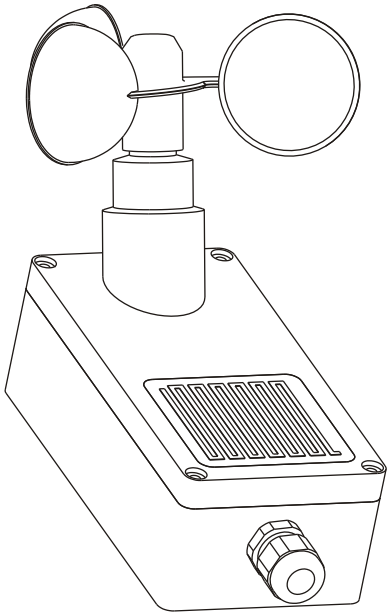
# WLA 330
## Wind/Rain sensor




| | | |
|---|---|---|
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# Important information

- Read instructions carefully before installation. Keep the instructions for future reference.
- Sensor WLA 330 should be installed in accordance with current national legislation.
- Disconnect from mains supply before installation or removal of the sensor and before carrying out any maintenance or service work and ensure that it cannot be reconnected unintentionally during this time.
- If the sensor gets activated, the window operator automatically closes the window. For personal safety, never have your hand or body out of the window without disconnecting from mains supply.
- Do not paint or lacquer the rain sensor.
- Dirt on the sensor may cause operating problems. Therefore, it is recommended to clean the rain sensor with a soft wet cloth once or twice a year or when required.
- Electrical products must be disposed of in conformity with national regulations for electronic waste and not with usual household waste.
- The packaging can be disposed of with usual household waste.
- WLA 330 is a low-voltage product that complies with the requirements of the EMC directive concerning use in household, trade and light industry.
- This product has been designed for use with genuine WindowMaster products. Connection to other products may cause damage or malfunction.

# Description

The wind/rain sensor comprises a wind wheel and a rain sensor surface.
This sensor is used for the automatic control of Smoke Control Units and ventilation central units.
The wind/rain sensor is equipped with a potential free change-over contact
having a contact rating of 60V/2A.
In the event of wind and/or rain, the change-over contact switches over from the N/C contact
to the N/O contact.
The settings for the wind trigger threshold, the actuation delay, the drop out delay
and the trip in the event of a mains failure are made by a 6 pole DIP switch in the sensor.

# Operation / Function

## Triggering by wind

The potential free contact switches when the (settable) wind sensor trips.
The red LED in the sensor is lit.

**Remark:**
The trip is reset 10 or 20 min. (settable) after the last sensor actuation.

**Beaufort table:**

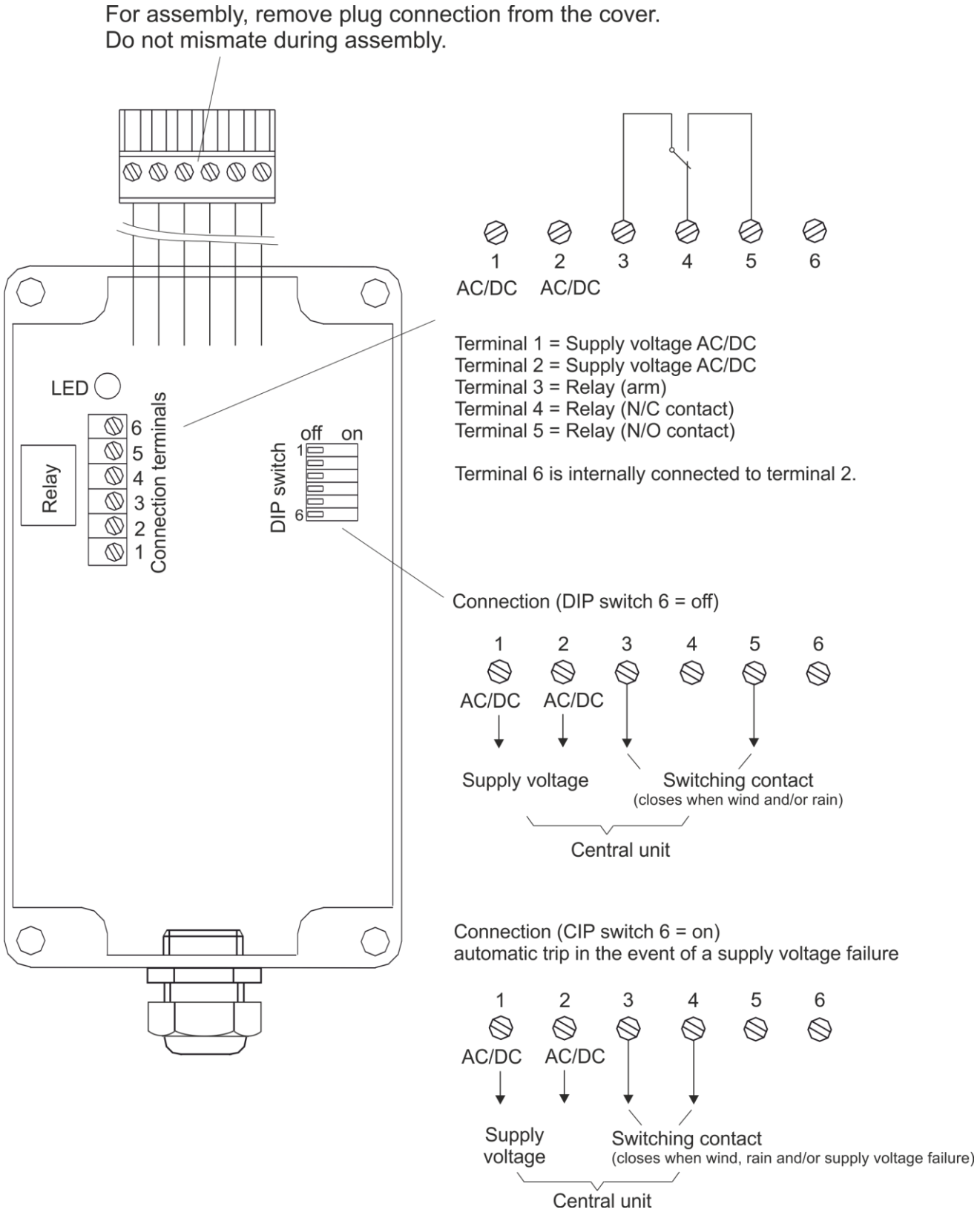
| Wind force in Beaufort | Speed in m/s | Speed in km/h | Wind intensity | Effects |
|---|---|---|---|---|
| 0 | 0 – 0,2 | < 1 | calm | smoke rises straight |
| 1 | 0,3 – 1,5 | 1 – 5 | light air | only noticeable from the smoke |
| 2 | 1,6 – 3,3 | 6 – 11 | light breeze | noticeable on the face |
| 3 | 3,4 – 5,4 | 12 – 19 | gentle breeze | thin twigs are moved |
| 4 | 5,5 – 7,9 | 20 – 28 | moderate breeze | thin branches are moved |
| 5 | 8 – 10,7 | 29 – 38 | fresh breeze | small trees sway |
| 6 | 10,8 – 13,8 | 39 – 49 | strong breeze | thick branches are moved |
| 7 | 13,9 – 17,1 | 50 – 61 | moderate gale | entire trees are in motion |
| 8 | 17,2 – 20,7 | 62 – 74 | fresh gale | Branches break off trees |
| 9 | 20,8 – 24,4 | 75 – 88 | strong gale | minor damage to houses |
| 10 | 24,5 – 28,4 | 89 – 102 | whole gale | trees blown over |
| 11 | 28,5 – 32,6 | 103 – 117 | storm | severe storm damage |
| 12 | > 32,6 | > 117 | hurricane | |

## Triggering by rain

The potential free contact switches when the rain sensor trips.
The red LED in the sensor is lit.

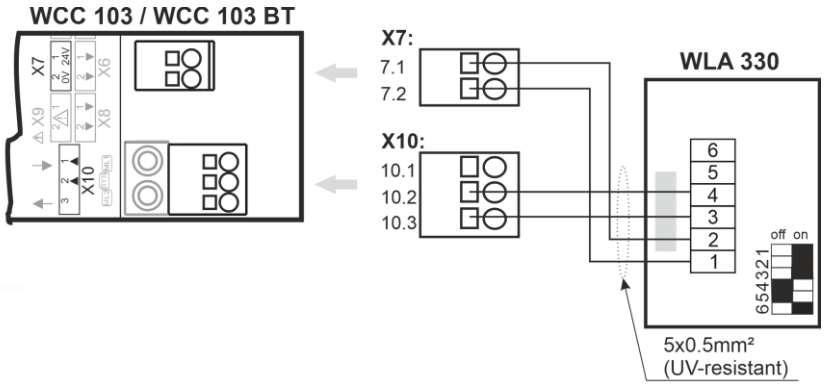
**Remark:**
The trip is reset 10 or 20 min. (settable) after the last sensor actuation.

## Operating/control and display elements

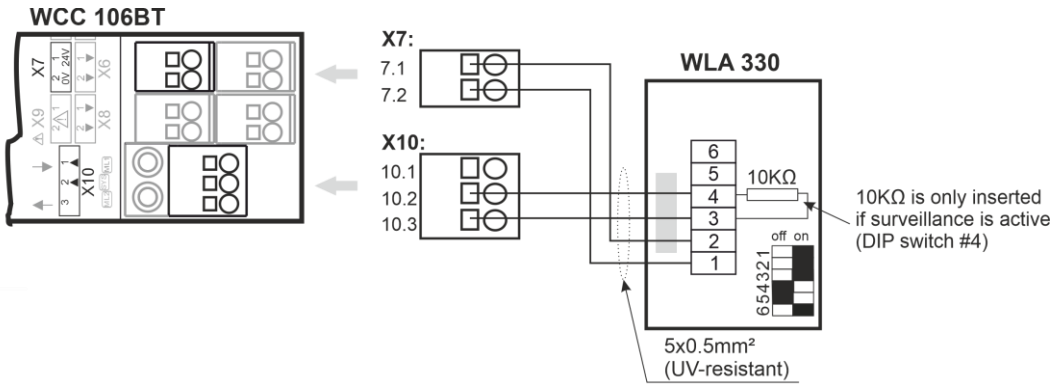


# Connection to control units

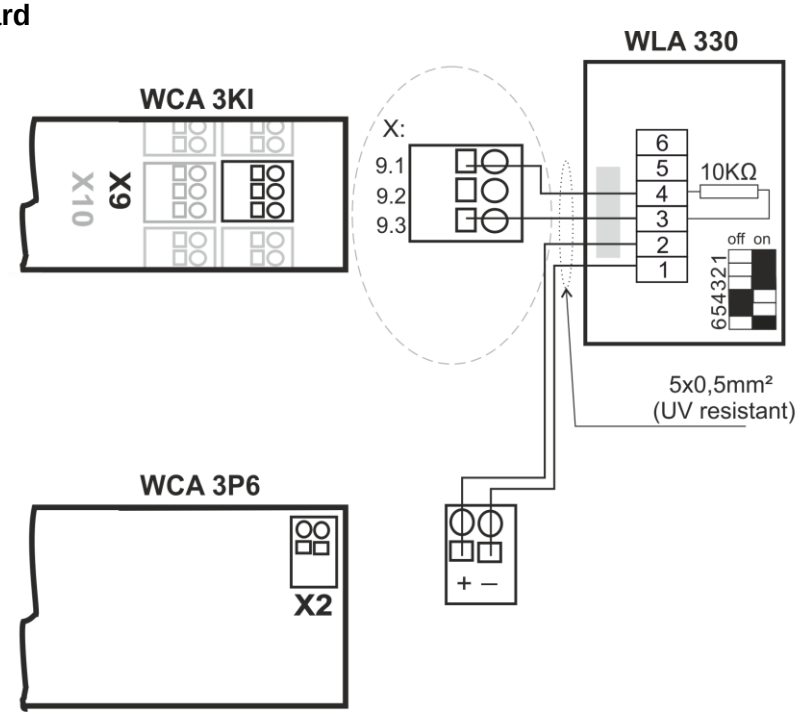
## WCC 103 / 103 BT



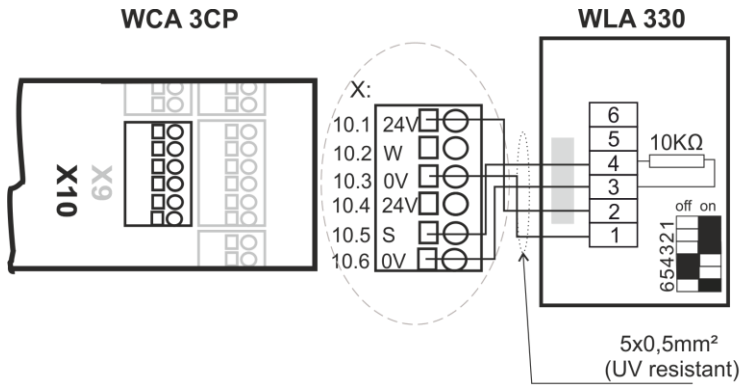

## WCC 106 BT



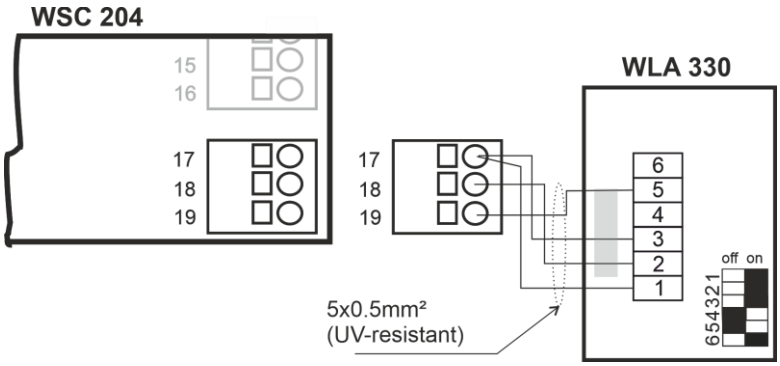

## WCC 3x0 Standard



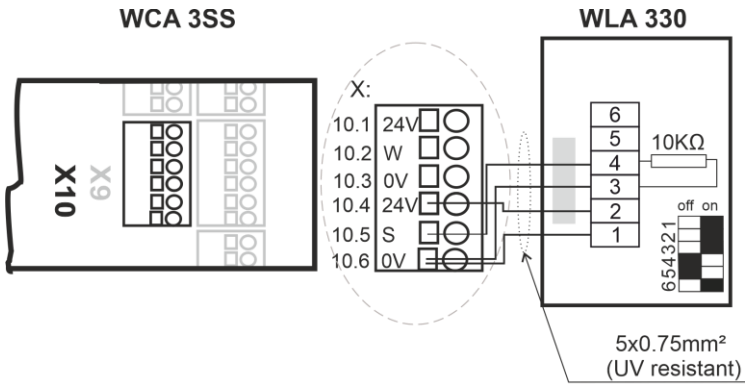
**WCC 3x0 Plus**



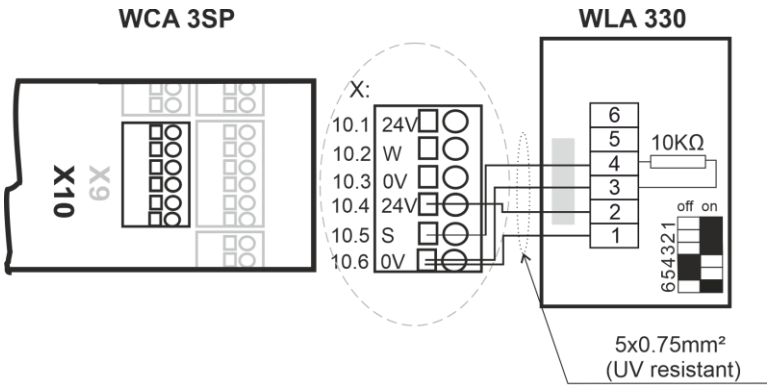

**WSC 204**



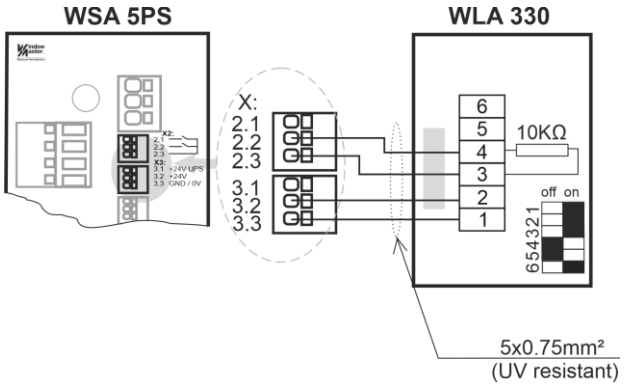

**WSC 3x0 Standard**




**WSC 3x0 Plus**



**WSC 5xx**




# DIP switches

Various wind/rain parameters and operating modes can be set by means of the installed DIP switches.

## DIP switch settings for the wind speed

| | **Test** | Approx **.3 m/s** | Approx **4 m/s** | Approx **6 m/s** | Approx **8 m/s** | Approx **10 m/s** | Approx **12 m/s** | Approx **14 m/s** |
|---|---|---|---|---|---|---|---|---|
| Switch 1 | off | **on** | off | **on** | off | **on** | off | **on** |
| Switch 2 | off | off | **on** | **on** | off | off | **on** | **on** |
| Switch 3 | off | off | off | off | **on** | **on** | **on** | **on** |

**Note**
Factory setting = operation, meaning switch 1, 2, 3 and 6 = on and switch 4 and 5 = off.

Should there during installation be the need to disconnect the wind/rain drop out delay, set switch 1+2+3 = off (= Test).

Important! Once installation and star-up are completed, proceed with the wind speed setting required on site, meaning one or more of the switches 1,2 or 3 MUST be on!

Remark: In the test setting, the activation and drop out delay is deactivated!

## DIP switch settings

| | **Switch setting OFF** | **Switch setting ON** |
|---|---|---|
| Switch 4 = Wind activation delay | 2 seconds | 5 seconds |
| Switch 5 = Wind/rain drop out delay | 10 minutes | 20 minutes |
| Switch 6 = Monitoring | off | on |

**Information regarding switch 6:**
Only the supply voltage (terminals 1+2) for the sensor is monitored.
The system will trip automatically in the event of a supply voltage failure.

**Display:** Red steady light in the sensor LED = Sensor tripped by wind or rain.

# Connection

Terminal 1 = Operating voltage AC/DC
Terminal 2 = Operating voltage AC/DC
Terminal 3 = Relay (arm)
Terminal 4 = Relay (N/C contact)
Terminal 5 = Relay (N/O contact)

# Technical data

| | |
|---|---|
| Supply voltage: | 18V to 26V AC or 20V to 32V DC |
| Circuit output: | 1 x potential free change-over contact |
| Switching capacity: | 60V / 2A |
| Sensor dimensions: | 80 x 160 x 55mm (WxHxD / without wind wheel) |
| Sensor weight: | approx. 0.7kg |
| Sensor protection type: | IP65 |
| Setting of the wind mode: | approx. 3 to 14 m/s (±20%) |
| Setting of the wind/rain drop out delay: | 10 min. / 20 min. |
| Setting of the wind actuation delay: | 2 s / 5 s |
| Setting of the monitoring: | Off / On |
| CE sign | in accordance with the EMC directive and the low voltage directive |
| Cleaning | clean the sensor regularly depending on the degree of soiling. |