

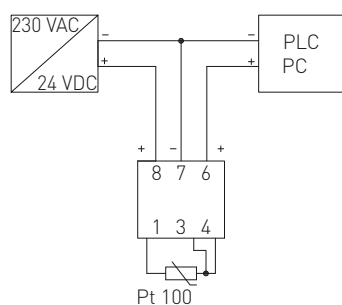
Top hat rail measuring transducers for temperature with multi-range switching and active output

The top hat rail measuring transducer **THERMASGARD® HSM** is an analogue temperature measuring transducer for Pt100 or Pt1000 sensors according to DIN 60751, with 13 switchable measuring ranges (selectable via DIP switches). It is installed inside control cabinets or distribution boxes. The top hat rail transmitter converts the sensor's temperature-dependent resistance signal into a standard signal of 0 - 10 V or 4...20 mA. The output signal is highly accurate temperature linear. The measuring transducer is factory-calibrated.

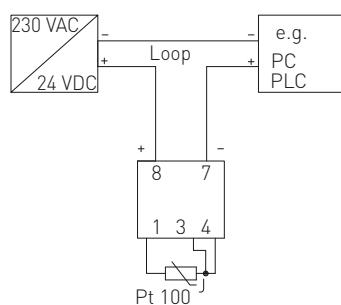
TECHNICAL DATA

Output:	0-10 V	4...20 mA
Power supply:	24 V AC / DC $\pm 10\%$	24 V DC
Power consumption:	< 0.2 VA / 24 V AC / DC	< 0.55 VA / 24 V DC
Input:	Pt100 / Pt1000	Pt100 / Pt1000
Testing current:	0.25 mA	0.25 mA
Zero point:	-200...+830 °C	-200...+830 °C
Range:	> +20 °C	> +20 °C
Sensor breakage:	> 10 V	> 20 mA
Short circuit:	0 V	< 4 mA
Residual ripple permissible:	< 10 %	< 10 %
Output:	0-10 V min. load resistance 3 kOhm	4...20 mA max. working resistance $R_a \text{ (Ohm)} = U_B - 12 \text{ V} / 0.02 \text{ A}$
Response time:	< 0.1 s	< 0.1 s
Operating temperature:	-40...+85 °C	-40...+85 °C
Enclosure:	2TE (75 x 25 x 53 mm) material polycarbonate, colour signal green (similar to RAL 6029)	
Protection class:	III (according to EN 60 730)	
Protection type:	IP 20 (according to EN 60 529)	
Standards:	CE conformity, electromagnetic compatibility according to EN 61 326, EMC directive 2014 / 30 / EU	

Connecting diagram **HSM - U**

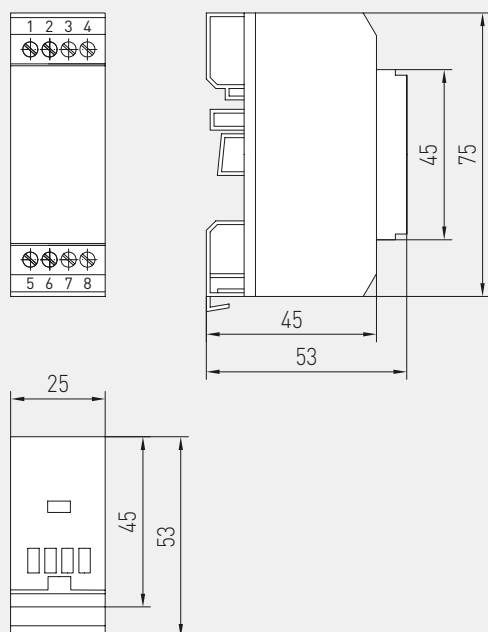


Connecting diagram **HSM - I**



Dimensional drawing

HSM



HSM



Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3	DIP 4
-20...+150 °C	ON	ON	ON	ON
0... +50 °C (default)	OFF	ON	ON	ON
0...+100 °C	ON	OFF	ON	ON
0...+200 °C	OFF	OFF	ON	ON
0...+300 °C	ON	ON	OFF	ON
0...+400 °C *	OFF	ON	OFF	ON
0...+500 °C *	ON	OFF	OFF	ON
0...+600 °C *	OFF	OFF	OFF	ON
-50... +50 °C	ON	ON	ON	OFF
-100...+100 °C	OFF	ON	ON	OFF
-30... +70 °C	ON	OFF	ON	OFF
-40... +60 °C	OFF	OFF	ON	OFF
0...+250 °C	ON	ON	OFF	OFF

* measuring ranges only for Pt100

THERMASREG® HSM – Top hat rail measuring transducers for temperature

Type / WG01	Sensor	Output	Item No.	Price
HSM-I			IP20, I-variant	
HSM-I	Pt100 / Pt1000	4...20mA	1101-6112-0009-700	118,58 €
HSM-U			IP20, U-variant	
HSM-U	Pt100 / Pt1000	0 - 10 V	1101-6111-0009-700	118,58 €
Extra charge:	Other ranges optional			21,42 €
For special orders please specify:	Type and measuring range (MR) e.g. HSM-U, Pt100, (MR: 0...+450 °C); HSM-I, Pt100, (MR: 0...+550 °C)			