

RF-L-DST DALI Radio Dimmer

Technical specifications and installation instructions

Item number 60562

F-Con



1. Description

The **RF-L-DST DALI** is a wireless dimmer for the Elsner RF wireless control protocol. The dimmer has a 230 V switch output (16 A) and a control output for dimming of lighting via the DALI bus. The **RF-L-DST DALI** sends a DALI broadcast command, that means all connected lamps get the same dimming command.

The lighting connected to the wireless dimmer can be controlled automatically and manually via the WS1 or (KNX) WS1000 Color Style building controller or the Solexa II wireless control system. Alternatively, direct manual operation is possible using the Remo 8/pro wireless remote control, via the RF-B2-UP button interface or the Corlo P RF solar wireless control button.

Functions:

- Dimmer for an electronic ballast, LED converter or electronic power supply unit for low-voltage systems
- 230 V switched output, 16 A
- DALI broadcast control output for up to 64 participants, including supply for the DALI bus (16 V)
- Reception of the control signal via radio
- Suitable for: WS1 Color, WS1 Style, WS1000 Color, WS1000 Style, KNX WS1000 Style (each from software version 1.818), Solexa II, Remo 8 (from version 0.1), Remo pro, RF-B2-UP, Corlo P1 RF, Corlo P2 RF

1.1. Deliverables

- Radio dimmer
- STASI locking bow, rubber seals

Available accessories:

- Mains connection wire (5 m)
- Connection wire (available in 1 m; 2,5 m; 5 m)

1.2. Technical data

The DALI bus in the device is designed according to the criteria for safety extra-low voltage (SELV). If the DALI bus is to meet the SELV criteria, all connected luminaires and ballasts must also meet the SELV requirements.

Housing	Plastic
Protection category	IP 54*
Dimensions	approx. 149 x 72 x 29 (W x H x D, mm)
Weight	approx. 180 g
Ambient temperature	Operation -25...+70 °C, storage -30...+85°C
Ambient humidity	max. 95% RH, avoid condensation
Operating voltage	230 V AC, 50 Hz (STAS3 plug)
Output	1 x switched output 230 V, 16 A, STAK3 coupling 1 x dimming (DALI), maximum 100 mA, with voltage supply for the DALI bus (typically 16 V), STAK3 coupling
Radio frequency	868.2 MHz (Elsner RF)

*The **Radio dimmer RF-L-DST DALI** 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.

1.2.1. Illumination brightness (dimming behaviour)

The reaction to the dimming command (minimum and maximum brightness, dimming levels) depends on the lamp.

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 its intended purpose. 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.

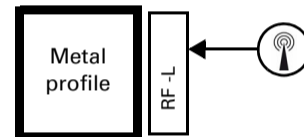
The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

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 the device. This side must not be positioned directly on metal surfaces or objects. Otherwise, the radio signal might be disturbed.

2.3. Installation and 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. Use the provided rubber seals between the STAK/STAS connectors. The connectors must be locked using the STASI locking bow.

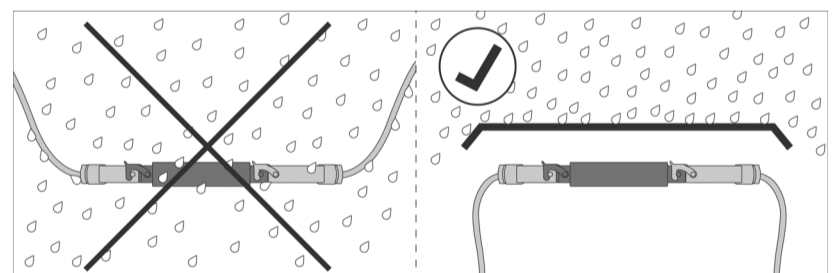


Do not expose to continuous sun radiation to avoid overheating. The housing is not UV-resistant.



No water may run along the supply line and device.

The device must not be exposed to water (rain). This could result in the electronic being damaged. A relative air humidity of 95% must not be exceeded. Avoid bedewing.



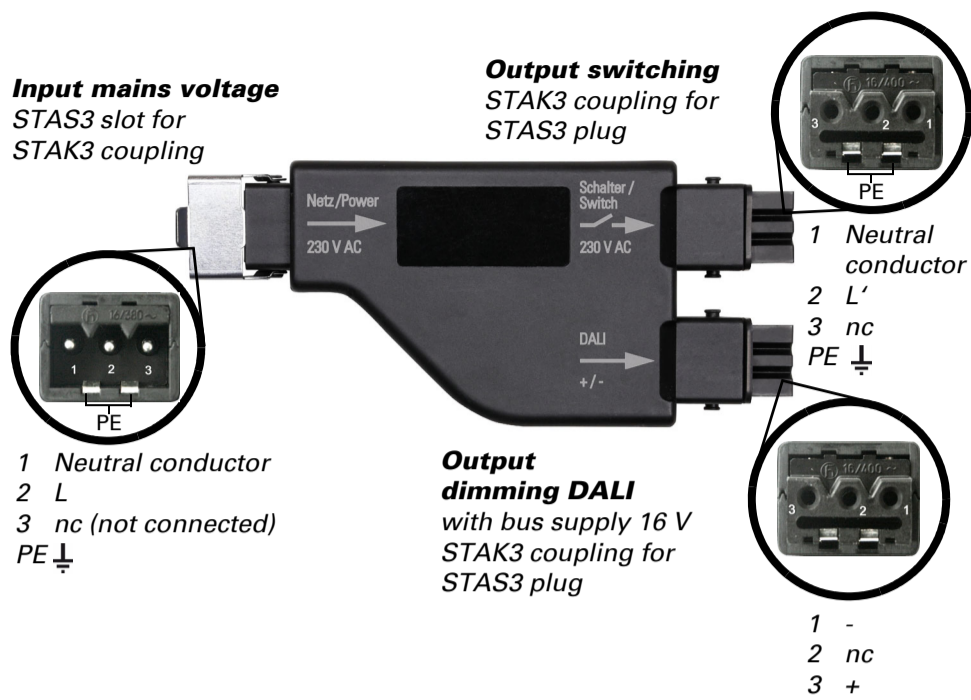
- Assemble the device in a protected area (e. g. in the box for the blinds/marquee/shutters in a construction profile beneath the roof tiles or in a housing).
- Lay the supply lines out and down from the device.



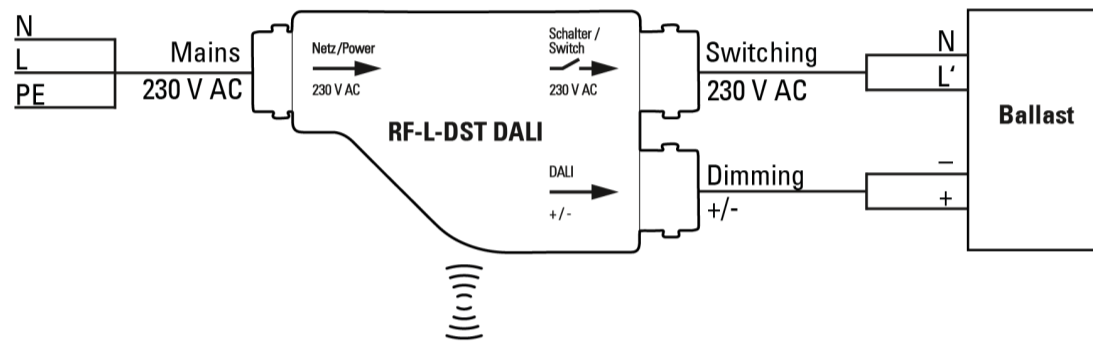
No vibrations!

- Assemble the device in a place that is free of vibrations.

2.4. Connection plan



2.4.1. Connection example



Mains connection wire and connection wires are available in different lengths as accessories.

Item numbers: Mains connection wire 60563 (5 m)

Connection wires 60565 (1 m), 60566 (2,5 m), 60567 (5 m)

2.5. 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-DST DALI** 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-DST DALI** 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-DST DALI** 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).