



Product Description

The interface module UG 3088 includes 2 separate devices in one enclosure. Because of its forcibly guided contacts a safe interfacing between control circuit and load circuit is provided. It can also be used to multiply and reinforce the contacts of safety modules. Different internal configuration possibilities allow to offer interface modules for various applications. To switch e.g. high DC loads the the output contacts can be connected in series. On the module with 2 NO and 2 NC contacts these can be connected internally as changeover contacts. Also a common control of both relays with only one input can be done.

Your Advantages

- According to IEC/EN 60947-5-1
- Economic and space saving because of 2 separate interface modules in one enclosure
- Simple contact multiplication and reinforcement - also of safety modules
- Cost and space saving alternative compared to contactors
- Simple contact monitoring by forcibly guided contacts
- With pluggable terminal blocks for easy exchange of devices

Features

- With forcibly guided contacts according to IEC 61810-3
- Version with up to 2 x 4 contacts
- Variant to switch high DC-load
- Width: 22.5 mm

Approvals and Markings



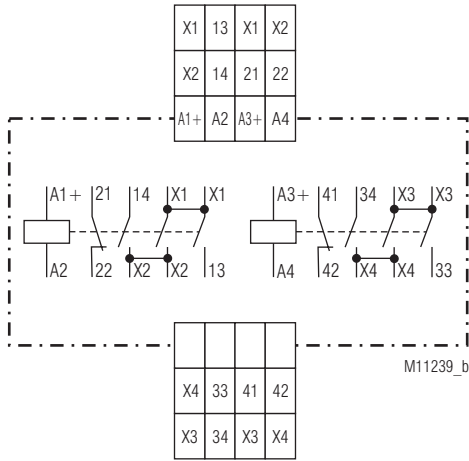
Applications

- Interfacing between control and load circuits
- Contact multiplication and reinforcement
- Separate switching of several current circuits, e. g. at
 - Machines and plants
 - Energy production and transport

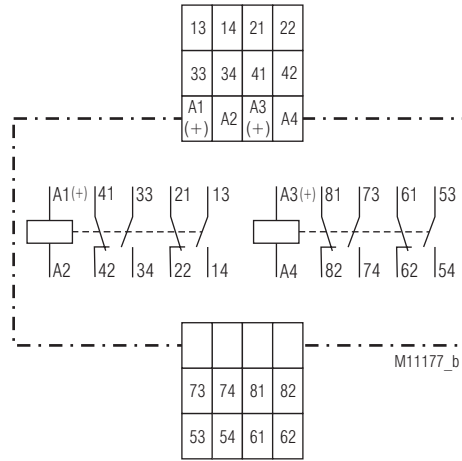
Indicators

- | | |
|--------------|--------------------------------------|
| Green LED 1: | On, when supply connected at Relay 1 |
| Green LED 2: | On, when supply connected at Relay 2 |

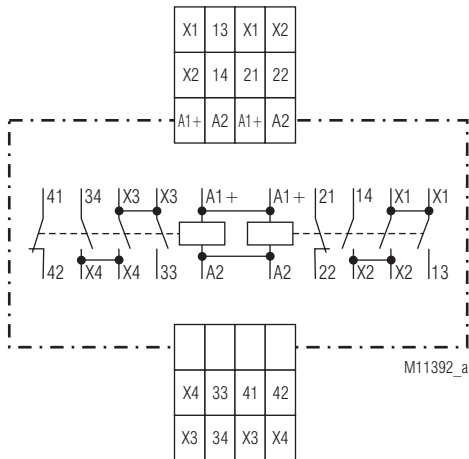
Circuit Diagrams



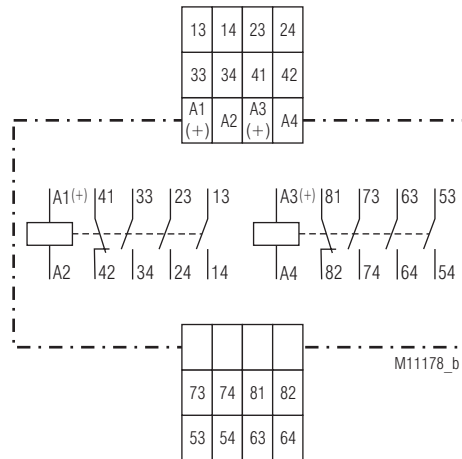
UG 3088.52PS/100



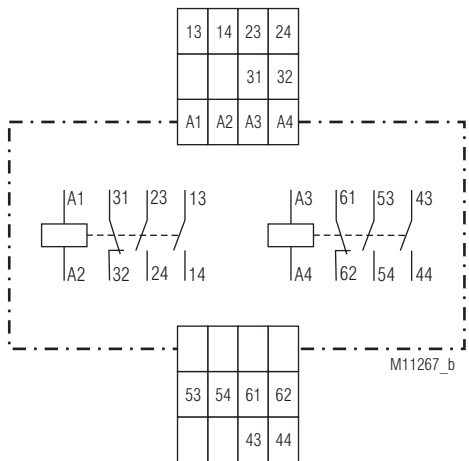
UG 3088.57



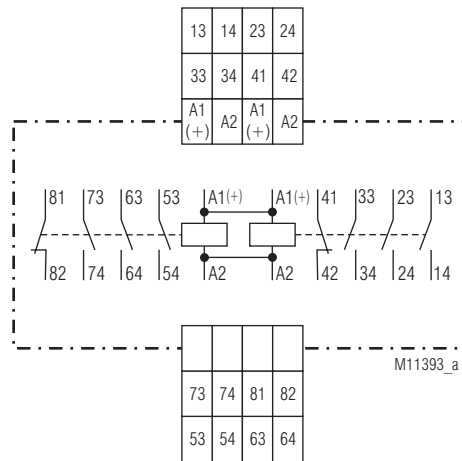
UG 3088.52/101



UG 3088.59



UG 3088.54 (AC 230 V, DC 220 V)



UG3088.59/001

Connection Terminals

Terminal designation	Signal description
A1, A2	Operation voltage Relay 1
A3, A4	Operation voltage Relay 2
13, 14, 23, 24, 33, 34 53, 54, 63, 64, 73, 74	Positive guided NO contacts for release circuit
21, 22, 41, 42, 61, 62, 81, 82	Positive guided NO contacts

Technical Data

Input

Nominal voltage U_N:	AC 24, 48, 110, 230 V DC 24, 48, 110, 220 V
Voltage range:	0.8 ... 1.1 U_N
Nominal consumption	
DC 24 V:	1.1 W
DC 110 V:	1.3 W
AC 230 V:	2.1 W
Nominal frequency:	50 / 60 Hz
Min. Off-time:	250 ms

Output

Contacts:

UG 3088.52/100, /101:	2 NO contacts, 2 NC contacts
UG 3088.54 (AC 230 V, DC 220 V):	4 NO contacts, 2 NC contacts
UG 3088.57:	4 NO contacts, 4 NC contacts
UG 3088.59, /001:	6 NO contacts, 2 NC contacts
Contact material:	AgNi + 0.2 μ m Au
Operate time U_N:	Typical 10 ms (only for DC devices)
Release time:	Typical 15 ms (only for DC devices)
Nominal output voltage:	AC 250 V, DC 24 V
Thermal current I_{th}:	2.5 A
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:	2 A / DC 24 V IEC/EN 60947-5-1
NC contacts:	2 A / DC 24 V IEC/EN 60947-5-1
To DC 13:	
NO contacts:	0.5 A / DC 110 V IEC/EN 60947-5-1
NC contacts:	0.5 A / DC 110 V IEC/EN 60947-5-1

Switching capacity variant /100 (internal 3 NO connected in series)

to DC 13:	
NO contacts:	3 A / DC 110 V at 0.1 Hz
NC contacts:	3 A / DC 110 V at 0.1 Hz

Electrical life

NO contacts	
to AC 15 at 1 A, AC 230 V:	1.5 x 10 ⁶ switch. cycl. IEC/EN 60947-5-1
NC contacts	
to AC 15 at 1 A, AC 230 V:	1 x 10 ⁶ switch. cycl. IEC/EN 60947-5-1
NO contacts	
to DC 13 at 1 A, DC 24 V:	0.5 x 10 ⁶ switch. cycl. IEC/EN 60947-5-1

Permissible switching

frequency:	2 switching cycles / s
Switching voltage min./max.:	AC/DC 10 V / AC/DC 250 V
Switching current min./max.:	10 mA / 2.5 A

Short circuit strength

max. fuse rating:	6 A gG / gL IEC/EN 60947-5-1
Mechanical life:	$\geq 40 \times 10^6$ switching cycles

General Data

Mounting-position:	Any
Operating mode:	Continuous operation
Temperature range	
Operation:	- 20 ... + 60 °C
Storage:	- 40 ... + 60 °C
Altitude:	≤ 2000 m

Clearance and creepage distances

Rated impulse voltage / pollution degree:	4 kV / 2 (base insulation) IEC 60664-1
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EMC

Electrostatic discharge (ESD):	8 kV (air) IEC/EN 61000-4-2
Fast transients:	4 kV IEC/EN 61000-4-4
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
Interference suppression:	Limit value class B EN 55011

Degree of protection

Housing:	IP 20 IEC/EN 60529
Terminals:	IP 20 IEC/EN 60529
Housing:	Thermoplast mit V0-Verhalten nach UL Subjekt 94

Technical Data

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:	
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)

Insulation of wires or sleeve length:

7 mm	
Wire fixing:	Captive slotted screw
Mounting:	DIN rail IEC/EN 60715
Weight:	Approx. 180 g

Dimensions

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

UG 3088.59PS DC 24 V	
Article number:	0066280
• 6 NO contacts, 2 NC contacts	
• Width:	22.5 mm

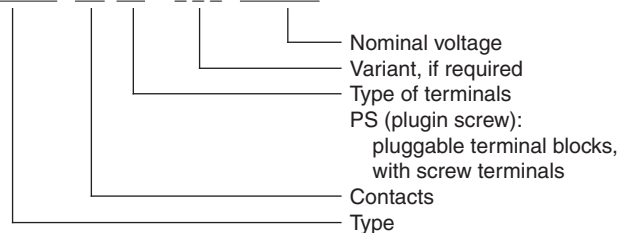
UG 3088.57PS DC 110 V	
Article number:	0066380
• 4 NO contacts, 4 NC contacts	
• Width:	22.5 mm

Variants

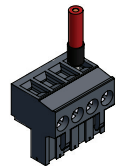
UG 3088._PS/100:	With contacts connected in series to switch high DC-loads. Separate control of the 2 relays with extended release time
UG 3088._PS/101:	With contacts connected in series to switch high DC-loads. Common control of the 2 relays with extended release time

Ordering example for variants

UG 3088 .57 PS / _ _ _ DC 24 V



Options with Pluggable Terminal Blocks



Screw terminal (PS/plugin screw)

