

TEMPERATUR AKTIV



RUMFØLERE

Room temperature measuring transducers, calibratable, with multi-range switching and active output

Calibratable room temperature measuring transducer **THERMASGARD® RTM 1** with continuous output, with or without optional display for displaying the actual temperature in an elegant housing made of plastic, with snap-on lid, base with 4-hole attachment for installation on vertically or horizontally installed in-wall flush boxes, with predetermined breaking point for on-wall cable entry, or in housing made of stainless steel (top and bottom part are of stainless steel, the lid is screwed on), vandal-proof version e.g. for schools, military barracks, and public buildings. This room temperature transmitter / residential room temperature sensor is used to detect / display temperatures in closed dry rooms, in apartments, in offices, supermarkets and business facilities.

RTM 1



TECHNICAL DATA

Power supply:	24 V AC / DC ($\pm 10\%$) for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ± 0.3 V
Working resistance:	$R_a \text{ (ohm)} = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Sensor:	Pt1000, DIN EN 60751, class B
Measuring ranges:	multi-range switching with 8 switchable measuring ranges, see table (other ranges optional) operating range $-30...+70^\circ\text{C}$ with manual zero point correction ($\pm 10\text{K}$)
Deviation, temperature:	typically $\pm 0.2\text{K}$ at $+25^\circ\text{C}$
Output:	0 - 10 V or 4...20 mA
Ambient temperature:	measuring transducer $-30...+70^\circ\text{C}$
Connection type:	2- or 3-wire connection
Process connection:	by screws
Housing:	plastic, material ABS, colour pure white (similar to RAL 9010), (optional stainless steel) V2A (1.4301)
Dimensions:	85 x 85 x 27 mm (Baldur 1) 75 x 75 x 25 mm (stainless steel)
Electrical connection:	0.14 - 1.5 mm ² via terminal screws
Installation:	wall mounting or on in-wall flush box $\varnothing 55$ mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes for cable entry from the back, with predetermined breaking point for on-wall cable entry from top / bottom in case of plain on-wall installation
Humidity:	<95% r. H., non-precipitating air
Protection class:	III (according to EN 60730)
Protection type:	IP 30 (according to EN 60529)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC directive 2014 / 30 / EU
Optional:	Two-line display with illumination , cutout 36 x 15 mm (W x H), for displaying the ACTUAL temperature and the internal diagnostics (sensor breakage, sensor short circuit) see beginning of this chapter!

Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
$-20^\circ\text{C}...+150^\circ\text{C}$	ON	ON	ON
$-50^\circ\text{C}...+50^\circ\text{C}$	OFF	ON	ON
$-20^\circ\text{C}...+80^\circ\text{C}$	ON	OFF	ON
$-30^\circ\text{C}...+60^\circ\text{C}$	OFF	OFF	ON
$0^\circ\text{C}...+40^\circ\text{C}$	ON	ON	OFF
$0^\circ\text{C}...+50^\circ\text{C}^*$	OFF	ON	OFF
$0^\circ\text{C}...+100^\circ\text{C}$	ON	OFF	OFF
$0^\circ\text{C}...+150^\circ\text{C}$	OFF	OFF	OFF

* (default / fixed with display)

Display and internal
diagnostics**RTM 1-U-Display**
RTM 1-I-Display

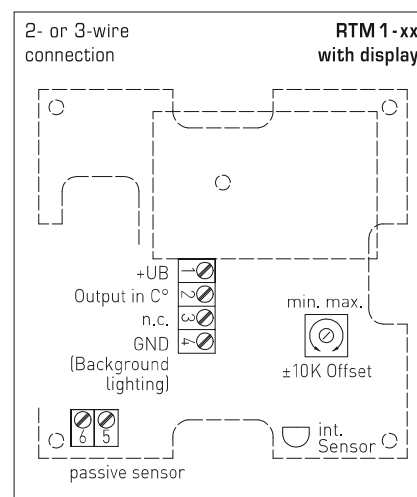
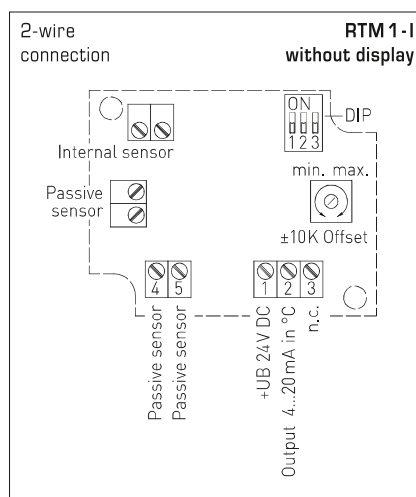
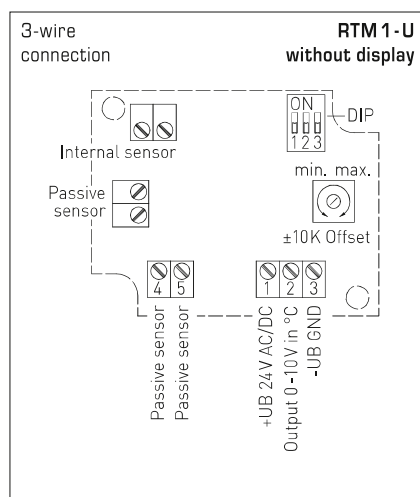
Standard



Sensor breakage



Sensor short circuit





S+S REGELTECHNIK

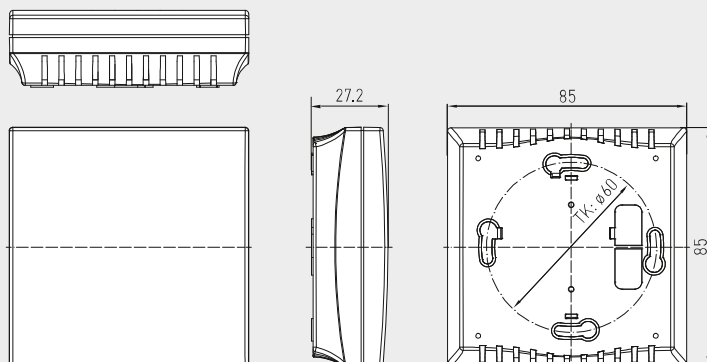
THERMASGARD® RTM 1

Room temperature measuring transducers,
calibratable, with multi-range switching
and active output



Dimensional drawing

Housing Baldur 1

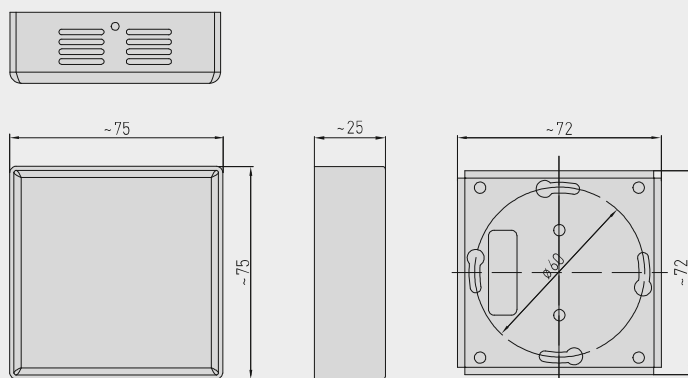


RTM 1
with display

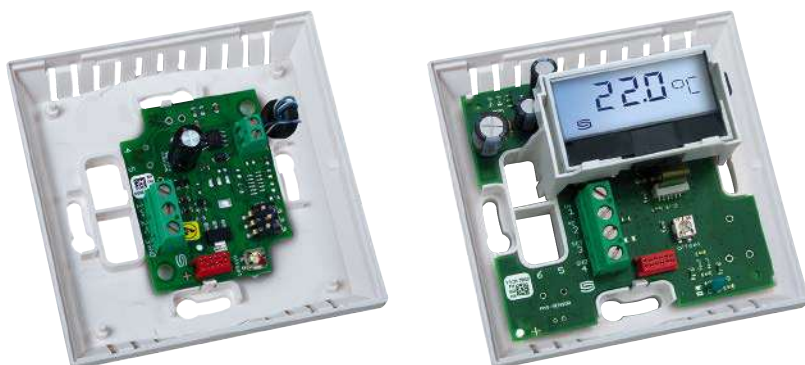


Dimensional drawing

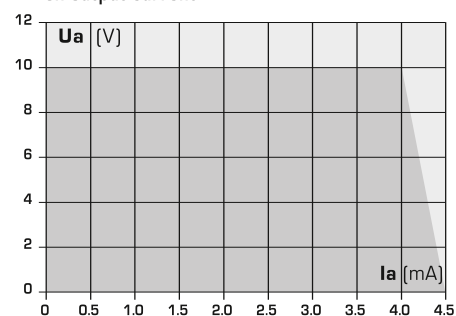
Housing stainless steel



RTM 1
(stainless steel)



Dependency of output voltage
on output current



THERMASGARD® RTM 1 Room temperature measuring transducers

Type / WG01	Sensor	Output	Features	Display	Item No.	Price
RTM1-U					IP30, U-variant	
RTM1-U	Pt1000	0-10V	–		1101-41A1-0000-200	72,94 €
RTM1-U LCD	Pt1000	0-10V	Display*	■	1101-41A1-2000-200	115,06 €
RTM1-U VA	Pt1000	0-10V	Stainless steel housing V2A (1.4301)		1101-4151-0000-200	189,76 €
RTM1-I					IP30, I-variant	
RTM1-I	Pt1000	4...20mA	–		1101-41A2-0000-200	72,94 €
RTM1-I LCD	Pt1000	4...20mA	Display*	■	1101-41A2-2000-200	115,06 €
RTM1-I VA	Pt1000	4...20mA	Stainless steel housing V2A (1.4301)		1101-4152-0000-200	189,76 €
Extra charge:		Other ranges optional				24,19 €
Note:		* When equipped with display, the measuring range of 0...+50 °C is fixed.				

The room sensor **THERMASGARD® FSTM / FSTM -P** in the in-wall housing, optionally with potentiometer, is used for measuring the room temperature, and for setpoint adjustment. It converts the measured values into a standard signal of 0-10 V. A digital, long-term stable sensor is used for temperature measurement.

The in-wall sensor is mounted in high-quality panel switch programmes, ideally of the brands Gira, Berker, Merten, Jung, Siemens or Busch-Jaeger (using in-wall adapters, no setpoint adjustment possible) either individually or in combination with light switches, socket outlets, etc.

It is used in non-aggressive, dust-free environments, in refrigeration, air conditioning and clean room technology, and in interior rooms, such as living rooms, offices, hotels, etc.

TECHNICAL DATA

Power supply:	24 V AC / DC ($\pm 10\%$)
Power consumption:	< 1.1 W / 24 V DC; < 2.2 VA / 24 V AC

TEMPERATURE

Sensor:	digital temperature sensor, low hysteresis, high long-term stability
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Long-term stability:	$\pm 1\%$ per year
Measuring range:	0...+50 °C
Deviation, temperature:	typically $\pm 0.8\text{ K}$ at +25 °C
Output, temperature:	0-10 V

POTENTIOMETER

Output, potentiometer:	0-10 V
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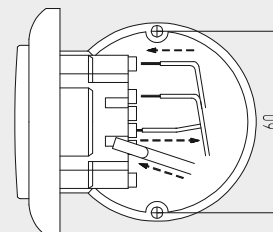
Mounting:	in-wall flush box $\varnothing 55\text{ mm}$
Electrical connection:	1,0-2,5 mm ² , via plug terminals
Ambient temperature:	Storage -35...+85 °C; Operation 0...+50 °C
Permitted humidity:	max. 90 % r.H., non-precipitating air
Medium:	clean air and other non-aggressive, non-combustible gases
Protection class:	III (according to EN 60 730)
Protection type:	IP 20 (according to 60 529)
Standards:	CE-conformity, electromagnetic compatibility according to EN 61 326, EMC Directive 2014 / 30 / EU

SWITCH PROGRAMME

Manufacturer:	GIRA System 55 (other switch programmes, manufacturers, colours as well as prices available upon request)
Housing:	plastic, the standard colour is pure glossy white (similar to RAL 9010) (other colours are available upon request with colour variants depending on the respective light switch programme)

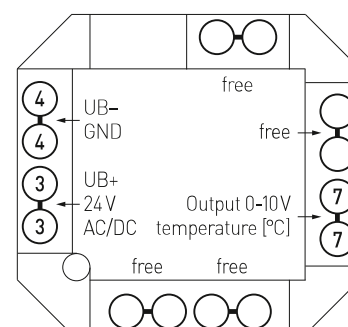
Mounting diagram

in-wall



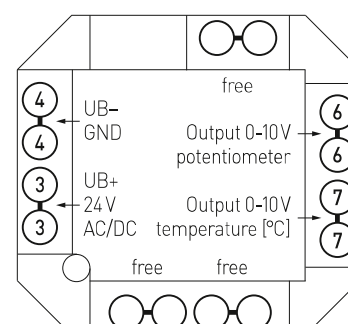
Connection diagram

FSTM



Connection diagram

FSTM - P





S+S REGELTECHNIK

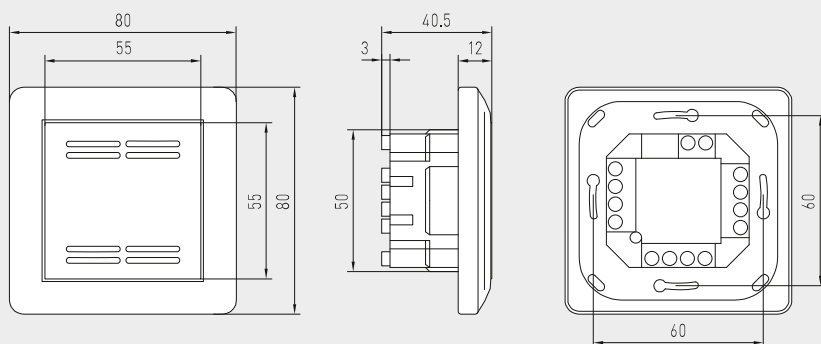
THERMASGARD® FSTM
THERMASGARD® FSTM-P

Room temperature sensor or measuring transducer,
in-wall in the panel switch programme,
with active output



Dimensional drawing

FSTM

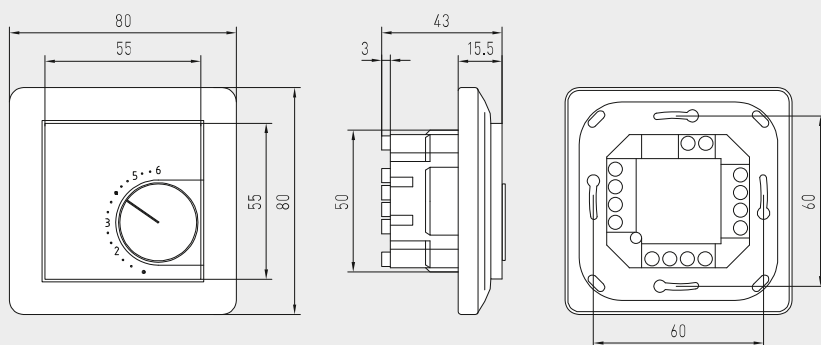


FSTM
Standard



Dimensional drawing

FSTM-P



FSTM-P
with potentiometer



Temperature table
MR: 0...+50 °C

°C	U _A [V]
0	0.0
5	1.0
10	2.0
15	3.0
20	4.0
25	5.0
30	6.0
35	7.0
40	8.0
45	9.0
50	10.0

THERMASGARD® FSTM Room temperature sensor or measuring transducer, in-wall
THERMASGARD® FSTM-P Room temperature sensor or measuring transducer, in-wall with potentiometer

Type / WG02	Measuring Range Temperature	Output Temperature	Potentiometer	Item No.	Price
FSTM					
FSTM-U	0...+50 °C	0-10V	–	1101-9121-0000-162	119,69 €
FSTM-P					
FSTM-U P	0...+50 °C	0-10V	0-10V	1101-9121-0004-282	142,27 €



**HVAC & BYGNINGS-
AUTOMATIK**

VORES PRODUKTSORTIMENT INKLUDERER:



FUGT - KANALFØLERE



TEMP. AKTIV - UDEFØLERE



TRÅDLØS - UDEFØLERE



TILBEHØR



TEMPERATUR AKTIV



TEMPERATUR PASSIV

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



ELVARME



KØLEPROFILER

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