

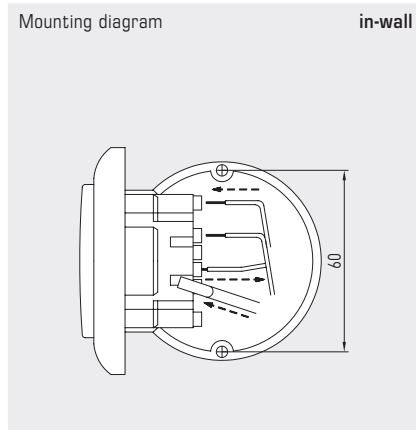
**Room humidity and temperature sensor or measuring transducer,
in-wall in the panel switch programme,
with active output**

The room sensor **HYGRASGARD® FSFM / FSFTM** in the in-wall housing is used for measuring the relative humidity and temperature of the air. It converts the measured values into a standard signal of 0-10 V.

A digital, long-term stable sensor is used for humidity and temperature measurement. Relative humidity [% RH] is the quotient of water vapour partial pressure divided by the saturation vapour pressure at the respective gas temperature.

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) 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 (± 10 %)
Power consumption:	< 1.1 W / 24 V DC; < 2.2 VA / 24 V AC

HUMIDITY

Sensor:	digital humidity sensor, with integrated temperature sensor, low hysteresis, high long-term stability
Long-term stability:	± 1 % per year
Measuring range, humidity:	0...100 % RH
Operating range, humidity:	0...95 % RH (non-precipitating air)
Accuracy, humidity:	typically ± 3.0 % (20...80 % RH) at +25 °C, otherwise ± 5.0 %
Output, humidity:	0-10 V

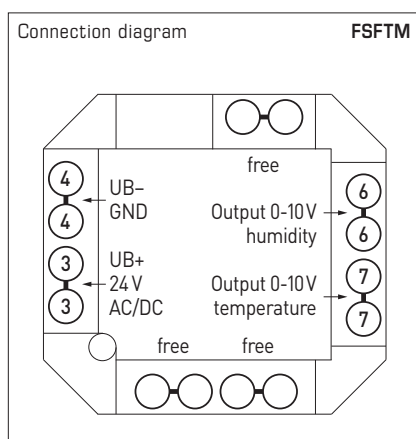
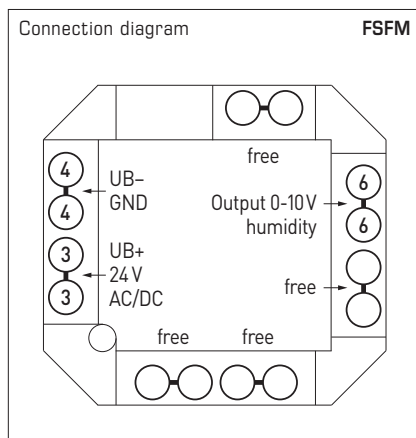
TEMPERATURE

Measuring range:	0...+50 °C
Accuracy, temperature:	typically ± 0.8 K at +25 °C
Output, temperature:	0-10 V

Mounting:	in-wall flush box Ø 55 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 % RH, 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 according to 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)





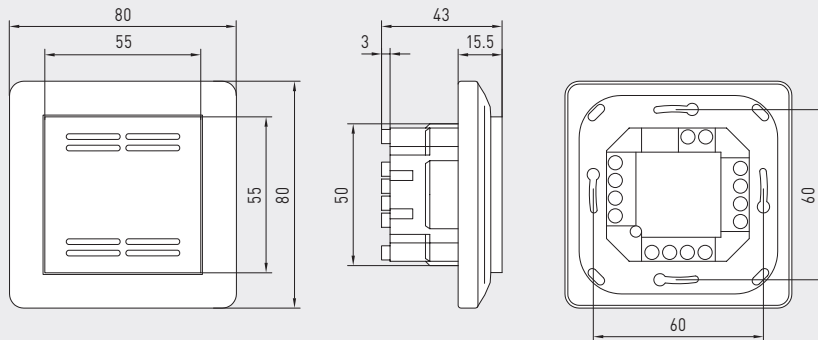
S+S REGELTECHNIK

HYGRASGARD® FSFM
HYGRASGARD® FSFTM

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



Dimensional drawing



FSFM
FSFTM

FSFM
FSFTM



Humidity table

MR: 0...100% RH

% RH	U _A [V]	% RH	U _A [V]
0	0	50	5.0
5	0.5	55	5.5
10	1.0	60	6.0
15	1.5	65	6.5
20	2.0	70	7.0
25	2.5	75	7.5
30	3.0	80	8.0
35	3.5	85	8.5
40	4.0	90	9.0
45	4.5	95	9.5
Continued to the right ...		100	10.0

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



HYGRASGARD® FSFM Room humidity sensor or measuring transducer, in-wall
 HYGRASGARD® FSFTM Room humidity and temperature sensor or measuring transducer, in-wall

Type / WG02	Measuring Range		Output		Item No.
	Humidity	Temperature	Humidity	Temperature	
FSFM					
FSFM-U	0...100% RH	-	0-10 V	-	1201-9121-0000-162
FSFTM					
FSFTM-U	0...100% RH	0...+50 °C	0-10 V	0-10 V	1201-9121-1000-162