

Precipitation sensor

8921



Description

The type 8921 precipitation sensor is used for the central collection of weather data to control heaters for units that must remain capable of being moved regardless of the weather conditions (for example, points heaters or rail or any other heaters).

The unit consists of an intelligent measuring device to record the external temperature and a opto- electronic precipitation sensor. .

All the messages that are required for consumption cost-oriented and secure control of heaters are provided via two zero-potential NO-contacts. One for temperature and one for precipitation. Further there is a serial interface (RS232) implemented.

In detail, they are as follows:
Terminal 7,8: Temperature
The contact will be closed if the temperature will be lower than the "switch-on-temperature" and switched off if the temperature will be higher than the "switch-off-temperature"+ "delta switch-off-temperature". The "switch-on-temperature" is adjustable from 0°C to 9°C. The "delta-switch-off-temperature" is adjustable from 0K to 9K.

Terminal 9,10: Precipitation
The sensor responds around 90 seconds after detecting precipitation in the form of rain or snow and after successfully completing the plausibility check. The drop-out delay is around 90 seconds, too.

Terminal x,y: Serial interface
The serial interface give the user more information as the relay contacts. The information will transferred in a transparent mode. You can check the interface by connecting a PC with a simple terminal programm. For the protocol see next page.

See the complete brochure folder for additional temperature monitors and complete points heating control units.

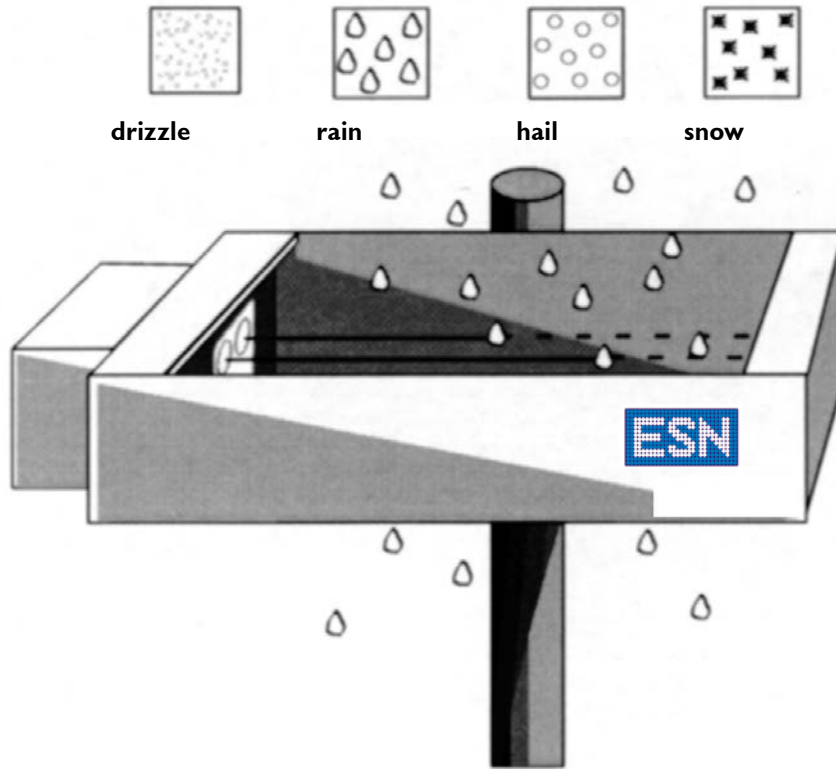


Technical data

Dimensions	LxWxH 250mmx165mmx85mm
Weight	approx. 2 kg
Sensor housing	Stainless steel / aluminium
Attachment	Strip-type fastening with special holder (accessories)
Type of protection	Housing: IP 65, DIN EN 60529
Ambient temperature	-30°C to +60°C
Supply voltage	Terminal 1 (L+), terminal 2 (L-) DC min. 9V to max. 32V
Power drawn	max. 10 W/VA
Connections	Terminals, max. 1.5 mm ²
outputs	2 relay output contacts NO: temperature (terminal 7,8) precipitation (terminal 9,10) serial output (RS 232, 9600,8,N,1) terminal 4(TX), 5 (RX), 3 (GND)
Contact rating	AC 250 V / 4 A cosφ > 0.7 DC 120 V / 1 A ohmic load
Connections	10 terminals
Displays	2 LED's in sensor display red: precipitation detection green: sensor in operation
Test voltage	4 kV _{eff.} (DC supply voltage-relay output)
Cable screw fitting	1x M20 x 1.5
Option	RS485 (future);
Accessories	Strip-type fastening device type 911015,

Ordering information

Type	Part No.
8921	140110



View without cover (PCB side)

