

Description

Double pole combined circuit breaker and ON/OFF switch with rocker actuation. Specially suited to single-phase applications. Snap-in front panel mounting. Thermal positively trip free mechanism ensures reliable overcurrent protection and safe physical isolation of the load circuit. Attractively styled, with rocker illumination optional. The status of the switching contacts is shown by the position of the rocker actuator. For high volume requirements customer-specific designs can be offered for the front bezel and the rocker.

It meets the requirements of the CBE standard EN 60934 (IEC 60934): S type, TO.

Meets the requirements regarding fire resistance of EN 60335-1 : 2007-02 Safety of household and similar electrical appliances.

Minimum ordering quantities apply!

Typical applications

Electrical motors, household appliances, office equipment, garden and hobby tools, power supplies, charging rectifiers, cable extension reels, multiple socket outlets.

Variants/Options

Type No.	1120 thermal circuit breaker
Configuration	F snap-in panel mounting
Size of frame	1 panel thickness 1 - 2.5 mm (without water splash protection) 2 panel thickness 1 - 2 mm (with water splash protection)
Number of poles	0 double pole without protection 5 double pole, one pole thermally protected
Design	0 standard 1 with water splash protection
Terminal design	P1 blade terminals 6.3x0.8 P2 blade terminals 6.3x0.8, 90° angled
Characteristic curve	Q0 without T1 thermal
Actuator style	U rocker (momentary switch) W rocker (latching switch)
Actuator colour	A black opaque B white opaque E blue opaque C red translucent D green translucent F blue translucent other colours upon request
Actuator markings	00 "I" and "O" moulded in
Illumination	0 without illumination B filament bulb
Illumination voltage range	0 without illumination 3 AC 90 V - 140 V 4 AC 185 V - 275 V DC illumination upon request
Current ratings	3, 4, 5, 6, 8, 10, 12, 14, 16 A
1120 - F 1 5 0 - P1 T1 - W B 00 00 - 10 A ordering example	



1120-..
without water splash protection with water splash protection

Technical data

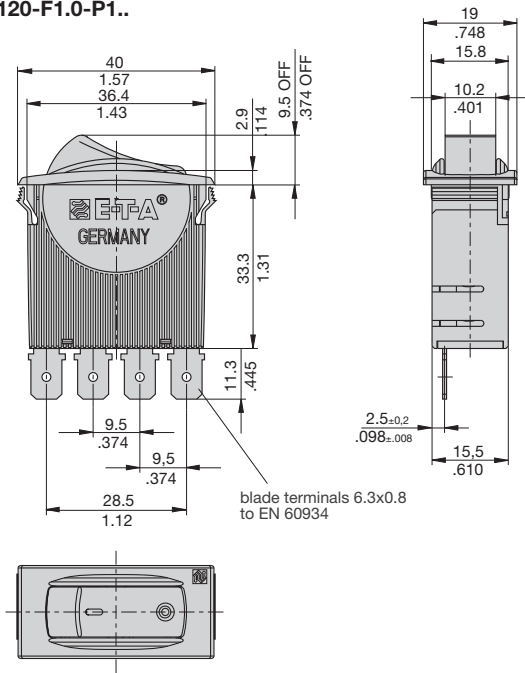
Voltage rating	AC 240 V; DC 32 V to EN 60934 AC 277 V; DC 50 V to UL 1077
Current ratings	3...16 A
Typical life	20,000 operations at I_N , inductive
Ambient temperature	-20 °C...+60 °C
Insulation co-ordination (IEC 60664-1)	rated voltage / pollution degree IEC 60934 2,5 kV/2
Dielectric strength	operating area test voltage AC 3,000 V terminal area test voltage AC 1,500 V pole/pole test voltage AC 1,500 V
Min. load	DC 10 V / 100 mA
Interrupting capacity	40 cycles AC 240 V: $6 \times I_N \cos\phi 0,6$ DC 32 V: $4 \times I_N L/R 2,5 \text{ ms}$
Switching capacity I_{cn} to UL 1077	AC 240 V: 3,500 A DC 50 V: 2,000 A
to IEC 60934	AC 240 V, DC 32 V: 200 A
Degree of protection (IEC 60529)	operating area IP40 with water splash protection IP66 terminal area IP00
Mass	approx. 20 g
Standards	EN 60934 / UL 1077

Approvals

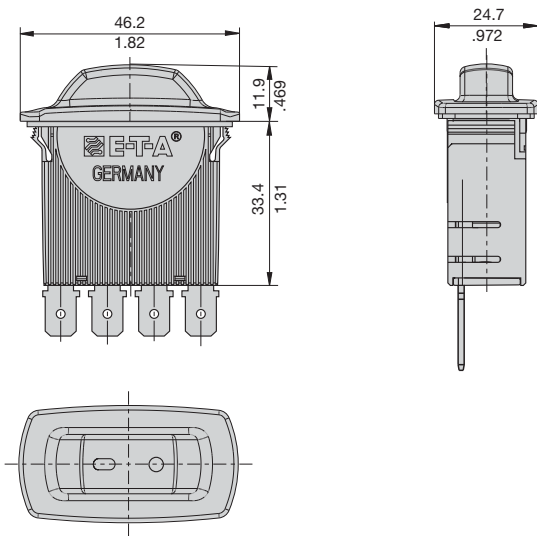
Authority	Voltage ratings	Current ratings
VDE	AC 240 V; DC 32 V	3...16 A
UL, USA + Canada	AC 277 V; DC 50 V	3...16 A

Dimensions single pole

1120-F1.0-P1..

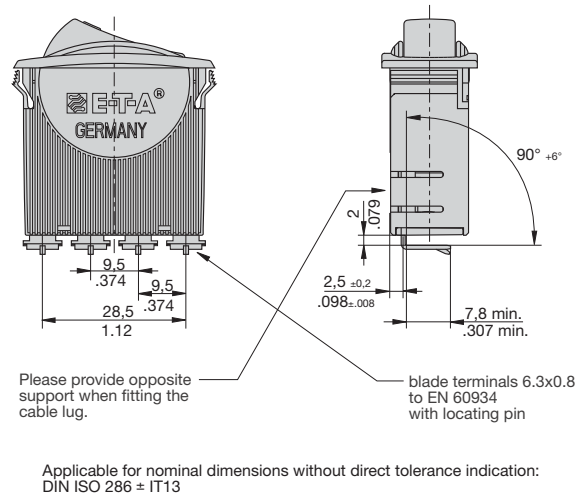


1120-F2.1-P1..

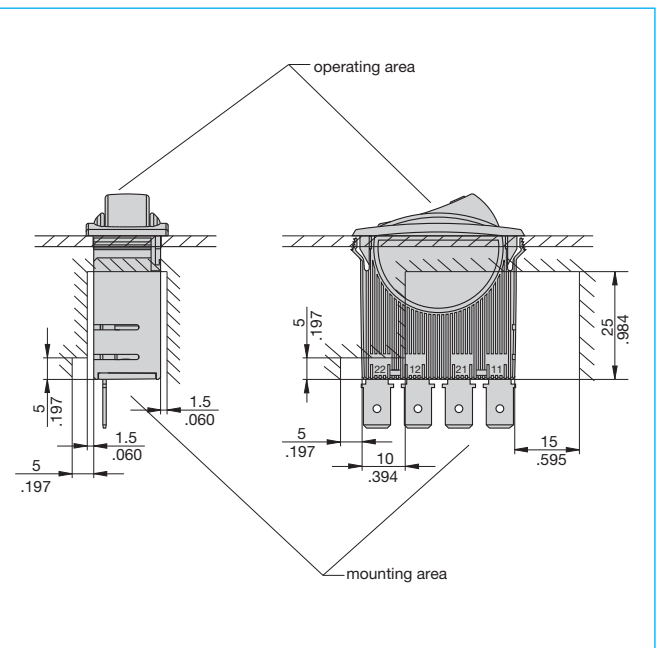


Dimensions double pole

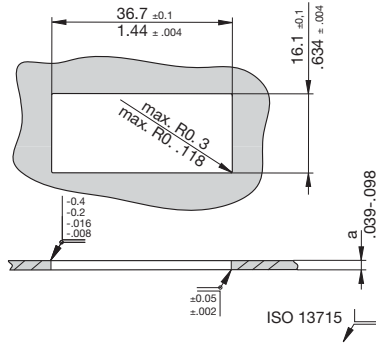
1120-F...-P2



Installation drawing



Cut-out dimensions



version	dimension "a"
1120-F1...-...	1 - 2.5 mm/ .039-.098
1120-F2...-...	1 - 2 mm/

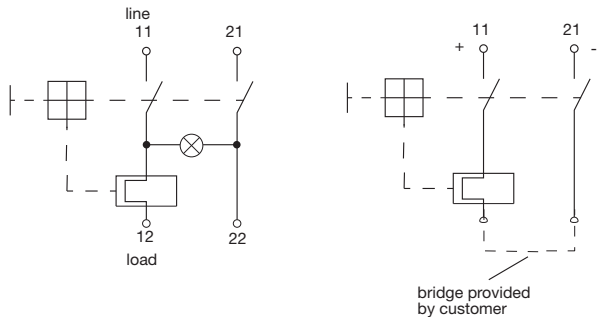
Applicable for nominal dimensions without direct tolerance indication:
DIN ISO 286 ± IT13

Internal connection diagrams

single pole connection

AC 240 V, DC 32 V

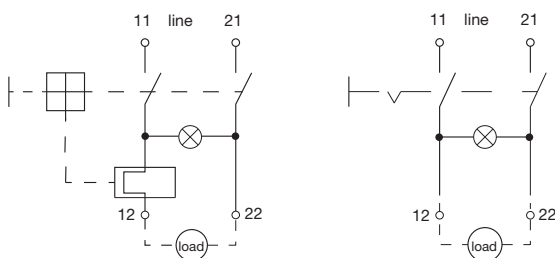
DC 50 V
(only without illumination)



double pole connection

thermally protected

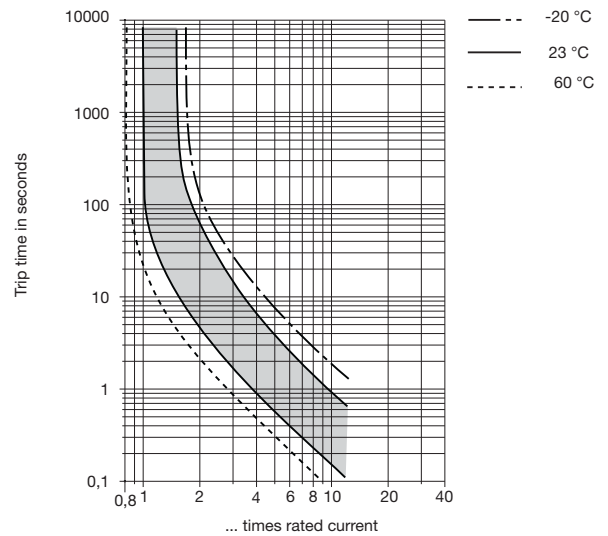
without protection



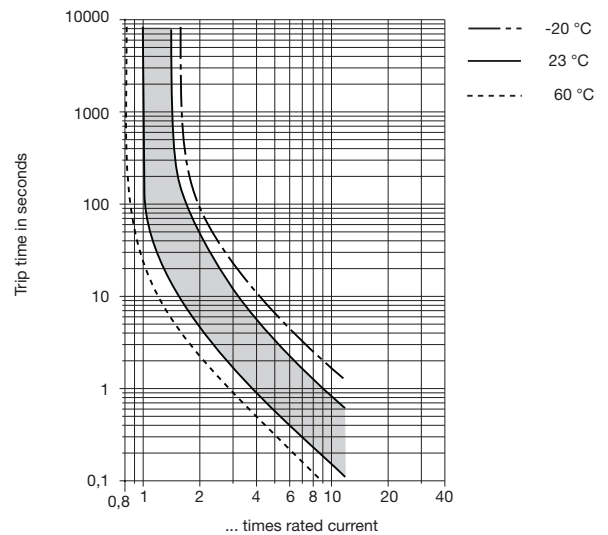
illumination shown optional

T1 - thermal characteristic curve

3 ... 6 A



8 ... 16 A



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.

Ambient temperature °C	-20	-10	0	+23	+40	+50	+60
Derating factor	0,84	0,88	0,92	1	1,08	1,14	1,23

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

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.