Operating instructions Radius belalatus® ten fan-shaped awning

These operating instructions are valid for the belalatus® fan-shaped awnings with different dimensions and opening angles

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1.2 General safety instructions

Together with the technical information for installation and operation, the safety regulations form the basis for the safe use of the fan. They must be read, followed and kept for later use before the fan is installed and used. This also includes the "Vibradorm Installation and Operating Instructions for the MCTxI-HBC Control Unit".

Failure to observe the safety regulations and instructions in the installation and operating instructions can result in serious damage to persons and material, for which the manufacturer expressly disclaims all liability or warranty!

The fan must be closed when the wind picks up or gusts of wind are approaching. Unattended fans must not be left open unless the purchased system has a wind monitor that works with the fan. Surprising strong winds could cause serious damage.

As the connection between the control unit (radio remote control or smartphone) and the control unit is established via Bluetooth, the possibility of external influences influencing this connection cannot be excluded. Accordingly, the following possibilities of external influence must be avoided:

- Electromagnetic interference (EMC), e.g. also from WLANs, cordless phones or microwave ovens
- Manipulation of the Bluetooth interface by third parties
- Unwanted operation of the system by third parties via smartphone (app) (prerequisite: smartphone with installed operating app near the receiver, smartphone / controller have to be paired)
- With all the possibilities of external influences mentioned, there is a possibility of unintentional movement of the drives, which can lead to danger to persons.

1.3 Using the belalatus® ten

When installing and operating the fan awning, the intended use must be observed:

- The fan-shaped awning (fan) is to be used exclusively as weather-resistant sun protection. The wind resistance of the open fan is limited and the information on this assumes that it is installed according to the instructions.
- The wind resistance of the opened fan is limited. The fan must be closed when the wind picks up or gusts of wind are approaching. Unattended fan awnings must not remain open. Surprising strong winds could cause serious damage.
- Before opening and closing the fan, check that there are no obstacles in the travel range.
- The fan awning may not be modified or hung with foreign material.
- Only use the sunblind in an undamaged condition and pay attention to possible faults. Arrange for its professional repair before further use!
- Only use original Radius accessories and spare parts to ensure safety, unadulterated comfort and flawless function.
- Where appropriate, a self-standing, stable climbing aid shall be used to attach or remove a protective cover. Make sure that it cannot tip over or slip away.
- The individual fan motors have overload protection. If a motor is moved for 6 minutes, it is blocked for 18 minutes. Only after this time is further operation possible again. However, an exception is a "priority signal" from a connected wind monitor or KNX system.
- Conversions or changes to the fan, control unit, remote control, motor and all connecting cables are prohibited!
- The controller may only be operated with the mains voltage specified on the type plate!
- It is essential to use the supplied power cord. Operating the control unit with a damaged power cable is prohibited!
- Electrical cables must not be exposed to any danger of crushing, bending or tensile stress.
- It shall be possible to switch the control system on and off by means of an electric switch which can be operated quickly and easily even in an emergency situation.
- **If the control unit is exposed to sunlight, it must be protected from direct sunlight with a well ventilated protective hood. The control unit has an IP 65 water protection rating.**

1.4 Scope of delivery

An electrically operated fan consists of the following components:

1. Fan-shaped awning

2. Control module (control box, remote control and power cable)

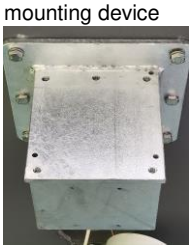
3. Antenna

4. Sun and wind sensor (optional)

1.5 Customer accomplishment

- mounting device, console (varies depending on the place of installation)
- on-site installation material (sleeves, screws, bases, etc.)
- electrical supply lines
- mounting the fan

Example of a mounting device



1.6 Options

- protective cover
- wind monitor with receiver for radio control
- well-ventilated protective hood

Well-ventilated protective hood

2 Operation

The belalatus® ten is put into operation by the commissioning personnel, for whom basic knowledge of mechanical and electrical engineering is required.

Once the belalatus® ten has been professionally commissioned, this innovative fan can be operated conveniently via various options:

- Smartphone app (Apple iOS)
- Somfy Telis RTS
- Somfy wind and sun sensors
- KNX home bus system
- VIBRADORM radio remote controls

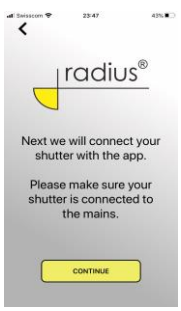
A maximum of 8 Smartphones or Vibradorm handheld transmitters can be taught-in.

3 Operation with a smartphone-app

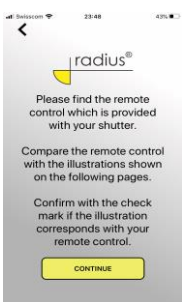
3.1 Pairing with the Radius smartphone-app

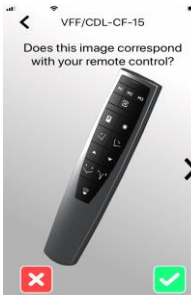
The Radius app can be downloaded free of charge from the Apple Store under Radius Control.

When using the app for the first time or resetting it, you can proceed step by step using the menu navigation.



Click «CONTINUE»

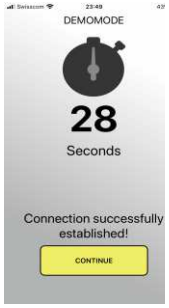


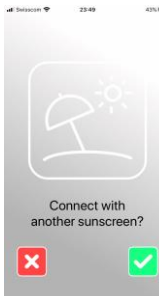


This remote control is included in the scope of delivery. Press the green button to use it later.

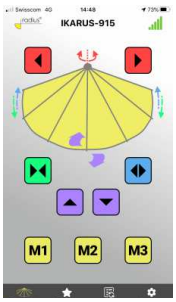
Follow the instructions on the screen and connect the controller to 230 VAC.

Each controller is delivered with a unique name. Select the one to be connected. This is displayed as soon as the connection is established.





If the installation is only for one fan, press X. The green tick should only be pressed if more than one is to be installed at the same time. The operating screen then appears.

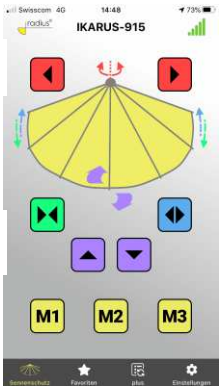


3.2 Opening and closing the fan

The fan awning can be easily moved to the desired position via the start screen on the app.

a. rotating
b. fan- in and -out
c. tilting

a.
b.
c.



The fan moves in this direction as long as the button is pressed. During commissioning, the zero and maximum positions were set so that the fan remains limited in its movements.

Using the memory buttons M1-M4, positions can be approached automatically (press button for approx. 1 second). If you want to stop this automatic movement, simply press the Memory button again.

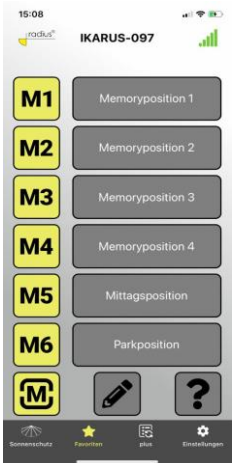
Further options can be selected using the function keys in the lower menu bar.

3.3 Favorite

Midday position and parking position are permanently stored positions which are determined by the qualified personnel during commissioning.

Memory positions 1 - 4 can be assigned individually by moving to the desired position. Then press the M key and the desired memory positions. The fan then moves automatically from one position to the other by pressing these keys.

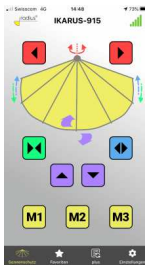
The different M positions can be renamed with the pencil symbol.

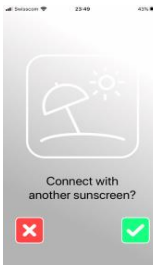


Via "Settings" you can access the expert mode, among others. This mode is password protected and must NOT be used

3.4 Additional information

By selecting the "add" button on the control menu, another Radius fan can be selected by standing near this fan to ensure a strong radio connection (indicated by the green bars).





Additional fans can be connected during installation in the menu sequence "*Connect to another sunscreen?* "menu sequence by pressing the green ok button or by repeating the coupling procedure described above.

If a fan cannot be added using the Add button, the app must be reset and the pairing has to be performed again as described above.

If this does not work in exceptional cases, the controller must be set current-free for about 20 seconds and the pairing process must be carried out afterwards.

If a further fan is added, the others must be disconnected from the power supply (current-free switching/unplugging). Only the newly programmed sun protection may be connected to the mains! Otherwise, you risk a malfunction of the fans that are already in operation.

4 Operation with a radio handled transmitter

The keys M1 - M3 are memory keys and any position can be defined and then moved to automatically as with the iOS app. Move to the desired position and press the Memory button 3 times and then the desired memory position M1-M3.

Use the P button to move the fan to the park position and the button to the midday position.

The fan can be moved manually using the other symbol function keys.

After a power failure, the handheld transmitter is in teach-in mode for 2 minutes. It is only ready for operation again after these 2 minutes.

5 Operation with SOMFY Telis RTS

- Fan moves to midday position (button up)
- Motion is stopped
- Fan moves into parking position (button down)

- By keeping this key pressed, the sun monitor can be switched on and off. This is then visible by the red LEDs "off" and "on".

A connected sun and wind sensor can automatically move the fan to the stored midday and parking position. These positions can also be approached via the Somfy handheld transmitter by pressing the up and down button. This signal is present at the control unit until it is replaced by the Somfy signal in the opposite direction, then it is present again.

If the fan is now moved to the middy or park position with the app or the remote control after the Somfy control was active, the Somfy signal remains present for the control memory. This means that if, for example, the fan automatically fans out in the sun and is then moved to the park position by the app, it cannot be opened with the control, because for the control's memory the fan is already open. To avoid this, you must first press the arrow key on the somfy remote control in the opposite direction and only then can you open it with the remote control.

If the fan is opened with the Smartphone App or the Vibradorm handheld transmitter, this information is not known to the sun and wind monitoring system. If the solar radiation is not sufficient in such a situation, then the stored position of the fan is "closed" for the sun and wind monitor system! **This means that the system would not close automatically when the wind comes up, because the position for the system is already "closed.**

It must therefore be ensured that when the fan is connected to a sun and wind sensor system, the Somfy Telis RT arrow key is always pressed downwards when the fan is opened with the Smartphone App or the Vibradorm remote control.

If the system has been opened with the Somfy remote control or automatically with the wind and sun sensor, it is no longer possible to move with the Radius App or Vibradorm remote control for the next 4 minutes. This can be avoided by briefly pressing the stop button (my).

In case of changeable weather and/or gusty wind, the automatic sun protection system must be switched off and the fan must be retracted. This prevents the fan from being continuously retracted and extended without great benefit.This is also provided for in our risk analysis.

Recommendation:

Recommendation: If a sun/wind monitor or a KNX bus system is used, it is recommended that the midday and parking position is approached by these systems.

6 Troubleshooting

In case of an unexpected error, please follow the instructions below:

- If the fan sail no longer reacts and you do not receive a display message on your smartphone, then disconnect the system from the mains for approx. 15 seconds and then switch the mains voltage on again.

Procedure for the following status information on the display:

- Duty cycle reached:
  - Wait about 18 minutes.
- Initialization necessary:
  - proceed according to initialization
- G Driver overloaded:
  - Disconnect the system from the mains for approx. 15 seconds and reconnect it to the mains.
- Error Pulse direction wrong:
  - Disconnect the system from the mains for approx. 15 seconds and reconnect it to the mains. If it still does not work, the Radius installer should be notified for rectification.
- If the current fails while the control inputs are active, it cannot be excluded that an initialization must be done. For this purpose, the following procedure can be carried out via the radio remote control (without app):
  - Press the "M" key 11 times in succession to activate the service mode. If no further key is pressed, the control unit automatically switches off the service mode after 10 seconds.
  - In service mode, the following functions are now available via the radio handheld transmitter:
    a) 3 x "M" followed by "fan out" (fan opens) Initialisation force is switched off
    b) 3 x 'M' followed by 'M1 Virtual limit switches are switched off
    c) 3 x "M" followed by "M3" current position of all drives is stored as zero position