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Ice and Snow Detector
1873-ESM, Single Unit

Quick Start Guide

The Ice and Snow Detector 1873 is a single-channel device that can be used for all applications in the field of ice and snow detection.

It can be connected to the following sensors:
- 3354 (rooftops, gutter heating)
- 3356, 3355 (areas, slab heating)

The device is configured with the factory setting (see *Installation and Adjustment Instructions* from page 19 or from page 40 depending on the documentation).

For a quick start, only the language and the sensor have to be set when the system is switched on for the first time. The application must be set to "Single Unit". We also recommend setting the moisture threshold above the dry value specified on the sensor, determined alternatively via a dry test measurement.

Required settings

Language

Deutsch

| Esc | - | + | Save |

Confirm "Deutsch" (German) with *Save* or change language with "+" and then confim with *Save*.

Menu → Installer → Startup →

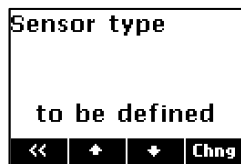During initial startup, all parameters must be set under the menu item mentioned above. These are:

Application

Application

Single Unit

| << | ▲ | ▼ | Chng |

The application must be set to "Single Unit". For information about the applications " System" and " Multi Channel" refer to complete 1873/ 75-ESM documentation.

Sensor type

The factory setting for the sensor type is "to be defined". Select the sensor type according to the connected sensor.

Sensor type

to be defined

| << | ▲ | ▼ | Chng |

Click *Chng*, select sensor with "+" and confirm with *Save*.

Recommended settings

Moisture threshold

Menu → **Installer** → **Config. modules** → **Moisture threshold**

It should be checked whether the factory-set moisture threshold of 5.0 matches the sensor used and its environment.

1. Add 1.0 to 2.0 to the dry value specified on the sensor depending on the desired sensitivity and set this value as the moisture threshold.

Click *Chng*, select sensor with "+" or "-" and confim with *Save*.

If there is no dry value on the sensor, it can be determined with the help of a test measurement:
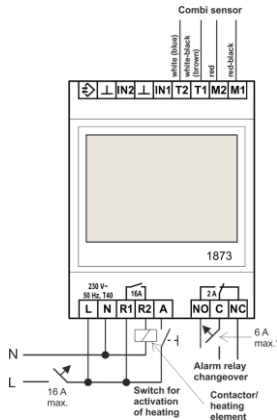
2. The sensor must be dry.

3. Start a test measurement.
   Service → ISD channel → Start moisture measurement?

Click *Chng*, change to "Yes" with "+" and confim with *Save*. (Automatically jumps to "No" after the measurement.)

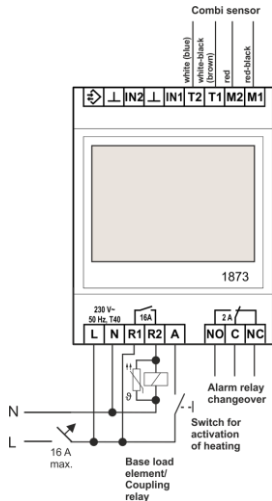The measured value is indicated on the idle display after 2-3 minutes.

4. Change the value as described under 1, if necessary.

Connection diagram 1873-ESM

* not required if used with 30 VDC max.

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Connection diagram 1873-ESM
with coupling relay/base load element

Combi sensor

white (blue)
white-black (brown)
red
red-black

⟳ ⊥ IN2 ⊥ IN1 T2 T1 M2 M1

1873

230 V~
50 Hz, T40   16A   2 A
L N R1 R2 A   NO C NC

Alarm relay
changeover

N

L
16 A
max.

Base load
element/
Coupling
relay

Switch for
activation
of heating