

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 2 m

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 whih 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



Rain Detector

WRD 01

Mar.12

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.

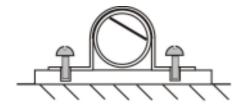
Installation

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 outout
- 3. Connect the power to the sensor's heater supply
- 4. Configure ontroller to detect the sensor voltage change.

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

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



Maintenance

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

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 cirulation