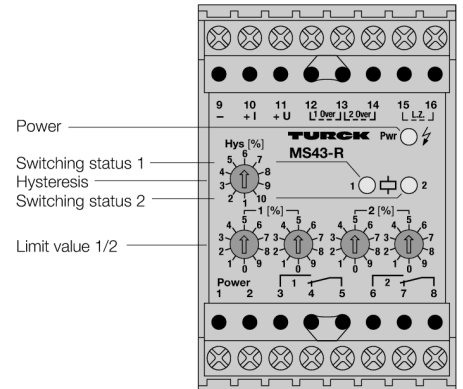
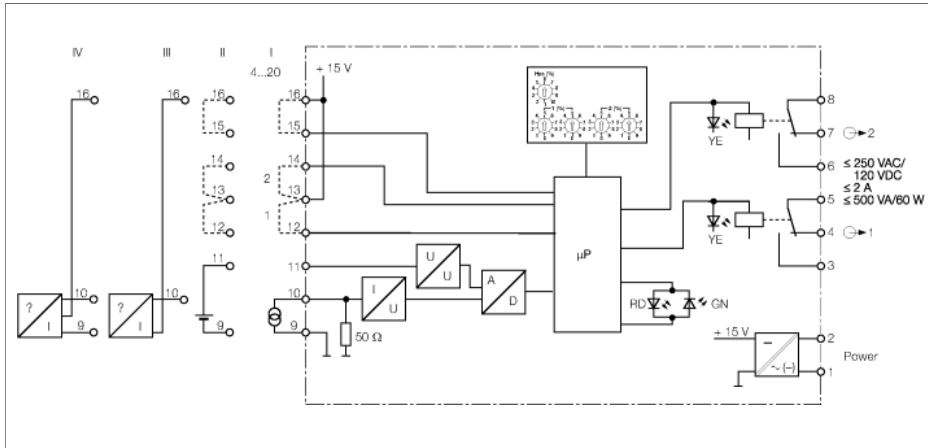


**Limit value indicator
1-channel
MS43-R**



The 1-channel limit value monitor MS43-R is used with analog sensors or devices such as level monitors, flow meters, position encoders, pressure transmitters, frequency and current converters. The input accommodates either (I) current signals of 0/4...20 mA, voltage signals of 0/2...10 V (II), 2-wire (III) or 3-wire sensors (IV) with a current consumption of 30mA may be powered directly by the MS43-R. For this purpose, a constant voltage of 15 V is provided by terminals 15/16.

The measuring range is converted from 0...20 mA to 4...20 mA, or from 0...10 V to 2...10 V. In live-zero mode the input circuit is monitored according to wire-break and short circuit. The green LED indicates operational readiness. When the input signal exceeds 22 mA or 11V, or falls below 2.0 mA or 1.0 V, both output relays change state and the dual color Power LED changes from green to red. The switching status of the correspondent output relay is indicated by a yellow LED.

Two rotary switches located on the front of the device allow setting of two independent setpoints between 1 % and 100 %. If the input signal reaches one of the defined setpoints, the respective output relay changes state.

Two yellow LEDs indicate the switching status of the outputs.

The switching hysteresis of both setpoints can be adjusted between 1 and 10 % of the setpoint by a rotary switch.

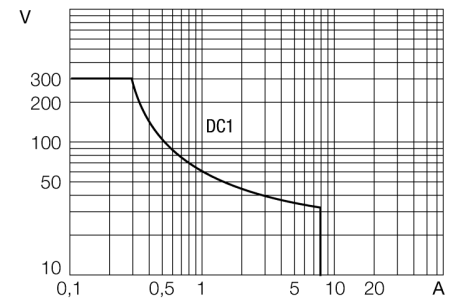
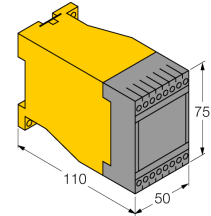
The monitoring mode of both set points can be programmed separately by bridging terminals 12 and 13 (set point 1) or terminal 13 and 14 (set point 2). Without bridges the relay de-energizes if the input signal drops below the set point.

- **Input: 0...20 mA, 0...10 VDC**
- **Output: 2 configurable limit value relays**
- **Input circuit monitoring for wire-break/short-circuit in live-zero operating mode**
- **Two switchpoints 1...100%**
- **Hysteresis adjustable 1...10%**
- **removable terminal blocks**
- **Galvanic separation of input circuits, output circuits and power supply**

**Limit value indicator
1-channel
MS43-R**

Type	MS43-R
Ident-No.	0507012
Nominal voltage	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage range	20...250 VDC
Power consumption	≤ 3 W
Transmitter connection	
Supply voltage	15 VDC
Current	35 mA
Voltage	0/2...10 VDC
Input resistance (voltage)	48 kΩ
Current input	0/4...20 mA
Input resistance (current)	50 Ω
Output circuits	
Output circuits (digital)	2 x relay (change-over)
Relay switching voltage	≤ 250 VAC/120 VDC
Switching current per output	≤ 2 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 10 Hz
Contact quality	AgNi, 3μ Au
Temperature drift	≤ 0.01 % / K
Galvanic separation	
Test voltage	2.5 kV
Rated voltage	250 V
Indication	
Operational readiness	green
Switching state	yellow
Error indication	red
Protection class	IP20
Ambient temperature	-25...+60 °C
Dimensions	75 x 50 x 110 mm
Weight	264 g
Mounting instruction	For mounting on DIN rail or mounting panel
Housing material	Polycarbonate/ABS
Electrical connection	2 x 8-pole removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²

Dimensions



Output relay electrical lifetime

