

Electronic device circuit breaker - EC-E1 2A - 0903024

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/O contact, nominal current: 2 A

Why buy this product

- ✓ 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

RoHS

Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	74.640 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
------	------------

Electronic device circuit breaker - EC-E1 2A - 0903024

Technical data

Electrical data

Fuse type	Automatic device
Rated surge voltage	0.5 kV
Operating voltage	24 V DC
	18 V DC ... 32 V DC
Nominal current I_N	2 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_O	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 ²
Conductor cross section solid max.	16 mm ²
Conductor cross section flexible min.	0.5 mm ²
Conductor cross section flexible max.	16 mm ²
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 ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	10 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	10 mm ²
2 conductors with same cross section, solid min.	0.5 mm ²
2 conductors with same cross section, solid max.	4 mm ²
2 conductors with same cross section, stranded min.	0.5 mm ²
2 conductors with same cross section, stranded max.	4 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.5 mm ²

Electronic device circuit breaker - EC-E1 2A - 0903024

Technical data

Connection data

2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	2.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	6 mm ²
Connection method	Screw connection
Stripping length	10 mm
Screw thread	M4
Tightening torque max	1.2 Nm

Standards and Regulations

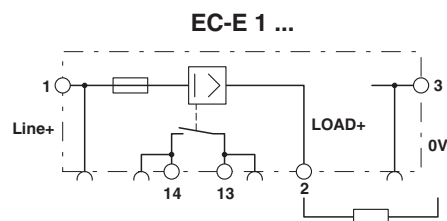
Standards/specifications	UL 508
	CSA 22.2 No. 14
	UL 2367
	CSA 22.2 No. 142
	CSA 22.2 No. 213
	UL 1604

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Circuit diagram



Approvals

Approvals

Electronic device circuit breaker - EC-E1 2A - 0903024

Approvals

Approvals

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

Ex Approvals

UL Recognized / CSA

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 317172
EAC			EAC-Zulassung
EAC			RU C- DE.A*30.B01546
UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
GL		http://exchange.dnv.com/tari/	14505-15 HH
cULus Listed			