XALDIGITAL

FEBO DEVICE INSTALLATION MANUAL

RPM/RS232 Configuration RPM/RS232 Configuration

2021

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OBJECTIVE

The purpose of this manual is to help you to install FEBO devices properly.

Counting connectors
FEBO's rhythm configuration devices aim to take data from dividers, depositors, etc. from production lines to visualize in real time the rhythm value and stoppages that occur in the operation, which can be CPM (cuts per minute), RPM (revolutions per minute), etc.

RS232 connectors
FEBO's RS323 configuration devices aim to take data from PLCs or scales on production lines.

1. PHYSICAL DEVICE VALIDATION

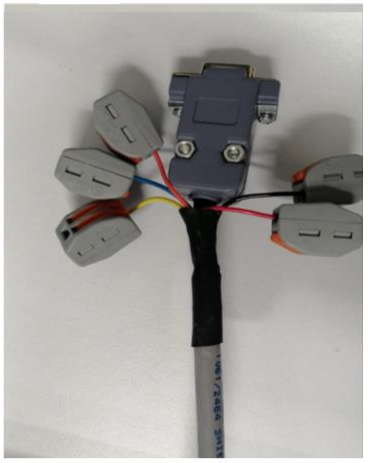
Visual inspection of the device

1.1 Verify that the device comes in perfect conditions and brings:

- Closed Device with Device ID in sight+ cable with 5 connectors
  - 3 for counting
    - Inputs: yellow and orange
    - Common: blue
  - 1 db9 female connector
    - Brown: 0Vcc
    - Black and blue: RX
    - Black and red: TX
  - 2 to feed (black and red)
    - GND: black
    - Positive: red
- Antenna with connector

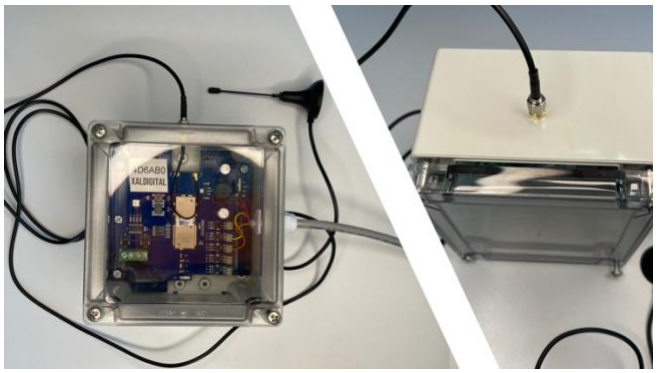
Closed Device with Device ID in

6 connectors



Antenna with

1.2 The antenna must be connected to the device. To connect it, just remove the plug it has on top and screw it carefully

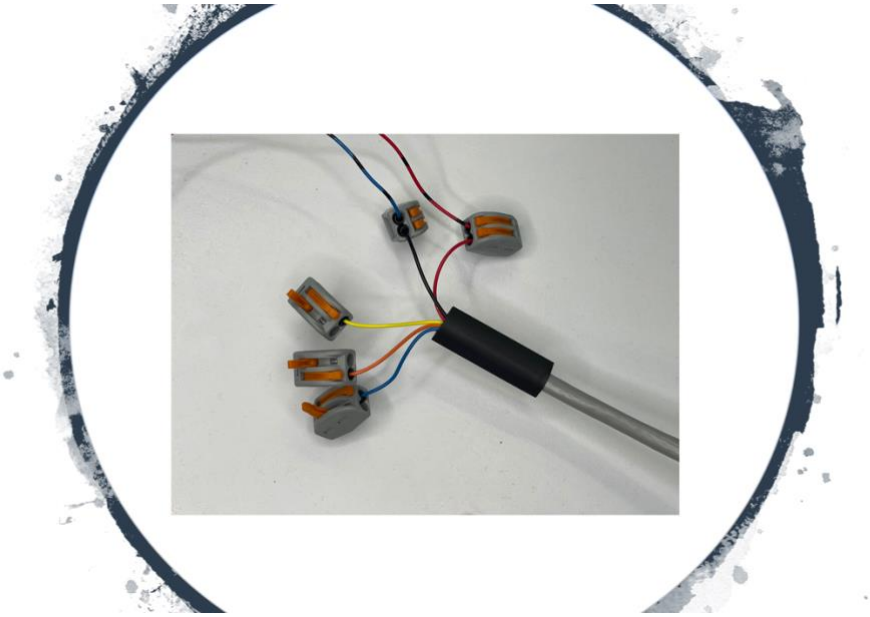


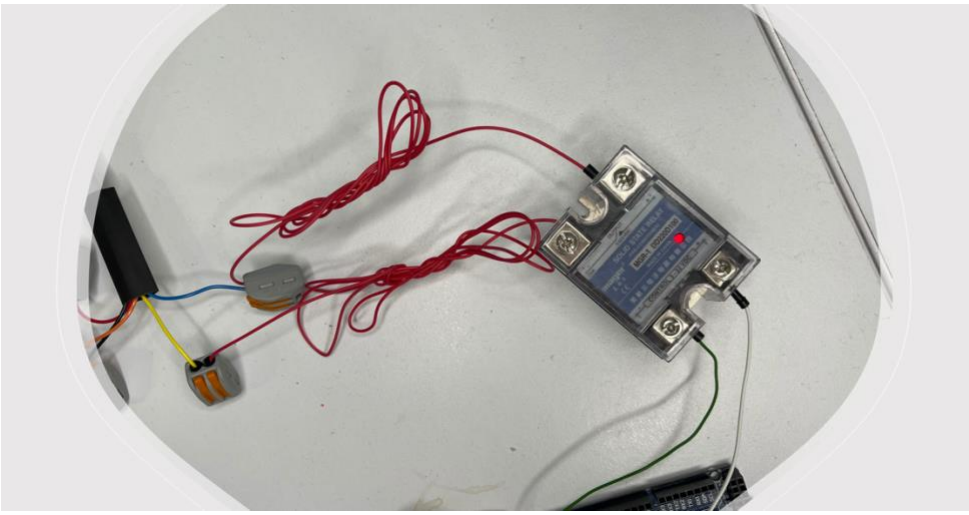
2. COUNTING DEVICE CONNECTION

Verify that the device works correctly

1. Connect the blue output to the common solid-state relay (not included – review recommendations for more information) and one of both inputs to the normally open contact of the same relay

To achieve this, the caps (oranges) of the connectors must be lifted.
And they should simply be inserted as shown above. It would look something like this:

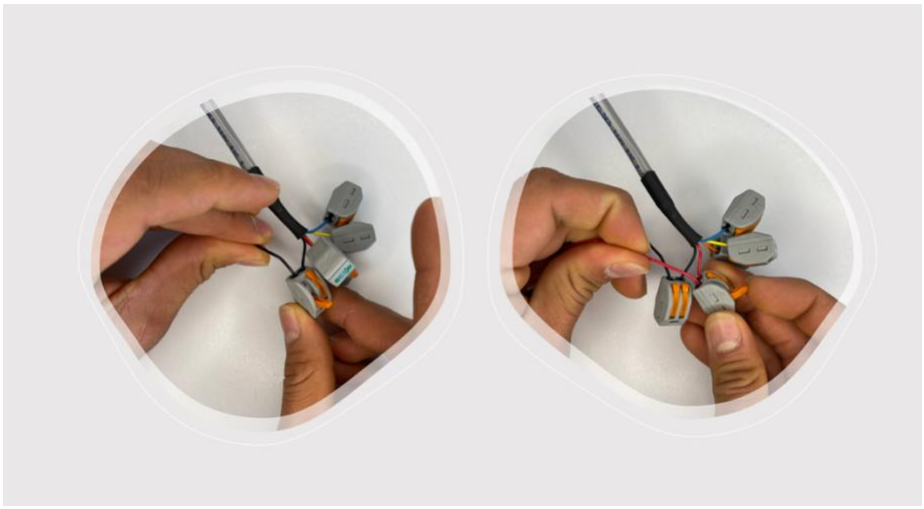




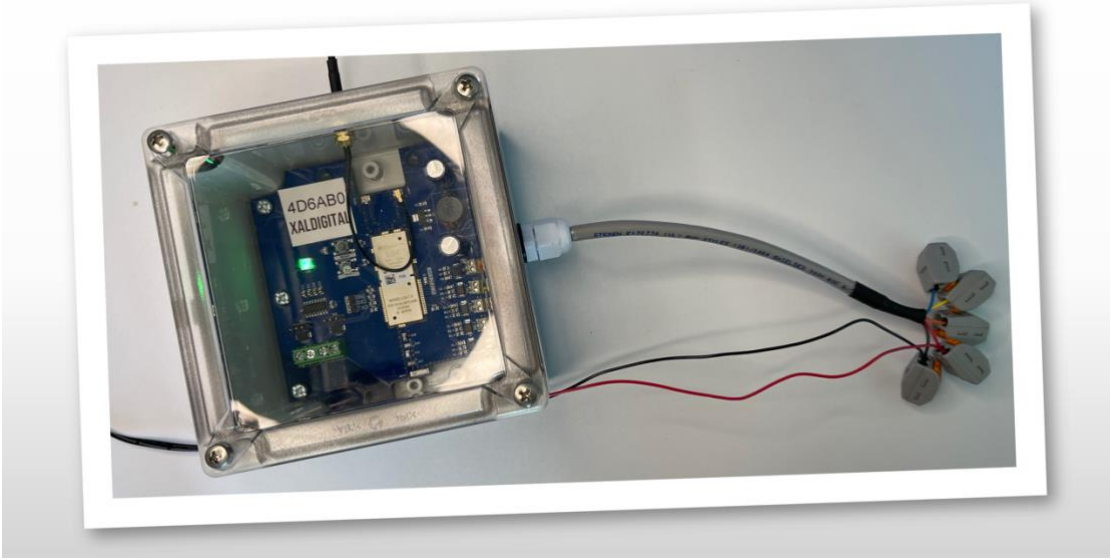
2. Connect the 2 cable connectors to supply energy. The FEBO device must be connected to an average 24v direct current power supply on the cables:
   - Red: positive
   - Black: GND

To achieve this, the caps (oranges) of the power connectors must be lifted: red (positive) and black (negative)

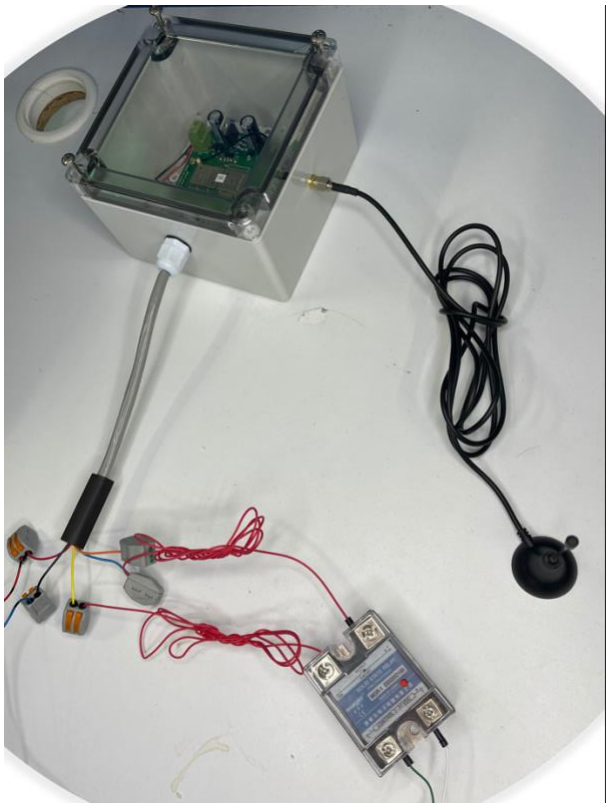
and must be connected respectively from the source (divisor, depositor, etc.) one by one. First the black one and then the red one



Once this step is complete, it will take approximately 15 seconds for the device to perform its power-on process. When the green LED is on, it means you are ready to ship.



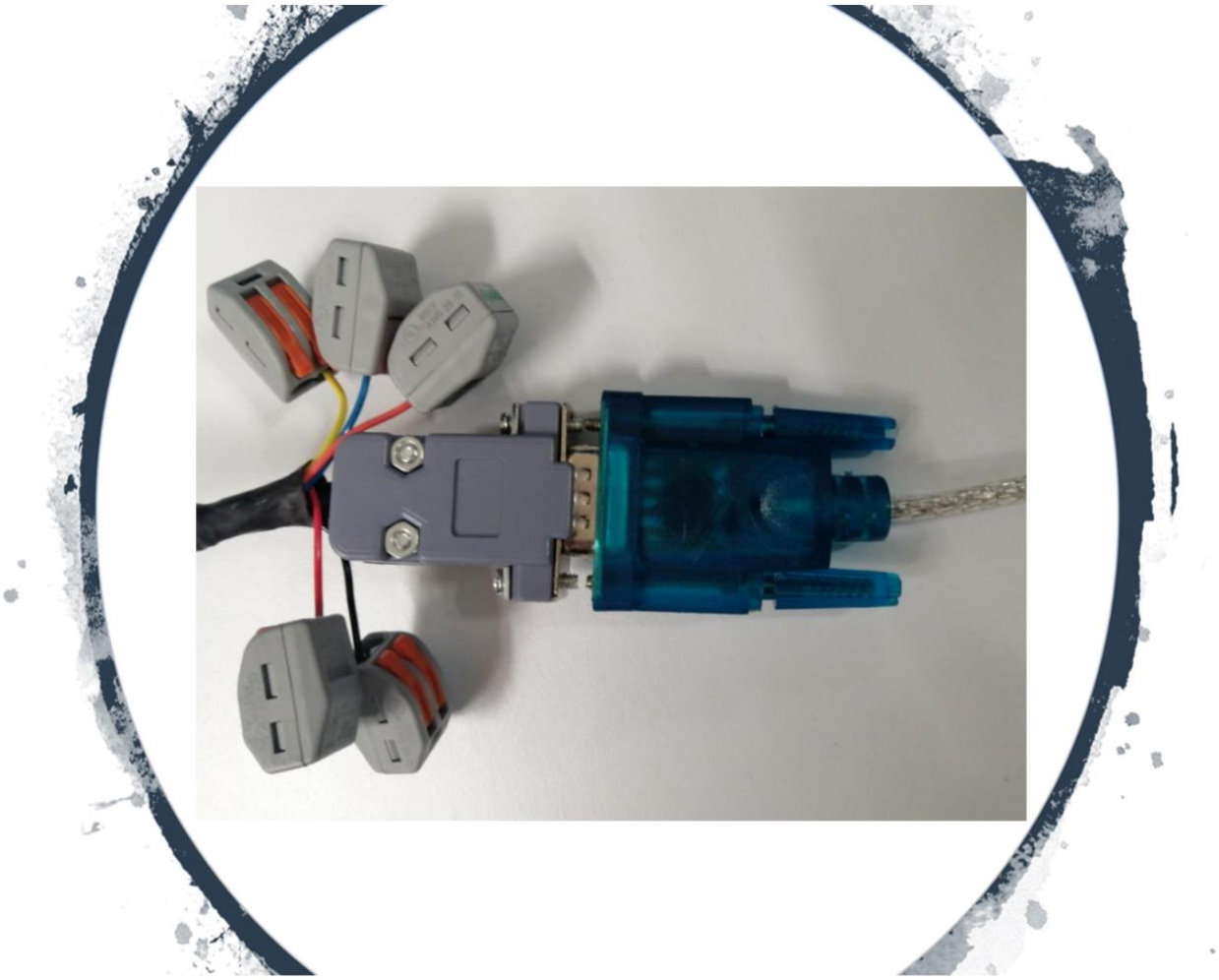
Properly installed Febo device:



3. RS232 DEVICE CONNECTION

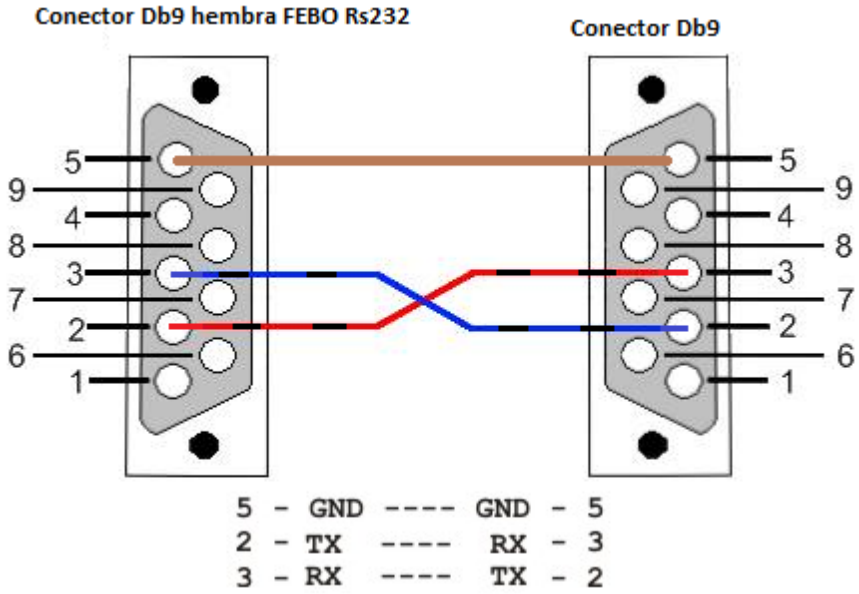
Verify that the device works correctly

1. Connect the db9 RS232 cable to its db9 male connector.



And it should simply be inserted as mentioned above. It would look something like this:

The connection between FEBO device and other device using RS232 must be like shown below:

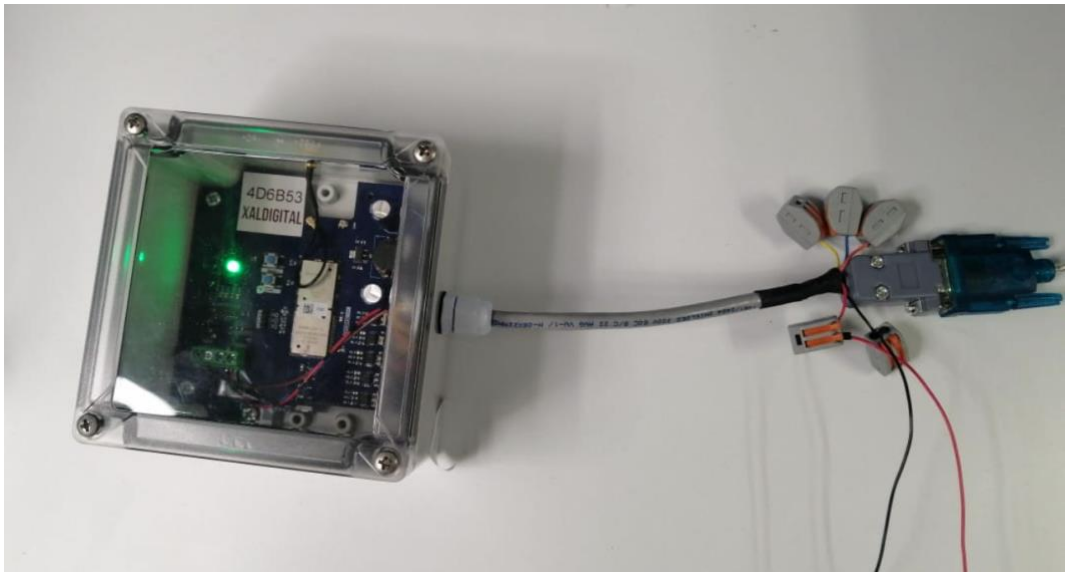


Connect the 2 connector cables to power. The FEBO device must be connected to an average 24v direct current power supply on the cables:

- positive
- 0Vcc

To achieve this, the caps (oranges) of the power connectors must be lifted: red (positive) and black (negative)

Once this step is complete, it will take approximately 15 seconds for the device to perform its power-on process. When the green LED is on, it means it´s are ready to ship.



4. USE OF THE DEVICE

How to know it´s working?

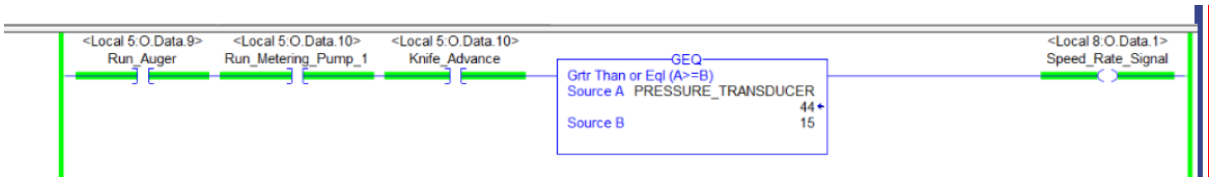
4.1 When the FEBO device is in read mode, the green light will be on.

4.2 When the light turns red means that it´s sending information

5. INSTALLATION TIPS

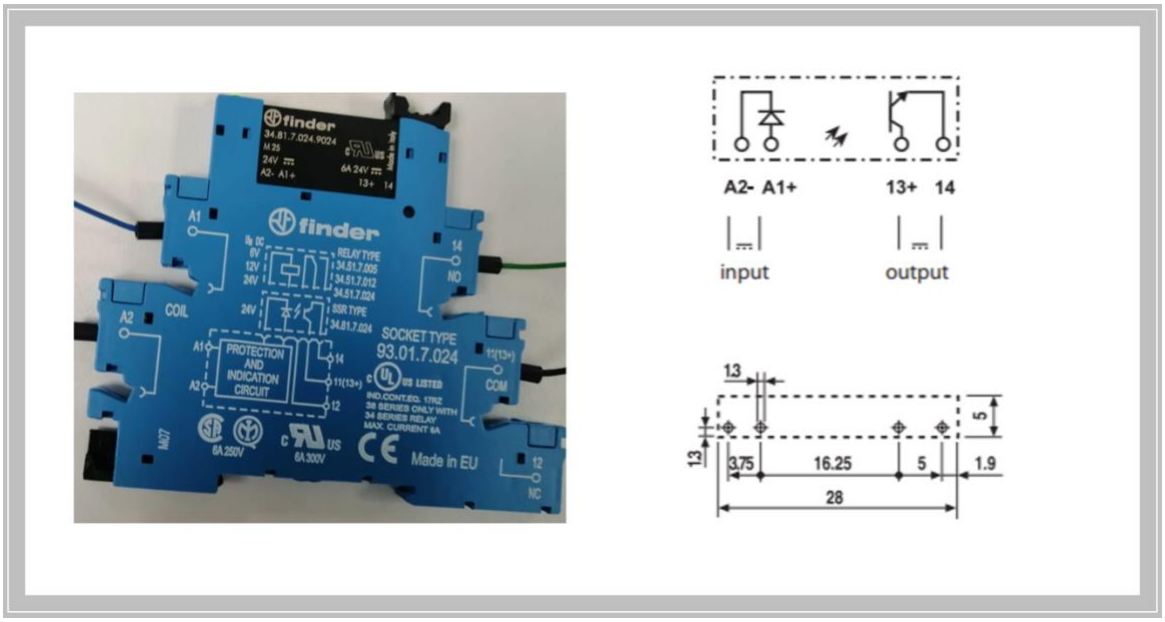
For a better FEBO device performance

- The device can be installed inside the electric boards because GSM antenna has a 1.3 m cable, which can get out easily and placed on top of the board
- Place junction box next to the device to host:
  - Electric switch
  - Relay
- Create a programming line for rhythm detection in the PLC of the equipment to be connected



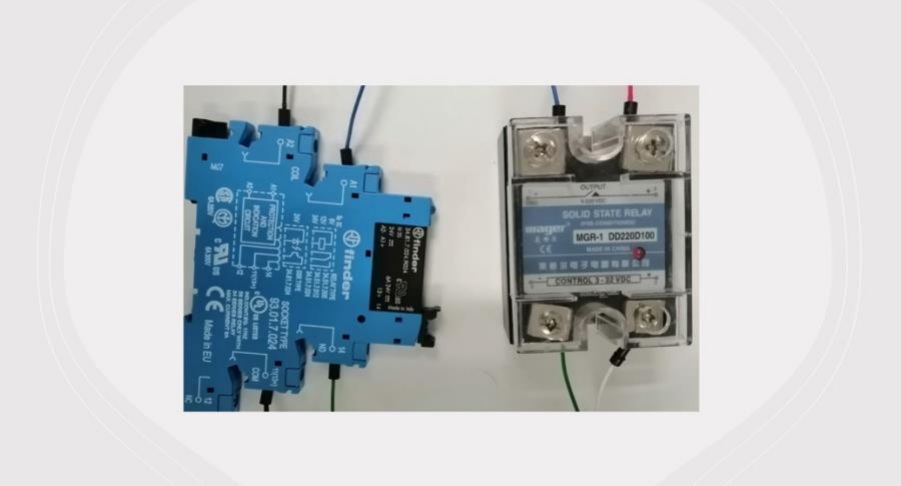
- Connect the relay and device plugs as indicated in the manuals.

Explainer video to connect your relays: https://bit.ly/2O2or2D



- Place the Sigfox micro-station in an open area close to as many Sigfox devices as possible
- Use 12-gauge cable, no more than 3 meters.

- Solid State Relay: for optimal operation of the manufacturer equipment, it is recommended to use solid state relays



- It is recommended to have a micro station with the signal of the devices (go to the micro station manual)
- Use insulating cable for noise protections

6. Specs

Technical specifications

5.1 FEBO IP66 / IP67 box: Dust protection 6 and Liquid protection 7 (submerging is not recommended)
NOTE: The IP degree of protection refers to an effective system to classify the different degrees of protection provided to them by the containers that protect the components that make up the equipment.

5.2 GSM antenna: It must not be handled or used on equipment other than FEBO, as it may be damaged or may damage the FEBO device.

CONTACT

Technical Support

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