

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, 1 N/O contact, 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
- ☑ N/O 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 pc
GTIN	4 046356 690713
GTIN	4046356690713

### 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

#### 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



09/17/2019 Page 2 / 7

# Electronic device circuit breaker - CB E1 24DC/1A NO P - 2800901

### Technical data

#### Ambient conditions

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
Туре	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 <sub>N</sub>	1 A
Active current limitation	typ. 1.25 x I <sub>N</sub>
Closed circuit current I <sub>0</sub>	typ. 8 mA (When switched on)
	typ. 17 mA (With alarm output)
Power dissipation	0.55 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 <sub>N</sub> )
Shutdown time load circuit	800 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
Maximum auxiliary contact operating current	0.5 A

Standards and Regulations

Standards/specifications	EMV EN 61000-6-3 Interference emission
--------------------------	--



### Technical data

Standards and Regulations

	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"	

### Drawings



Trigger characteristic

### Diagram





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





Circuit diagram





Application drawing

### Approvals

Approvals

#### Approvals

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

Ex Approvals



Approvals



Phoenix Contact 2019 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com