

PTC-resistor relay type MSR 220 SEL

for Dry-Transformers, 4 PTC-Circuits

MSR 220 SEL



The MSR 220 SEL is a PTC-resistor relay for the monitoring of up to 4 PTC resistor sets. It is used favourably, where the simultaneous monitoring of 2 ALARMS and the controlling offforced cooling are required. It is suitable also for the application in systems, in which an error message must be suppressed in the moment of switching on supply voltage, e.g. because supply voltage is supplied by the monitored transformer.

The MSR 220 SEL is especially suitable for the monitoring of cast resin dry-type transformers. The switching points of the integrated ventilator control are determined by the nominal response temperatures (NRT) of the connected PTC resistor sets. This and the insertable automatic delay for the fan enable a better utilization of the transformer.

The monitoring of the sensors on short-circuit and break as well as the simultaneous digital and analog evaluation of the sensor for ALARM 3 minimize false alarms.

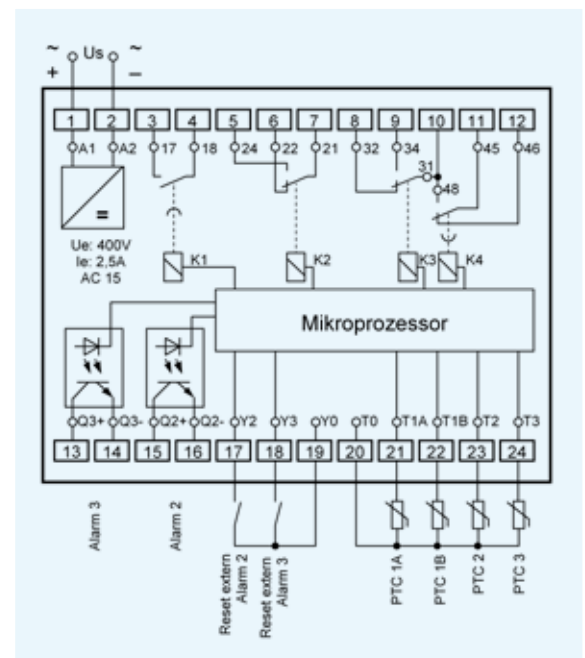
Test-buttons simplify the check of the device and the connected equipment.

- 2 PTC-resistor sets for ventilation control (ALARM 1), e.g. ON at 90 °C, OFF at 80 °C,
- optional operation with only one PTC resistor set
- delay ventilation 20 min. insertable

- automatic test of fan 1x/week
- TEST-buttons for ALARM 1 and ALARM 2 (3 seconds at the same time pressed for ALARM 3)
- ALARM 2, e.g. for preliminary warning
- ALARM 3 analog and digital evaluation, minimizing risk for false alarms
- electronic reclosing-lock for ALARM 2 and 3 (disconnectible), RESET-button integrated
- integrated time delay relay for suppressing of error signals when switching on and off
- open collector outputs (max. DC 60 V/40 mA) for ALARM 2 and 3 for message to a PLC
- sensor monitoring for short-circuit and line break, release of ALARM 2 in case of error
- LED displays for ON, ALARM 1, 2 and 3 and sensor error
- Universal Power Supply AC/DC 24-240 V

Order numbers:
AC/DC 24-240 V

T 221672



Technical Data

Rated supply voltage U_s
connectable PTC resistors
switching point
output relays
type of contact
test conditions
rated ambient temperature range
dimensions (h x w x d) attachment

protection housing / terminals
weight

AC/DC 24 - 240 V \pm 15 %, \leq 3 VA
4 x 1...6 PTC according to DIN 44 081 or 44 082
< 4000 Ω
3 x 1 change-over contact, 1 normally-open contact
type 2 (see "general technical informations")
see "general technical informations"
-20...+55 °C

design S 24: 82 x 120 x 121 [mm]
on 35 mm DIN rail according to DIN EN 50 022
or with screws M4
IP 30 / IP 20
approx. 500 g