

# RF-MSG-ST IP53

## Radio Motor Control Unit

### Technical specifications and installation instructions

Item number 60535

F-Con



## 1. Description

The **RF-MSG-ST IP53** is a radio motor control unit for one drive (e.g. shade or window).

A connected drive can be operated directly using the remote controls Remo 8/pro, via the button interface RF-B2-UP or the solar radio button Corlo P RF.

If the drive shall execute automatic functions, the **RF-MSG-ST IP53** is taught into the radio channels of the WS1 Color/Style, WS1000 Color/Style, WS1000 Connect or Solexa II controls.

### Functions:

- Control of drives for shading elements (e.g. blinds) or windows
- 1 connection for 230 V-drive (STAK3)
- Reception of the radio control signal
- Suitable for (The **RF-MSG-ST IP53** can only be taught-in at one of these units): WS1 Color, WS1 Style, WS1000 Color, WS1000 Style, KNX WS1000 Style (from software version 1.20), WS1000 Connect, Solexa II, Remo 8 (from version 0.1), Remo pro, RF-B2-UP, Corlo P1 RF, Corlo P2 RF.

### 1.0.1. Scope of delivery

- Radio motor control unit

Available accessories:

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

### 1.1. Technical data

Housing	Plastic
Degree of protection	IP 53*
Dimensions (without locking bow)	approx. 147 x 36 x 29 (W x H x D, mm)
Weight	approx. 140 g
Ambient temperature	Operation -20...+55°C, storage -30...+85°C
Ambient humidity	max. 95% RH, avoid condensation
Operating voltage	230V AC
Standby power consumption	2 W
Input	STAS3 plug, 230 V AC, 50 Hz
Output	1 x drive, STAK3 coupling, 230 V AC (up/down/N/PE), loadable to max. 4 A / 230 V AC
Radio frequency	868.2 MHz (Elsner RF)

\*The **Radio motor control unit RF-MSG-ST IP53** 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



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



### **DANGER!** **Risk to life from live voltage (mains voltage)!**

There are unprotected live components inside the device.

- Inspect the device for damage before installation. Only put undamaged devices into operation.
- Comply with the locally applicable directives, regulations and provisions for electrical installation.
- Immediately take the device or system out of service and secure it against unintentional switch-on if risk-free operation is no longer guaranteed.

Use the device exclusively for building automation and observe the operating instructions. Improper use, modifications to the device or failure to observe the operating instructions will invalidate any warranty or guarantee claims.

Operate the device only as a fixed-site installation, i.e. only in assembled condition 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.

### 2.1. Safety notice for automatic functions



#### **WARNING!**

#### **Risk of injury from automatically moving components!**

Parts of the system can be started by the automatic controls and be a danger to persons.

- No persons may remain in the travelling range of parts driven by an electric motor.
- Adhere to the relevant building regulations.
- Ensure that the return path/access to the building is not blocked if spending time outside the building (danger of being locked out).
- Correctly decommission the system for maintenance and cleaning work.

If there is a power outage, the system does not work. Therefore, shadings should be moved to a save position if there are anticipated weather conditions, for example, if this has not already been done by the automatic function (product protection).

If the power supply is removed, the connected drive switches off. When the power is restored, the consumer remains switched off until a new movement command is received by the actuator.

### 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.

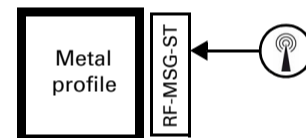


Fig. 1

The antenna symbol on the housing shows the position of the antenna in **RF-MSG-ST IP53**. This side must not be positioned directly on metal surfaces or objects. Otherwise, the radio signal might be 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.



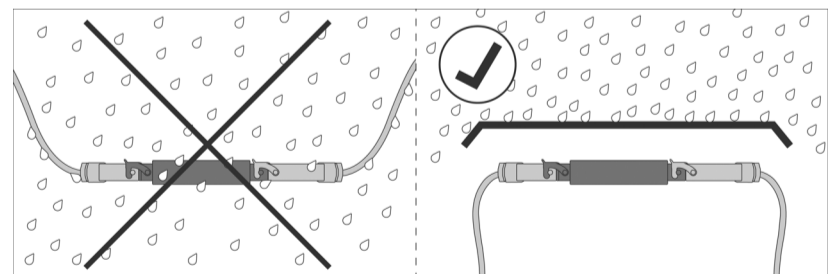
#### **Do not expose to continuous sun radiation** to avoid overheating.

The housing is not UV-resistant.

- 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).



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



- 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.

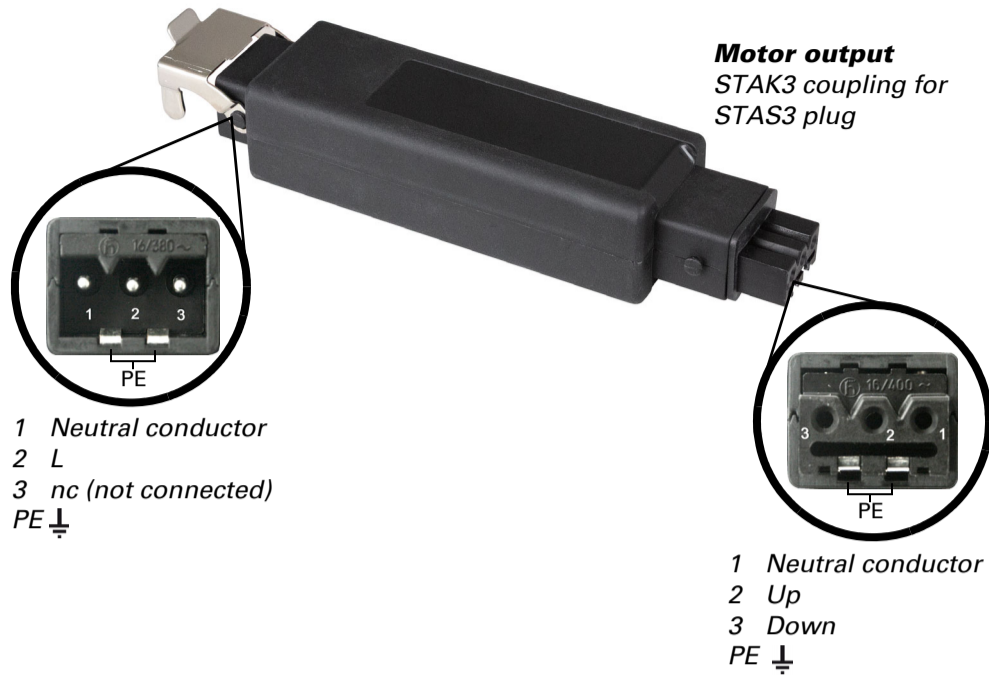
### 2.3.1. Connection scheme

Abb. 2



Fig. 3

**Input mains voltage**  
STAS3 slot for  
STAK3 coupling



**Motor output**  
STAK3 coupling for  
STAS3 plug

1 Neutral conductor  
2 L  
3 nc (not connected)  
PE ⚡

1 Neutral conductor  
2 Up  
3 Down  
PE ⚡

## 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-MSG-ST IP53** voltage supply or interrupt it for at least 3 seconds if the unit is already supplied with power.
3. For 5 minutes after connecting the voltage, the **RF-MSG-ST IP53** 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-MSG-ST IP53** 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 in accordance with the legal regulations. Do not dispose of it with the household waste!