

DOL 111

Rain detector



For other language variants of this document we refer to www.dol-sensors.com or your local dealer.

1 Product description

DOL 111 is an optical rain detector with built-in optical probes for rain detection.

Among other things, DOL 111 can be connected to a climate controller to ensure automatic closing of inlets in case of rain.

2 Mounting

If the rain detector should control air inlets, it must be mounted close to the inlets.

Fasten the rain detector to a bracket, e.g. an angle bracket. The rain detector must be mounted horizontally with the lens upwards.

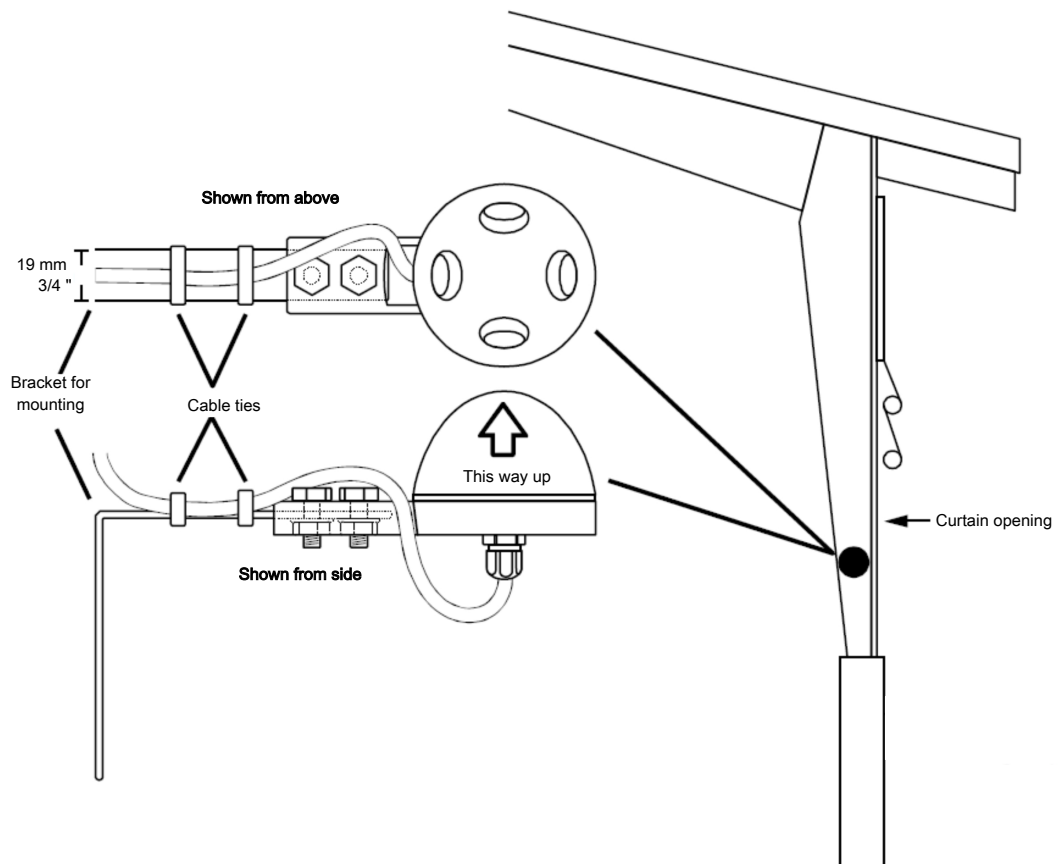


Figure 1: Building cross-section.

3 Electrical Installation



Installation, servicing and troubleshooting of all electrical equipment must be carried out by qualified personnel in compliance with the applicable national and international standard EN 60204-1 and any other EU standards that are applicable in Europe.

The installation of a power supply isolator is required for each motor and power supply to facilitate voltage-free work on the electrical equipment. The power supply isolator is not included.

3.1 Connections

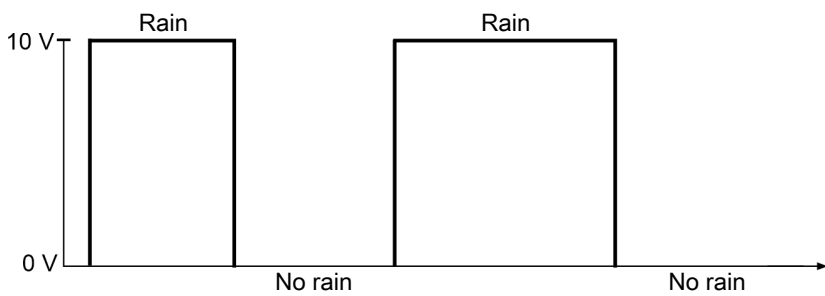
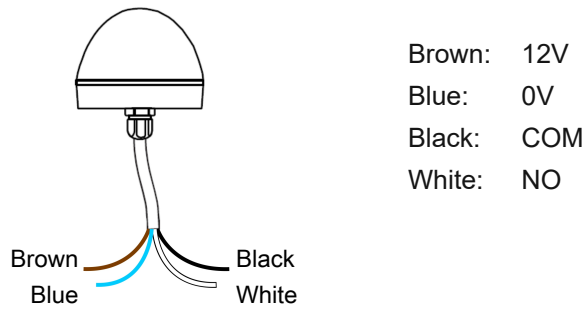


Figure 2: White and black is a NO switch which is short-circuited in case of rain. In this example, black is connected to 10V and white is connected to input with resistor to 0V.

3.2 DIP switches

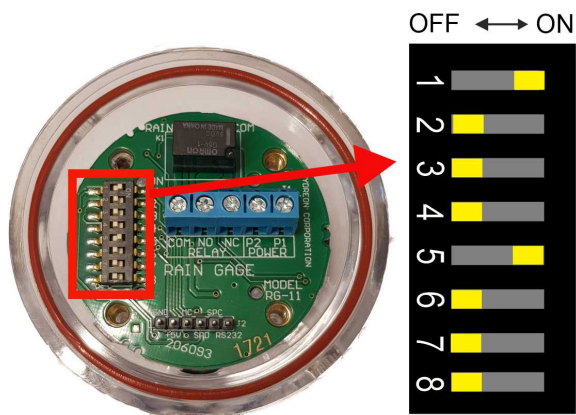


Figure 3: Correct factory setting of DIP switches.

3.3 Circuit diagram

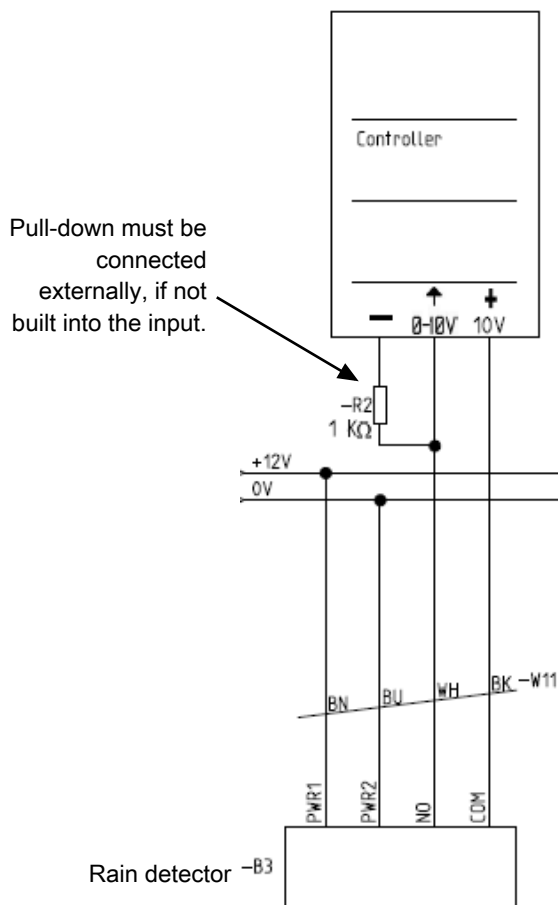


Figure 4: Example of connection to climate controller.

4 Maintenance

At regular intervals, DOL 111 should be checked for dirt on the lens, that would otherwise impair the functionality of the sensor.

Clean the rain detector with water and a brush without using:

- High-pressure cleaner
- Highly compressed air
- Solvents
- Corrosive/caustic agents
- alcohol-based disinfectants

5 Technical data

Electrical		
Input voltage	VDC	10 – 15 Nominal 12
Current	mA	Nominal 15 Max. 55
Power output	VDC	Relay output normally open Max. load: 1A, 24 VDC
Sensitivity		Medium: 6.35 mm/hour (1/4"/hour) Stops detection 30 sec. to 5 min. after last drop
Mechanical:		
Material		UV-resistant polycarbonate, UV-stable ABS, stainless steel, silicone O-ring
Cable	m	30 (4 x 22 AWG / 0.34 mm)
Environment		
Ambient temperature	°C	-40 to +60
Protection class	IP	
Shipment		
Dimensions H x W x D (excl. cable)	mm	76 x 71 x 120
Dimensions crated H x W x D	mm	110 x 230 x 310
Weight	g	1500
Shipping weight	g	1650

5.1 Dimensions

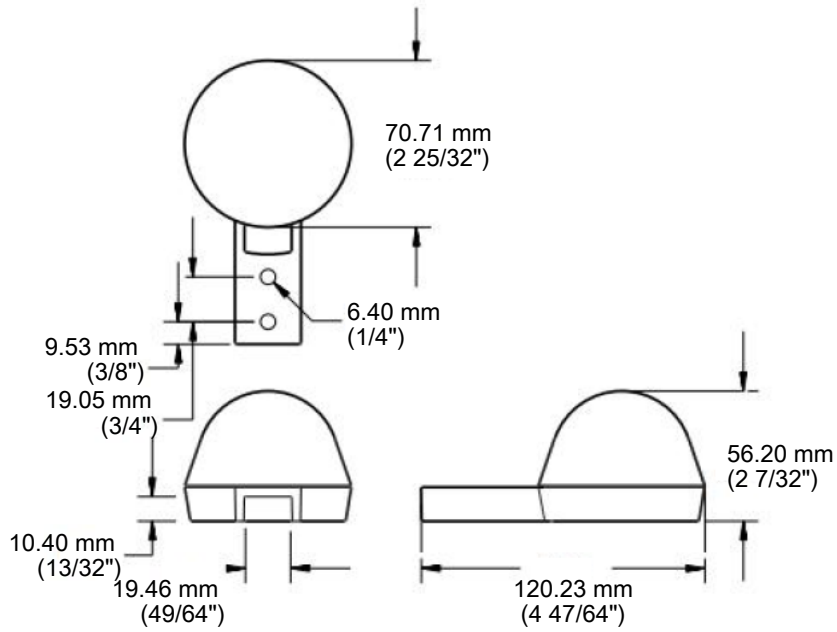


Figure 5: DOL 111.

