

## Electronic device circuit breaker - EC-E4 12A - 0903039

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, signal contact: 1 N/C contact, nominal current: 12 A

### Product Features

- 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
- Selective protection of all 24 V DC load circuits at switched-mode power supply units
- The residual current is always limited to 1.3 - 1.8 times the nominal current



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	76.43 g
Custom tariff number	85362010
Country of origin	Germany

### 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

## Electronic device circuit breaker - EC-E4 12A - 0903039

### Technical data

#### Electrical data

Rated surge voltage	0.5 kV
Operating voltage	24 V DC
	18 V DC ... 32 V DC
Nominal current $I_N$	12 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.	20
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>

## Electronic device circuit breaker - EC-E4 12A - 0903039

### Technical data

#### Connection data

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
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

### 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

#### ETIM

ETIM 2.0	EC000899
ETIM 3.0	EC000899
ETIM 4.0	EC000899
ETIM 5.0	EC000899

#### UNSPSC

UNSPSC 6.01	30211812
UNSPSC 7.0901	39121411

# Electronic device circuit breaker - EC-E4 12A - 0903039

## Classifications

### UNSPSC

UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121411

## Approvals

### Approvals

#### Approvals


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

#### Ex Approvals


UL Recognized / CSA

#### Approvals submitted

## Approval details

UL Recognized 

EAC

UL Listed 

cUL Listed 

GL

# Electronic device circuit breaker - EC-E4 12A - 0903039

## Approvals



## Drawings

Circuit diagram

