Instructions for Use

28/10/2021

Symbol explanation

Symbols on the machine

This product complies with applicable EU directives

Symbols in this user manual

Warning/Caution!

Application area

The product is a weather station with communication via Modbus intended to control solar shading within Swegon's demand-controlled indoor climate system WISE.

The product may not be used for anything other than its intended use.

General



Read through the entire instructions for use before you install/use the product and save the instructions for future reference. It's not permissible to make changes or modify this product other than those specified in this document.

The packaging contains the following items

1 x WISE WS

- 1 x Connection 10 m
- 1 x Wall mounting bracket
- 1 x Instructions for Use

Protective equipment



Always use appropriate personal protective equipment for the work in question, in the form of gloves, respirators and protective glasses during handling, installation, cleaning and service/maintenance.

Electrical safety



Permitted voltage, see "Electrical data".

It's not permissible to insert foreign objects into the product's contactor connections or the electronics's ventilation openings; risk for shortcircuiting.

Cable sizing must be carried out for cabling between the product and the power supply source.

Disconnect the power supply when working on products that are not required to run in production.

Always follow the local/national rules for who shall be permitted to carry out this type of electrical installation.

Handling

• The product must be handled with care.

Installation

- Assemble the product according to applicable industry regulations.
- Install the product for easy access during service/ maintenance.
- Check to make sure that the product doesn't have any visible defects.
- Check that the product is properly secured after it has been installed.
- Check that all cables are properly secured in place after installation.



Installation, dimensions & weight

The guide pieces must be removed when installing with the supplied wall mounting bracket, see figure 1.

It must be mounted in the correct north direction (geographic north) for accurate determination of wind and sun direction.

The hex screw serves as the north marking, see figure 2.

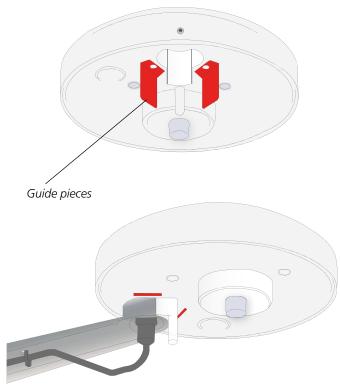
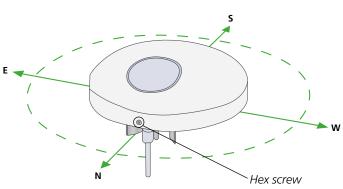


Figure 1. Installation with wall mounting bracket.



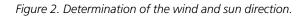




Figure 3. WISE WS with wall mounting bracket.

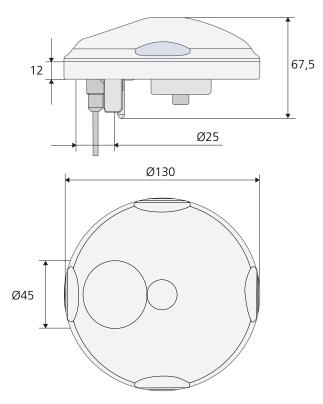
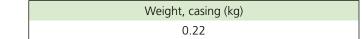


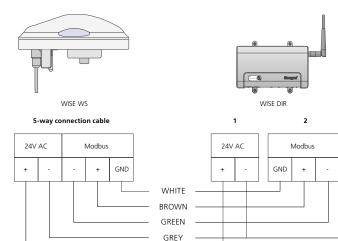
Figure 4. Measurements, WISE WS.



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Connections



5-way connection cable

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PIN	Core colour	Function	
2	White	DATA_GND	
3	Brown	DATA +	
4	Green	DATA -	
6	Yellow	24 V AC +	
7	Grey	24 V AC -	

YELLOW

Figure 5. Connection WISE WS.

Use

Use SuperWISE to activate communication via Modbus RTU on the WISE DIR to which the weather station is connected.

Trouble shooting

- Make sure that the product is energized.
- Check the product's Modbus connection.
- Check that the product is connected correctly to the right WISE DIR.

Cleaning

Ideally, the product should be cleaned in connection with the cleaning of the rest of the ventilation system.

External cleaning

- If necessary use water and a soft cloth.
- Never use a detergent or cleaning solvent.

Service/maintenance

- The product doesn't require any maintenance, except for any cleaning when necessary.
- Check the general condition of the product in connection with a service. Pay particular attention to the suspension, cables and that they sit firmly in place.
- It's not permissible to open or repair electrical components.
- If you suspect that the product or a component is defective, please contact Swegon.
- A defective product or component must be replaced by an original spare part from Swegon.

Materials and surface treatment

- Polycarbonate casing.
- Stainless steel wall mounting bracket.

Disposal

Waste must be handled according to local regulations.

Product warranty

The product warranty or service agreement will not be valid/will not be extended if: (1) the product is repaired, modified or changed, unless such repair, modification or change has been approved by Swegon AB; or (2) the serial number on the product has been made illegible or is missing.

Swegon⁴

WISE WS

Technical data

IP class:	IP65, only for correct installation
CE marking:	See Thies Clima
	Adolf Thies GmbH & Co. KG
	WSC11 (4.9056.10.000)

Function	Range of measurement
Wind speed	0 40 m/s
Wind direction	1 360°
Light intensity	0 150 kLux (N, S, E, W)
Sun angle	1 360°
Sun height	1 360°
Twilight	0 999 Lux
Precipitation	0/1 (no/yes)
Temperature	-30 +60 °C
Relative humidity	
Relative	0 100%
Absolute	0 400 g/m ³
Dew-point	-30 +60 °C
Air pressure	300 1100 hPa

Electrical data

Power supply:	24 V AC
Communication:	Modbus RTU via WISE DIR

References

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www.swegon.com WISE WS product data sheet WISE System Guide SuperWISE II / SuperWISE II SC User Manual

