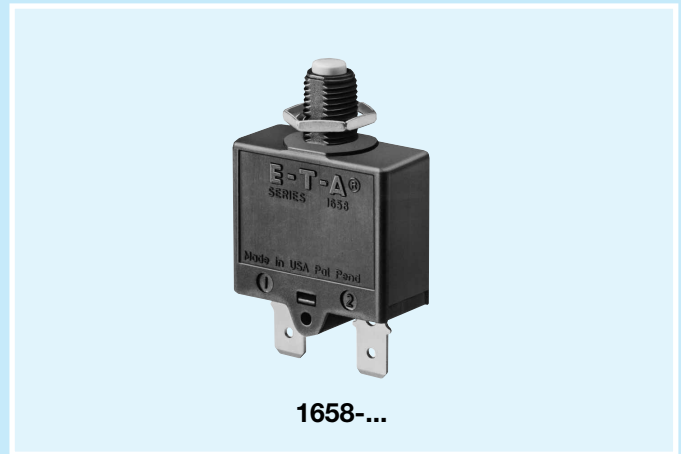
Type No.	Description
1658	single pole thermal circuit breaker
Threadneck design	
G21	manual reset type, 3/8"-27 threadneck
G41	manual reset type, 7/16"-32 threadneck
A21	auto reset type, 3/8"-27 threadneck
A41	auto reset type, 7/16"-32 threadneck
A00	auto reset type, without threadneck
Hardware	
00	no hardware
01	one PAL nut, bulk
02	one PAL nut, one hex nut, bulk
03	one PAL nut mounted
04	one PAL nut, one hex nut, mounted
05	one PAL nut, knurled nut, bulk
06	one knurled nut, bulk
07	one knurled nut, mounted
08	two hex nuts, bulk
Terminals	
P10	.250" quick connect
P13	.250" quick connect 90°
S80	straight screw terminals*
S83	90° bent screw terminals*
Current ratings	
	5 ... 25 A

1658 - G21 - 02 - P10 - 5.00 A Ordering example

* Screws and lockwasher bulk shipped

Standard current ratings and typical voltage drop values

Current rating (A)	Voltage drop (mV)	Current rating (A)	Voltage drop (mV)
5	≤ 150	10	≤ 140
6	≤ 150	12	≤ 140
7	≤ 150	15	≤ 240
8	≤ 150	20	≤ 240
9	≤ 150	25	≤ 240



1658-...

Technical data

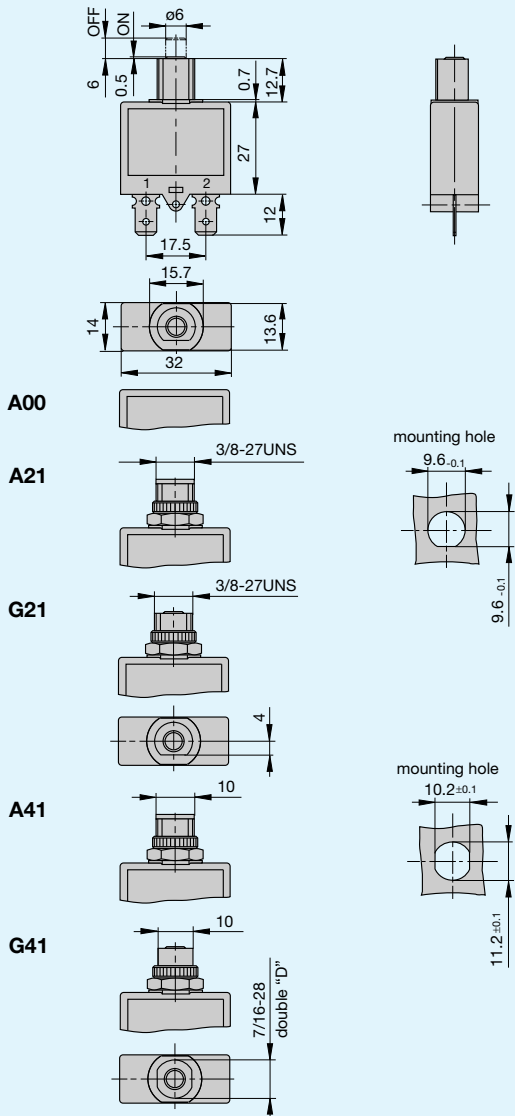
Max. voltage rating	AC 250 V; DC 28 V	
Current ratings	5...25 A	
Protection class (IEC 730-1)	I (II when mounted to the installation drawing)	
Typical life	1000 operations at 2 x I _N	
Temperature range	0...+55 °C	
Creepage resistance	PTI 150 to IEC 112	
Insulation co-ordination (IEC 664 and 664 A)	Rated impulse withstand voltage operating area	Pollution degree 2
Dielectric strength (IEC 664 and 664A)	Test voltage operating area	AC 4000 V
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity (VDE 0660, part 101, P-2)	200 A	
Interrupting capacity (UL 1077/EN 60934 PC1)	I _N 5...15 A 20...25 A	U _N AC 250 V/DC 28 V 2000 A AC 125 V/DC 28 V 2000 A
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	30 g (11 ms) to IEC 68-2-27, test Ea	
Corrosion	96 hours at 5 % saltspray, to IEC 68-2-11, test Ka	
Humidity	240 hours at 95 % RH to IEC 68-2-3, test Ca	
Mass	approx. 16 g	

Approvals

Authority	Voltage rating	Current ratings
VDE	AC 250 V; DC 28 V	5...25 A
UL, CSA	AC 125 V; DC 28 V	20..25 A

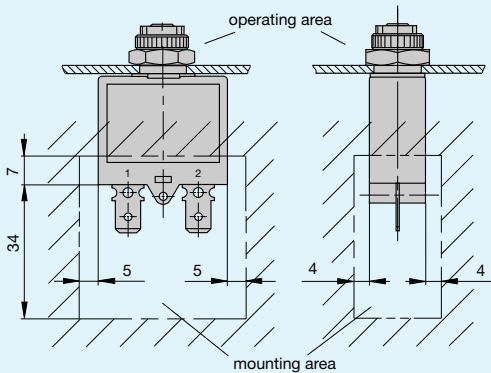
ETA® Thermal Overcurrent Circuit Breaker 1658-...

Dimensions

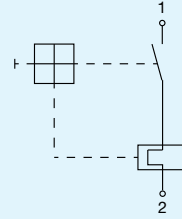


See ordering information for mounting hardware

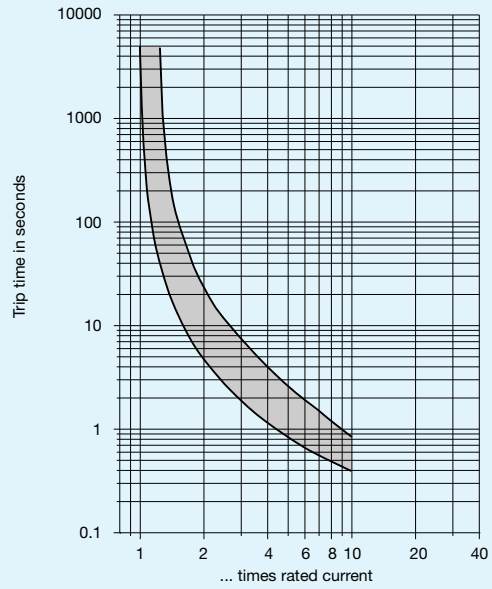
Installation drawings for protection class II (IEC 730-1/DIN 40014)



Internal wiring diagrams



Typical time/current characteristics at 23°C



Terminal design

