These instructions must be read prior to installation and use!

Preliminary remarks HELLA Clamping option ONYX.CONNECTOR

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.**

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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.
Installation Instructions and Instructions for Use

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.

In the outdoor area the ONYX.CONNECTOR must be protected against the weather at its place of installation.

Scope of delivery

The following components are included in the scope of delivery:
- Clamping option ONYX.CONNECTOR (quantity as per order)
- Installation instructions clamping option ONYX.CONNECTOR

Device description

Clamping option ONYX.CONNECTOR
Art. No. 50680301
220-240 V AC / 50 Hz

The ONYX.CONNECTOR is a control device that is clamped or plugged in-between the motor/load and the power supply. It is suitable for the control of 230 V Venetian blind, roller shutter and awning motors, as well as for the switching on/off of 230 V lights.

Hirschmann cable socket STAK 3
Terminal for power supply line

Fig. 1: Connections:

Legend

Hirschmann cable socket STAK 3 for connection to the motor
1 Neutral conductor N
2 Phase UP
3 Phase DOWN
4 Protective conductor PE

Terminal for power supply line

L Neutral conductor
PE Protective earth conductor

Technical data

Input 220-240 V AC / 50 Hz
Output 450 VA
Nominal capacity 0.2 W
IP rating IP54
Admissible ambient temperature -25 °C to +55 °C
Radio frequency 868.3 MHz
Transmission power 12.6 mW
Installation type Is clamped / plugged in-between the motor and the power supply
Dimensions LxWxH 132x29x24 mm
Weight 60 g

Installation

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

Extended instructions for the electrical installation can be found in the downloaded area of our website http://www.hella.info.

The place of installation must be selected in a way that the ONYX.CONNECTOR is always protected against wind and weather. ONYX.CONNECTOR may not be mounted to places, where rain water may be accumulated.

1. ONYX.CONNECTOR is mounted in the box system of your sun protection unit. Usually the control device is fixed to the top rail.
2. Connection to the power supply as per Fig. 2.
Connection diagram

Attention!
The motor cable must be directly connected to the control device ONYX.CONNECTOR. Clamping points/junctions in the motor cable are unacceptable.

Attention!
When actuating the 230 V lighting, the maximum output power of 450 VA may not be exceeded. This must especially be observed with lightings with electrical ballasts, which have a high inrush current. In addition, a cut-off relay must be used with higher electric capacities.

Connecting the mains voltage (230 V AC / 50 Hz) to the ONYX.CONNECTOR
The input terminal is provided for the voltage supply of the actor. The names L, PE and N mark phase, earth conductor and neutral conductor. Please observe the terminal assignment as shown in Fig. 1 and Fig. 2.

Connecting the motor / lighting to the ONYX.CONNECTOR
The motor / lighting is directly plugged to the ONYX.CONNECTOR via the Hirschmann connector-in connection. If the motor / lighting is not provided with a STAS 3 connector (Fig. 3), it is necessary to provide the connection cable subsequently with it. Please observe the terminal assignment as shown in Fig. 1 and Fig. 2.

The unintentional drawing-out of the connection cables during operation can cause life-endangering situations due to electric shock or short circuit.

Configuration
Before configuring the ONYX.CONNECTOR, download HELLA’s free app ONYX® from the App store / Google Play to your smart phone.
Before you can use ONYX.CONNECTOR in combination with ONYX.CENTER or ONYX.CLICK, ONYX.CONNECTOR must be added in 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.

Precondition:
ONYX.CONNECTOR is installed (see chapter “Wiring diagram”). The mechanical end positions of the drives must be adjusted.

Operating guidelines
Groups
Groups with their different sun protection units can be configured freely in the ONYX®-app. All units in one group can be controlled together.

Favourite position (heart symbol)
In the ONYX®-app six freely selectable positions per sun protection unit can be saved, which you simply can use again at a later time.

Automatic Operation
In the ONYX®-app you can set up as many time functions as you like, which, at the desired times, make your sun protection units move to the adjusted positions. ONYX® is also provided with an astro function, which, at sunrise or sunset, moves your sun protection unit automatically to a defined position. With the help of the sun sensor a particular position can be defined, if the threshold value of the sun is below or exceeds the preset value.
Settings

Device type
The different device types can be selected in the ONYX®-app under "advanced settings". It is necessary to define the type of device. By selecting the appropriate category, it is assigned to this type. Device types are outdoor blind, roller shutter, awning, facade blind and light. For device types, you do not want to be displayed in the app, i.e. central pushbutton without a connected drive, the drive type "Hidden" is available. By default the device type "Roller shutter" is set.

Outdoor blind parameters
You find the outdoor blind parameters under "advanced settings" in the ONYX®-app. Under "Tilting time" it is possible to transmit the time the outdoor blind requires for a complete tilting to the ONYX® control. This must especially be observed, if a drive with a slow slat tilting is mounted.

Preset tilting times:
- Outdoor blind 90°: 1.25 s
- Outdoor blind 180°: 2.5 s

Motor parameters
You find the adjustment possibilities for the motors under "advanced settings" in the ONYX®-app. If your sun protection unit moves contrary to the direction of your control command, you can activate the reversal of the direction of rotation with the icon "Reverse direction of rotation". In addition, the "Automatic running time" can be activated/deactivated under "motor parameters". The automatic running time should be deactivated only, if ONYX.CONNECTOR is not directly connected to a drive, i.e. to a cut-off relay. The running time can be adjusted manually, when the automatic running time is deactivated. As a standard the automatic running time is activated.

Wind resistance class
You find the wind resistance classes in the ONYX®-app under "advanced settings". These preset wind resistance classes are only relevant, if the optional weather sensor ONYX.WEATHER is used. Please note, that the real values set depend on the installation situation on-site; these values are available in the documentation of the sun protection device and must be strictly observed!

Preset wind resistance classes:
- Roller shutter: Class 4 (13.8 m/s)
- Awning: Class 2 (10.7 m/s)
- Facade blinds: Class 4 (13.8 m/s)
- Outdoor blind: Class 4 (13.8 m/s)

Output selection
This adjusting possibility is only available for the device type "light". Under "output selection" you can select which connection at the STAK 3 output is to be used for the actuation of the lighting. It is possible to select between "Channel A" (connection 1 and 2) and "Channel B" (connection 1 and 3). As a standard "Channel A" is set.

Ideal use of the radio signal
In case of bad reception, the position of the ONYX.CONNECTOR 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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Troubleshooting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive does not run or runs only briefly.</td>
<td>Motor connection incorrect.</td>
<td>Check the connection as per Fig. 2. Change connection, if necessary.</td>
</tr>
<tr>
<td>Lighting can not be controlled.</td>
<td>Incorrect connection.</td>
<td></td>
</tr>
<tr>
<td>Drive runs into the wrong direction.</td>
<td>Directions were interchanged during installation.</td>
<td>Perform the reversal of the direction in the ONYX®-app, as described in the chapter &quot;Settings&quot;.</td>
</tr>
<tr>
<td>The adapter plug for the control can not be controlled in the ONYX®-app (off-line).</td>
<td>- The wrong control device was added. - No mains voltage at the adapter plug for the control.</td>
<td>- Check if the serial number is correct and add it again. - Provide mains voltage with ONYX.CONNECTOR.</td>
</tr>
<tr>
<td>Poor or no radio</td>
<td>Adverse position of ONYX.CENTER / ONYX.CLICK</td>
<td>Reposition ONYX.CENTER / ONYX.CLICK or ONYX.CONNECTOR.</td>
</tr>
</tbody>
</table>
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 nosey 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, nosey and nosey glances, also available for subsequent installation.

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

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