

TRM202

2 channel controller

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Short guide

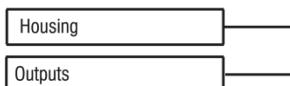
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1. Scope of delivery

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Mounting kit	- 1
Gasket	- 1

2. Ordering information

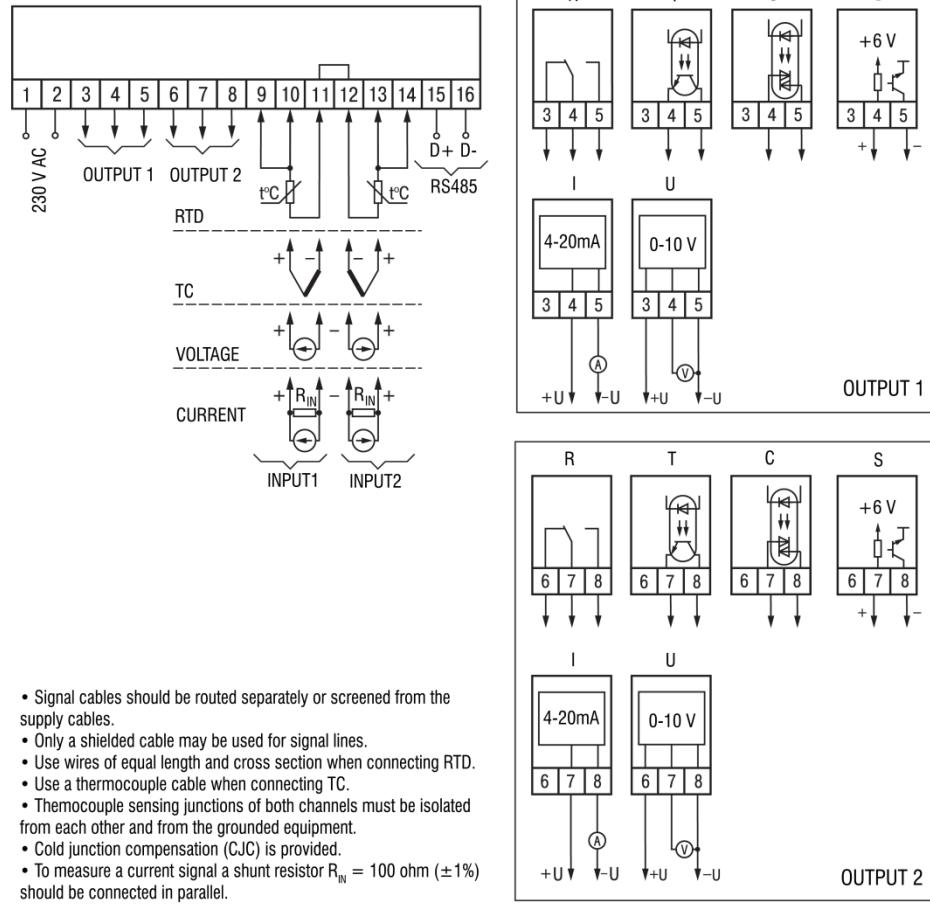
TRM202-HX.XX



Housing: H1 - panel mount (96 x 96 x 70 mm)
H2 - panel mount (96 x 48 x 100 mm)
H3 - wall mount (105 x 130 x 65 mm)

Outputs: R - Relay
T - NPN transistor
C - TRIAC
S - Solid state relay
I - 4-20 mA
U - 0-10 V

3. Wiring



6. Specification

Power supply		230 (90...245) V AC, (47...63 Hz)
Power consumption, max.		6 VA
Inputs		
Analog inputs		2
Sampling rate, max.		1 s
Input resistance	4-20 mA	external resistor $R_{IN} = 100 \text{ ohm}$ (in parallel)
	0-1 V	$\geq 100 \text{ kohm}$
Basic error	RTD	$\pm 0.25\%$
	TC	$\pm 0.5\%$
Linear signals		$\pm 0.5\%$
Outputs		
Optional output		2
Digital	Relay	8 A / 230 V AC, $\cos \varphi \geq 0.4$ / 30 V DC
	NPN transistor	200 mA, 40 V DC
	TRIAC	50 mA, 240 V AC (constant operation) 0.5 A ($f \leq 50 \text{ Hz}$, pulse duration $\leq 5 \text{ ms}$)
	Solid state relay	100 mA, 4...6 V DC
Analog	4-20 mA	10...36 V, max. 1 kohm
	0-10 V	15...36 V, min 2 kohm
Network		
RS485 interface	Terminals	D+, D-
	Protocols	Modbus RTU/ASCII, akYtec
	Baud rate	2.4...115.2 kbit/s
	Cable	Shielded twisted pair (STP)
Housing		
Enclosure	H1	H2
Dimension, mm	96 x 96 x 70	96 x 48 x 100
IP Code	front IP54	front IP54
Environmental conditions		
Ambient temperature		+1...+50°C
Storage temperature		-25...+55°C
Relative humidity		up to 80% (at +35°C, non-condensing)
Altitude		up to 2000 m above sea level

7. Inputs (parameters in t1, in.t2)

Table 1

Display	Input signal	Measurement range
Linear signals		
CD-5	0 - 5 mA	0...100 %
CD20	0 - 20 mA	0...100 %
CD40	4 - 20 mA	0...100 %
U-50	-50...+50 mV	0...100 %
U-1	0 - 1 V	0...100 %
RTD according to IEC 60751:2008		
r385	Pt50	-200...+750 °C
r385	Pt100	-200...+750 °C
RTD according to GOST 6651		
r391	50P	-200...+750 °C
r428	50M	-190...+200 °C
r426	Cu50	-50...+200 °C
r391	100P	-200...+750 °C
r428	100M	190...+200 °C
r426	Cu100	-50...+200 °C
r23	53M	-50...+200 °C
r46	46P	-200...+750 °C
TC according to IEC 60584-1:2013		
E-j	J	-200...+1200 °C
E-n	N	-200...+1300 °C
E-k	K	-200...+1300 °C
E-s	S	0...+1750 °C
E-r	R	0...+1750 °C
E-R1	A	0...+2500 °C
E-t	T	-200...+400 °C
E-b	B	+200...+1800 °C
TC according to GOST 8.585		
E-L	L	-200...+800 °C
E-R2	A-2	0...+1800 °C
E-R3	A-3	0...+1800 °C

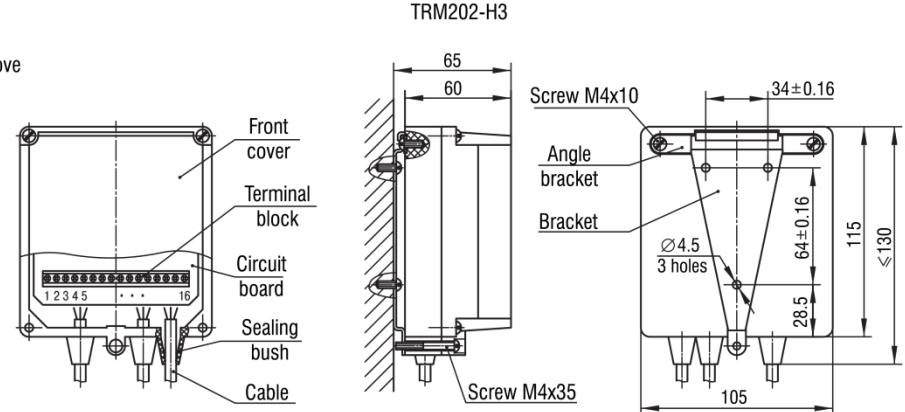
9. Digital function

Table 2

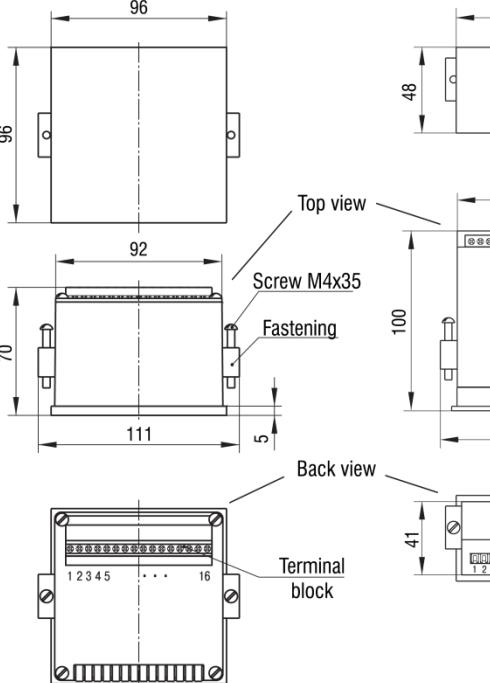
Parameter Cmp1, Cmp2	Mode	Output state
00	OFF	
01 (default)	Heating	
02	Cooling	
03	Alarm within limits	
04	Alarm outside limits	

4. Dimensions

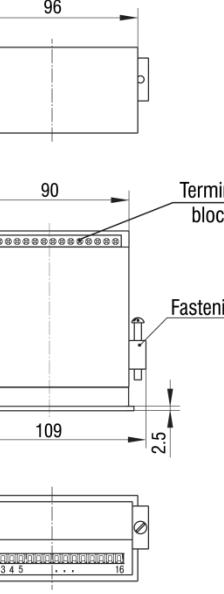
- To access the terminal block remove the front cover and disconnect the ribbon cable.
- Sealing rubber bushes should be trimmed to match the cable diameter.



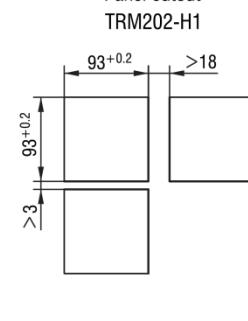
TRM202-H1



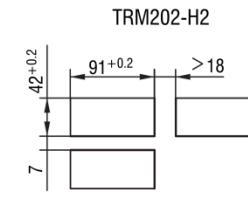
TRM202-H2



Panel cutout TRM202-H1



Panel cutout TRM202-H2

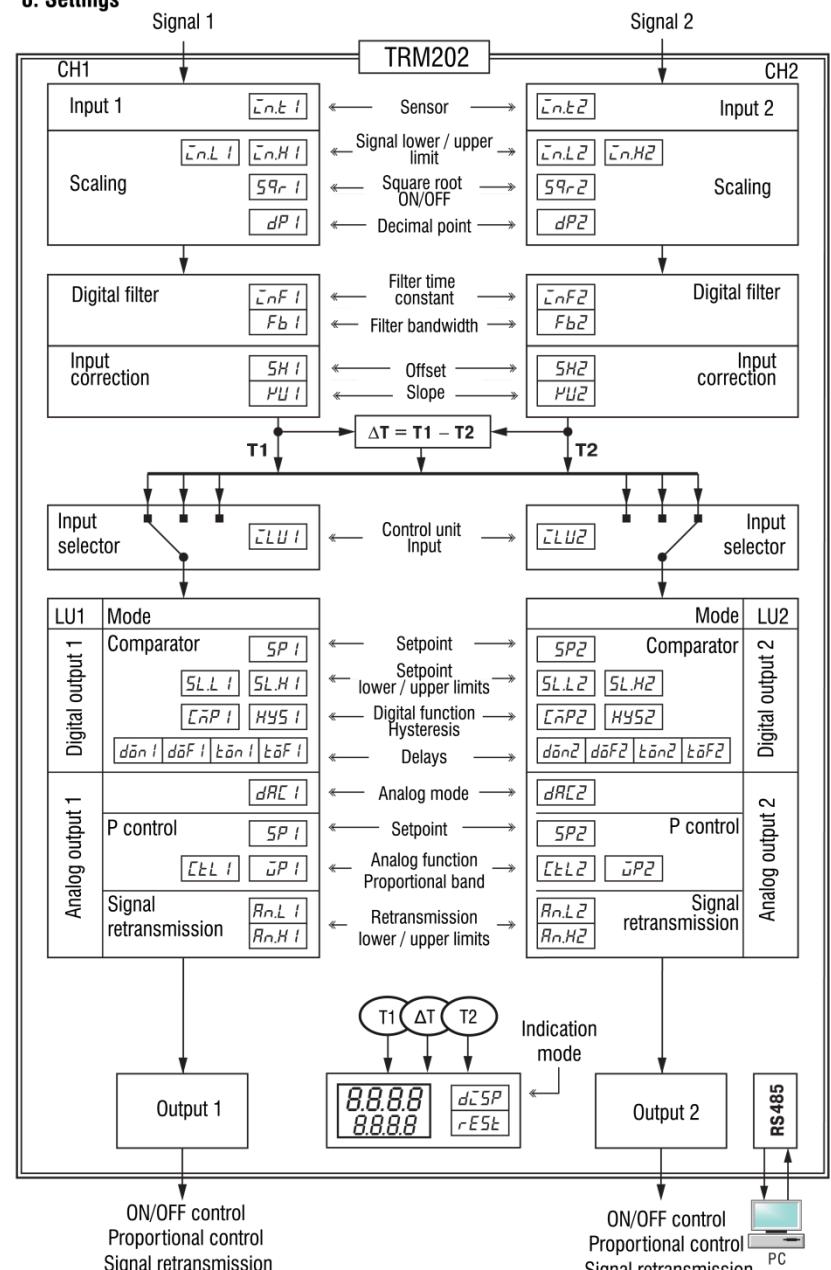


Max. panel thickness 15 mm

5. Safety

- Ensure that the device is provided with its own power supply line and electric fuse
- Ensure that the mains voltage matches the rated voltage specified on the nameplate
- Connect the power supply only after the wiring of inputs and outputs has been completed
- Do not use the device where it is subjected to flammable or explosive gases

8. Settings



10. Configuration

