

Interface Relay IK 3050



0273677



Your Advantages

- Suitable for switching low loads > 10 V / > 10 mA
- Compact design for installation systems and industrial distribution systems according to DIN 43880

Features

- According to DIN EN 61 810-1
- Protective separation according to IEC/EN 61 140, IEC/EN 60 947-1
- 1 changeover contact
- With input wiring protection against voltage surges
- LED indicator
- Width: 17.5 mm

Product Description

The interface relay IK 3051 is designed to switch low loads and is used to separate control and load circuits. A input is protected against voltage peaks. To indicate the control status, the unit has an LED indicator. The compact enclosure allows space saving installation in consumer units or industrial cabinets.

Approvals and Markings



Applications

- Link between the control and power levels
- For separating potentials

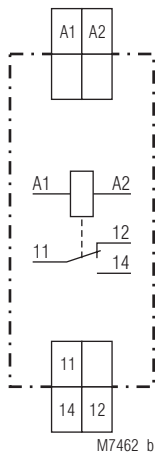
Indicator

yellow LED: on when the relay is supplied with current

Notes

The interface relay is for switching low loads > 10 V / > 10 mA. The contacts also permit the maximum switching current. However, since the gold plating is burnt off at this current level, the unit is no longer suitable for switching low loads again afterwards.

Circuit Diagram



Connection Terminals

Terminal designation	Signal description
A1, A2	Control input
11, 12, 14	Changeover contact

Technical Data	
Input	
Nominal voltage U_N:	AC/DC 24, 48 V AC 230 ... 240 V
Voltage range:	0.8 ... 1.1 U_N
Nominal consumption:	DC 24 V AC 230 V 0.3 W 2.5 VA
Nominal frequency:	50 / 60 Hz
Frequency range:	± 5 %
Output	
Contacts:	1 changeover contact
Contact material:	AgNi + 3 µm Au
Operate/release time:	< 10 ms / < 25 ms
Switching low loads:	≥ AC/DC 10 V ≥ 0.01 A ≥ 0.1 VA ATTENTION ! see „Notes“ switching of low loads
Thermal current I_{th}:	5 A
Switching capacity to AC 15	
NC contact:	3 A / AC 230 V IEC/EN 60 947-5-1
NO contact:	1 A / AC 230 V IEC/EN 60 947-5-1
to DC 13	
NC contact:	1 A / DC 24 V IEC/EN 60 947-5-1
NO contact:	1 A / DC 24 V IEC/EN 60 947-5-1
Electrical life to AC 15 at 3 A, AC 230 V:	1 x 10 ⁵ switch. cycl. IEC/EN 60 947-5-1
Permissible switching frequency:	6 000 switching cycles / h
Short circuit strength	
max. fuse rating:	6 A gL IEC/EN 60 947-5-1
Mechanical life:	> 30 x 10 ⁶ switching cycles
General Data	
Operating mode:	Continuous operation
Temperature range:	- 20 ... + 60°C
Clearance and creepage distances rated impulse voltage/ pollution degree	
Input / Output:	6 kV / 2 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:	2 kV IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	1 kV IEC/EN 61 000-4-5
between wire and ground:	2 kV IEC/EN 61 000-4-5
HF-wire guided:	10 V IEC/EN 61 000-4-6
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:	20 / 060 / 04 IEC/EN 60 068-1
Terminal designation:	EN 50 005
Wire connection:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² 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 IEC/EN 60 715
Weight:	72 g
Dimensions	
Width x height x depth:	17.5 x 89 x 59 mm

Standard Type	
IK 3050.11 AC 230 ... 240 V 50/60 Hz	
Article number:	0067059
• Output:	1 Wechsler
• Nominal voltage U_N :	AC 230 ... 240 V
• Width:	17.5 mm