



WRD 230L

Technical Data

Supply voltage	230Vac ±10% 50/60Hz
Internal power consumption	
Electronic	3VA
Preheating	1VA
Total heating	3VA
Ambient temp. range	-30...+60°C
Storage temperature	-30...+70°C
Relative humidity	0...100%
Switching point	Fixed
Switching hysteresis	Fixed, approx. 30% of the switching point
Drop-out time	Min. 5 minutes automatic adjustment
Test voltage	
Supply voltage→Electronics:	1,5 kV
Electronics→Relay contacts:	1,5 kV
Electromagnetical compatibility	Test values in acc. with EN 50081-1; EN 50082-2 EN 61010-1
Relay output	
WRD 230L, WRD 230LR	AC 250 V, max. 4 A, 300 VA ind.
WRD 24L	24 V, max. 20 mA, <1W
Mechanical service life	Approx. 10 ⁶ switching cycles
Housing	PC, european grey similar to RAL7035
Protection class	IP65
Mounting	Metal tube mast Ø approx. 25-50 mm
Weight incl. mounting material	Approx. 0,9 kg

features

- Gives no false alarm
- Robust design
- Can be used for Meterological Measurement
- Suitable for Greenhouse Automation
- IP65 Housing
- Automatic light detection built-in

Application

The detector recognizes rain or snow as precipitation within a few seconds and transmits the signal by means of a potential-free relay contact (disturbance relay).

This switching output can be used for retransmission to e.g. ventilation or shading installations in automatically controlled greenhouses.

Sensitivity adjustment is not necessary.

It recognizes even light drizzle without, however, giving a false rain signal with little condensation.

Advantages

- Little wear of the drive motors and elements due to automatic adjustment of the reset time to the actual weather situation.
- Automatic switching frequency during night limited to max. 10 switchings/night, by this low noise pestering in residential areas.
- Sensitivity adjustment or readadjustment is not necessary, this enables a more quicker mounting and therefore lower installation costs.
- Energy and cost saving due to a smaller number of switching functions with shorter reaction time.

Function

The WRD 230, WRD 24L react if the plate drops below the adjustable sensitivity setting, the built-in relay pulls in.

The WRD 230LR react if the plate drops below the adjustable sensitivity setting, the built-in relay pulls in.

Ordering Codes

WRD 230L	Rain detector, standard relay 230Vac
WRD 230LR	Rain detector, with opposite switching function, 230Vac
WRD 24L	Rain detector, low current relay 24Vdc



Rain Detector c/w Light Detection

WRD 230L WRD 24L

Jan.09

Function

The WRD 230, WRD 24L react if the plate drops below the adjustable sensitivity setting, the built-in relay **pulls in**.

The WRD 230LR react if the plate drops below the adjustable sensitivity setting, the built-in relay **drops out**.

At the same time the integrated sensor heating switches on.

When the surface has dried off sufficiently (resistance drops below set value plus hysteresis) the automatic reset delay time starts.

This reset time is regulated by an incorporated light sensor which provides for an optimal adjustment to the current weather situation.

The reset time is increased from approx. 5 minutes up to 60 minutes by darkness or by spell of bad weather.

This helps to avoid on the one hand undesirable temperature increases in a glass house or on the other hand e.g. too high switching frequencies of the flap actuating motors.

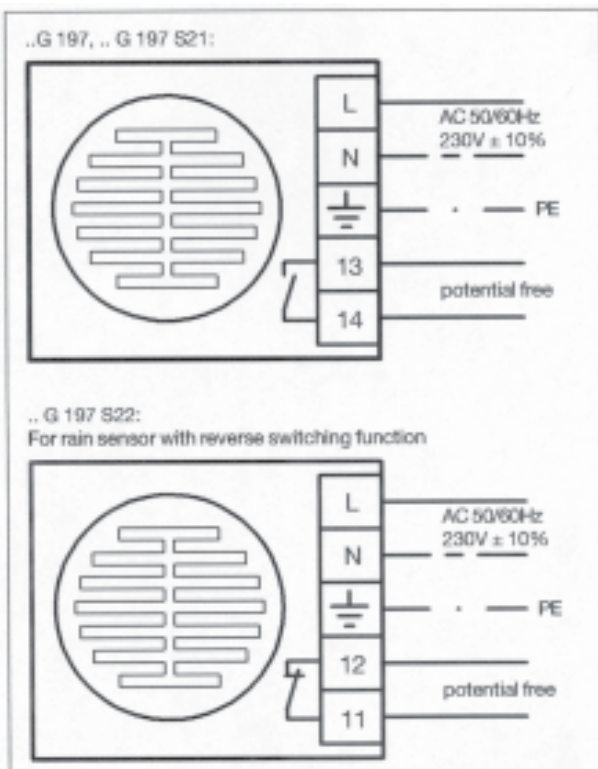
From the moment when the reset time starts up to the moment when the sensor signals "rain" again, the sensor heating switches back to approx. 25% of its total value.

This heating before hand serves to avoid a rain signal during, e.g., fog or dew.

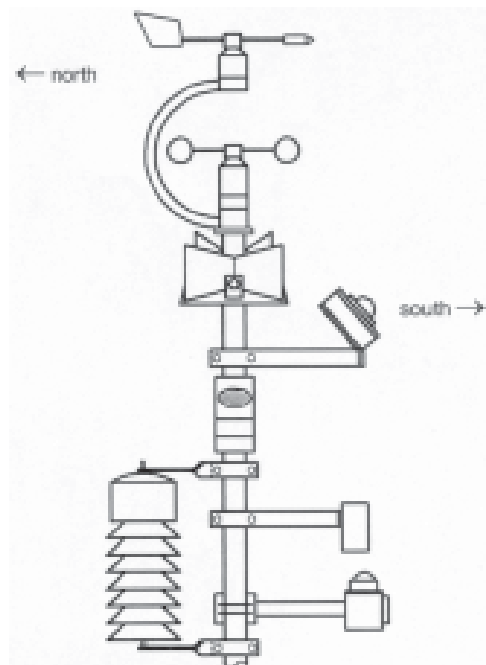
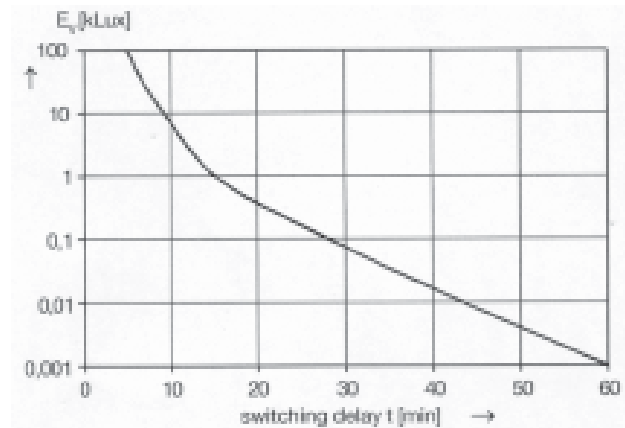
Maintenance

The sensor surface should be cleaned with water at regular intervals, depending on the pollution level.

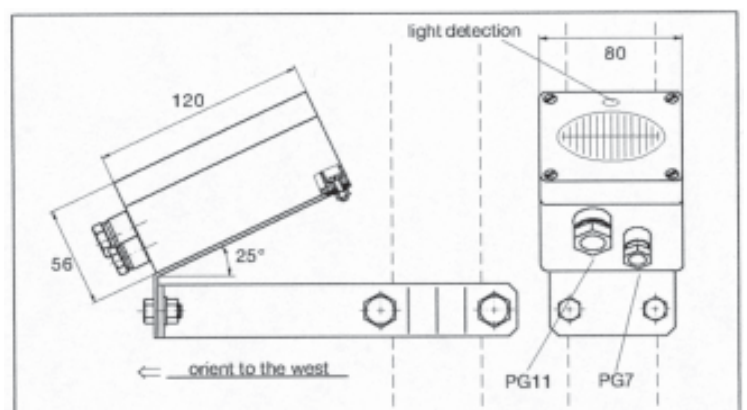
Connection Diagram



Charateristic



Dimension/ Mounting



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