

# Electronic device circuit breaker - CB E1 24DC/2A NC P - 2800916

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Electronic device circuit breaker, 1-pos., active current limitation, 1 N/C contact, plug for base element.

The figure shows the CB E1 24DC/1A NC 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
- N/C contact for remote signaling of the operating state
- 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 690652
GTIN	4046356690652
Weight per Piece (excluding packing)	35.900 g
Custom tariff number	85362010
Country of origin	Germany

## Technical data

### Dimensions

Height	45 mm
Width	12.3 mm
Depth	52 mm
Complete module height	90 mm
Complete module width	12.3 mm
Complete module depth	77.3 mm

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## Technical data

### 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
Type	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 $I_N$	2 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. 17 mA (With alarm output)
Power dissipation	0.61 W (Nominal operation)
Temperature derating	2 A (at 50°C)
Tripping method	E (electronic)
Dielectric strength	max. 30 V DC (Load circuit)
Voltage drop	100 mV (at $I_N$ )
Contact type	without electrical isolation
Shutdown time load circuit	400 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
Auxiliary type of contact	floating signal contact
Minimum auxiliary contact operating voltage	10 V DC
Maximum auxiliary contact operating voltage	30 V DC
Minimum auxiliary contact operating current	10 mA

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## Technical data

### Electrical data

Maximum auxiliary contact operating current	0.5 A
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### Standards and Regulations

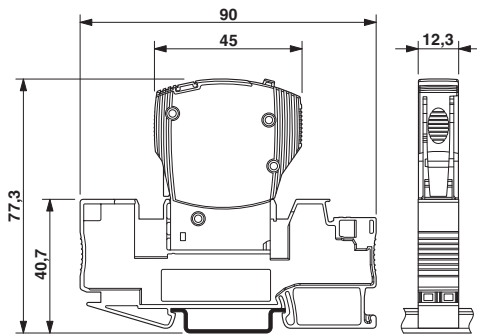
Standards/specifications	UL 2367 UL recognized
	UL 508 UL/C-UL listed
	EMV EN 61000-6-3 Interference emission
	EMV EN 61000-6-2 Noise immunity

### Environmental Product Compliance

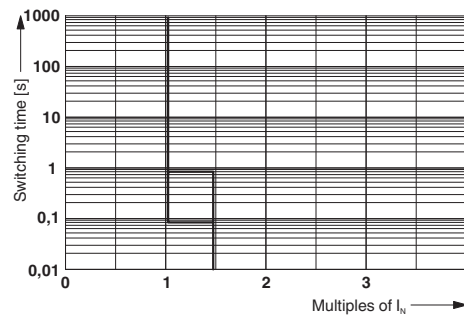
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Dimensional drawing

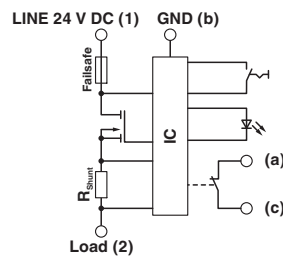


Diagram



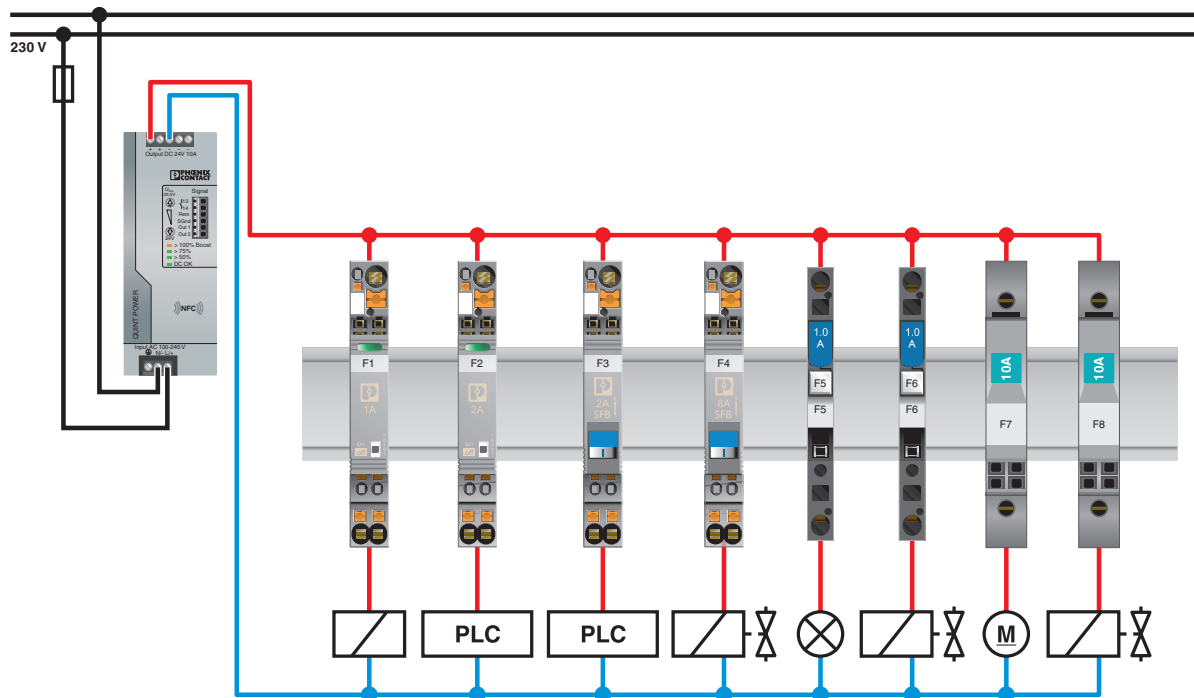
The figure shows the complete module consisting of a base element and Trigger characteristic connector

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 / EAC / cULus Listed

#### Ex Approvals


### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 317172
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GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	61533-13 HH
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UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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EAC			EAC-Zulassung
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EAC			RU C- DE.A*30.B01561
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# Electronic device circuit breaker - CB E1 24DC/2A NC P - 2800916

## Approvals

cULus Listed



## 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, width: 10.7 mm, number of positions: 2, color: red

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### Accessories

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, pitch: 6.2 mm, width: 16.9 mm, number of positions: 3, color: red

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Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, pitch: 6.2 mm, width: 23.1 mm, number of positions: 4, color: red

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Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, pitch: 6.2 mm, width: 29.3 mm, number of positions: 5, color: red

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Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, pitch: 6.2 mm, width: 60.3 mm, number of positions: 10, color: red

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Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, pitch: 6.2 mm, width: 122.3 mm, number of positions: 20, color: red

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## Electronic device circuit breaker - CB E1 24DC/2A NC P - 2800916

### Accessories

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, pitch: 6.2 mm, width: 308.3 mm, number of positions: 50, color: red

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### Labeled terminal marker

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

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### 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

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### 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



