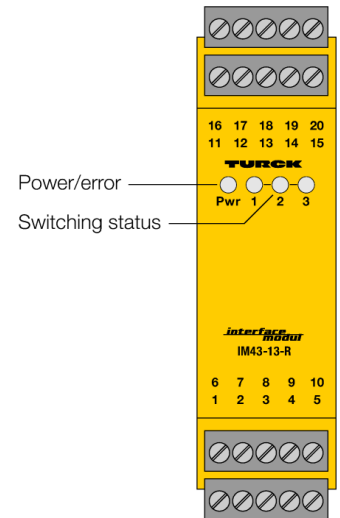
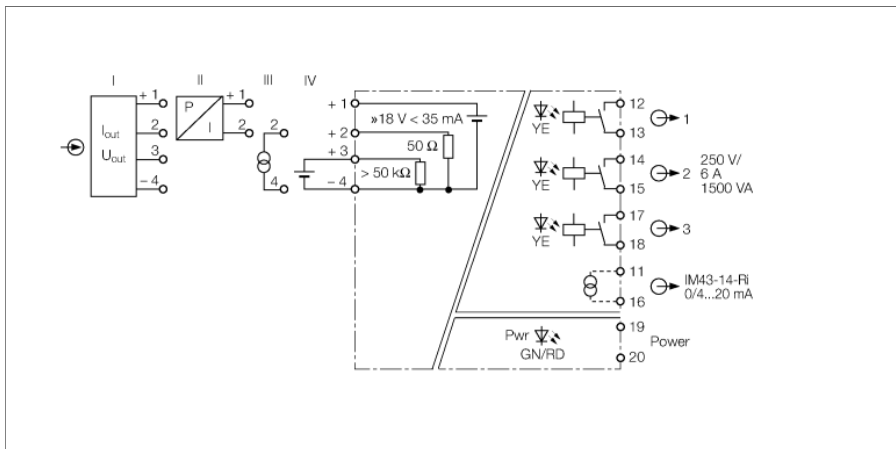


**Trip amplifier**  
**1-channel**  
**IM43-13-R**



The 1-channel IM43-13-R trip amplifier 0/4... 20 mA currents or 0/2...10 V voltages for overshoot and undershoot of limit values.

The three limit values are set via the lateral rotary coding switches.

Additionally, 18 V (with max. 35 mA) are provided for transmitters or sensors.

The green LED indicates operational readiness. Three yellow LEDs indicate the switching status of the corresponding output.

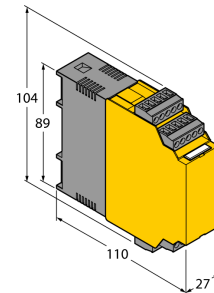
The output mode of the relays and the hysteresis are set via DIP switches.

- **FM<sub>US</sub> TR CU**
- **Monitors 3 limit values at a current or voltage input**
- **Power supply of 2-wire or 3-wire transmitters/sensors**
- **Input circuit: 0/4...20 mA; 0/2...10 V**
- **Output circuit: 3 independent limit value relays**
- **Limit value relay adjusted via rotary coding switches**
- **Hysteresis and relay outputs adjusted via DIP switch**
- **Universal operating voltage**
- **Complete galvanic isolation**
- **Input reverse-polarity protected**

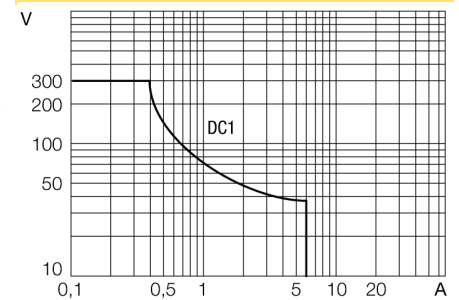
**Trip amplifier**  
**1-channel**  
**IM43-13-R**

<b>Type designation</b>	IM43-13-R
Ident-No.	7540040
<b>Nominal voltage</b>	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage range	20...250 VDC
Power consumption	≤ 5 W
<b>Transmitter connection</b>	
Supply voltage	≥ 17 V / 20 mA
Current	35 mA
Voltage input	0/2...10 VDC
Input resistance (voltage)	≥ 50 kΩ
Input current	0/4...20 mA
Input resistance (current)	≤ 50 Ω
<b>Output circuits</b>	
Output circuits (digital)	3 x relays (NO)
Output switching voltage relay	≤ 30 VDC / ≤ 250 VAC
Switching current per output	≤ 6 A
Switching capacity per output	≤ 1500 VA
Switching frequency	≤ 10 Hz
Contact quality	AgNi, 3μ Au
<b>Reference temperature</b>	23 °C
Temperature drift	≤ 0.00075 % of full scale/K
<b>Galvanic isolation</b>	
Test voltage	2.5 kV
<b>Indication</b>	
Operational readiness	green
Switching state	Yellow
Error indication	red
<b>Protection class</b>	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+70 °C
Storage temperature	-40...+80 °C
Dimensions	104 x 27 x 110 mm
Weight	185 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Polycarbonate/ABS
Electrical connection	4 × 5-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup>
Tightening torque	0.5 Nm

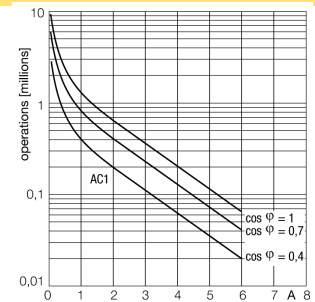
**Dimensions**



**Output relay – Load curve**



**Output relay – Electrical lifetime**



**Trip amplifier  
1-channel  
IM43-13-R**

**Accessories**

Type code	Ident-No.	Description	Dimension drawing
IM-CC-5X2BK/2BK	7541219	Cage clamp terminals for IM modules ( Ex-devices with 27 mm overall width); includes: 4 pcs. of 5-pin black terminals	