

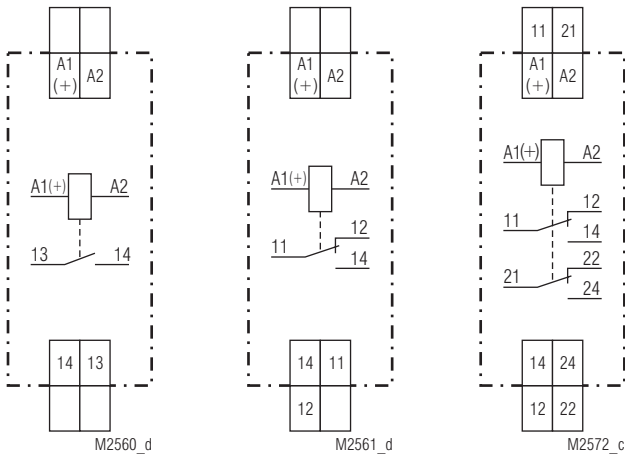
Interface Relay Input-Output Interface Relay IK 8802

Translation
of the original instructions



- According to IEC/EN 61810-1, IEC/EN 60947-5-1
- With 1 or 2 changeover contacts as options
- High permanent current I_{th}
- For switching low loads as an option
- LED display (for AC/DC 24 V only)
- Width 17.5 mm

Circuit Diagrams



IK 8802.01

IK 8802.11

IK 8802.12

Connection Terminals

Terminal designation	Signal description
A1	Control signal L resp. DC+
A2	Neutral N resp. DC-
13/14	NO contact load
11/12/14, 21/22/24	Changeover contacts load

Approvals and Markings



Function

- Link between the control and power levels
- For potential separation

Indicators

LED: On, when supply connected

Technical Data

Input

Nominal voltage U_N : AC/DC 12 V max. 48 % RW,
AC/DC 24 V max. 48 % RW,
AC/DC 230 V

Voltage range: 0.8 ... 1.1 U_N
Nominal consumption: AC 12, 24 V 0.7 VA
DC 12, 24 V 0.6 W

Nominal frequency: 50 / 60 Hz
Frequency range: ± 5 %

Output

Contacts

IK 8802.01: 1 NO contact
IK 8802.11: 1 changeover contact
IK 8802.12: 2 changeover contacts

Operate / release time: < 10 ms / < 10 ms

Thermal current I_{th}

IK 8802.11: 10 A
IK 8802.12: 2 x 5 A

Switching capacity

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

Electrical life

To AC 15 at 3 A, AC 230 V
1 changeover contact: 2.5 x 10⁵ switching cycles
2 changeover contacts: 0.5 x 10⁵ switching cycles

Permissible switching frequency:

3000 switching cycles/h

Short circuit strength

max. fuse rating

IK 8802.11: 10 A gG / gL IEC/EN 60947-5-1
IK 8802.12: 6 A gG / gL IEC/EN 60947-5-1

Mechanical life:

> 50 x 10⁶ switching cycles

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range		
Operation:	- 20 ... + 55°C	
Storage:	- 40 ... + 80°C	
Altitude:	< 2000 m	
Clearance and creepage distances		
Rated impulse voltage / pollution degree:		
input/output:	4 kV / 3	IEC 60664-1
Contacts:	2.5 kV / 2	IEC 60664-1
	only for 1-phase systems (same phase)	

EMC

Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF-irradiation		
80 MHz...6 GHz:	10 V/m	IEC/EN 61000-4-3
Fast transients:	4 kV	IEC/EN 61000-4-4
Surge voltages between		
Wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	4 kV	IEC/EN 61000-4-5
HF-wire guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011

Degree of protection

Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529

Housing:

Thermoplastic with V0 behaviour according to UL subject 94

Vibration resistance:

Amplitude 0.35 mm frequency 10 ... 55 Hz IEC/EN 60068-2-6

Climate resistance:

Humid heat IEC/EN 60068-2-30

Terminal designation:

EN 50005

Wire connection:

2 x 2.5 mm² solid or 2 x 1.5 mm² stranded ferruled DIN 46228-1/-2/-3/-4

Wire fixing:

Flat terminals with self-lifting clamping piece IEC/EN 60999-1

Fixing torque:

0.8 Nm

Mounting:

DIN rail IEC/EN 60715

Weight:

60 g

Dimensions

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

Standard Type

IK 8802.12 AC/DC 24 V 50/60 Hz	
Article number:	0012142
• Output:	2 changeover contacts
• Nominal voltage U_N :	AC/DC 24 V
• Width:	17.5 mm

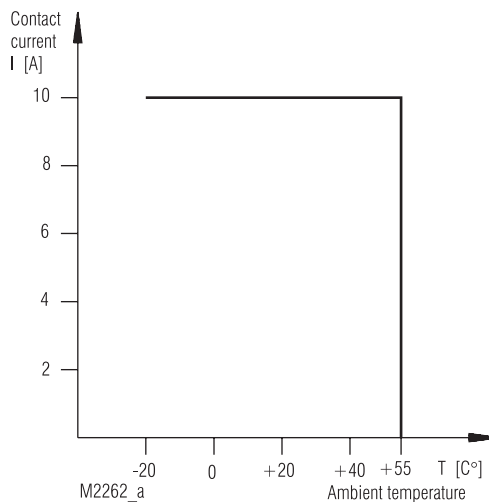
Variants

IK 8802._./005:	For low loads of 0.1 ... 60 V, 1 mA ... 300 mA
IK 8802._./023:	AC/DC 230 V, without an LED

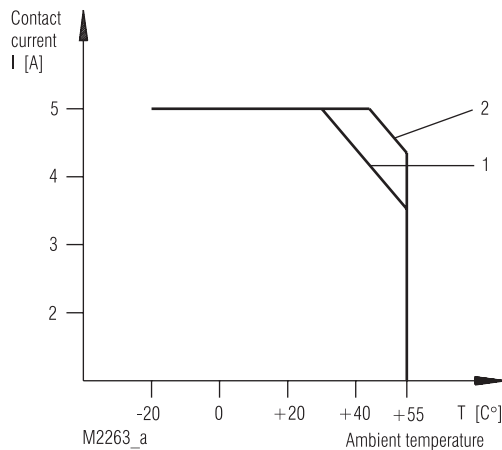
Ordering example for variants

IK 8802 .12 / _ _ _ AC/DC 24 V 50 / 60 Hz	
_____	Nominal frequency
_____	Nominal voltage
_____	Variant, if required
_____	Contacts
_____	Type

Characteristics

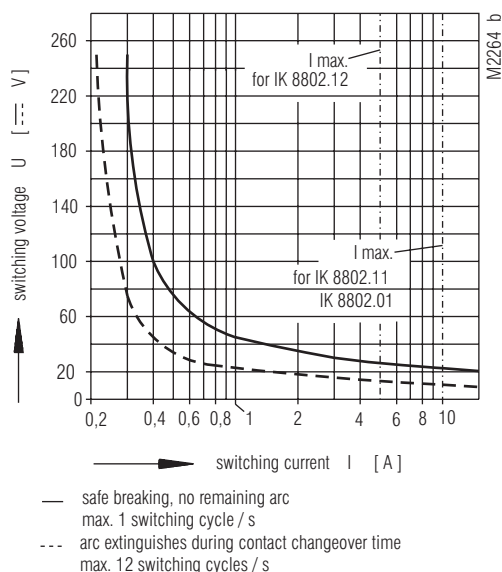


Permissible contact current of IK 8802.01 and IK 8802.11 depends on the ambient temperature.



1. at nominal voltage, mounted without distance, current on both contacts
2. at nominal voltage, mounted without distance, current on only one contact

Permissible contact current of IK 8802.12 depends on the ambient temperature.



Arc limit curve (load limit curve)