

Pulse-Contact Protection Relays

with Additional DC Voltage Output



- Pulse-controlled
- Floating contacts
- Precise switching behaviour



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Model:
 MSR



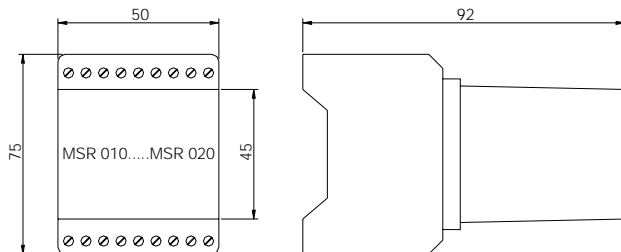
Description

Multifunctional relays, comprising power supply unit, pulse generator, isolation amplifier and switching amplifier, serve to increase the switch capacity, as the control loop is connected to low voltage. The switch capacity of reed contacts, especially when switching capacitive and inductive loads, is very often exceeded; this causes the reeds to stick – thus giving rise to dangerous faults.

A contact protection relay is used to eliminate this problem, the switch capacity and service life of the reed contacts is significantly improved.

On the other hand, types MSR-010 and MSR-020 have a time response. The chatter effect is thus almost totally eliminated, and no switching operation occurs when the contact opens or closes for a short period. The switching operation is thus clearly defined. Type MSR-011 is a bistable interval relay with self-holding and is thus suitable for an interval circuit, for example for pump control. Design and construction of the contact protection relay satisfy VDE regulations 0110 insulation class c/250 V. The housing made of polyamide 6.6 can be mounted by clip-on mounting on standard mounting rail 35 x 7.5 mm (according to DIN 50022), or in series, by individual screw fixing.

Dimensions



Technical Details

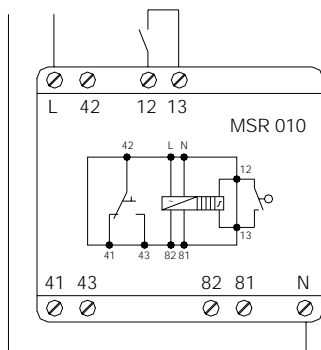
- Auxiliary power: 230 VAC -10%, +6%, 50-60 Hz
- Power input: typically 5 VA
- Pulse-control voltage: 35-40 VDC (electrically isolated)
- Pulse width ratio: 1:100 (typically)
- Allowed contact-contact resistance: ≤ 4.7 kOhm
- Pulse width: 500 μs (typically)
- OFF delay: approximately 0.5 s
- Relay output: MSR 10 (1 floating changeover contact)
MSR 20 (2 floating changeover contacts)
MSR 11 (1 floating changeover contact - bistable)
allowed loading: 250 V approximately 8 A, 1.760 VA
- Voltage output: 24 VDC, max. load: 20 mA
- Pin assignment: DIN 45 140
- Insulation class: C/250 VAC according to VDE 0110
- Class of protection: housing IP 40 terminals IP 20
- Protection: total insulation
- Case material: polyamide 6.6, colour green
- Temperature range: 0°C to 70°C
- Mounting: standard rail 35 x 7.5 mm according to DIN 50022

Order Details (Example: MSR-010)

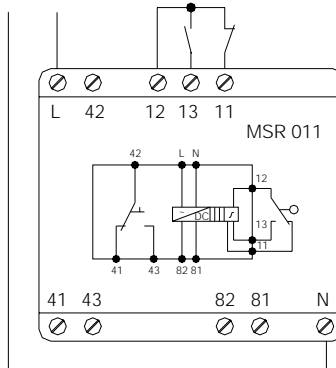
Relay output	Order no.
1 floating changeover contact	MSR-010
2 floating changeover contacts	MSR-020
1 floating changeover contact - bistable	MSR-011

Wiring diagrams

Auxiliary power input
230 VAC, 50Hz



Auxiliary power input
230 VAC, 50Hz



Auxiliary power inputs
230 VAC, 50Hz

