Monitoring Relay MR50

- Input standard signals 0/4..20 mA, 0/2..10 V DC
- Measuring range programmable
- Max. 4 alarm outputs
- Isolated analog output 0/4..20 mA, 0/2..10 V DC

Characteristics

The Monitoring Relay MR50 has inputs for industry standard signals 0/4..20 mA and 0/2..10 V DC. Measuring value and programmable unit are shown in the display. The integrated transmitter supply offers direct connection of loop powered sensors. Simple programming, up to 4 alarm outputs (SPDT) and optional available fully isolated free programmable analog output 0/4..20 mA; 0/2..10 V DC meets the demand for different applications.

Technical data

- Power supply:
  - Supply voltage: 230 V AC ±10 %, 115 V AC ±10 %, or 24 V DC ±15 %
  - Power consumption: max. 5 VA
  - Operating temperature: -10...+55 °C
- CE-conformity:
- Input:
  - 0/4..20 mA; 0/2..10 V DC
  - Ri: current 10 Ω, voltage 10 kΩ
- Fault detection: break of wire
- Accuracy: <0,1 %, ±1 Digit
- Transmitter supply: 24 V DC max. 30mA
- Outputs:
  - Relay SPDT: < 250 V AC < 250 VA < 2 A
  - cosφ ≥ 0.3, < 300 V DC < 40 W <2 A
  - Analog output:
    - 0/4..20 mA, burden ≤500 Ω, 0/2..10 V burden >500 Ω, isolated, output changes automatically (burden dependent)
    - Accuracy: 0.2 %; TK 0.01 %/K
    - Fault function at break of wire:
      - Analog output: 0 mA, < 3.6 mA or >21.5 mA
      - Alarm contact(s): min. or max. programmable
- Display:
  - graphic LCD-display with 128 x 64 Pixel, and white back-light
- Case:
  - Polyamide (PA) 6.6 , UL94V-0
  - acc. to DIN EN 60715:2001-09
- Weight: approx. 450 g
- Connection:
  - screw terminals 0.14..2.5 mm² (AWG 26..14)
- Protection class: case IP30, terminals IP20, BGV A3

Dimensions

Connection diagram

Ordering code

MR50 - on - - - -
1. Input
   - standard signals 0/4..20 mA, 0/2..10 V DC, transmitter supply 24 V DC, max. 30 mA
2. Alarm output A1, A2
   - 2R 2 relays SPDT
3. Alarm output A3, A4
   - 00 not installed
   - 2R 2 relays SPDT
4. Analog output
   - 00 not installed
   - AO 0/4..20 mA, 0/2..10 V DC
5. Supply voltage
   - 0 230 V AC, ±10 % 50-60 Hz
   - 1 115 V AC, ±10 % 50-60 Hz
   - 5 24 V DC, ±15 %
6. Options
   - 00 without option