

MSR01

Multi-Function Relay

- protects your sensors
- advantageous timing
- additional DC voltage output
- with switching status display
- max. temperature: 70 °C



Description:

The MSR01 series includes the multi-function relays MSR 10, MSR 11 and MSR 20, a selection that covers all common applications.

The MSR 10 and MSR 20 are pure contact protection relays for one or two control signals which protect the contacts of your measuring instruments against overload due to excessive switching capacities, especially with inductive or capacitive loads.

A cleverly selected drop-out delay for these units ensures that high-frequency switching of the sensor contacts is not taken into account, so that the switching points are clearly defined.

The MSR 11 is a highly qualified bistable interval relay with self-retaining, which can take over your complete pump control in combination with two level switches.

Typical applications:

Of course, this unit also protects the contacts of the connected switches against overload.

The devices of the MSR01 series are all designed as standard for a supply voltage of 230 VAC and have a 24 VDC-DC output.

Optionally, they can also be supplied for connection to 115 VAC, 24 VAC and 24 VDC. MSR 10, MSR 11 and MSR 20 are available with 24 VDC PNP electronic outputs on request.

The polyamide housing has protection class IP 20, but can be equipped with an IP 65 enclosure available as an accessory.

Mounting is on a standard DIN 50022 mounting rail or via an adapter for individual mounting by screw mounting.

Models:

MSR01 Multi-function relay

Version: 10

monostable contact protection relay for single contacts

Version: 11

bistable interval relay with self-retaining for 2-fold-contacts

Version: 20

monostable contact protection relay for 2-fold contacts

Power supply:

standard 230 VAC;
optional 115 VAC, 24 VAC or 24 VDC

Electrical Data:

Regulations:

- EN 50 178 electrical safety
- EN 50 082-2 interference immunity
- EN 50 081-1 interference emission
- EN 60 947-5-1 low-voltage switchgear

Auxiliary power:

Power supply: 230 VAC (standard),
50 bis 60 Hz

Power consumption: version 10 typical 5 VA
version 11 typical 5 VA
version 20 typical 6 VA

Control signals:

- **control voltage:** 35 to 40 VDC pulses
- **pulse-pause ratio:** 0,5 ms / 50 ms ($\pm 20\%$)
- **switching threshold:** 9,7 VDC ($\pm 10\%$)
- **input impedance:** 3300 Ohm, 100 nF
- **cable and contact resistance:** max. 4700 Ohm, 47 nF

Outputs:

- **relay outputs:** 1 or 2 potential-free changers
- **delay in pick-up and drop-out:** 10 ms/ 450 ms
 $\pm 20\% + 50$ ms
- **contact material:** AgCdO or AgNi+Au
- **switching capacity:** max. 250 VAC, 8 A
min. 24 V DC; 100 mA
- **short-circuit device:** F 10 A
(max. short-circuit current <100 A)
- **voltage output:** (conditionally short-circuit proof)
- **voltage:** 24 VDC ($\pm 10\%$)
- **load:** max. 20 mA

Technical Data:

- **Max. ambient temp.:** 0 °C bis 70 °C
- **Protection class:** IP 20
- **Rated insulation voltage** 250 VAC
- **Housing:** polyamide 6.6
- **Attachment:** standard rail 35 x 7,5 DIN50022
- **Connection cross-section:** 0,5 to 2,5 mm²
(solid or fine-stranded)

(an adapter is available for individual mounting)

Order Code:

Order number:

MSR01. 10. 1. 0

Multi-function relay

Version:

10 = monostable contact protection relay for single contact
11 = bistable interval relay with self-retaining for 2 fold-contacts
20 = monostable contact protection relay for 2 fold-contacts

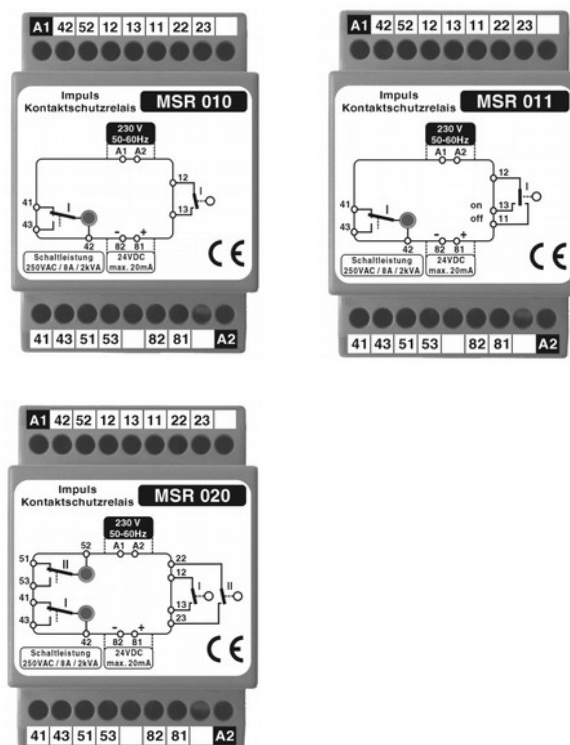
Power supply:

1 = 230 VAC standard
2 = 115 VAC
3 = 24 VAC
4 = 24 VDC

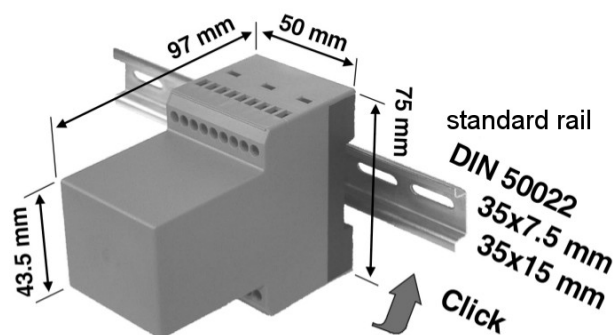
Options:

0= without
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Electrical Connection:



Dimensions:



Accessories