

2 channel controller

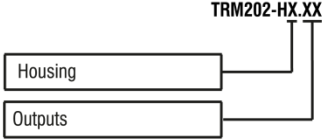
TRM202

2 channel controller
Short guide
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1. Scope of delivery

TRM202	- 1
Short guide	- 1
Mounting kit	- 1
Gasket	- 1

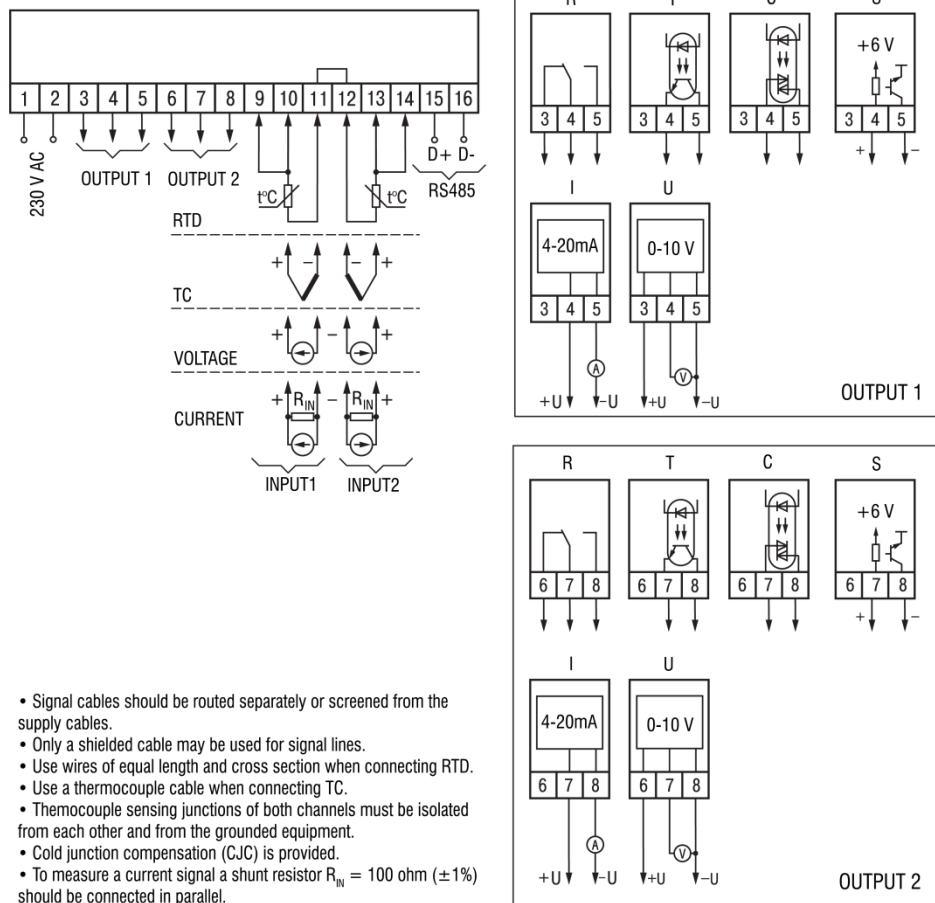
2. Ordering information



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)

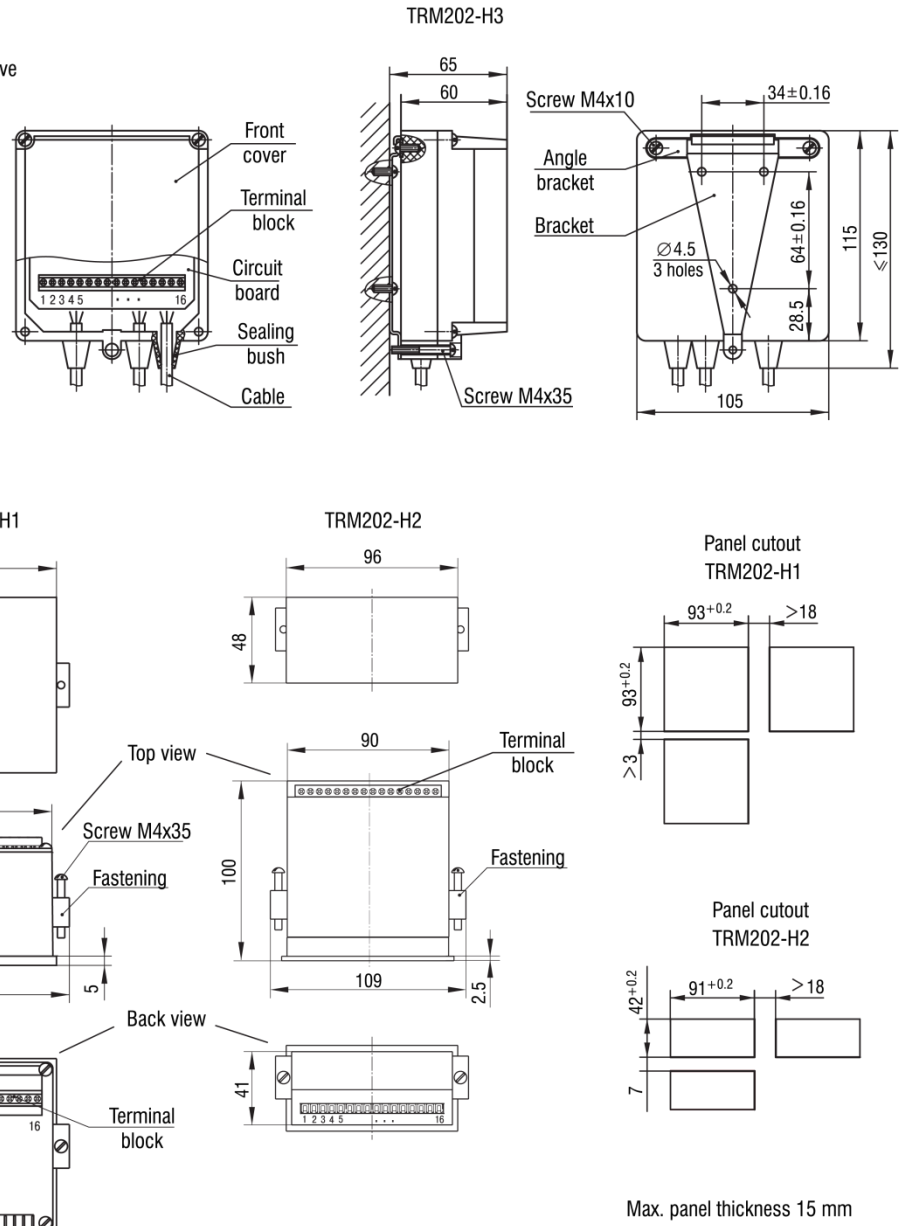
Outputs:
R - Relay
T - NPN transistor
C - TRIAC
S - Solid state relay
I - 4-20 mA
U - 0-10 V

3. Wiring



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.



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

6. Specification

Table 1

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)	
	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	H3
Dimension, mm	96 x 96 x 70	96 x 48 x 100	105 x 130 x 65
IP Code	front IP54	front IP54	IP44
Environmental conditions			
Ambient temperature	$+1...+50^\circ\text{C}$		
Storage temperature	$-25...+55^\circ\text{C}$		
Relative humidity	up to 80% (at $+35^\circ\text{C}$, non-condensing)		
Altitude	up to 2000 m above sea level		

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

Table 2

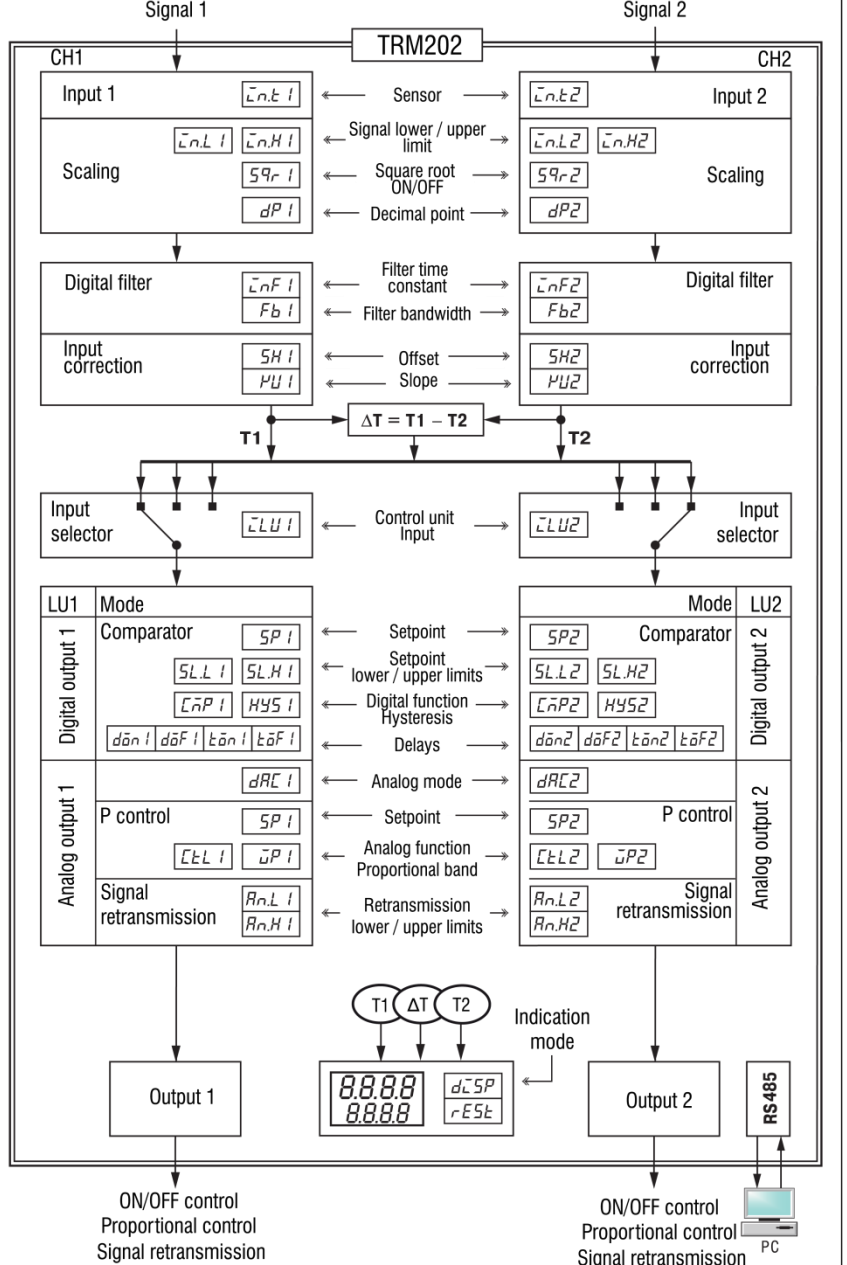
Display	Input signal	Measurement range
Linear signals		
$\overline{0-5}$	0 - 5 mA	0...100 %
$\overline{0-20}$	0 - 20 mA	0...100 %
$\overline{4-20}$	4 - 20 mA	0...100 %
$\overline{U-50}$	-50...+50 mV	0...100 %
$\overline{U0-1}$	0 - 1 V	0...100 %
RTD according to IEC 60751:2008		
$\overline{r-385}$	Pt50	-200...+750 °C
$\overline{r-385}$	Pt100	-200...+750 °C
RTD according to GOST 6651		
$\overline{r-391}$	50P	-200...+750 °C
$\overline{r-428}$	50M	-190...+200 °C
$\overline{r-426}$	Cu50	-50...+200 °C
$\overline{r-391}$	100P	-200...+750 °C
$\overline{r-428}$	100M	190...+200 °C
$\overline{r-426}$	Cu100	-50...+200 °C
$\overline{r-23}$	53M	-50...+200 °C
$\overline{r-46}$	46P	-200...+750 °C
TC according to IEC 60584-1:2013		
$\overline{E-J}$	J	-200...+1200 °C
$\overline{E-N}$	N	-200...+1300 °C
$\overline{E-K}$	K	-200...+1300 °C
$\overline{E-S}$	S	0...+1750 °C
$\overline{E-R}$	R	0...+1750 °C
$\overline{E-A1}$	A	0...+2500 °C
$\overline{E-T}$	T	-200...+400 °C
$\overline{E-b}$	B	+200...+1800 °C
TC according to GOST 8.585		
$\overline{E-L}$	L	-200...+800 °C
$\overline{E-R2}$	A-2	0...+1800 °C
$\overline{E-R3}$	A-3	0...+1800 °C

9. Digital function

Table 3

Parameter CmP1, CmP2	Mode	Output state
00	OFF	
01 (default)	Heating	ON HYS
02	Cooling	ON HYS
03	Alarm within limits	ON HYS
04	Alarm outside limits	ON HYS

8. Settings



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10. Configuration

