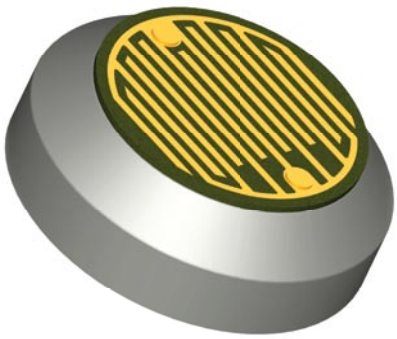
manual

operating instructions
precipitation detector
model RSA



decsription
The detector is provided with the latest technology in integrated circuits and has several electronic control actions in order to realize reliable functioning. It is protected against static discharges.

Thanks to the compact electronical design all kinds of weather conditions can be dealt with by one microcontroller-based circuit in a small housing. The difference in voltage between both detection electrodes will be determined by the weather conditions.The surface of the detector-printboard is heated thus, that falling rain or snow will evaporate. Surface temperature is controlled by a differential temperature sensor.

A direct alarm contact is available, no further remote electronics or mechanics are necessary.The potential-free contact can be connected directly to alarm instrumentation.

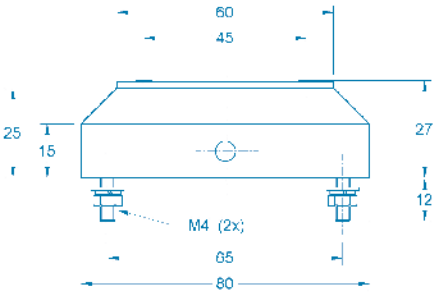
principle
The electrical resistance between the gold-plated electrodes is measured and fed into the electronic circuit. The alarm relay wil be energized or de-energized dependent on the programmed conditions. The heating of the sensor surface is controlled by a differential temperature measuring system in such a way that any precipitation will be detected within the specified temperature range. The detector has a (factory)-programmable sensitivity level and an alarm relay (on/off).

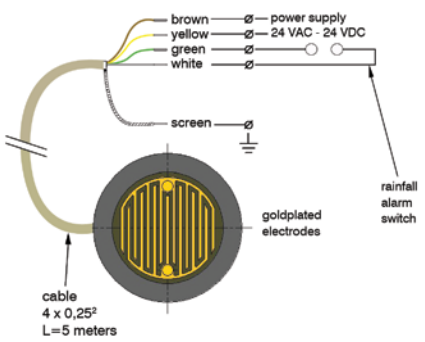
mounting
The detector should be mounted at an angle of about 20 - 30°C in such a way that water will run off freely from the gold-plated electrodes. Installation in the vicinity of trees or bushes (falling leaves) or any environment where loose particles can influence the resistance between the gold-plated electrodes should be avoided. Correct functioning of the detector can be checked easily by wetting the gold layers on top.

maintenance
It is important to keep the detection surface clean. For correct working and long life it is advisable to clean this surface regularly by rinsing with clear water. When persistent contamination is present, use a wetted or soaped sponge and rinse with water.

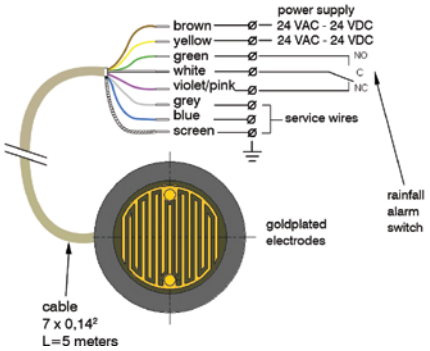
technical specifications

detection	rainfall and snow
power supply	24 VDC or 24 VAC, ± 200 mA
output	Reed-relay switch, (NO) 2 A (30 VDC) or 0,5 A (125 VAC)
delay	RSA-1 on 10 sec, off 5 min. RSA-3 on 10 sec, off 30 sec.
operating temperature	- 25 .. 40 °C , 24 VAC supply in conditions below -15°C recommended
dimensions	ø 80 x 27 mm ; detection surface : ø 45 mm
mounting	2 studs ss M4 x 12 mm
cable	4 x 0,25 mm² or 7 x 0,14 mm² L = 5 metres, screened Screen is connected to system earth!
protection	IP-65
weight	600 g

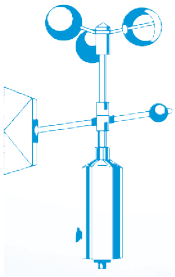




4-wired



7-wired



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made to measure

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