

Pendulum room temperature measuring transducer, (with globe), calibratable, with Modbus connection

Calibratable room pendulum temperature measuring transducer (with globe) **THERMASGARD® RPTM2 - Modbus - T3** with Modbus connection, in an impact-resistant plastic housing with quick-locking screws, optionally with /without display, cable sensor with a black plastic globe.

The pendulum sensor has been specially designed to detect the temperature in larger rooms or halls. The resistance thermometer (globe thermometer) achieves a very good, representative measurement result due to its positioning in the room. The dark radiation sensor determines the effective radiation heat at the measured location. This is relevant for calculating the thermal comfort (operative room temperature) taking into account the co-action of thermal radiation and thermal convection. The ratio of globe temperature / air temperature is approx. 70% / 30%.

Innovative Modbus sensor with galvanically separated RS485 Modbus interface, selectable bus termination resistance, DIP switch for setting the bus parameters and bus address in current-free state, LEDs for telegram status display, two separate push-in terminals and large three-line display (illuminated, with customised programming in the 7-segment range and dot-matrix range). Uses **internal diagnostics** to detect sensor breakage or sensor short circuit as errors. The error messages can be retrieved via Modbus and are shown on the display. The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

RPTM2 - Modbus - T3

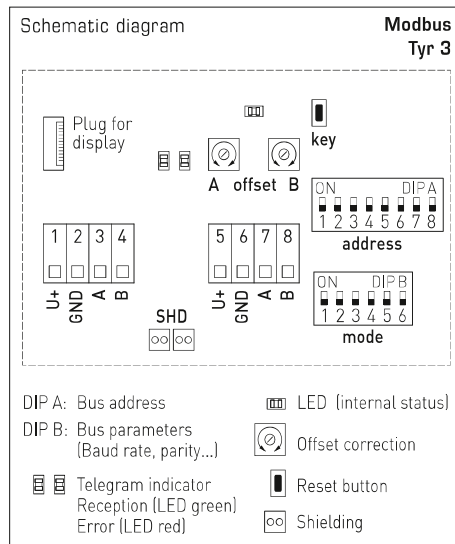


Device version with **M12 connector** (optional on request)



TECHNICAL DATA

Voltage supply:	24 V AC (±20%) and 15...36 V DC
Power consumption:	< 1.2 W / 24 V DC; < 1.8 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B
Measuring range:	-50...+150 °C T_{min} -50 °C, T_{max} +80 °C
Temperature deviation:	typically ±0.2 K at +25 °C
Zero point offset:	±10 °C
Ambient temperature:	Measuring transducer -30...+70 °C
Medium:	clean air and non-aggressive, non-combustible gases
Bus protocol:	Modbus (RTU mode), address range 0... 247 selectable
Signal filtering:	0.3 s / 1 s / 10 s
Housing:	plastic, UV-stabilised, material polyamide, 30% glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent!
Housing dimensions:	108 x 78.5 x 43.3 mm (Tyr 3 without display) 108 x 78.5 x 45.8 mm (Tyr 3 with display)
Cable connection:	cable gland , plastic (2x M20 x 1.5; with strain relief, exchangeable, inner diameter 8 - 13 mm) or M12 connector according to DIN EN 61076-2-101 (optional on request)
Connection cable:	PVC, H03VV-F, 2 x 0.5 mm ² , cable length (KL) = approx. 1.5 m (other lengths optional)
Globe:	plastic, colour black, Ø = 50 mm
Electrical connection:	0.2 - 1.5 mm ² , using push-in terminals
Permissible air humidity:	<95% r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC Directive 2014 / 30 / EU
Equipment:	Display with illumination , three-line, programmable, cutout approx. 51 x 29 mm (W x H), for displaying the actual temperature, error message or an individually programmable display value
Internal diagnostics:	Error 1 at sensor breakage Error 2 at sensor short circuit
ACCESSORIES	see table



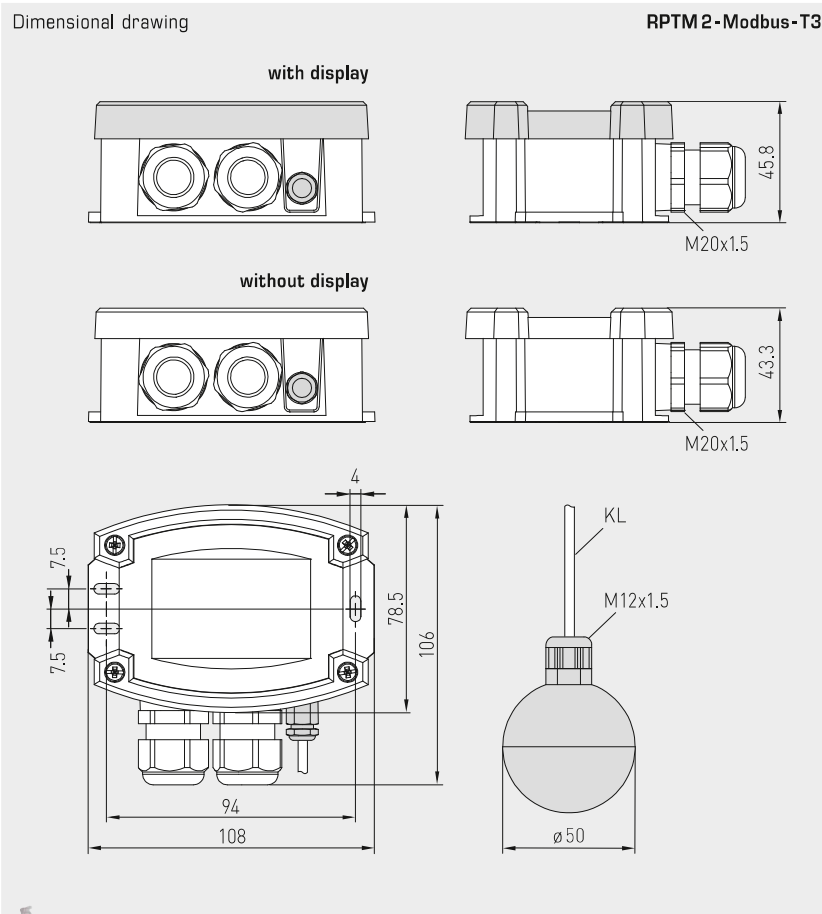


NEW

S+S REGELTECHNIK

THERMASGARD® RPTM2 - Modbus - T3

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(with globe), calibratable,
with Modbus connection



RPTM2-Modbus-T3
with display



THERMASGARD® RPTM 2 - Modbus - T3 Pendulum room temperature measuring transducer (with globe)

Type / WG01	Sensor	Output	Type	Display	Item No.
RPTM 2 - Modbus - T3					
RPTM2-MODBUS-T3	Pt1000	Modbus	Sensor abgesetzt		1101-6296-0210-000
RPTM2-MODBUS-T3 LCD	Pt1000	Modbus	Sensor abgesetzt	■	1101-6296-4210-000
Extra charge:	per running metre of connecting lead (PVC)				on request
	Cable connection with M12 connector according to DIN EN 61076-2-101				on request

ACCESSORIES

KA2-Modbus	Communication adapter (with USB and RS485 interface) for system connection (incl. quick-start software)				1906-1200-0000-100
LA-Modbus	Line termination device (with terminating resistor) as an active bus termination of RS485 networks				1906-1300-0000-100