eltherm®

At a glance

Applications

Roof surfaces, gutters and downpipes

Frost protection

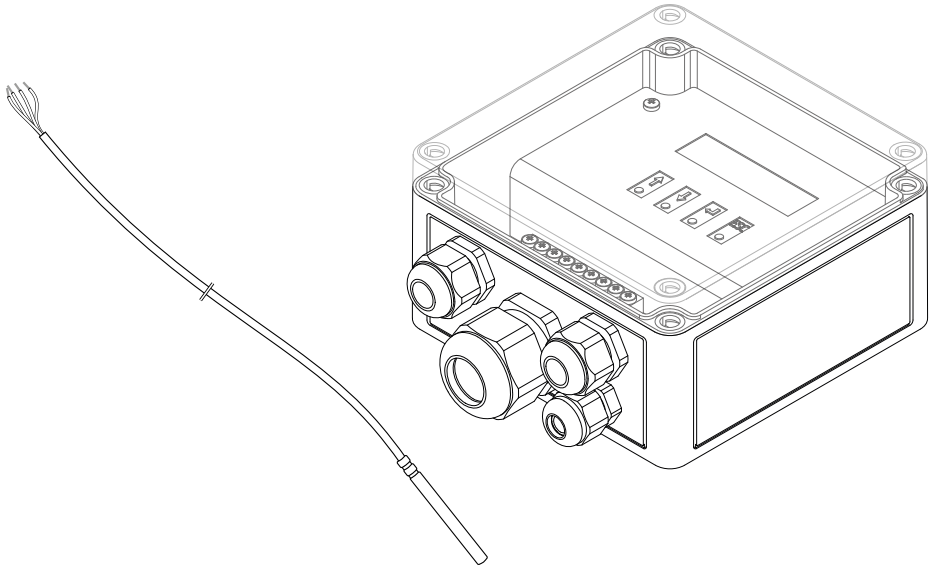
- Building technology
- Gutters
- Downpipes
- Roof surfaces
- Snow load

Advantages

- Energy-saving
- Reliable & economical
- Easy installation & operation

Approvals

ISD-1.1
Ice and Snow Detector for Roof



Electrical gutter and roof surface heating protects against winter damage that can occur due to an excessive load of snow and formation of ice. The water can flow out and there is no way for ice to form.

For economic control, use of the electronic ice and snow detector ISD-1.1 is normally recommended. Measuring the humidity and temperature in the ice and snow detector makes it possible to implement energy-saving operation. In this way the heating is only turned on briefly if the frost limit is exceeded with moisture present at the same time.

The microprocessor controlled ISD-1.1 has an illuminated LCD display.
Setpoint values and actual values for temperature, moisture and the reheating time can be accessed and adjusted.

Sensor addressing

Heating circuit / Addresses	Heating circuit 1
1	x
2	(x)*1

Up to two sensors can be connected.
The sensors have fixed addresses of 1 and 2, which are assigned to heating circuit 1.
The sensors are connected in parallel.

*1 Additional sensor optional.
Please note the sensor addressing when placing your order.

Checklist

Temperature sensors *2

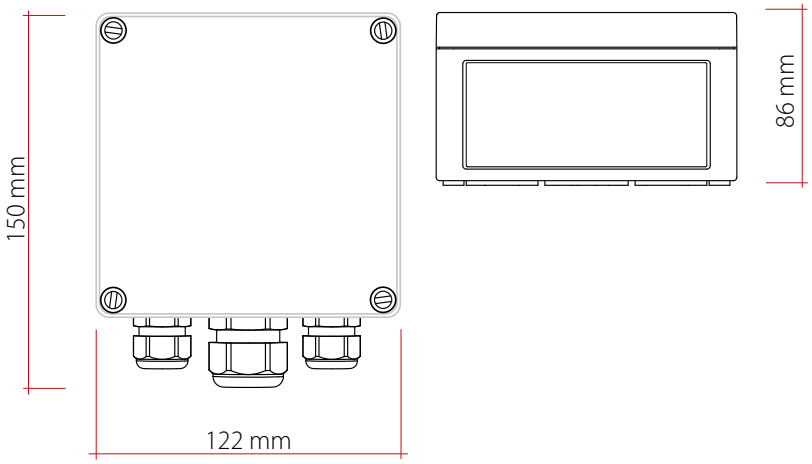
ISD-STH 1	Moisture and temperature sensor, 5.0 m CL	TBC0001
ISD-STH 2	Moisture and temperature sensor, 10.0 m CL	TBC0002
ISD-STH 3	Moisture and temperature sensor, 20.0 m CL	TBC0003

*2 When ordering multiple temperature sensors, please specify their intended use, as they must be configured at the factory

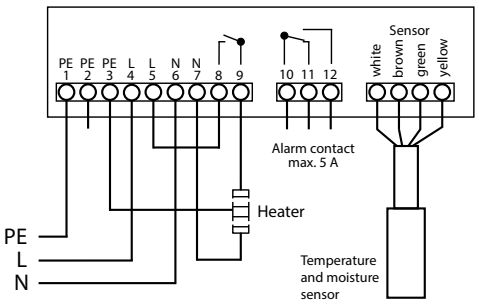
Technical Specifications

Operating voltage	230 V AC 50/60 Hz
Max. power consumption	max. 3 VA
Ambient temperature	-10 °C up to +50 °C
Storage temperature	-40 °C up to +80 °C
Switching capacity Relay 1	Relay N/O contact, 250 VAC/150 VDC, 25 A cos φ =1
Switching capacity Relay 2	Relay change over contact, 250 VAC/150 VDC, 5 A cos φ =1
Setpoint temperature range	0.0 °C to 9.0 °C
Switching hysteresis	0.5 K to 5.0 K
Switching accuracy	± 1 K
Terminals	Load: 1.5 to 4 mm²; Sensor & Error: 0.5 to 2.5mm²
Sensor connection	2 sensor inputs (parallel)
Display	Illuminated, 2 lines, 16 places
Housing material	Polycarbonate, grey; transparent cover
Dimensions	122 x 86 x 150 mm (WxHxD)
Protection	IP 65
Mounting	Wall mounting
Weight	approx. 0.6 kg

Dimensions



Connection diagram



Ordering Information

Type	Item no.
ISD-1.1 including moisture sensor ISD-STH, 5.0 m CL, Address 1 *[3]	0620624

*[3] **Sensor:** Detailed information on the various sensors can be found in data sheet "ISD-STH Moisture & Temperature Sensors"

8643020620624 Data sheet for ISD-1.1 EN - subject to technical changes without notice.

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