

Product information

Wind / Rain detector type WTS-892 Rain detector WS-890

-  Please take notice about the content of this manual!
-  To avoid damage and injury!
-  Please retain this manual for later use (maintenance...)



Product description



Universal technical data

The wind / rain detector, WTS 892 with its integrated evolution electronics and its installed adjustable time delay as well as the rain detector, WS-890 are applicable for smoke and heat exhaust systems and/or ventilation units with 24 V control voltage of **SIMON RWA Systeme GmbH**. The detectors give the command to close the windows, that normally are controlled by the control unit, automatically in wind and/or rain.

Operation voltage range:	20 - 30 V DC (20 - 30 V AC)
Nominal voltage:	24 V DC (24 V AC)
Current consumption none operated:	70 mA
Current consumption when triggering:	110 mA
Ingress protection:	IP 65
Operation temperature:	-20° C to 85° C
Loading capacity alarm contact (change-over contact):	30 V / 1 A
Housing:	ABS, lightgrey, simila RAL 7035
Housing dimension (l x w x h):	WTS-892 = 190 x 100 x 150 mm WS-890 = 190 x 80 x 62 mm
Mounting accessories:	Mounting angle, Aluminium ecru and mast clamp zinc coated, inside-Ø 52 mm for max. 2" - pipe
Weight:	WTS-892 = 0,5 kg WS-890 = 0,4 kg

4



Function/ Electrical Connection

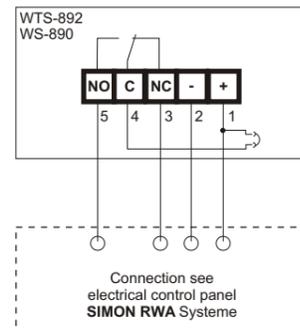
Table for adjusting the wind strength

Wind strength (in Beaufort)	Feature	Wind speed (in m/s)	Impact pressure* (in Pa = N/m²)
0	Calm	0 - 0,2	0 - 0,2
1	puff	0,3 - 1,5	0,6 - 1,4
2	moderate breeze	1,6 - 3,3	1,6 - 6,8
3	moderate breeze	3,4 - 5,4	7,2 - 18,2
4	looming gale	5,5 - 7,9	18,9 - 39,0
5	fresh breeze	8,0 - 10,7	40,0 - 71,6
6	stiff breeze	10,8 - 13,8	72,9 - 119,0
7	stiff wind	13,9 - 17,1	120,8 - 182,6
8	stormy wind	17,2 - 20,7	184,9 - 267,8
9	storm	20,8 - 24,4	270,4 - 372,1
10	heavy storm	24,5 - 28,4	375,2 - 504,1
11	gale-force wind	28,5 - 32,6	507,7 - 664,2
12	hurricane	32,7 and more	668,3 and more

* The impact pressure data have been simplifiedly calculated ($P = \text{impact pressure, } V \text{ in m/s, } P = V^2 / 1,6 \text{ (Pa = N/m}^2\text{)}$)

Connection wind / rain detector, WTS-892, rain detector, WS-890

Jumper stuck: the alarm contact is used for triggering smoke and heat exhaust and/or ventilation systems of **SIMON RWA Systeme**.



Connection see electrical control panel **SIMON RWA Systeme**

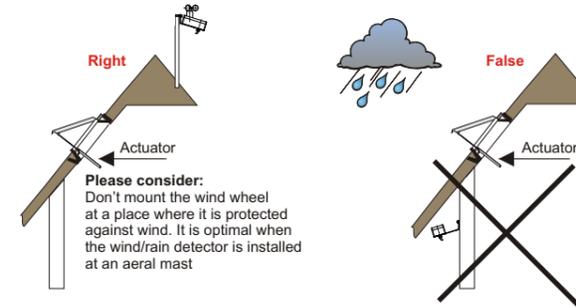
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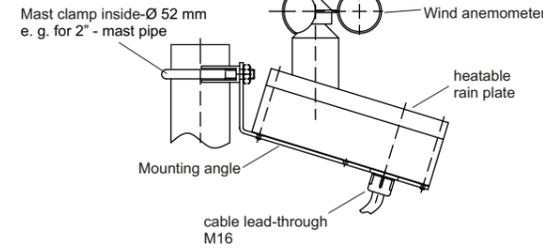
Installation

The installation may only be accomplished by specialists.

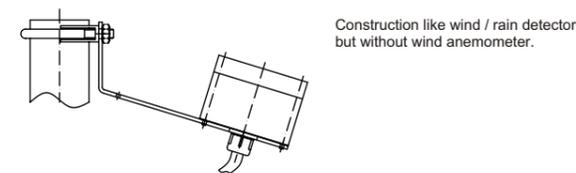
Attention: Choose an installation location, where rain and wind can unhinderedly reach the sensor areas! Also avoid heavy wind turbulences. When mounting the detector on a mast, the aerial pipe must be lengthened for approx. 0,5 meters in the direction of the lightning conductor. The detector ought to be mounted 2 meters above the highest point at the roof.



Wind / rain detector, WTS-892



Rain detector, WS-890



For wall mounting remove the mast clamp!

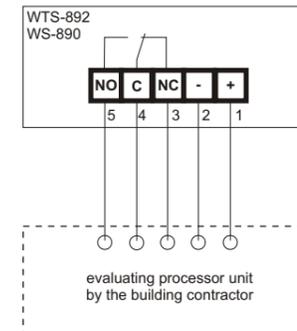
5



Function/ Electrical Connection

Connection wind / rain detector, WTS-892, rain detector, WS-890

If the alarm contact is required as a dry contact for an evaluation by the building contractor, the jumper has to be removed!



The VDE-commands 0855 for antenna installation regarding to the mechanical stability, electrical safety and lightning protection measures are to be considered. Run and insert the low voltage lines separated from the 230 V lines!



Attention



Maintenance

The function of the system must be tested periodically by the customer. In case of defect the installer has to be informed at once. Please change defect parts immediately with original parts. The system as well as components of a system may just be opened by the manufacturer.

Material defects:

The device must be used as normally intended. The device is subject to natural wear and tear. In case of material defect claims, these shall be asserted in writing, stating the source of supply of the device. Prescribed time limits and further provisions with regard to claims for material defects exclusively correspond with our General Terms and Conditions (download: www.simon-rwa.de, or they may be requested by sending an e-mail to info@simon-rwa.de, or by phone +49 851 988700).



Disposal

According to the disposal law "ElektroG", this device must be disposed properly at the end of its life time.

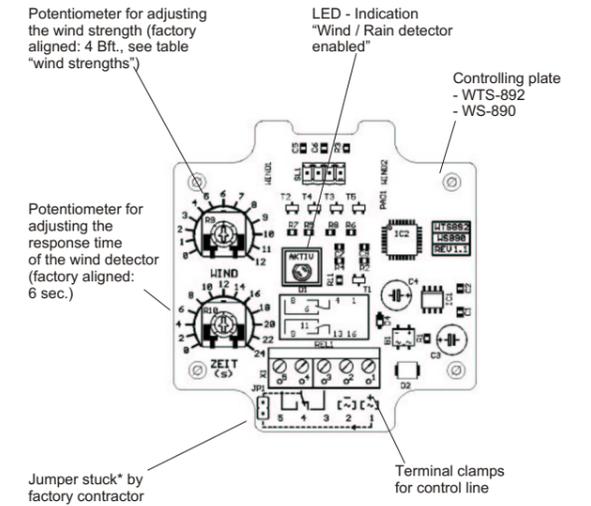
3



Function/ Electrical Connection

In rain and/or wind an alarm contact (change-over contact) gets connected. In the control unit the triggering contact gets changed into a "closing" demand and the appropriate opening elements get closed. When the wind abates and the sensor has dried the command stays enabled for approx. 15 minutes in order to bridge squalls and uneven drying. By means of the potentiometer integrated in the wind / rain detector the worst wind strength and also the response time (switch-on response, e. g. short lasting squalls) can be adjusted. A heat, integrated below the antenna - meander avoids false triggering and provides a fast drying.

Electronic board for wind / rain detector, WTS-892 and rain detector, WS-890



* If the wind / rain detector (WTS-892, WS-890) shall not be connected to smoke and heat exhaust and/or vent systems of **SIMON RWA Systeme** but if only a dry contact is required then remove the jumper!

6

EC-Manufacturer's declaration

(according to article 4 section 2 EC-regulation 89/392/EEC)

We hereby declare, that the product listed below due to its conception and design and in the make, issued by us is, according to the enclosed notes on operation and mounting, designed to be inserted into a machine respectively installation. Its initial operation is prohibited until the machine or the installation, into which the mentioned part is to be mounted, fully complies with the EC-regulation 89/392/EEC changed by 91/368/EEC and 89/336/EEC changed by 93/31/EEC and 73/23/EEC.

Any adaptations or alteration of which may be made to the product, without the prior consent of **SIMON RWA Systeme GmbH**, will make this declaration

Denomination: Wind / Rain detector type WTS-892, Rain detector type WS-890

For manufacturing or order number please see type plate

We certify conformity with applicable EC-regulations of the product stated above.

89/336/EEC changed by 92/31/EEC, 89/392/EEC changed by 91/368/EEC, 73/23/EEC, EN50081-1, EN50082-1, EN 55014, DIN EN292/1 and EN292-2
For delivered respectively not ready-mounted or not yet operated components of an electrical smoke and heat ventilation exhaust system with a manufacturer's declaration according to EC- machine regulation the customer will be liable for proper mounting and initial operation as well as for drawing up of the declaration of conformity according to EC-regulations.

This declaration certifies compliance with the regulations mentioned, however does not include an assurance of specific characteristics.

Please comply with notes on security mentioned in the instructions.

Passau, 05-09-23



The management