

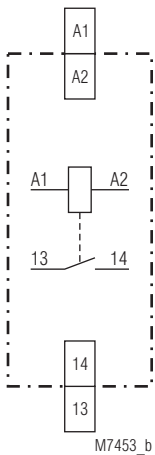
Interface Relay
IG 3051

Translation
of the original instructions



- According to IEC/EN 60947-5-1
- Input for AC/DC 24 V, AC 110 V or 230 V, as required
- 1 NO contact for AC 230 V
- LED indicator
- Width 8.8 mm

Circuit Diagrams



Approvals and Markings



Indicators

1 LED: On when the output relay is activated

Notes

There must be no 3-phase voltage (400 V) between the input and contact circuit.

Technical Data

Input

Nominal voltage U_N : AC / DC 24 V
AC 110, 230 V
Voltage range: AC 0.8 ... 1.1 U_N
At 10% residual ripple: DC 0.9 ... 1.2 U_N
At 48% residual ripple: DC 0.8 ... 1.1 U_N
Nominal consumption: AC 230 V 1.3 VA
DC 24 V 0.2 W
Nominal frequency: 50 / 60 Hz
Release voltage: 20 % U_N

Output

Contacts:
IG 3051.01: 1 NO contact
Thermal current I_{th} : 3 A
Nominal output voltage: AC 270 V / DC 125 V
Switching voltage (min.): 5 V
Switching-on capacity: 5 A
Switching current (min.): 1 mA
Switching capacity: 3 A AC 230 V / DC 30 V ohmic load
Electrical life: 1 x 10⁵ switching cycles at nominal load IEC/EN 60947-5-1
Operate time: ≤ 20 ms
Release time: ≤ 20 ms
Short circuit strength max. fuse rating: 4 A gG / gL IEC/EN 60947-5-1
Mechanical life: 2 x 10⁶ switching cycles

Connection Terminals

Terminal designation	Signal description
A1, A2	Operating voltage
13, 14	Output contacts

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range		
Operation:	- 20 ... + 60 °C	
Storage:	- 20 ... + 60 °C	
Altitude:	≤ 2000 m	
Clearance and creepage distances		
Rated impulse voltage / pollution degree:	4 kV / 2	IEC 60664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation		
80 MHz ... 2,7 GHz:	10 V / m	IEC/EN 61000-4-3
Fast transients:	4 kV	IEC/EN 61000-4-4
Surge voltage 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
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:	20 / 060 / 04 IEC/EN 60068-1	
Terminal designation:	EN 50005	
Wire connection:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded ferruled DIN 46228-1/-2/-3/-4	
Stripping length:	10 mm	
Wire fixing:	Plus-Minus-terminal screws M3,5 with self-lifting clamping piece IEC/EN 60999-1	
Fixing torque:	0.8 Nm	
Mounting:	DIN rail	IEC/EN 60715
Weight:	35 g	

Dimensions

Width x height x depth: 8.8 x 89 x 58 mm

Standard Type

IG 3051.01 AC/DC 24 V 50/60 Hz
Article number: 0043210
• Output: 1 NO contact
• Nominal voltage U_N : AC/DC 24 V
• Width: 8.8 mm

Ordering Example

IG 3051 .01 AC 230 V 50 / 60 Hz

Nominal frequency
Nominal voltage
Contacts
Type