

Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

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

Your advantages

- ✓ Individually adjustable with protective plugs
- ✓ Protective plug with fixed nominal current value as protection against unintentional changes
- ✓ Active current limitation to improve the capacity of the upstream power supply
- ✓ Remote switch-on and switch-off thanks to the controller function
- ✓ Increased system transparency with integrated remote message function



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 690836
GTIN	4046356690836
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85362010
Country of origin	Germany

Technical data

Dimensions

Height	45 mm
Width	12.3 mm
Depth	52 mm

Ambient conditions

Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

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
Vibration (operation)	3g (according to IEC 60068-2-6, Test Fc)
Degree of protection	IP30 (Actuation area)

General

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	8 A
Rated insulation voltage U_i	30 V (Load circuit)
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	1.06 W (Nominal operation)
Temperature derating	7.2 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	120 mV (at I_N)
Shutdown time load circuit	80 ms (see time/current characteristic curve)
Undervoltage switch-off load circuit	< 14 V (typ. OFF)
	> 17 V (typ. ON)
Max. capacitive load load circuit	20000 μ F
Output voltage status output	24 V DC
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)

Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

Technical data

Electrical data

Pulse length reset input	min. 20 ms
Voltage reset input	< 3 V DC (Low state)
	> 8 V DC (High state)
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

Conformance/approvals

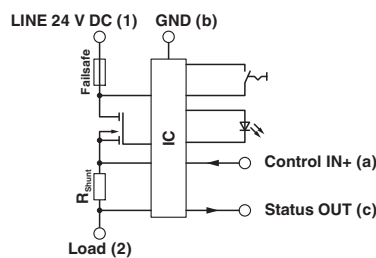
Designation	UL approval
Identification	UL Listed UL 508
	UL Recognized UL 2367
Designation	Shipbuilding approval
Identification	DNV GL

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

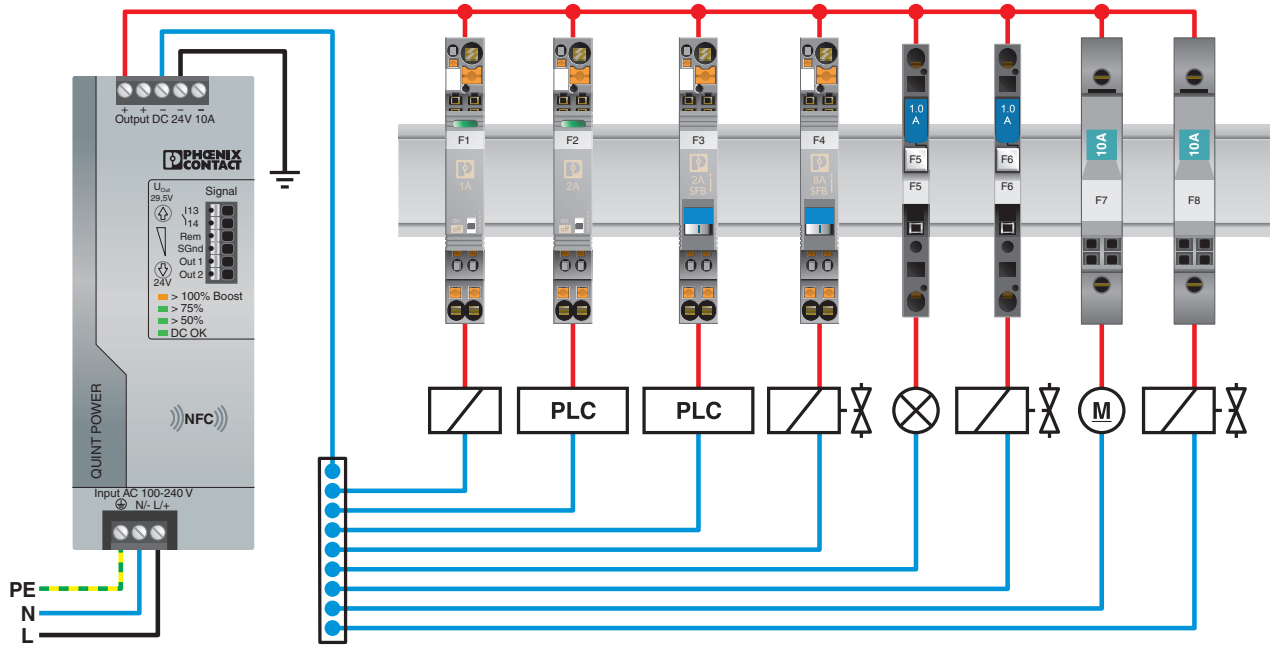
Drawings

Circuit diagram



Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

Application drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27140401
eCl@ss 11.0	27140401
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141116
eCl@ss 9.0	27141116

ETIM

ETIM 3.0	EC000899
ETIM 4.0	EC000899

Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

Classifications

ETIM

ETIM 6.0	EC000899
ETIM 7.0	EC000899

UNSPSC

UNSPSC 6.01	30211812
UNSPSC 7.0901	39121411
UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
-----------	--	---	---------------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 317172
---------------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
------------	--	---	---------------

Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

Approvals

DNV GL		https://approvalfinder.dnvgl.com/	TAE00003KA
--------	---	---	------------

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 circuit breaker - CB E1 24DC/8A S-C P - 2800927

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 circuit breaker - CB E1 24DC/8A S-C P - 2800927

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, Number of individual labels: 5

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, Number of individual labels: 5

Necessary add-on products

Electronic circuit breaker - CB E1 24DC/8A S-C P - 2800927

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
