

Electronic device circuit breaker - CB E1 24DC/6A S-R P - 2800912

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Electronic device circuit breaker, 1-pos., active current limitation, status output and reset input, plug for base element.


The figure shows the CB E1 24DC/1A S-R P version

Why buy this product

- Compact design with precise nominal current levels
- Modular expansion possible thanks to the uniform, plug-in housing concept
- Sophisticated remote signaling concept enables monitoring from any location
- The reset input can be switched by means of remote control
- Active current limitation, even when switching capacitive loads
- Supply/remote signaling can be bridged with CLIPLINE complete accessories



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 690997
GTIN	4046356690997
Weight per Piece (excluding packing)	35.600 g
Weight per piece (including packing)	35.600 g
Custom tariff number	85362010
Country of origin	Germany
Sales Key	L1 - Circuit Breaker

Technical data

Dimensions

Height	45 mm
Width	12.3 mm
Depth	52 mm
Complete module height	90 mm

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Technical data

Dimensions

Complete module width	12.3 mm
Complete module depth	77.3 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 50 °C (non-condensing)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Humidity test	96 h, 95% RH, 40°C
Degree of protection	IP30 (Actuation area)

General

Installation instructions	When mounted in rows without convection cooling, the nominal device current should only be led to a maximum of 80% due to the thermal effect during continuous operation (100% operating factor). Special precautionary measures must be taken in systems or machines, to prevent components from restarting (e.g., use of a safety PLC). Parallel connection of multiple circuit breakers is not permitted.
Flammability rating according to UL 94	V0
Mounting type	On base element
Color	gray
Number of positions	1
Degree of pollution	2
Design	Male

Electrical data

Fuse type	Electronic
Rated surge voltage	0.5 kV
Operating voltage	24 V DC
	18 V DC ... 30 V DC
Nominal current I_N	6 A
Required backup fuse	not required, integrated failsafe element
Active current limitation	typ. 1.25 x I_N
Closed circuit current I_0	typ. 8 mA (When switched on)
	typ. 11 mA (With status output)
Power dissipation	1.04 W (Nominal operation)
Temperature derating	5 A (at 50°C)
Tripping method	E (electronic)
Dielectric strength	max. 30 V DC (Load circuit)
Voltage drop	130 mV (at I_N)
Contact type	without electrical isolation
Shutdown time load circuit	130 ms (see time/current characteristic curve)
Undervoltage shutdown load circuit	< 14 V (typ. OFF)
	> 17 V (typ. ON)
Max. capacitive load load circuit	20000 µF
Output voltage status output	24 V DC

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Technical data

Electrical data

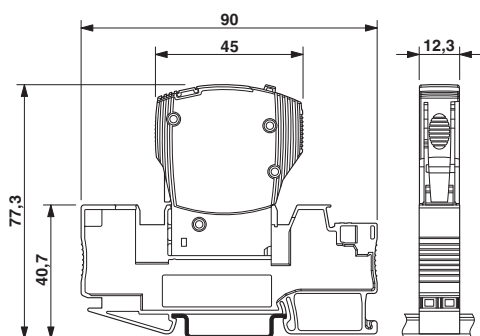
Output current status output	max. 0.2 A (Short-circuit-proof)
Input voltage reset input	max. 30 V DC
Current consumption reset input	typ. 2.6 mA (at 24 V DC)
Auxiliary type of contact	Positive-switching signal output

Standards and Regulations

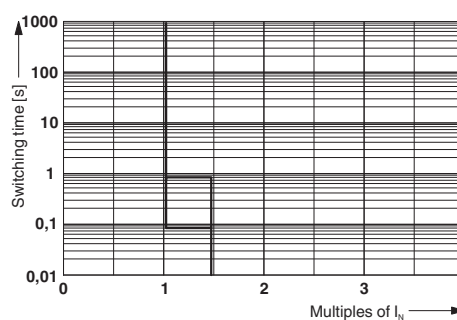
Standards/specifications	UL 2367 UL recognized
	UL 508 UL/C-UL listed
	EMV EN 61000-6-3 Interference emission
	EMV EN 61000-6-2 Noise immunity

Drawings

Dimensional drawing

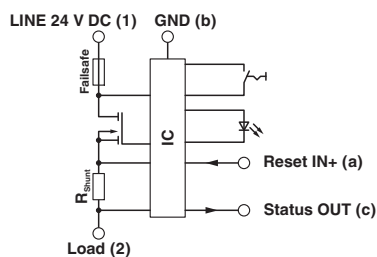


Diagram



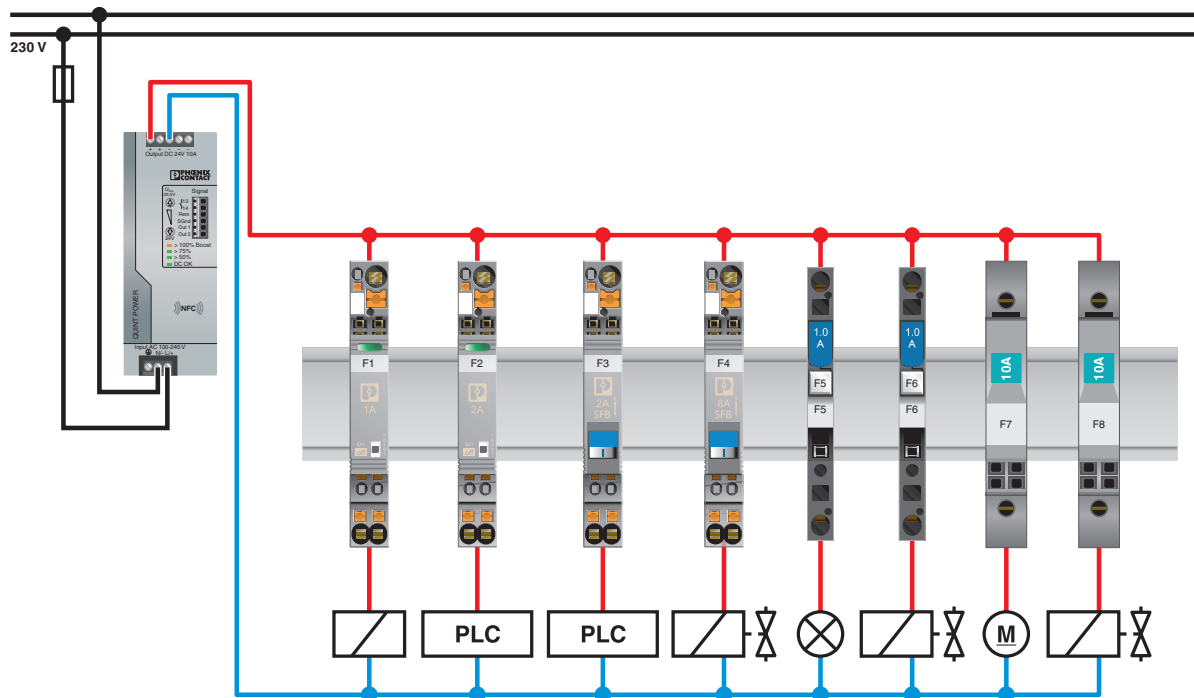
The figure shows the complete module consisting of a base element and Trigger characteristic connector

Circuit diagram



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Application drawing



Classifications

eCl@ss

eCl@ss 4.0	27141116
eCl@ss 4.1	27141116
eCl@ss 5.0	27141116
eCl@ss 5.1	27141116
eCl@ss 6.0	27141116
eCl@ss 7.0	27141116
eCl@ss 8.0	27141116
eCl@ss 9.0	27141116

ETIM

ETIM 3.0	EC000899
ETIM 4.0	EC000899
ETIM 5.0	EC000899
ETIM 6.0	EC000899

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Classifications

UNSPSC

UNSPSC 6.01	30211812
UNSPSC 7.0901	39121411
UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121410

Approvals

Approvals

Approvals

UL Recognized / GL / UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 317172
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GL		http://exchange.dnv.com/tari/	61533-13 HH
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UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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EAC			RU C- DE.A*30.B01561
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cULus Listed			
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Accessories

Accessories

Bridge

Jumper - CB PT BRIDGE - 2801014



Bridge plug for bridging contacts 1 to 2 for CB base elements

Jumper - CB RC BRIDGE - 2801616



Bridge plug for bridging contacts 11 to 14 for CB base elements

Cutting tools

Front cutter - CUTFOX-FBS - 1212124



Cutting tool, for separating individual jumper bars from FBS ... plug-in bridges and EB ... insertion bridges

Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 10.7 mm, Number of positions: 2, Color: red

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 16.9 mm, Number of positions: 3, Color: red

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Accessories

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 23.1 mm, Number of positions: 4, Color: red

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 29.3 mm, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Pitch: 6.2 mm, Length: 23 mm, Width: 60.3 mm, Number of positions: 10, Color: red

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Pitch: 6.2 mm, Length: 23 mm, Width: 122.3 mm, Number of positions: 20, Color: red

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 50, Color: red

Labeled terminal marker

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Accessories

Zack Marker strip, flat - ZBF 12 CUS - 0825018



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

Terminal marking

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

Necessary add-on products

Base element - CB 1/6-2/4 PT-BE - 2800929



Base element with push-in connection technology for CB ... device circuit breakers

Base element - CB 1/10-1/10 UT-BE - 2801305



Base element with screw connection technology for CB... device circuit breakers