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# Description

KOBOLD 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, the KOBOLD models 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. Model 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 re gulations. The housing made of polyamide 6.6 can be mounted by clip-on mounting on standard mounting rail  $35 \times 7.5$  mm, or in series, by individual screw fixing.

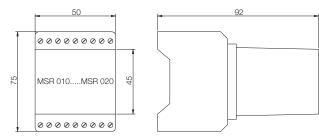
# **Technical Details**

Auxiliary power:	230 V <sub>AC</sub> -10%, +6%, 5060 Hz
Power input:	typically 6 VA
Pulse-control voltage:	35-40 $V_{DC}$ (electrically isolated)
Pulse width ratio:	1:100 (typically)
Allowed contact-	
contact resistance:	≤ 4,7 kΩ
Pulse width:	500 µs (typically)
OFF delay:	approx. 0,5 s
Relay output:	MSR 10
	(1 floating changeover contact) MSR 20
	(2 floating changeover contacts) MSR 11
	(1 floating changeover contact -bistable-)
	max. 250 V <sub>AC</sub> / 8 A
	min. 24 V <sub>DC</sub> / 0,1 A
Voltage output:	24 V <sub>DC</sub> , max. load: 20 mA
Protection:	terminals IP 20
Case material:	polyamide 6.6, colour red
Temperature range:	0°C70°C
Mounting:	standard rail 35 x 7,5 mm

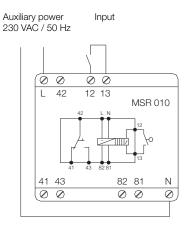
### Order Details (Example: MSR-010)

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

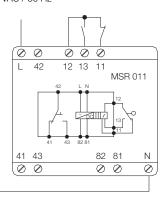
# Dimensions



### Wiring diagrams



Auxiliary power 230 VAC / 50 Hz



Input

Auxiliary power Input 230 VAC / 50 Hz

