## 1

## PTC-Resistor-Relay Type MSF220VL

for Dry-Transformers, Fan, Warning, Trip Winding and Trip Core

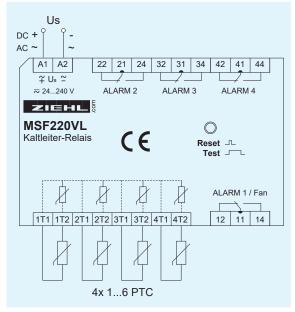
MSF220VL



Art.-no: T221674

The MSF220VL is particularly suitable for monitoring of temperatures at dry transformers, when also the temperature of the core shall be measured. Monitoring of core temperature is especially required in rectifier transformers because of harmonics causing heat in the core. An intelligent control prolongs automatically the runtime of a cooling-fan, depending on the load of the transformer. Each PTC-circuit is monitored for break and short circuit. This reduces probability of false alarms. Relays in operating-current mode prevent from a trip-signal when switching on supply voltage. The device can be adapted to different applications with 4 programs:

- 1.) Fan-control alarm trip (winding) trip (core)
- 2.) Alarm trip (winding) trip (core) alarm (fault)
- 3.) Fan-control alarm trip (winding) alarm (fault)
- 4.) Fan-control with hysteresis T1/T2 alarm trip (winding) time relay
- 4 inputs for PTC
- · Intelligent control of fan
- Automatic fan-test 1x / week
- electronic reclosing lock for alarms (trip) connectable
- Monitoring of sensors
- Test-button
- Simple testing with disconnectable monitoring of break and short circuit (for 10 minutes)
- · LEDs for alarms, states of relays and sensors
- Housing for mounting on DIN-Rail or wall-mount (option)
- Mounting height 55 mm
- Universal supply voltage AC/DC 24-240 V



## Technical Data

Rated supply voltage Us

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 ± 15 %, < 3 VA

4 x 1... 6 PTC according to DIN 44 081 or 44 082 < 4000  $\Omega$ 

4 x 1 change-over contacts type 2 see "general technical information" see "general technical information" -20... +60 °C

design V 4: 90 x 70 x 58 [ mm ] on 35 mm DIN rail according to DIN EN 50 022 or with screws M4 IP 30 / IP 20 approx. 185 g