**FIG. 2 Connecting Roller Shutter to GATE motor**

**I. SPECIFICATIONS**

- **Power supply:** 110 - 240 V AC
- **Power consumption:** up to 0,8 W
- **Operational temperature:** 0 - 35°C
- **Dimension:** 3,5 x 8,1 x 24,9 cm
- **Rated input current:** 4,8 A for tolerance and reliable load
- **Range:** 1,7 m indoors, up to 3 m outdoors

**DANGER**

- **DANGER of electrocution!** Even when the device is powered off, the voltage may be present at its terminals. Always disconnect power supply before performing any maintenance or repair works to avoid dangerous voltage levels.

- **CAUTION:** Make sure the module is connected to the power supply and the device is configured to communicate with the Z-Wave network.

- **Warning:** The module goes into the auto inclusion mode, until any button is pressed.

**II. TECHNICAL INFORMATION**

- **FIBARO Roller Shutter 2 is a universal, 2-Wire, Z-Wave compatible, electric control unit. The device allows for controlling motors of window awnings, roller blinds, venetian blinds, gates and others, which are single phase AC (50/60 Hz) motors. FIBARO Roller Shutter 2 allows for precise positioning of a roller blind or venetian blind slats. Precise positioning in available in the operating modes for motors equipped with mechanical and electronic limit switches.**

**III. SUPPORTED LOADS**

- Lamp and movable load
- Inductive load

**IV. GENERAL INFORMATION ABOUT FIBARO SYSTEM**

FIBARO is a wireless smart home automation system, based on the Z-Wave protocol. During our operating experience, we have gained a lot of experience using this technology in our projects, including Z-Wave in a residential environment. The FIBARO system is an excellent tool for anyone interested in smart home automation.

**V. ROLLER SHUTTER INSTALLATION**

**TIPS FOR ARRANGING THE ANTENA**

1. Locate the antenna as far as possible from metal elements as possible interference sources. It’s recommended to position the device away from power lines or metal structures.
2. Install the antenna with due regard for the antenna’s optimal orientation. It’s recommended to position the antenna with the orientation to the window system.

**CALIBRATING SLATS POSITIONING IN VENETIAN BLINDS**

- **V. 2-WIRE NETWORK INCLUSION**
  - Make sure the module is connected to the power supply.
  - Connect the module to the power supply.
  - The module goes into the auto inclusion mode, until any button is pressed.

**VI. 2-WIRE NETWORK EXCLUSION**

- **VII. ROLLER SHUTTER RESET**
  - Make sure the module is connected to the power supply.
  - Connect the module to the power supply.
  - The module goes into the auto inclusion mode, until any button is pressed.

**CAUTION**

- **DANGER of electrocution!** Even when the device is out of power, voltage may be present at its terminals, while transportation voltage is present during configuration or transportation.
- **CAUTION:** Make sure the module is connected to the power supply, and the device is configured to communicate with the Z-Wave network.
- **Warning:** The module goes into the auto inclusion mode, until any button is pressed.

**X. OPERATING THROUGH THE Z-WAVE NETWORK**

After including into the 2-Wire network, FIBARO Roller Shutter will be automatically detected and included into the Z-Wave network (see Fig. 6). After choosing one of the above operating modes, device will be represented in Home Center 2 interface by icons shown in Fig. 6.

**XII. ASSOCIATIONS**

Through an association Fibaro Roller Shutter may control another 2-Wire network device, e.g. another Roller Shutter, Wall Switch, Dimmer, Roll-up/Shutter Control, etc.

**NOTE**

- **Warning:** The module goes into the auto inclusion mode, until any button is pressed.
- **CAUTION:** The module needs to be calibrated with any given motor.

**NOTE**

- **Warning:** The module goes into the auto inclusion mode, until any button is pressed.
- **CAUTION:** Venetian blind slats may be operated by momentum switches.
Fibaro Roller Shutter provides three association groups: FIBARO MAIN GROUP, SHUTTERS CONNECTED TO VENETIAN BLINDS and SHUTTERS CONNECTED TO MANUFACTURER.

Fibaro Roller Shutter allows for operating the devices associated in III association group by a button associated in I-st association group.

Parameter 14 settings. This parameter is used for controlling the main controller, it will try to establish a routed connection, through the main controller, without blinking.

Fibaro Roller Shutter uses the Protection Command Class v2 to report the module status. Only one device per channel can be connected to Q1 and Q2 terminals according to Fig. 2. In any other mode, the parameter value is not relevant.

33. Response to temperature alarm

- 1 Open blind.

Default setting: Parameter size: 1 [byte]

35. Managing stats in response to alarm.

In Venetian Blind Mode (parameter 10 set to 2), the parameter 17 is used for managing stats in response to alarm. In any other mode, the parameter value is not relevant.

- 0 No change data position - data return to the last set position.

Default setting: Default setting: Parameter size: 1 [byte]

POWER AND ENERGY REPORTS SETTINGS:

40. Power reports.

The module will send a new power report every 60 seconds. The parameter defines a period after which an open blind action must be performed. In any other operating mode the parameter value is irrelevant.

Available settings:
- 0: 60 seconds
- 1: 120 seconds
- 2: 3600 seconds
- 3: OFF

Default setting: Parameter size: 1 [byte]

41. Power threshold.

Available settings: 1455 (1455 seconds)

Default setting: Parameter size: 1 [byte]

42. Periodic power or energy reports.

Available settings: 1455 (1455 seconds)

Default setting: Parameter size: 1 [byte]

43. Energy reports.

Energy level change which will result in new energy value report being sent. The parameter defines a period after which an open blind action must be performed. In any other operating mode the parameter value is irrelevant.

Threshold value: 0.5 [byte]

Default setting: Parameter size: 1 [byte]

44. Self-measurement

A Roller Shutter may include power and energy used by itself in the hourly reports. The parameter defines a period after which a self-measurement is performed.

Available settings: 0, 60, 120, 240, 360, 720, 1440, 2880, 10080

Default setting: Parameter size: 1 [byte]

SCENES AND ASSOCIATIONS SETTINGS:

50. Scenes / Associations activation.

A scene may be activated by one or more association scenes or are activated by the switch keys.

Available settings: 0 Scene activation

Default setting: Parameter size: 1 [byte]

X. GENERATION

Refer to the product user manual for detailed information.

This Device may be used with all devices compatible with ZigBee Smart Home 2 and all devices compatible with ZigBee Smart Home 3.

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
   a) This device may not cause harmful interference, and
   b) This device must accept any interference received, including interference that may cause undesired operation.

2. This device must accept any interference received, including interference that may cause undesired operation.

3. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
   a) Reorient or relocate the receiving antenna.
   b) Increase the separation between the equipment and receiver.
   c) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
   d) Consult the dealer or an experienced radio/TV technician for help.

4. The product is not a toy. Keep away from children and animals!

5. This Device may be used with all devices compatible with ZigBee Smart Home 2 and all devices compatible with ZigBee Smart Home 3.