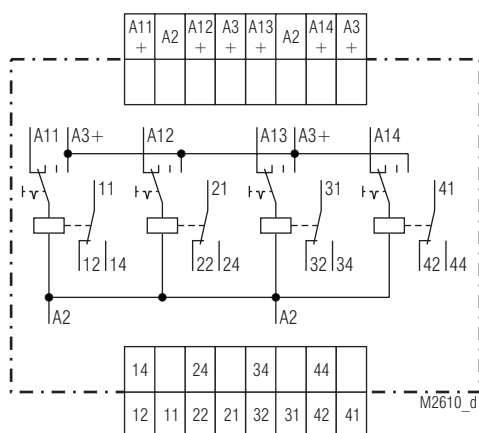


Interface Relay System Output Interface Relay IP 3070/022

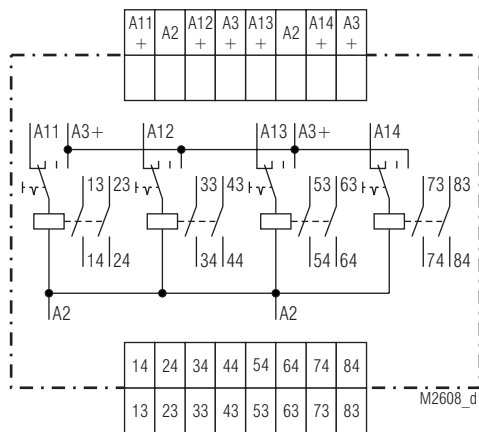


- According to IEC/EN 60 947-5-1
- 4 interface relay with separate control via A1 and common connection of A2
- With 3-position test switch:
 - Position 1: Normal operation
 - Position 2: Relay output always off
 - Position 3: Relay output always switched on for switch cabinets with mounting plate and cable duct
- With 1 changeover contact each
- 1 LED each for operating state
- Optionally with 2 NO contacts each
- Width: 70 mm

Circuit Diagrams



IP 3070.11/022



IP 3070.02/022

Connection Terminals

Terminal designation	Signal description
A11, A12, A13, A14, A2, A3	Operation voltages of the relays
11 ... 84	Output contacts see circuit diagrams

Approvals and Markings



Indicators

LEDs light up at the corresponding interface relay when operating voltage is present.

Technical Data

Input

Nominal voltage U_N:	DC 24 V
Voltage range:	0.8 ... 1.1 U_N
Nominal consumption:	4 x 0.5 W
Release voltage:	$\geq 0.05 U_N$

Output

Contacts

IP 3070.11/022:	4 output relays with 1 C/O contact each
IP 3070.02/022:	4 output relays with 2 NO contacts each
Operate time:	≤ 12 ms
Release time:	≤ 10 ms
Nominal output voltage:	min. AC/DC 10 V max. DC 250 V, AC 400 V
Thermal current I_{th}:	10 A total current (see continuous current limit curve)

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
to DC 13	1 A / DC 24 V IEC/EN 60 947-5-1

Electrical life

to AC 15 at 2 A, AC 230 V:	2.5 x 10 ⁵ switch. cycl. IEC/EN 60 947-5-1
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Permissible switching frequency:

max. 36 000 switching cycles / h

Short circuit strength

max. fuse rating:	10 A gG / gL IEC/EN 60 947-5-1
Mechanical life:	$\geq 10 \times 10^6$ switching cycles

General Data

Operating mode:	Continuous operation
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Temperature range:

Operation:	- 20 ... + 55 °C
Storage:	- 20 ... + 55 °C

Altitude:

< 2.000 m

Clearance and creepage distances

Rated insulation voltage:	300 V
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Overvoltage category:

III

rated impuls voltage /

pollution degree:	4 kV / 2
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IEC 60 664-1

Technical Data

EMC

Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation		
80 MHz ... 2.7 GHz:	10 V / m	IEC/EN 61 000-4-3
Fast transients:	2 kV	IEC/EN 61 000-4-4
Surge voltage		
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 classe 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
20 / 055 / 04 IEC/EN 60 068-1

Climate resistance:

Terminal designation:

EN 50 005

Wire connection:

2 x 2.5 mm² solid or
2 x 1.5 mm² stranded wire with ferrules
DIN 46 228-1/-2/-3/-4

Stripping length:

10 mm

Wire fixing:

Plus-Minus-terminal screws M3,5 with self-lifting clamping piece function according to IEC 60 999-1

Fixing torque:

0.8 Nm

Mounting:

DIN rail

IEC/EN 60 715

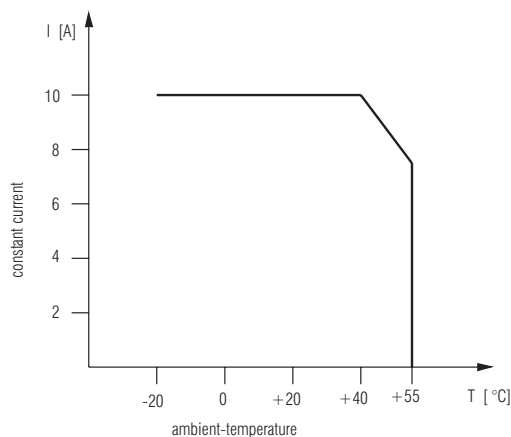
Weight:

250 g

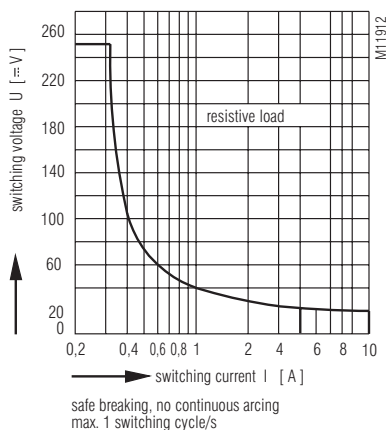
Dimensions

Width x height x depth: 70 x 90 x 61 mm

Characteristics



Derating-curve



Arc limit curve

Standard Type

IP 3070.11/022 DC 24 V

Article number:

0050977

• Outputs:

4 interface relays with 1 C/O each

• Nominal voltage U_N:

DC 24 V

• Width:

70 mm

Variant

IP 3070.02/022:

Interface relay system consisting of 4 interface relays with 2 NO contacts each

Ordering Example

IP 3070 . . . /022 DC 24 V

Nominal voltage

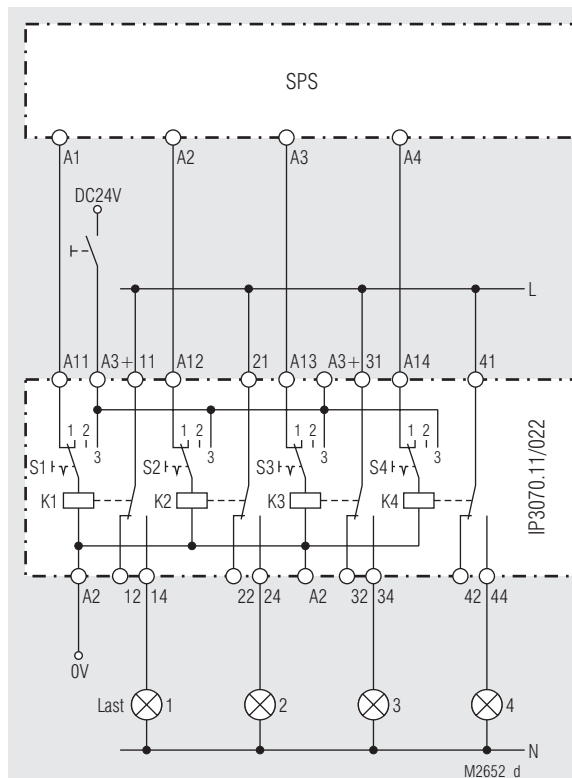
Contacts

.11 4 interface relays with 1 C/O each

.02 4 interface relays with 2 NO each

Type

Connection Example



Interface relay IP 3070.11/022 with slide switch S1 ... S4 with 3 switch positions.

Position 1: Normal operation, i. e. relay control via e.g. PLC.

Position 2: Relays are switched off, e.g. for testing the PLC.

Position 3: external control via "A3+" Terminal possible (Hand-sensor), e. g. for testing the loads 1 ... 4.