



WRD 01

Features

- Etched carbon electrodes
- IP67 housing
- 0-1Vdc output signal
- On/Off detection of rain
- Smooth sensing area and heating element for fast response
- Heater can be controlled from DDC-controller
- Suitable for naturally ventilated building applications

Technical Data

Supply voltage	8-24Vdc
Heater power supply	12Vdc@120mA or 24Vdc from DDC controller auxiliary supply connected via 100ohm, 5W resistor
Output	0 to 1Vdc (0=no rain, >1V=rain is present)
Dimensions	150mm x 20mm diameter
Sensing area	15mm x 30mm
Weight	150 gram
Cable length	2m
Operating range	-25 to +55C
Storage range	-25 to +55C
Protection rating	IP67
Approval	The product meet the demand of CE

Description

The WDR 01 rain detector is suitable for outdoor use.

The sensing part of the probe is an etched area which consists of three carbon electrodes separated by a waterproof resin.

The sensing area is smooth to allow water droplets to run off more easily and it should be mounted at a 30 to 40degree angle to assist this.

The unit also incorporates a heating element to dry off the surface wetness once rainfall has ceased.

The heater can be run continuously using a special power supply, or can be powered from a DDC-controller.

It can be used as part of a control strategy for window/ louvre opening in naturally ventilated buildings.

Function

The probe is essentially On or OFF devices with virtually no graduation between the two modes.

It is difficult to define sensitivity; however, adroplet of distilled water 1mm in diameter will swith the detector OFF to ON mode, when the signal output goes from 0V to 1,4V.

Rain detector may be mounted at ground level or on the cross arm of wheather station.

Ordering Codes

WRD 01 Rain detector

Application

The WDR 01 Rain Detector is designed to detect rainfall.

It does not measure the amount of rain, but provides an immediate indication of precipitation for control automatic windows or louvres in buildings or atria.

Installation

The sensor should be mounted in a location providing safe access for maintenance and a suitable operating environment.

1. Fix the sensor in position
2. Wire the sensor's power supply and output
3. Connect the power to the sensor's heater supply
4. Configure controller to detect the sensor voltage change.

Fix the sensor to a permanent structure using 2 off 20mm spacer bar saddles, available from electrical wholesaler as shown below.

Note that the sensing area should be mounted at an angle of 30 to 40 degree to enable surface moisture to run off.



Maintenance

The surface should be cleared by scrubbing with a toothbrush or similar lightly abrasive brush..

We reserve the right to make changes and improvements in our products which may effect the accuracy of the information contained in this leaflet.

Connections

Red	Detector supply 8-24Vdc
Blue	Detector supply 0V
Green	Signal 0V
Yellow	Signal 0V - Dry / >1,4V - Wet
Black	Heater supply 100ohm to white
White	Heater supply 100ohm to black

Note

Do not cover, allow air circulation