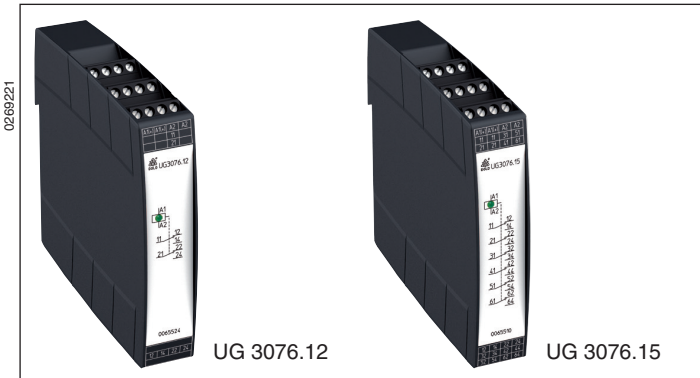


Interface Relay UG 3076/007

Translation
of the original instructions



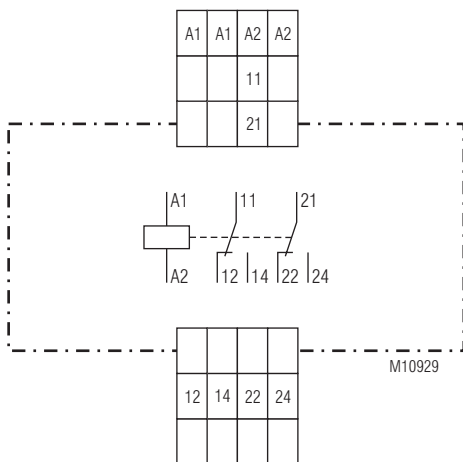
Your Advantages

- According to IEC/EN 60947-5-1
- Reliable fast response
- Simple contact multiplication
- Cost and space saving alternative compared to contactors
- With pluggable terminal blocks for easy exchange of devices

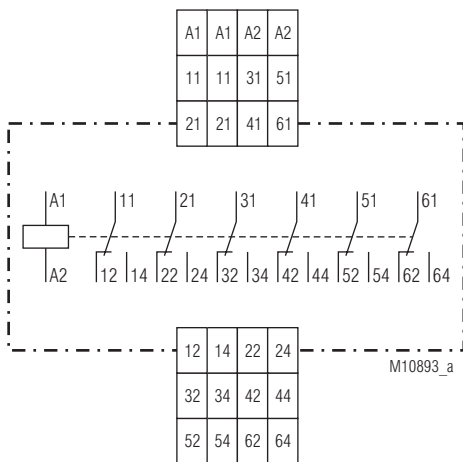
Features

- 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

Connection Terminal

Terminal designation	Signal description
A1 / A2	Operation voltage
11 ... 64	Output contacts see circuit diagrams

Technical Data

Input

Nominal voltage U_N :

UG 3076.12:	AC 24, 48, 110, 230 V DC 24, 48, 110, 220 V
UG 3076.15:	AC/DC 24, 48, 110, 125, 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

Nominal frequency:

Frequency range:	50 / 60 Hz $\pm 5\%$ of nominal frequency
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Output

Contacts:

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

Operate time:

	Typical 7 ... 8 ms
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Release time:

	Typical 7 ms
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Nominal output voltage:

	AC 250 V, DC 24 V
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Thermal current I_{th} :

	4 A (see quadratic total current limit curve)
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Switching capacity

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

Electrical life

NO contacts		
To AC 15 at 1 A, AC 230 V:	2.5 x 10 ⁶ switch. cycl.	IEC/EN 60947-5-1
NO contacts		
To AC 15 at 0,5 A, AC 230 V:	4 x 10 ⁶ switch. cycl.	IEC/EN 60947-5-1
NC contacts		
To AC 15 at 1 A, AC 230 V:	1.5 x 10 ⁶ switch. cycl.	IEC/EN 60947-5-1
NO contacts		
To DC 13 at 1 A, DC 24 V:	1.5 x 10 ⁶ switch. cycl.	IEC/EN 60947-5-1

Permissible switching frequency:

	10 switching cycles / s
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Switching voltage min./max.:

	AC/DC 10 V / AC/DC 250 V
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Switching current min./max.:

	10 mA / 4 A
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Short circuit strength

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

	$\geq 30 \times 10^6$ switching cycles
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General Data

Operating mode:

	Continuous operation
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Temperature range:

Operation:	- 20 ... + 60 °C
Storage:	- 20 ... + 60 °C

Altitude:

	< 2000 m
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Clearance and creepage distances

Rated impulse voltage / pollution degree:		
Auxiliary voltage / Contacts:	6 kV / 2	IEC 60664-1
Contacts / Contacts:	4 kV / 2	IEC 60664-1

EMC

Electrostatic discharge (ESD):	8 kV (air)	IEC/EN 61000-4-2
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HF irradiation

80 MHz ... 6 GHz:	10 V / m	IEC/EN 61000-4-3
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Fast transients:	4 kV	IEC/EN 61000-4-4
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Surge voltages

between		
Wires for power supply:	2 kV	IEC/EN 61000-4-5
Between wire and ground:	4 kV	IEC/EN 61000-4-5
HF-wire guided:	20 V	IEC/EN 61000-4-6

Interference suppression:	Limit value class B	EN 55011
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Degree of protection

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

Housing:	Thermoplast with V0-behaviour according to UL subject 94
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Vibration resistance:	Amplitude 0,35 mm, frequency 10 ... 55 Hz, IEC/EN 60068-2-6
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Climate resistance:	20 / 060 / 04	IEC/EN 60068-1
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Terminal designation:	EN 50005
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Technical Data

Wire connection:

Plug in with

screw terminals

Max. cross section for connection:

1 x 0.25 ... 2.5 mm² solid or stranded ferruled (isolated) or 2 x 0.25 ... 1.0 mm² massiv oder stranded ferruled (isolated)

Insulation of wires or sleeve length:

7 mm

Wire fixing:

Captive slotted screw

Fixing torque:

0.5 Nm

Mounting:

DIN rail

IEC/EN 60715

Weight:

Approx. 190 g

Dimensions

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

UG 3076.12PS/007 DC 110 V

Article number:	0065524
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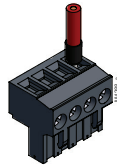
- 2 changeover contacts
- Width: 22.5 mm

UG 3076.15PS/007 AC/DC 24 V

Article number:	0065510
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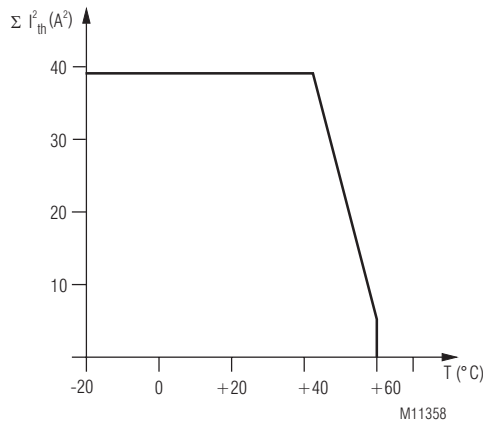
- 6 changeover contacts
- Width: 22.5 mm

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