

Type: 3131-A



Combination of single pole circuit breaker and ON/OFF switch with soft-touch rocker actuation. Contoured rockers are available with a choice of colours and legends, with optional illumination. The 3131 is sealed to provide IP66 rated front of panel water splash protection. It meets the requirements of circuit breaker standard EN 60934 (IEC 60934): S type, TO.

Voltage rating:

- AC 240 V
- DC 28 V

Current ratings:

from 0.1 A to 20 A

Number of poles:

single pole

Mounting method:

flange

Terminal design:

blade terminals
screw terminals

Actuation:

rocker

Auxiliary contacts:

without auxiliary contacts

Water splash protection:

without water splash protection

Illumination:

with illumination
without illumination

Typical life:

30,000 operations at $1 \times I_N$, inductive

Interrupting capacity I_{cn} :

0.1...2 A: $10 \times I_N$

2.5...20 A: 150 A

Approvals:

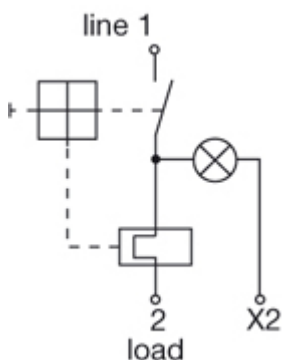
UL 1500 Ignition Protected

UL 1077

VDE (EN 60934)

Dimensions

Internal connection diagrams



Description

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Typical applications

Motor protection, transformer protection, household appliances and office equipment, electrical tools, mobile homes, watercraft, construction vehicles, medical equipment.

Current ratings and typical internal resistance values

Current rating (A)	Internal resistance (Ω)	Current rating (A)	Internal resistance (Ω)
0.1	94	4	0.0435
0.2	24	5	0.0325
0.3	12	6	0.0215
0.4	5.30	7	0.0165
0.5	4.20	8	0.0165
0.8	1.50	10	< 0.02
1	0.9	12	< 0.02
1.2	0.80	14	< 0.02
1.5	0.45	15	< 0.02
2	0.27	16	< 0.02
2.5	0.0785	18	< 0.02
3	0.0595	20	< 0.02
3.5	0.0565		

Illumination voltage / power consumption

Operating voltage	Power consumption (LED)	
	Y = yellow	T = blue
12 V	10 mA	10 mA
24 V	10 mA	10 mA
115 V	< 1 mA	-
230 V	< 1 mA	-

Approvals

Authority	Voltage rating	Current rating
UL 1500	Ignition Protected	
UL 1077	AC 250 V; DC 32 V	0.1...20 A
VDE (EN 60934)	AC 240 V; DC 32 V	0.05...20 A

NEW



3131
Circuit breaker

Technical data

For further details please see chapter: Technical Information

Voltage rating	AC 240 V; DC 28 V	
Current rating range	0.1...20 A	
Typical life	0.1...20 A 30,000 operations at 1 x I _N , inductive	
Ambient temperature	-20...+60 °C (-4...+140 °F)	
Insulation co-ordination (IEC 60664)	2.5 kV/2 re-inforced insulation in the operating area	
Dielectric strength	test voltage AC 3,000 V	
operating area	test voltage AC 1,500 V	
current path/current path		
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity I _{cn}	0.1...2 A	10 x I _N
	2.5...20 A	150 A
Interrupting capacity (UL 1077)	0.1...16 A: AC 240 V	3,000 A
	DC 32 V	2,500 A
Protection class (IEC 60529)	operating area IP66 terminal area IP00	
Vibration	5 g (57-500 Hz) ± 0.38 mm (10-57 Hz) test to IEC 60068-2-6, test Fc, 10 frequency cycles/axis	
Shock	25 g (11 ms), test to IEC 60068-2-27, test Ea	
Corrosion	96 hours at 5 % salt mist, test to IEC 60068-2-11, test Ka	
Humidity	240 hours at 95 % RH, test to IEC 60068-2-78, test Cab	
Mass	approx. 30 g	

Ordering Information

Type number

3131 single pole thermal circuit breaker or switch

Function

A circuit breaker single pole, latching switch

C circuit breaker single pole, momentary switch

Mounting

F flange mounting

Accessories

1 with sealing IP66

Terminal design

H terminal 1: screws M3.5x5 ISO 1580 (DIN 85)

terminal 2: blade terminal for 1x6.3x0.8 mm or 2x2.8x0.8 EN 60934 connectors

N terminals 1,2 and 4: blade terminal for 1x6.3x0.8 mm or 2x2.8x0.8 EN 60934 connectors

P terminals 1 and 2: blade terminal for 1x6.3x0.8 mm or 2x2.8x0.8 EN 60934 connectors

Characteristic curve

T thermal 1.0 – 1.4 times rated current

Q switch only

Actuator style

0 without actuator

rocker X3131-W... must be ordered separately

Actuator colour

0 without actuator

Rocker legends

00 without

Rocker marking

0 without

Orientation

0 without

Illumination

0 without

1 illuminated when in position 1 (ON)

3 as 1, with dimmed illumination of window 1

Type of illumination

0 without illumination

T blue LED

Y yellow LED

Illumination voltage range

0 without illumination

2 10 - 14 V DC

3 20 - 32 V DC

6 90 - 140 V AC

7 185 - 275 V AC

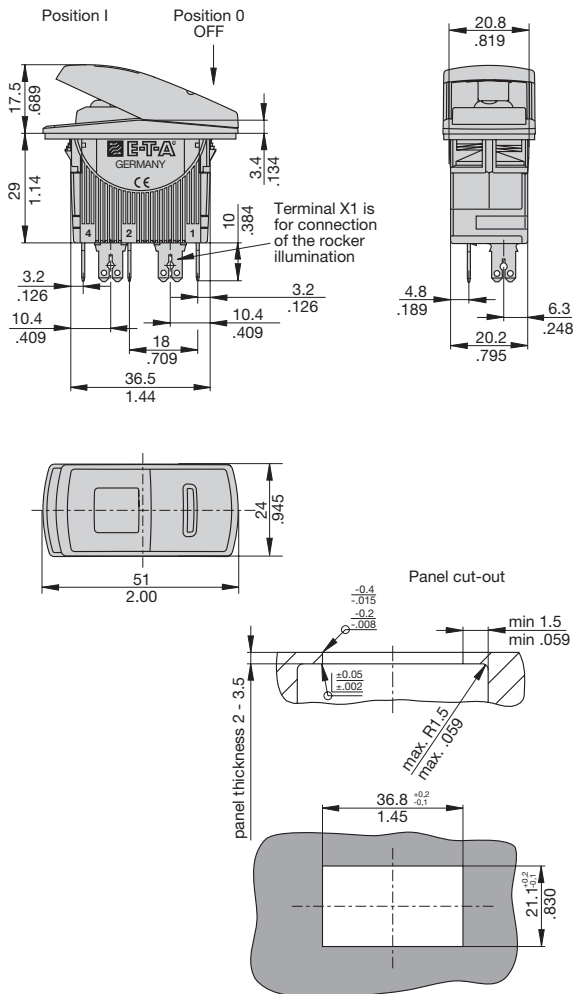
Current ratings

0.1...20 A

3131 - A F 1 P T - 0 0 00 0 0 - 1 Y 3 - 10A ordering example

3131 - . . . N Q - 0 0 00 0 0 - . . . - 20A switch

Dimensions



Installation drawing

