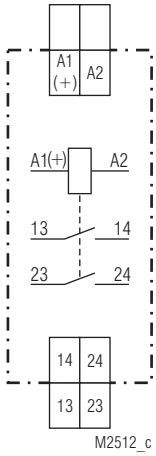
SAFEMASTER
Interface Module
IK 3079

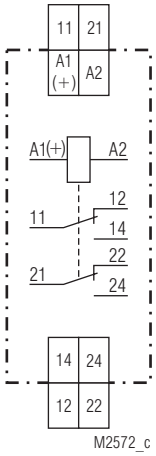
0221564

- According to IEC/EN 61 810-1
- With input protection circuit against voltage peaks
- Forcibly guided contacts according to EN 50 205
- 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
- 17.5 mm width

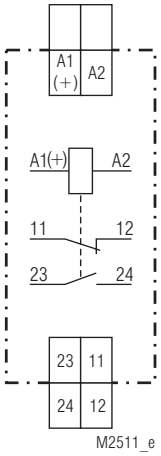
Circuit Diagram



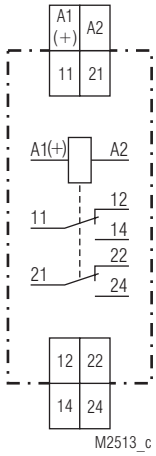
IK 3079.02



IK 3079.12



IK 3079.16
IK 3079.16/103



IK 3079.12 (special version)

Approvals and Marking

CE

Indication

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 3079.16/103: 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: ± 5 % of nominal frequency

Output

Contacts
IK 3079.02: 2 NO contacts
IK 3079.12: 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 IEC/EN 60 947-5-1
to AC 15 at 1 A, AC 230 V: ≥ 2.5 x 10^5 switching cycles
Electrical life
to AC 15 at 10 A, AC 230 V: ≥ 10^6 switching cycles IEC/EN 60 947-5-1
Permissible switching frequency: max. 10 switching cycles / s
Switching capacity min. / max.: 3 VA / 2 000 VA
or 2 x 1250 VA simultaneous
3 W / 200 W
Mechanical life: ≥ 50 x 10^6

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range:		
IK 3079:	- 20 ... + 55 °C	
IK 3079/103:	- 20 ... + 85 °C	
Clearance and creepage distances		
rated impuls voltage / pollution degree		
Input/Output:	4 kV / 2	IEC 60 664-1
Contacts:	2.5 kV / 2 only for 1-phase systems (same phase)	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF-irradiation:	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
Climate resistance:	Humid heat	IEC/EN 60 068-1
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
Mounting:	DIN rail	IEC/EN 60 715
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

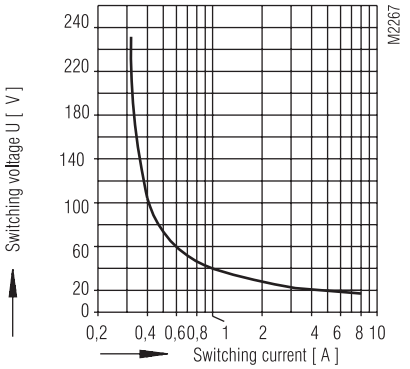
IK 3079 .16 AC/DC 24 V 50 / 60 Hz

- 50 / 60 Hz: Nominal frequency
- AC/DC 24 V: Nominal voltage
- .16: Contact
- IK 3079: Type

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

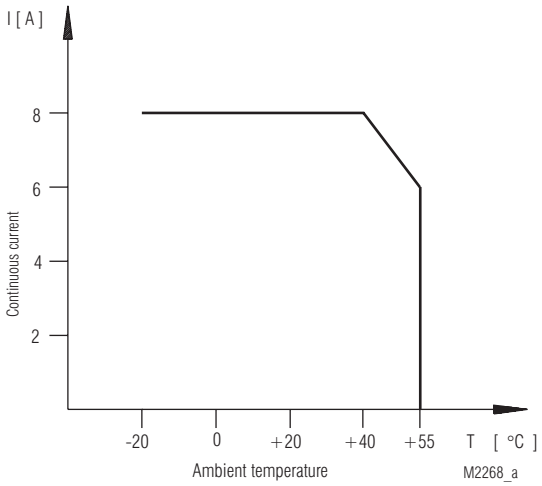
- 50 / 60 Hz: Nominal frequency
- DC 24 V: Nominal voltage
- /103: Temperature range: - 20 ... + 85 °C
- .16: Contact
- IK 3079: Type

Characteristics

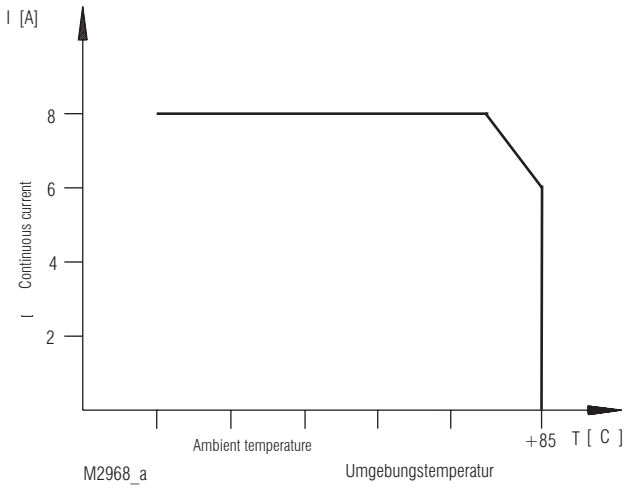


Safe switch-off, no continuous arc,
max. 1 switching operation / s

Limit curve for arc-free operation under ohmic load



IK 3079: Continuous current limit curve as a function of the ambient temperature



IK 3079/103: Continuous current limit curve as a function of the ambient temperature