

## Interface Relay IK 3050

Translation  
of the original instructions



### 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 61810-1
- Protective separation according to IEC/EN 61140, IEC/EN 60947-1
- 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

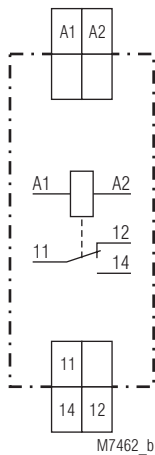
### Indicator

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

<b>Nominal voltage <math>U_N</math>:</b>	AC/DC 24, 48 V AC 230 ... 240 V
<b>Voltage range:</b>	0.8 ... 1.1 $U_N$
<b>Nominal consumption:</b>	DC 24 V      AC 230 V 0.3 W            2.5 VA
<b>Nominal frequency:</b>	50 / 60 Hz
<b>Frequency range:</b>	± 5 %

### Output

<b>Contacts:</b>	1 changeover contact
<b>Contact material:</b>	AgNi + 3 µm Au
<b>Operate/release time:</b>	< 10 ms / < 25 ms
<b>Switching low loads:</b>	≥ AC/DC 10 V ≥ 0.01 A ≥ 0.1 VA
	<b>ATTENTION !</b> See „Notes“ switching of low loads
<b>Thermal current <math>I_{th}</math>:</b>	5 A

### Switching capacity

to AC 15		
NC contact:	3 A / AC 230 V	IEC/EN 60947-5-1
NO contact:	1 A / AC 230 V	IEC/EN 60947-5-1
to DC 13		
NC contact:	1 A / DC 24 V	IEC/EN 60947-5-1
NO contact:	1 A / DC 24 V	IEC/EN 60947-5-1

### Electrical life

to AC 15 at 3 A, AC 230 V:	1 x 10 <sup>5</sup> switch. cycl.	IEC/EN 60947-5-1
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### Permissible switching frequency:

	6 000 switching cycles / h
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### Short circuit strength

<b>max. fuse rating:</b>	6 A gG / gL	IEC/EN 60947-5-1
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### Mechanical life:

	> 30 x 10 <sup>5</sup> switching cycles
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## General Data

<b>Operating mode:</b>	Continuous operation	
<b>Temperature range:</b>	- 20 ... + 60°C	
<b>Clearance and creepage distances</b>		
Rated impulse voltage/ pollution degree		
Input / Output:	6 kV / 2	IEC 60664-1
<b>EMC</b>		
Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation:	10 V/m	IEC/EN 61000-4-3
Fast transients:	2 kV	IEC/EN 61000-4-4
Surge voltages between		
Wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	2 kV	IEC/EN 61000-4-5
HF-wire guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011
<b>Degree of protection</b>		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
<b>Housing:</b>	Thermoplastic with V0 behaviour according to UL Subject 94	
<b>Vibration resistance:</b>	Amplitude 0.35 mm frequency 10 ... 55 Hz IEC/EN 60068-2-6	
<b>Climate resistance:</b>	20 / 060 / 04	IEC/EN 60068-1
<b>Terminal designation:</b>	EN 50005	
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded ferruled DIN 46228-1/-2/-3/-4	
<b>Wire fixing:</b>	Flat terminals with self-lifting clamping piece IEC/EN 60999-1	
<b>Fixing torque:</b>	0.8 Nm	
<b>Mounting:</b>	DIN rail	IEC/EN 60715
<b>Weight:</b>	72 g	

## Dimensions

<b>Width x height x depth:</b>	17.5 x 89 x 59 mm
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## 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