RF-L LED-ST IP54
Radio Dimmer

Technical specifications and installation instructions
Item number 60557

F-Con

1.   Description

RF-L LED-ST IP54 is a radio dimmer for the WS1 and WS1000 Color or Style, WS1000 Connect controls and for radio control system Solexa II. The **RF-L LED-ST IP54** is provided for LED lights. The radio dimmer allows dimming in 1% increments.
A light connected to the radio dimmer can also be operated directly using the remote control Remo 8/pro via the button interface RF-B2-UP or the solar radio button Corlo P RF (without an additional control unit).

Functions:
- Universal dimmer with automatic load recognition (phase angle control/ phase sector control)
- For dimmable LED in combination with dimmable power supplies, load 20 - 300 W
- Reception of the radio control signal
- Suitable for: WS1 Color, WS1 Style, WS1000 Color, WS1000 Style, KNX WS1000 Style (from software version 1.8).
  WS1000 Connect. Solexa II.
  Remo 8 (from version 0.1), Remo pro, RF-B2-UP, Corlo P1 RF, Corlo P2 RF.

1.0.1. Deliverables

- Radio dimmer

1.1.   Technical data

Housing	Plastic
Protection category	IP 54*
Dimensions (without locking bow)	ca. 147 x 49 x 32 (W x H x D, mm)
Weight	approx. 140 g
Ambient temperature	Operation -20…+70 °C, storage -55…+90°C
Ambient humidity	max. 95% RH, avoid condensation
Operating voltage	230V AC
Input	STAS3 plug (230 V)
Output	STAK3 coupling, loadable from 20 - 300 W (Depending on transformer also less than 20 W)
Radio frequency	868.2 MHz

*The **Radio dimmer RF-L LED-ST IP54** should be installed in a protected area despite a high protection category because water can enter in via the connectors. Please observe the instructions in Chapter *Connection*.

The product conforms with the provisions of EU directives.

2.   Installation and start-up

2.1.   Installation notes

Installation, testing, operational start-up and troubleshooting should only be performed by an electrician.

DANGER!
Risk to life from live voltage (mains voltage)!
There are unprotected live components within the device.
- VDE regulations and national regulations are to be followed.
- Ensure that all lines to be assembled are free of voltage and take precautions against accidental switching on.
- Do not use the device if it is damaged.
- Take the device or system out of service and secure it against unintentional use, if it can be assumed, that risk-free operation is no longer guaranteed.

The device is only to be used for the intended purpose described in this manual. Any improper modification or failure to follow the operating instructions voids any and all warranty and guarantee claims.

After unpacking the device, check it immediately for possible mechanical damage. If it has been damaged in transport, inform the supplier immediately.
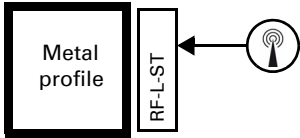
The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

2.2.   Notes on wireless equipment

When planning facilities with devices that communicate via radio, adequate radio reception must be guaranteed. The range of wireless control will be limited by legal regulation and structural circumstances. Avoid sources of interference and obstacles between receiver and transmitter, that could disturb the wireless communication. Those would be for example:

- Walls and ceilings (especially concrete and solar protection glazing).
- Metal surfaces next to the wireless participants (e. g. aluminium construction of a conservatory).
- Other wireless devices and powerful local transmitters (e.g. wireless headphones), which transmit on the same frequency. Please maintain a minimum distance of 30 cm between wireless transmitters for that reason.

The antenna symbol on the housing shows the position of the antenna in **RF-L LED-ST IP54**. This side must not be positioned directly on metal surfaces or objects. Otherwise, the radio signal might disturbed.
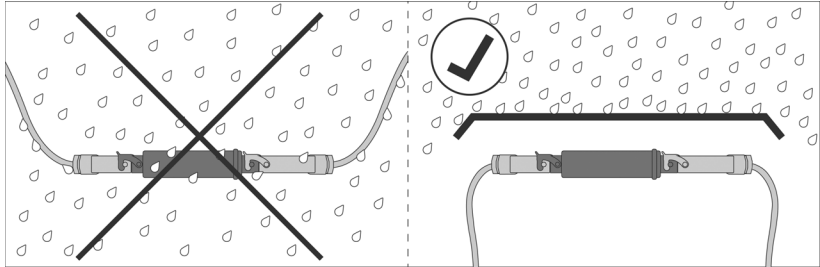
2.3.   Connection

The radio module is connected between the appliance and the power supply. It may only be connected to flexible lines using STAK/STAS connectors. The connectors must be locked using the locking bow.

Do not expose to continuous sun radiation to avoid overheating. The housing is not UV-resistant.
- Assembly the device in a protected area (e. g. in the box for the blinds/marquee/shutters in a construction profile beneath the roof tiles or in a housing).

No water may run along the supply line and device because water can enter in via the connectors.
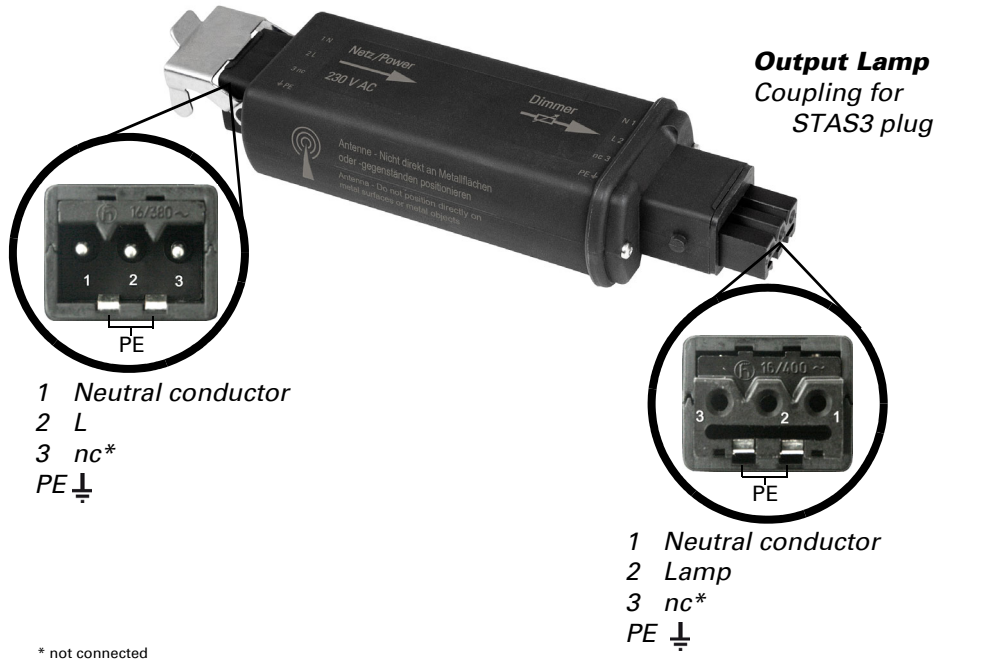

- Assembly the device in a protected area (e. g. in the box for the blinds/marquee/shutters in a construction profile beneath the roof tiles or in a housing).
- Lay the supply lines out and down from the device.

No vibrations!
- Assemble the device in a place that is free of vibrations.

2.3.1. Connection assignment

Input power supply
Plug for STAK3 coupling

Output Lamp
Coupling for STAS3 plug

1 Neutral conductor
2 L
3 nc*
PE ⏚

1 Neutral conductor
2 Lamp
3 nc*
PE ⏚

* not connected

2.4.   Establish wireless connection

1. Set the control unit and/or remote control or the button to teaching mode (observe the corresponding manual/data sheet)

2. Switch on the **RF-L LED-ST IP54** voltage supply or shut it off for at least 3 seconds if the unit is already supplied with power.
3. For 5 minutes after connecting the voltage, the **RF-L LED-ST IP54** will send a "Learn" telegram every 10 seconds.
4. The wireless connection will be established automatically. For building control systems, the display will display "Device is learning".
5. The **RF-L LED-ST IP54** will stop sending "Learn" telegrams once the reply "Learned" (for a learning process) or a control command is received (in the event of a power interruption during operation).

2.5. Notes on mounting and commissioning

Device must not be exposed to water (rain). This could result in the electronics being damaged. A relative air humidity of 95% must not be exceeded. Avoid condensation.

3. Disposal

After use, the device must be disposed of or recycled in accordance with the legal regulations. Do not dispose of it with the household waste!