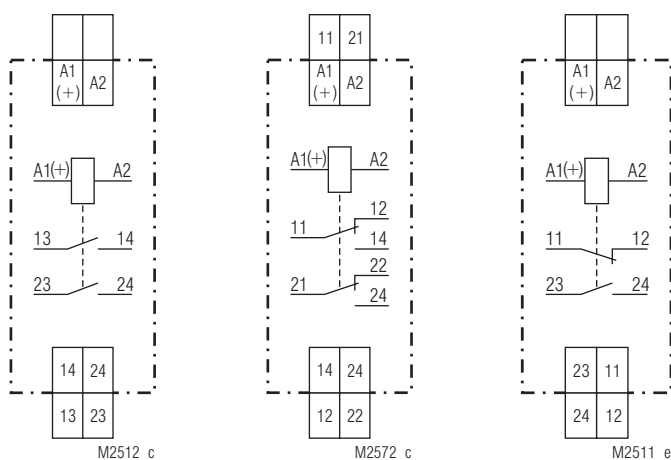


SAFEMASTER Interface Module IK 3079



- According to IEC/EN 61 810-1
- With input protection circuit against voltage peaks
- Forcibly guided contacts according to IEC 61810-3
- I_{th} max. 8 A or 2 x 5 A
- Functional display by LED
- Optionally 2 NO or 2 changeover contacts or 1 NO and 1 NC
- IK 3079/103: with forcibly guided contacts according to ZH/457
- DIN rail or screw mounting
- 17.5 mm width

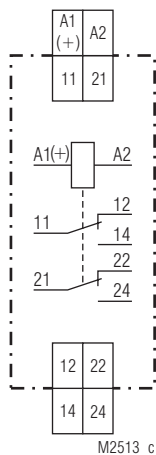
Circuit Diagrams



IK 3079.02

IK 3079.12
IK 3079.12/103

IK 3079.16
IK 3079.16/103



IK 3079.12 (special version)

Connection Terminals

Terminal designation	Signal designation
A1+	L / +
A2	N / -
11, 12	NC contact
13, 14; 23, 24	NO contacts
11, 12, 14 21, 22, 24	C/O contacts

Approvals and Markings



Indicator

green LED: on, when control voltage connected

Technical Data

Input

Nominal voltage U_N :
 IK 3079.02, IK 3079.16: AC/DC 24 V
 IK 3079.12: AC/DC 24 V, AC 230 V
 IK 3079.12/103, IK 3079.16/103: DC 24 V
Voltage range: AC 0.8 ... 1.1 U_N , DC 0.9 ... 1.2 U_N
Nominal consumption: approx. 0.9 W
Nominal frequency: 50 / 60 Hz
Frequency range: $\pm 5\%$ of nominal frequency

Output

Contacts

IK 3079.02: 2 NO contacts
 IK 3079.12, IK 3079.12/103: 2 changeover contacts
 IK 3079.16, IK 3079.16/103: 1 NC and 1 NO contact
Response time: ≤ 8 ms
Release time: ≤ 15 ms
Contact type: Spring contact
Nominal output voltage: AC 10 V ... AC 400 V
Thermal current I_{th} : max. 8 A or 2 x 5 A simultaneous
Switching capacity
 to AC 15:
 NO contact: 3 A / AC 230 V IEC/EN 60 947-5-1
 NC contact: 1 A / AC 230 V IEC/EN 60 947-5-1
Electrical life
 to AC 15 at 1 A, AC 230 V: $\geq 2.5 \times 10^5$ switching cycles
Permissible switching frequency: max. 10 switching cycles / s
Switching capacity
 min. / max.: 0.1 VA / 2 000 VA
 or 2 x 1250 VA simultaneous
 0.1 W / 200 W
Mechanical life: $\geq 50 \times 10^6$

General Data

Operating mode: Continuous operation
Temperature range
 IK 3079
 Operation: -25 ... +60 °C
 Storage: -25 ... +70 °C
 IK 3079/103
 Operation: -20 ... +85 °C
 Storage: -25 ... +90 °C
Relative air humidity: 93 % bei 40 °C
Altitude: < 2,000 m

Technical Data

Clearance and creepage distances

rated impulse voltage /

pollution degree

Input / Output:

4 kV / 2 IEC 60 664-1

Output / Output:

2.5 kV / 2 IEC 60 664-1

only for 1-phase systems
(same phase)

EMC

Electrostatic discharge: 8 kV (air) IEC/EN 61 000-4-2

HF-irradiation

80 MHz ... 1 GHz: 10 V / m IEC/EN 61 000-4-3

1 GHz ... 2.7 GHz: 10 V / m IEC/EN 61 000-4-3

Fast transients: 4 kV IEC/EN 61 000-4-4

Surge voltages

between

wires for power supply: 2 kV IEC/EN 61 000-4-5

between wire and ground: 4 kV IEC/EN 61 000-4-5

Interference suppression: Limit value class B EN 55011

Degree of protection:

Housing: IP 40 IEC/EN 60 529

Terminals: IP 20 IEC/EN 60 529

Housing:

Thermoplastic with V0-behaviour
according to UL subject 94

Vibration resistance:

Amplitude 0.35 mm

frequency 10 ... 55 Hz IEC/EN 60 068-2-6

Humid heat IEC/EN 60 068-1

Climate resistance:

Terminal designation: EN 50 005

Wire connection:

2 x 2.5 mm² solid or

2 x 1.5 mm² stranded ferruled

DIN 46 228-1/-2/-3/-4

Wire fixing:

Flat terminals with self-lifting

clamping piece IEC/EN 60 999-1

Fixing torque:

0.8 Nm

Mounting:

DIN rail mounting (IEC/EN 60715) or
screw mounting M4, 90 mm hole pattern,
with additional clip available as accessory

Weight:

60 g

Dimensions

Width x height x depth: 17.5 x 89 x 58 mm

Standard Type

IK 3079.16 AC/DC 24 V

Article number: 0041187

• Temperature range: -20 ... +55 °C

• Output: 1 NC, 1 NO contact

• Nominal voltage U_N : AC/DC 24 V

• Width: 17.5 mm

IK 3079.16/103 DC 24 V

Article number: 0053851

• Temperature range: -20 ... +85 °C

• Output: 1 NC, 1 NO contact

• Nominal voltage U_N : AC/DC 24 V

• Width: 17.5 mm

Ordering Example

IK 3079 .16 AC/DC 24 V 50 / 60 Hz

Nominal frequency

Nominal voltage

Contact

Type

IK 3079 .16 /103 DC 24 V 50 / 60 Hz

Nominal frequency

Nominal voltage

Temperature range:

-20 ... +85 °C

Contact

Type

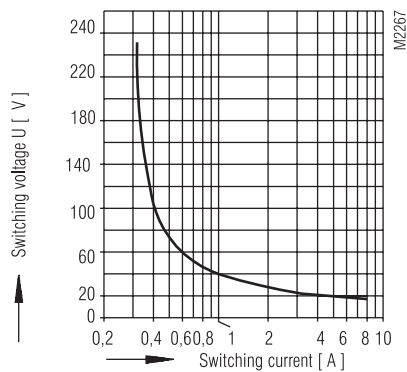
Accessories

ET 4086-0-2:

Additional clip for screw mounting

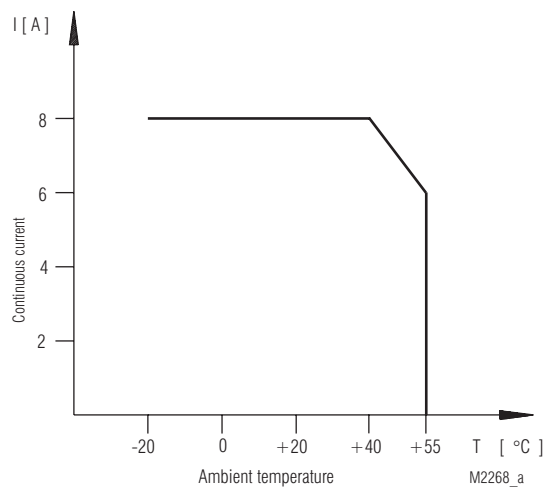
Article number: 0046578

Characteristics

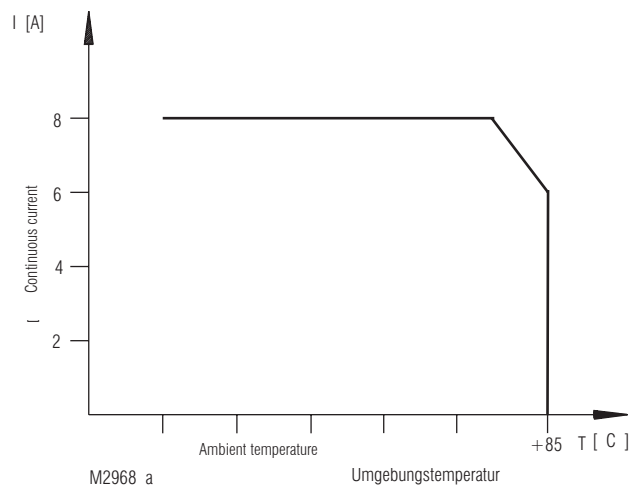


Safe switch-off, no continuous arc,
max. 1 switching operation / s

Limit curve for arc-free operation under ohmic load



IK 3079: Continuous current limit curve as a function of the ambient temperature (only for not mounted devices)



IK 3079/103: Continuous current limit curve as a function of the ambient temperature (only for not mounted devices)