Electronic device circuit breaker - CBMC EG4 24DC/1-8A NO - 1065730

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Multi-channel electronic circuit breaker with electrical isolation for protecting four loads at 24 V DC in the event of overload or short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Your advantages

- Easy device replacement without replanning, thanks to compact design and options for individual adjustments
- Circuits can be adjusted without any tools by means of one single pushable LED button
- System safety is increased during maintenance work thanks to disconnection via electrical isolation
- Safe system operation, thanks to patented monitoring of electrical isolation
- Reliable protection against unintentional adjustment of current values, thanks to electronic locking
- Status LEDs in traffic light colors enable instantaneous determination of operating states

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 729312
GTIN	4055626729312
Weight per Piece (excluding packing)	167.000 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	36 mm
Depth	98 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Humidity test	96 h, 95 % RH, 40 °C

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Ambient conditions

Altitude	≤ 3000 m up to 52 °C (amsl (above mean sea level))
	≤ 4000 m up to 46 °C (amsl (above mean sea level))
Degree of protection	IP20

General

Flammability rating according to UL 94	V-0
Mounting type	DIN rail: 35 mm
Color	light grey RAL 7035
Number of positions	1
Protection class	III
Degree of pollution	2
Type	DIN rail module, one-piece

Electrical data

Fuse type	electronic
Rated surge voltage	0.5 kV
Operating voltage	18 V DC ... 30 V DC
Rated voltage	24 V DC
Rated current I_N	max. 32 A DC (IN+)
	max. 40 A DC (per terminal position when bridging additional devices via IN+)
	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 A DC (adjustable per output channel)
Measuring tolerance I	± 15 %
Feedback resistance	max. 35 V DC
Fail-safe element	15 A DC (per output channel)
Efficiency	> 99 %
Closed circuit current I_0	typ. 80 mA
Power dissipation	typ. 2 W (No-load operation)
	< 7 W (Nominal operation)
Module initialization time	1.6 s
Waiting time after switch off of a channel	5 s (at overload / short circuit)
Temperature derating	25 A DC (at 60 °C)
	28 A DC (at 56 °C)
	32 A DC (at 52 °C)
Tripping method	EG (electronic - galvanic disconnection)
Required backup fuse	not required, integrated failsafe element, supplied with standard switched-mode power supply
	30 A (gG, supplied with linear power supply, Icn ≥ 200 A)
Dielectric strength	max. 35 V DC (Load circuit)
Shutdown time load circuit	≤ 10 ms (for short circuit > 2.0 x I_N)
	1 s (1.2 ... 2.0 x I_N)
Undervoltage shutdown load circuit	≤ 17.8 V DC (active)

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Electrical data

	≥ 18.8 V DC (inactive)
Surge voltage shutdown load circuit	≥ 30.5 V DC (active)
	≤ 29.5 V DC (inactive)
Max. capacitive load load circuit	45000 µF (Depending on the current setting and the short-circuit current available)

Remote indication contact

Connection name	Remote indication circuit
Switching function	N/O contact
Stripping length	10 mm
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²
DC operating voltage	0 V DC ... 30 V DC
DC operating current	100 mA DC

Signaling

Channel LED off	off (Channel switched off)
Channel LED green	lit (Channel switched on)
Channel LED yellow	lit (Channel switched on, channel load > 80%)
	flashing (Programming mode active)
Channel LED red	lit (Channel switched off, relay error, overvoltage or undervoltage active)
	ON temporarily (Channel switched off, 5 s cool-down phase, overload or short-circuit release)
	flashing (Channel switched off, ready to be switched back on, overload or short-circuit release)
	two flashes (Channel switched off, device total current limit 32 A exceeded)

Connection data

Connection name	Main circuit IN+
Connection method	Push-in connection
Stripping length	15 mm
Conductor cross section solid	0.2 mm² ... 10 mm²
Conductor cross section AWG	24 ... 8
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 4 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 6 mm²
Connection name	Main circuit IN-
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²

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Connection data

Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²
Connection name	Main circuit OUT
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²

Standards and Regulations

Standards/specifications	EN 61000-6-2 EMC – Immunity for industrial areas
	EN 61000-6-3 EMC – Emission for residential, business and commercial properties and small operations
	EN 60068-2-78 Environmental influences – Vibrations (sinusoidal)
	EN 50178 Equipping power installations with electronic equipment

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

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Product drawing

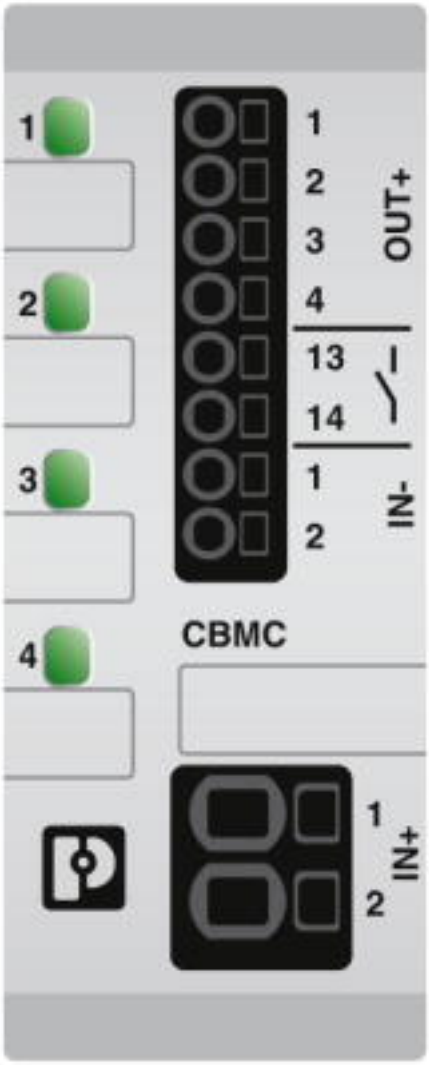

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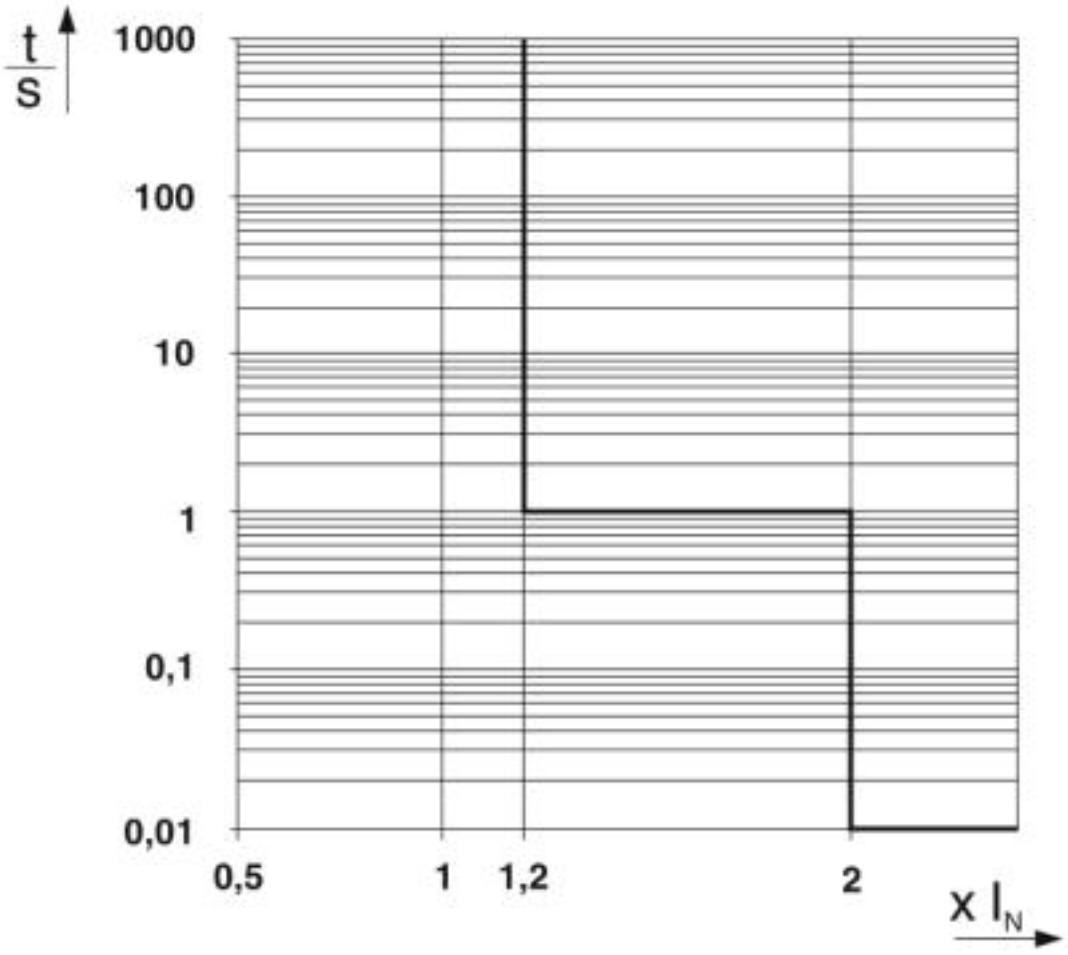
Diagram



Trigger characteristic in the DC range

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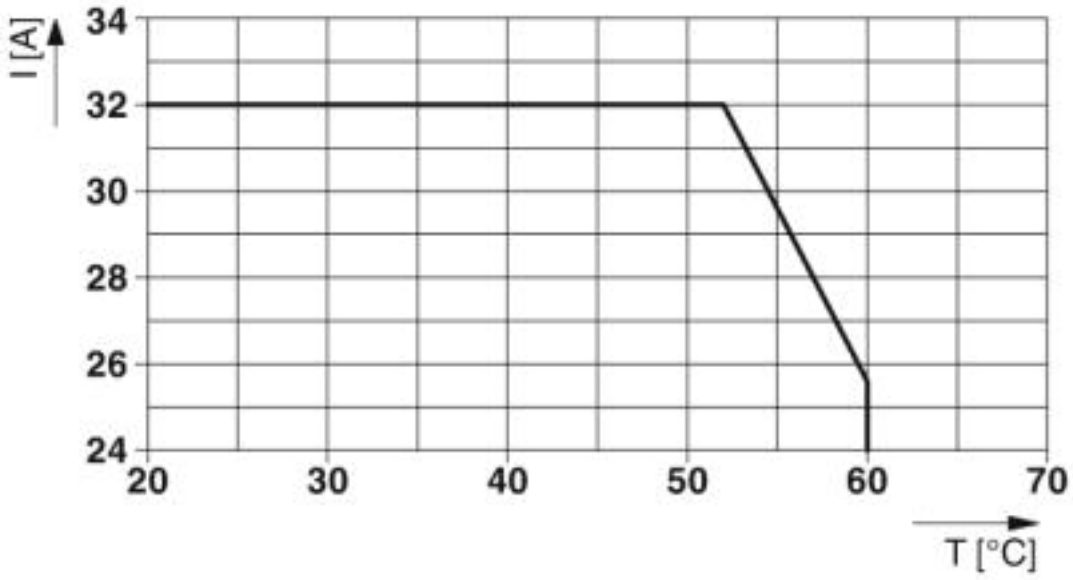
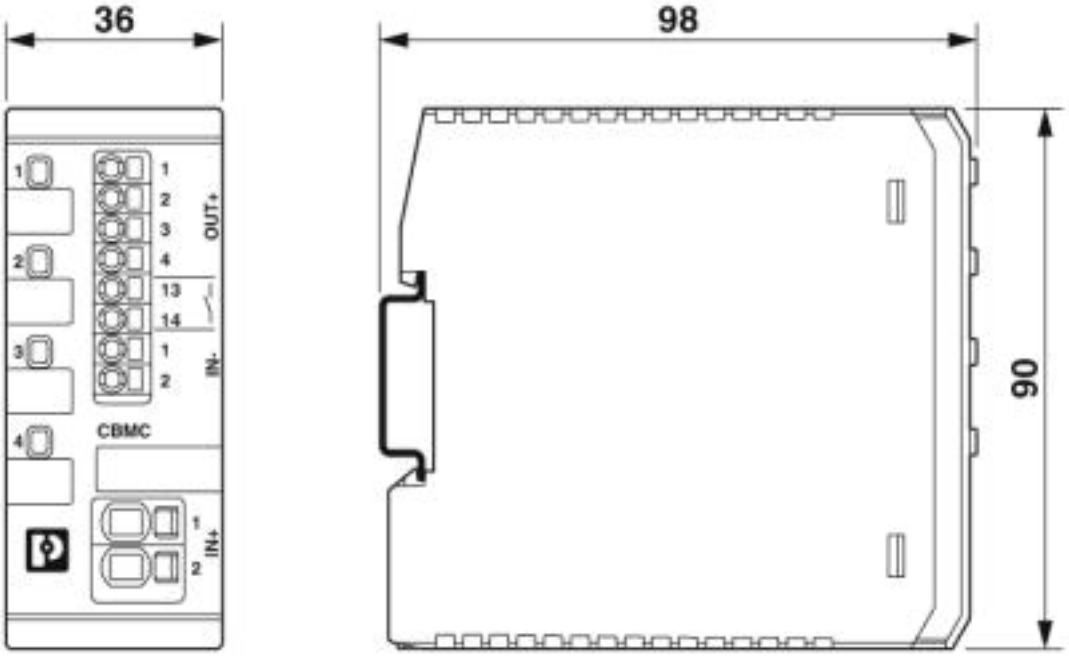
Diagram



Max. permissible current in relation to the ambient temperature

Dimensional drawing



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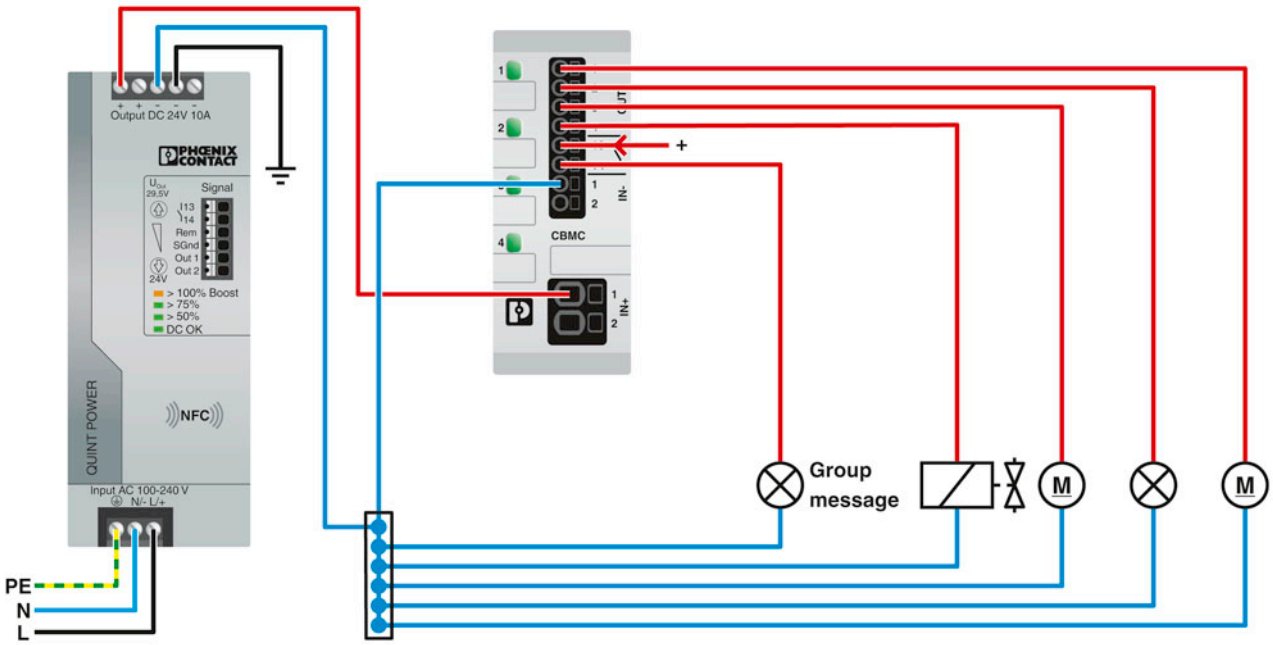
Application drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27140401
eCl@ss 8.0	27141116
eCl@ss 9.0	27141116

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Classifications

ETIM

ETIM 5.0	EC000899
ETIM 6.0	EC000899
ETIM 7.0	EC000899

Accessories

Additional products

Label - EML (10X7)R - 0816663

Label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: 10 x 7 mm, Number of individual labels: 10000

Equipment marking - EML-ESD (20X7)R - 0830567

Equipment marking, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: 20 x 7 mm, Number of individual labels: 4000

Power supply unit - QUINT4-PS/1AC/24DC/10 - 2904601

Primary-switched QUINT POWER power supply with free choice of output characteristic curve, SFB (selective fuse breaking) technology, and NFC interface, input: 1-phase, output: 24 V DC/10 A

Power supply unit - QUINT4-PS/1AC/24DC/20 - 2904602

Primary-switched QUINT POWER power supply with free choice of output characteristic curve, SFB (selective fuse breaking) technology, and NFC interface, input: 1-phase, output: 24 V DC/20 A

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Accessories

Power supply unit - QUINT4-PS/3AC/24DC/10 - 2904621

Primary-switched QUINT POWER power supply with free choice of output characteristic curve, SFB (selective fuse breaking) technology, and NFC interface, input: 3-phase, output: 24 V DC/10 A

Power supply unit - QUINT4-PS/3AC/24DC/20 - 2904622

Primary-switched QUINT POWER power supply with free choice of output characteristic curve, SFB (selective fuse breaking) technology, and NFC interface, input: 3-phase, output: 24 V DC/20 A

Power supply unit - TRIO-PS-2G/1AC/24DC/10 - 2903149

Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: single phase, output: 24 V DC/10 A

Power supply unit - TRIO-PS-2G/1AC/24DC/20 - 2903151

Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: single-phase, output: 24 V DC/20 A

Power supply unit - TRIO-PS-2G/3AC/24DC/5 - 2903153

Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: 3-phase, output: 24 V DC/5 A

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Accessories

Power supply unit - TRIO-PS-2G/3AC/24DC/10 - 2903154

Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: 3-phase, output: 24 V DC/10 A

Power supply unit - TRIO-PS-2G/3AC/24DC/20 - 2903155

Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: 3-phase, output: 24 V DC/20 A

Power supply unit - TRIO-PS-2G/3AC/24DC/40 - 2903156

Primary-switched TRIO power supply for DIN rail mounting, input: 3-phase, output: 24 V DC/40 A, dynamic boost, tool-free fast connection technology for solid and stranded conductors with ferrule