

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

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Electronic circuit breaker, signal contact: 1 N/O contact, nominal current: 2 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

package_quantity	6
GTIN	4046356328005

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
Inflammability class according to UL 94	V0

Electrical data

Fuse	Electronic
Fuse type	Automatic device
Rated surge voltage	0.5 kV
Operating voltage	24 V DC
Operating voltage	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)
Pollution degree	2
Switching capacity I_{CN}	(Active current limitation)

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Closed-circuit current range I₀	typ. 25 mA ±5 mA (When switched on)
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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 (without condensation)

Connection data

Conductor cross section solid min.	0.5 mm ²
Conductor cross section solid max.	16 mm ²
Conductor cross section stranded min.	0.5 mm ²
Conductor cross section stranded max.	16 mm ²
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	6
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.5 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve max.	10 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.5 mm ²
Conductor cross section stranded, 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
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

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Standards and Regulations

Standards/specifications	UL 508
Standards/specifications	CSA 22.2 No. 14
Standards/specifications	UL 2367
Standards/specifications	CSA 22.2 No. 142
Standards/specifications	CSA 22.2 No. 213
Standards/specifications	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
UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121411

approvals

UL Recognized /

Approval details



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accessories

Mounting rail

NS 35/ 7,5 PERF 2000MM - 0801733



NS 35/ 7,5 CU UNPERF 2000MM - 0801762



NS 35/15 UNPERF 2000MM - 1201714



NS 35/15 CU UNPERF 2000MM - 1201895



NS 35/15-2,3 UNPERF 2000MM - 1201798



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accessories

NS 35/15 AL UNPERF 2000MM - 1201756



NS 35/15 PERF 2000MM - 1201730



Screwdriver tools

SZS 0,6X3,5 - 1205053



Terminal marking

UC-TMF 12 - 0819233



ZBF 12:UNBEDRUCKT - 0809735



End block

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accessories

CLIPFIX 35-5 - 3022276



E/UK 1 - 1201413



Bridge

FBST 500-PLC BU - 2966692



FBST 500-PLC RD - 2966786



FBST 500 TMC-N GY - 0901028



Drawings

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Circuit diagram

