

Interface Relay UG 3076/007



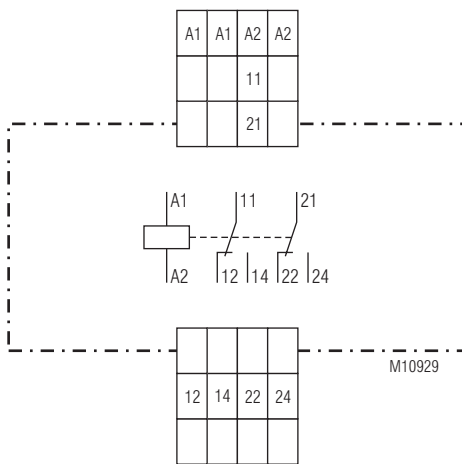
Your Advantages

- Reliable fast response
- Simple contact multiplication
- Cost and space saving alternative compared to contactors
- With pluggable terminal blocks for easy exchange of devices

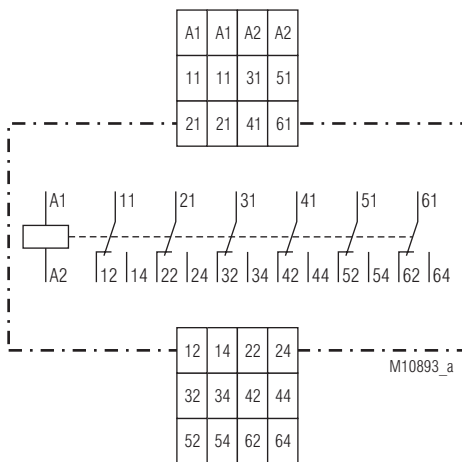
Features

- UG 3076.12: 2 changeover contact
- UG 3076.15: 6 changeover contact
- Safe release voltage: the output relay is de-energized at $U < 27\% U_N$
- Width 22.5 mm

Circuit Diagrams



UG 3076.12



UG 3076.15

Approvals and Markings



Application

- Fast response, e. g. inductive load and circuit breakers
- Interfacing between control and load circuits
- Separate switching of several current circuits, e. g. at
 - Machines and plants,
 - Energy production and transport

Indication

green LED: on, when supply connected

Technical Data

Input

Nominal voltage U_N :

UG 3076.12:	AC 48, 110, 230 V DC 48, 110, 220 V
UG 3076.15:	AC/DC 24, 48, 110, 230 V

Voltage range

DC:	0.8 ... 1.1 U_N
AC:	0.9 ... 1.1 U_N

Nominal consumption

DC 24 V:	2.7 W
DC 110 V:	3.3 W
AC 230 V:	2.7 W

Output

Contacts:

UG 3076.12:	2 changeover contacts
UG 3076.15:	6 changeover contact

Operate time:

typical 7 ... 8 ms

Release time:

typical 7 ms

Nominal output voltage:

AC 250 V, DC 24 V

Thermal current I_{th} :

4 A
(see quadratic total current limit curve)

Switching capacity

to AC 15:		
NO contacts:	3 A / AC 230 V	IEC/EN 60 947-5-1
NC contacts:	2 A / AC 230 V	IEC/EN 60 947-5-1
to DC 13:		
NO contacts:	4 A / DC 24 V	IEC/EN 60 947-5-1
NC contacts:	4 A / DC 24 V	IEC/EN 60 947-5-1

Electrical life

NO contacts		
to AC 15 at 1 A, AC 230 V:	1.5 x 10 ⁶ switch. cycl.	IEC/EN 60 947-5-1
NO contacts		
to AC 15 at 0,5 A, AC 230 V:	2.5 x 10 ⁶ switch. cycl.	IEC/EN 60 947-5-1
NC contacts		
to AC 15 at 1 A, AC 230 V:	1 x 10 ⁶ switch. cycl.	IEC/EN 60 947-5-1
NO contacts		
to DC 13 at 1 A, DC 24 V:	0.5 x 10 ⁶ switch. cycl.	IEC/EN 60 947-5-1

Permissible switching frequency:

10 switching cycles / s

Switching voltage min./max.:

AC/DC 10 V / AC/DC 250 V

Switching current min./max.:

0.3 mA / 1 A

Short circuit strength

max. fuse rating: 6 A gL IEC/EN 60 947-5-1

Mechanical life:

≥ 30 x 10⁶ switching cycles

General Data

Operating mode:

Continuous operation

Temperature range:

- 20 ... + 60°C (see characteristics)

Clearance and creepage distances

rated impulse voltage / pollution degree:	4 kV / 2	IEC 60 664-1
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EMC

Electrostatic discharge (ESD):	8 kV (air)	IEC/EN 61 000-4-2
Fast transients:	4 kV	IEC/EN 61 000-4-4
Surge voltages between		
wires for power supply:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011

Degree of protection

Housing:	IP 20	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529

Housing:

Thermoplast mit V0-Verhalten nach UL Subjekt 94

Vibration resistance:

Amplitude 0,35 mm, frequency 10 ... 55 Hz, IEC/EN 60 068-2-6

Climate resistance:

20 / 045 / 04 IEC/EN 60 068-1

Terminal designation:

EN 50 005

Technical Data

Wire connection:

Plugin with screw terminals

max. cross section for connection:	1 x 0.25 ... 2.5 mm ² solid or stranded ferruled (isolated) or 2 x 0.25 ... 1.0 mm ² massiv oder stranded ferruled (isolated)
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Insulation of wires or sleeve length:

7 mm

Wire fixing:

captive slotted screw

Mounting:

DIN rail

IEC/EN 60 715

Weight:

approx. 190 g

Dimensions

Width x height x depth: 22.5 x 105 x 120.3 mm

Standard Types

UG 3076.12PS/007 DC 110 V

Article number: 0065524

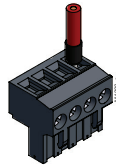
- 2 changeover contacts
- Width: 22.5 mm

UG 3076.15PS/007 AC/DC 24 V

Article number: 0065510

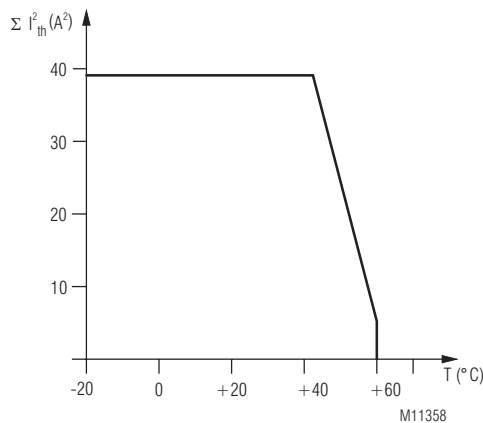
- 6 changeover contacts
- Width: 22.5 mm

Options with Pluggable Terminal Blocks



Screw terminal (PS/plugin screw)

Characteristics



Quadratic total current

$$\sum I_{th}^2 = I_{th1}^2 + I_{th2}^2 + I_{th3}^2 + I_{th4}^2 + I_{th5}^2 + I_{th6}^2$$

$I_{th1}, I_{th2}, I_{th3}, I_{th4}, I_{th5}, I_{th6}$: thermal current I_{th} in contactrows

Quadratic total current limit curve