

## Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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

### Your advantages

- ✓ 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 pc
GTIN	 4 046356 690850
GTIN	4046356690850
Weight per Piece (excluding packing)	0.040 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

# Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

## 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
Vibration (operation)	3g (In accordance with IEC 60068-2-6, Test Fc)
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	V-0
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 $I_N$	1 A
Active current limitation	typ. 1.25 x $I_N$
Closed circuit current $I_o$	typ. 8 mA (When switched on)
	typ. 11 mA (With status output)
Power dissipation	0.4 W (Nominal operation)
Temperature derating	1 A (at 50 °C)
Tripping method	E (electronic)
Required backup fuse	not required, integrated failsafe element
Dielectric strength	max. 30 V DC (Load circuit)
Voltage drop	140 mV (at $I_N$ )
Shutdown time load circuit	800 ms (see time/current characteristic curve)

# Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

## Technical data

### Electrical data

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
Output current status output	max. 0.2 A (Short-circuit-proof)
Input voltage reset input	7 V DC ... 30 V DC (Reset with falling edge)
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	EMV EN 61000-6-3 Interference emission
	EMV EN 61000-6-2 Noise immunity

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

### eCl@ss

eCl@ss 4.1	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
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
ETIM 7.0	EC000899

### UNSPSC

UNSPSC 6.01	30211812
UNSPSC 7.0901	39121411

# Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

## Classifications

### UNSPSC

UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121410

## Approvals

### Approvals

#### Approvals

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

#### Ex Approvals

### Approval details

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
-----------	--	---	---------------

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
---------------	--	---	---------------

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
------------	--	---	---------------

EAC			RU C- DE.A*30.B01561
-----	--	--	-------------------------

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00003KA
--------	--	---	------------

## Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

### 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

## Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

### Accessories

Plug-in bridge - FBS 2-6 - 3030336



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

---

Plug-in bridge - FBS 4-6 - 3030255



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

---

Plug-in bridge - FBS 10-6 - 3030271



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

---

## Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

### Accessories

Plug-in bridge - FBS 20-6 - 3030365



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

---

### 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 size: 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: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 12 mm, lettering field size: 5.15 x 12.15 mm

---

### Necessary add-on products

## Electronic device circuit breaker - CB E1 24DC/1A S-R P - 2800908

### Accessories

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

---

---