

# Electronic device circuit breaker - EC-E 0,5A DC24V - 0903041

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 reset input, nominal current: 0.5 A

## Why buy this product

- Selective protection of all 24 V DC load circuits at switched-mode power supply units
- A combination of active electronic current limitation in the event of short circuit and overload shutdown ensures that the circuit breaker can respond to overloads faster than the switched-mode power supply unit
- The residual current is always limited to 1.3 - 1.8 times the nominal current



## Key Commercial Data

Packing unit	6 STK
GTIN	 4 046356 466875
GTIN	4046356466875

## Technical data

### 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.
Mounting type	DIN rail: 35 mm
Color	black
Flammability rating according to UL 94	V0

### Electrical data

Fuse	electronic
Fuse type	Automatic device
Rated surge voltage	0.5 kV
Operating voltage	24 V DC

# Electronic device circuit breaker - EC-E 0,5A DC24V - 0903041

## Technical data

### Electrical data

	18 V DC ... 32 V DC
Nominal current $I_N$	0.5 A
Required backup fuse	not required, integrated failsafe element
Dielectric strength	max. 32 V DC (Load circuit)
Degree of pollution	2
Switching capacity $I_{CN}$	Active current limitation
Closed-circuit current range $I_0$	typ. 25 mA $\pm$ 5 mA (When switched on)

### Dimensions

Height	83 mm
Width	12.5 mm
Depth	80 mm
Height NS 35/7,5	83 mm
Height NS 35/15	90.5 mm

### Ambient conditions

Degree of protection	IP20 (Housing)
Ambient temperature (operation)	0 °C ... 50 °C (non-condensing)

### Connection data

Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	6
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	10 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	10 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, solid max.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	6 mm <sup>2</sup>
Connection method	Screw connection
Stripping length	10 mm

# Electronic device circuit breaker - EC-E 0,5A DC24V - 0903041

## Technical data

### Connection data

Screw thread	M4
Tightening torque max	1.2 Nm

### Standards and Regulations

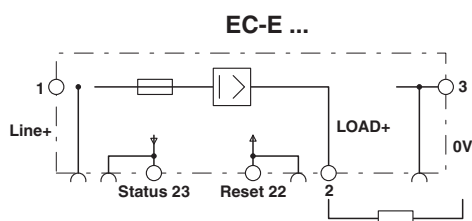
Standards/specifications	UL 508
	CSA 22.2 No. 14
	UL 2367
	CSA 22.2 No. 142
	CSA 22.2 No. 213
	UL 1604

### Environmental Product Compliance

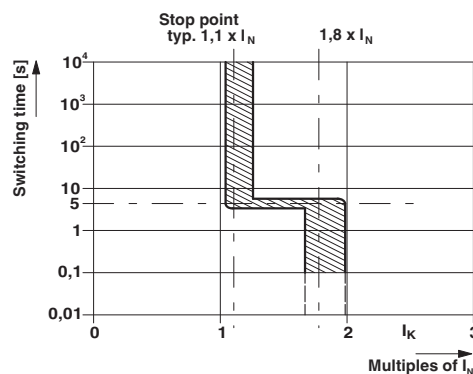
REACH SVHC	Lead 7439-92-1
------------	----------------

## Drawings

Circuit diagram



Diagram



Trigger characteristic

## Approvals

### Approvals

#### Approvals

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






#### Ex Approvals

CSA / UL Recognized

### Approval details

# Electronic device circuit breaker - EC-E 0,5A DC24V - 0903041

## Approvals

EAC			RU C- DE.A*30.B01546
EAC			EAC-Zulassung
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
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
DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00002HC
cULus Listed			

Phoenix Contact 2018 © - 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>