



MSR010

Multi-function relay

MSR010

with additional power supply of 24V DC

to reinforce fine contacts, microswitches and other contact devices with low breaking capacity.

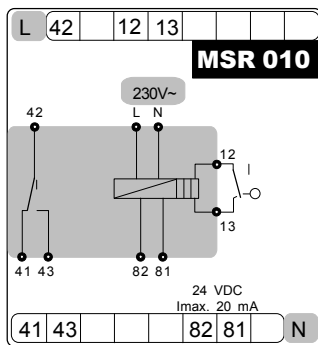
Description of the relay

The multi-function relay may be considered as a contact protection relay or contact intensifier. If a potential-free (voltage-free) contact of a control device is connected to the multi-function relay "12" and "13", it triggers an electronic device which in turn switches a switch relay of higher output. The contact control voltage is a pulse voltage of 24 V and is decoupled from the mains. The pulses are needle pulses in a ratio 1:100.

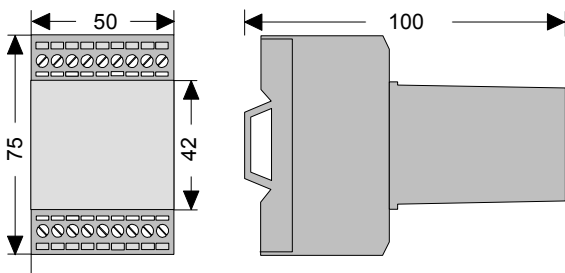
The multi-function relay can be used wherever instrument precision contacts need to be reinforced, or where decoupling of the contacts is necessary, or where equipment is operated using low voltage, for example HGseries hygrostats if they are used at over 80%rel. humidity. This prevents destructive voltage arcing in the event of the hygrostat microswitch becoming wet.

At the same time, the MSR010 multi-function relay has a direct voltage output of 24V DC . This is an ideal power supply for sensors or other controllers.

Connection diagram



Dimensions diagram



Technical data

Power supply	230V AC
allowable deviation	-10%...+6%
frequency	50...60Hz
power consumption	22mA

as contact protecting relay

pulse control voltage	24 V DC ±10%
	decoupled from the mains
pulse pause ratio	0.5 ms / 50 ms ±20%
allowable contact transition resistance	< 4.7 k ohms, 47 nF
pulse duration	250 µs (typical)
release delay	10...60 ms
relay output	potential-free changeover contact
allowable loading	8A 250V AC, 1860 VA

as power supply

voltage output	24 V DC ±10%
max current at pure power supply	50mA
at additional contact protection operation	20mA
pin configuration	DIN 45140
insulation class	C/250V AC conforming to VDE0110
ambient temperature	0°C...+70°C
allowable rel. humidity	5%rh... 90%rh
electromagnetic compatibility EMC	
resistance to interference	ref. EN 50 082-2
interference emission	ref. EN 50 081-2
housing	polyamide 6.6, colour green
mounting	standard bar 35x7,5mm in accordance with DIN 50022
individual mounting with adapter panel (order no. 20.015)
type of protection	IP40 (terminals IP20)
weight	0.45kg

„subject to technical modifications“