



**These instructions must be read
prior to installation
and use!**



HELLA

Weather sensor ONYX.WEATHER

☒ **Installation instructions**

☒ **Operating guidelines**

Preliminary remarks HELLA Weather sensor ONYX.WEATHER

With this HELLA product you have opted for a high-quality product with a most up-to-date technology that can nevertheless be easily installed and operated. In these instructions we describe the basic installation, commissioning and use.

➤ These instructions are addressed to trained electricians.

The following symbols will assist you with the installation or use and require a safety-conscious conduct:



Attention!

This symbol indicates instructions that, if disregarded, can put the user in danger.



Attention!

This symbol indicates instructions that, if disregarded, can potentially result in damage to the product.



This symbol indicates instructions for use or helpful information.



This symbol requires you to act.



Attention!

This symbol indicates a risk of injury or danger to life due to an electric shock.



This symbol indicates parts of the product, for which you will find important information in these installation instructions.

Table of Contents

Preliminary remarks HELLA Weather sensor ONYX.WEATHER.....	1
General notes	2
Safety instructions.....	3
Designated use.....	4
Scope of delivery	5
Device description.....	5
Technical data.....	5
Installation.....	6
Connection diagram.....	7
Installation to the facade.....	8
Configuration.....	9
Ideal use of the radio signal	11
Fault removal	12
Disposal	12

General notes

➤ Questions

In case of questions concerning the installation or the use of your product, please consult your authorized specialist shop.

➤ Warranty

Warranty claims are subject to statutory limitation periods. Wear parts are excluded from the warranty; the same applies for changes in colour and changes in characteristics caused by UV radiation.

➤ Liability

In case of non-observance of the directions and information given in these instructions and in case of improper operation or unintended use, the manufacturer shall not accept any warranty claims concerning any damage to the product. In these cases the liability for consequential damage to any parts or persons is ruled out as well.

➤ Legal notes

The graphs and texts of these instructions were carefully prepared. We cannot be held liable for any errors and their potential consequences! Subject to technical modifications to the product and to these instructions! These instructions include copyrighted information. All rights reserved! The listed product or brand names are trademarks of the respective owners.

➤ EC declaration of conformity

The HELLA Sonnen- und Wetterschutztechnik GmbH hereby declares that this product complies with the basic requirements and the other applicable regulations of the EC directives. The complete declaration of conformity can be found in the download area of our website <https://www.hella.info>.

Safety instructions



These installation instructions refer to prefabricated elements, that (1) for 100% are made from parts, which are defined by us, and (2) which are made in manufacturing processes, which are defined by us too; in all other cases we do not provide any guarantee!

The safety instructions as well as the appropriate instructions must be read carefully before installation and use. In case of non-observance of the directions and information given in these instructions and in case of improper installation and operation or unintended use, the manufacturer shall not accept any warranty claims concerning any damage to the product. In these cases the liability for consequential damage to any parts or persons is ruled out as well.



- Follow the described installation steps and pay attention to recommendations and notes.
- Keep these instructions in a safe place.
- All installation and removal works, as well as maintenance and repair works are only allowed to be carried out by authorised and qualified specialist staff.
- Observe the regulations for prevention of accidents of the employer's liability insurance association!
- Before operation check the unit for visible damage. If the unit is damaged, it should not be used; please consult authorized specialist staff immediately.
- Only use unmodified original parts from HELLA.
- In case of unauthorised opening of the device, improper use, incorrect installation or incorrect operation, there is a risk of damage to persons or property.
- Never let children play with the unit.

Subject to technical modifications – Date of Issue May/2020

3

Scope of delivery

The following components are included in the scope of delivery:

- Weather sensor ONYX.WEATHER with mains cable (5 m)
- Mounting material (2 dowels and 2 screws)
- Operating instructions ONYX.WEATHER

Device description

ONYX.WEATHER
Model W2000
Art. no. 50680202
220-240 V AC / 50-60 Hz

ONYX.WEATHER is a weather sensor. It can record values for wind speed, insolation, temperature, air humidity and barometric pressure at the facade and controls the entire sun protection system automatically and dependent on the weather. The weather sensor is fixed to the facade using the mounting material enclosed.

Technical data

Input	220-240 V AC / 50-60 Hz
Nominal capacity	0.3 W
IP rating	IP54
Admissible ambient temperature	-15 °C to +60 °C
Radio frequency	868.3 MHz
Transmission power	12.6 mW
Installation type	Fixing to the facade with the mounting material enclosed
Dimensions LxWxH	180x100x180 mm
Weight	170 g (on the facade), 320 g (total weight)
Measuring range of wind speed	2 m/s to 32 m/s
Measuring range of brightness	0 Lux to 120 kLux

Subject to technical modifications – Date of Issue May/2020

5

Safety instructions



Attention! Risk of injury or danger to life due to an electric shock!

- Set-up, examination, commissioning and error correction of the unit must only be performed by authorised or trained expert staff (as per VDE 0100).
- Switch off the current to the connecting lines when working at the unit. There is danger to life! Take safety precautions against unintentional switching on!
- Check the electrical wires regularly for damage. Do not use the unit if any damage is found.



Observance of regulations and rules

The building owner is responsible for the observance of statutory rules and country-specific provisions on site.

Designated use

The weather sensor ONYX.WEATHER may only be used for the control of outdoor blinds / exterior Venetian blinds, roller shutters and awnings that are provided with drives, which are intended for this use. Any use other or beyond that is not considered intended use. The connection of external devices must be carried out in consultation with the specialist staff.



- It is not allowed to use radio system in areas with an increased risk of interference (e.g. hospitals, airports).
- The remote control is only admissible for devices and systems, where a malfunction in the transmitter or receiver does not pose a risk to persons, animals or objects, or if this safety risk is covered by other safety installations.



- **Follow the wiring diagram precisely!**
- We cannot accept responsibility for damage, that can result from improper installation.

4

Subject to technical modifications – Date of Issue May/2020

Installation



Prior to starting the installation, check the proper function of the transmitter and the receiver at the desired installation position.

The installation location for the weather sensor ONYX.WEATHER must be selected in a way that the values measured for wind speed, sun intensity as well as temperature and air humidity roughly equal the ones at the sun protection system. To ensure a correct measuring of the insolation, ONYX.WEATHER is to be mounted precisely at an angle of 90 degrees and absolutely perpendicular to the facade (see Fig. 1).

Care has to be taken that at the desired mounting position a 230 V / 50 Hz power connection is available. Extended instructions for the electrical installation can be found in the download area of our website <http://www.hella.info>.



1. Place the ONYX.WEATHER at the desired position on the facade.
2. Mounting material to fix ONYX.WEATHER to the facade is enclosed in the delivery.
3. Connect the stripped mains cable to the 230 V / 50 Hz mains.



It is never ever allowed to mount the weather sensor ONYX.WEATHER in the shade or the wind shadow of the extended sun protection unit. The wall bracket is to be mounted in such a way that the column with the wind wheel points vertically upwards (as shown in Fig. 1).



Updraughts or down draughts on the facade may destroy products. Up-draughts or down draughts are not recognised by ONYX.WEATHER. This must be observed upon the installation of ONYX.WEATHER.

6

Subject to technical modifications – Date of Issue May/2020

Connection diagram

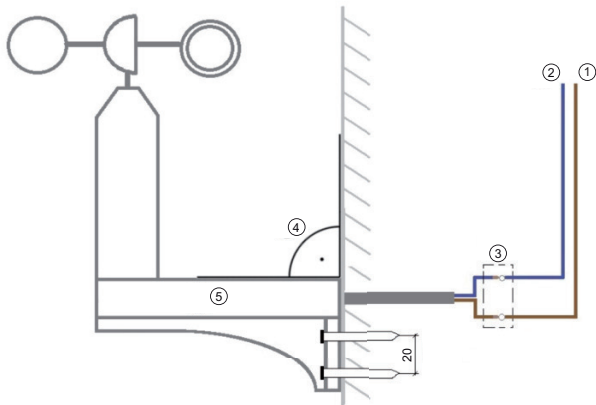


Fig. 1

Legend

- ① Phase L
- ② Neutral conductor N
- ③ Junction box
- ④ Right angle
- ⑤ ONYX.WEATHER

Mains cable for mains voltage 230 V AC / 50 Hz

The 5 m long mains cable is provided for the voltage supply of the module. Phase and neutral conductor are colour-coded (blue = neutral conductor; brown = phase).

Installation to the facade



For the installation of the ONYX.WEATHER the pluggable bottom part of the housing is removed. This can easily be removed by pulling it downward. The space between the boreholes for the screwing is 20 mm (see Fig. 1).



Brickwork / concrete

For the installation of ONYX.WEATHER in the brickwork or on concrete the anchors and screws included in the scope of delivery must be used. For this purpose, a borehole with a diameter of 8 mm, min. 40 mm deep, must be provided.



Wood

For the installation of ONYX.WEATHER on a wooden facade, the enclosed screws or other suitable woodscrews can be used.



Thermal insulation composite system

For the installation of ONYX.WEATHER on the thermal insulation composite system special insulation dowels must be used. For detailed installation instructions of these insulation dowels, please refer to the instructions of the dowel manufacturer.

Configuration



Before configuring the ONYX.WEATHER, download HELLA's free app ONYX® from the app store / Google Play to your smart phone.

Before you can use ONYX.WEATHER in combination with ONYX.CENTER, ONYX.WEATHER must be added to the app ONYX®. You will find all information regarding the configuration in the instructions for ONYX.CENTER / ONYX.CLICK, directly in the app ONYX® or in the download area on our homepage <https://www.hella.info>.

The serial number (ID) to assign multiple ONYX.WEATHER can be found in the housing of the weather sensor (pull the pluggable bottom part of the housing downwards).



Setting the wind resistance class for your products.

The wind resistance class can be individually set for every product that is monitored by the ONYX.WEATHER. The wind resistance class depends on the sun protection product itself as well as on the type of installation. After adding the weather sensor, all assigned products are configured with standard wind resistance classes. These wind resistance classes must then be adapted individually to the wind resistance classes of your sun protection product. The information about the wind resistance class of your product can be found in the technical documentation of your sun protection product.

Configuration

Wind Protection Classes

Wind protection class	Wind force (degrees acc. to Beaufort)	Description	Wind speed* m/s (km/h)	Effect of the wind in the interior land
0	0-3	Calm - light breeze	0-5.4 (0-19)	Smoke raises vertically, wind moves thin twigs
1	4	moderate breeze, moderate wind Wind speed (Beaufort number)	5.5-7.9 (20-28)	Wind moves twigs and thin branches, whirls up dust and loose paper
2	5	fresh breeze, fresh wind	8-10.7 (29-38)	small deciduous trees begin to sway
3	6	strong wind	10.8-13.8 (39-39)	strong branches are swaying, umbrellas can be held with difficulties only
4	7	near gale	13.9-17.1 (50-61)	Resistance felt when walking against the wind, whole trees in motion
5	8	stormy wind	17.2-20.7 (62-74)	Branches break off from the trees, walking outside is difficult
6	9	storm	20.8-24.4 (75-88)	Branches break off from trees, smaller damage on houses

Source: ift Rosenheim

* ... In the respectively selected wind resistance class, ONYX.WEATHER always gives a wind alarm at the upper limit value (marked in bold).

Configuration



Incorrectly set wind resistance classes can lead to the product not moving to a safety position despite high wind speeds. This poses a safety risk and sun protection units as well as the surroundings can get damaged and persons can get injured.

Ideal use of the radio signal



In case of bad reception, the position of the ONYX.WEATHER or ONYX.CENTER must be changed.



Radio systems that send on the same frequency may cause interference with reception. It must be considered that the range of the radio signal is limited by statutory regulations and structural measures.

Fault removal

Problem	Possible cause	Troubleshooting
The weather sensor can not be found in the ONYX®-app (off-line).	<ul style="list-style-type: none"> - The wrong weather sensor was added. - No mains voltage at the weather sensor. 	<ul style="list-style-type: none"> - Check if the serial number (ID) is correct and add it again. - Provide mains voltage with ONYX.WEATHER.
Poor or no radio reception.	Adverse position of the ONYX.CENTER or ONYX.WEATHER.	Change the position of the antenna of the ONYX.CENTER or re-position the ONYX.CENTER or ONYX.WEATHER.
ONYX.WEATHER can not be scanned, because the camera does not start automatically.	ONYX®-app has no authorisation to access the camera of the smart phone.	Authorisation to access the camera must be given.
The sun protection unit does not retract in case of strong wind. The sun protection unit constantly retracts even with the slightest breeze.	Wind protection class incorrectly set.	The wind protection class for the relevant product must be reset. ATTENTION: Observe the limit values for your sun protection product.
Device locked.	ONYX.WEATHER is already configured in another network.	Follow the instructions on your screen, perhaps voltage interruption.

Disposal



Dispose of the device in accordance with the current country-specific regulations for electronic scrap (e.g. collecting points).



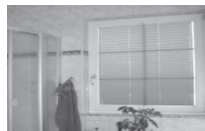
HELLA Interior Venetian Blinds

regulate the lighting in a room very comfortably, immediately gracing it with much more atmosphere.



HELLA Insect Screens

and you decide who is allowed to come in and who isn't.



HELLA Pleated Blind

folds up very compactly and protects very well against the sun and nosy glances where only little space is available.



HELLA Venetian Blinds

serve for the light regulation, as view protection, anti-glare blind and heat protection.



HELLA Front-mounted Roller Shutter

for more safety and protection against rain, wind, heat, the cold, noise and nosy glances, also available for subsequent installation.



HELLA Facade Awning

with exposing mechanism for lovely facade design with perfect heat protection and anti-glare blind.

For questions, wishes and ideas:
HELLA Infoline +43/(0)4846/6555-0

HELLA Sonnen- und Wetterschutztechnik GmbH

A-9913 Abfaltersbach, No. 125
Tel.: +43/(0)4846/6555-0
Fax: +43/(0)4846/6555-134
e-mail: office@hella.info
Internet: <http://www.hella.info>