

Qbus Wireless Zigbee relay (QWZ-REL02/230)



Figure 1 Photo QWZ-REL02/230

1. Product description

The QWZ-REL02/230 is a component of Qbus' wireless range. This allows you to implement a Qbus system even in a traditionally wired installation. The QWZ-REL02/230 is a dual relay module with wireless control using the Zigbee protocol. It can be built into a standard recessed box. This module can switch small loads such as lighting fixtures.

After being added to SMIII using its unique serial number, the QWZ-REL02/230 can be linked to the Qbus Wireless Interface with Zigbee protocol (QWI/ZB) through the built-in push button. A green LED is provided to indicate the configuration status. Additionally, you can directly control the relays using 1 or 2 connected push buttons that are under power. The two relay contacts directly switch the connected power to the connected load(s).

If a voltage-free contact is desired or heavy loads need to be switched, you need to provide an additional relay/contact that is energized by this module. The inputs are always connected to the two relay outputs. The inputs cannot be used to activate scenes or modes other than those compatible with relay outputs.

Thanks to the connection with the Qbus controller via QWI/ZB, numerous applications and configurations are possible. This allows for various control options within the Qbus system, as well as online control with, for example, Qbus Control.

The Zigbee relay can function with directly connected push buttons before being linked to QWI/ZB, but it will only support a bistable function in that case. Even when the module is out of range of the Zigbee network, it will only support a bistable function..

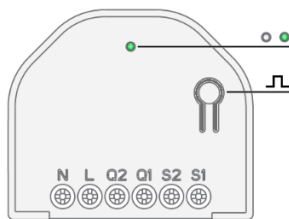


Figure 2 Detail LED-indication and push button

2. Safety Instructions



Read the complete manual before installing and activating the module.

ATTENTION

- Do not open the module. Warranty will be void if the module is opened!
- Do not connect higher loads! Respect the indicated power rating on the device.
- Provide necessary protection against overload and short-circuit.
- Ensure there is no interference with the wireless connection. Do not install the module in a distribution box, in a metal enclosure, or in close proximity to large metal objects.
- Always adhere to electrical regulations.
- Qbus is not liable for any damages resulting from improper handling or misuse of the module.

3. Installation & wiring

Installation: Place the QWZ-REL02/230 in a suitable fireproof and dry enclosure, such as a recessed box or junction box. There should be at least 10mm of free space around the module to allow for proper heat dissipation.

ATTENTION! Before making the module inaccessible, ensure it is paired with the QWI/ZB!

Power Supply: The module operates on a voltage range of 100Vac-240Vac and must be protected by a two-pole automatic fuse of maximum C6A. Strip about 5mm of insulation from the conductor and screw it into the N-L connectors. Connect the first load to Q1 and the second load to Q2. If desired, push buttons can be connected to inputs S1 and S2.

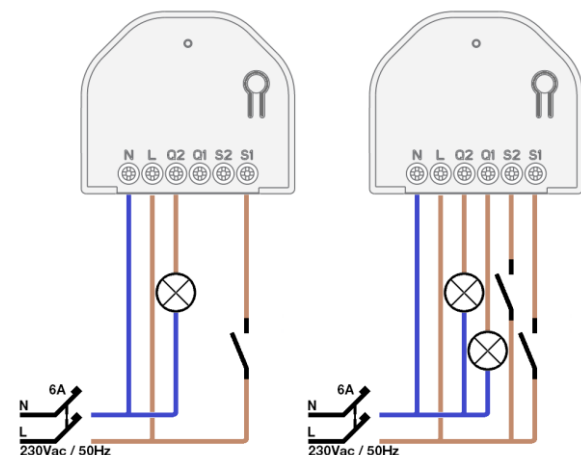


Figure 3 Connection options

4. Commissioning

1. Once the module is connected and power is applied, and both the QWI/ZB and System Manager are accessible, you can begin the configuration.
2. In System Manager III (SMIII), navigate to "Modules," enter the serial number of the QWZ-REL02/230, and assign the desired outputs. Follow the instructions in System Manager III to pair the module with the QWI/ZB module.
3. To put the module in pairing mode, press and hold the push button for at least 5 seconds until the green LED starts blinking rapidly. The module will remain in pairing mode for approximately 30 seconds from that point. The LED should blink at the same repeated fast pace.

- Using the "Remove from network" button in SMIII

OR

- Press and hold the built-in push button until the LED blinks slowly and then release it. The module will now enter configuration mode again. This can be indicated by the faster blinking pace of the LED.

- Bistable (with On/Off delay)
- Timer 1 (Reminder timer)
- Timer 2 (Staircase timer)
- Timer 3 (Lazy timer)
- Interval
- Timer 4 (Master / Slave)
- Thermostat (Heating; Cooling; Turbo; Alarm)

When directly controlling via connected push buttons, you are operating the device in Stand-Alone mode and, if it is linked to a Zigbee network, it will transmit its status to that network.

5. Troubleshooting

- Check if the wireless connection in the installation is not disrupted between this module and the QWI/ZB.
- Verify the configuration of the QWI/ZB and whether the link with this module is still active.
- Ensure that other wireless devices operating on the same frequency or those working in close proximity do not interfere with the operation of this product.
- If the distance between the module and the QWI/ZB is too great, bring the module closer to the QWI/ZB to establish a connection.

- The module switches on or off at the wrong time.
- The relay engages for a short period and then automatically disengages.
- The module does not respond to any control, and there is a good reception between the QW1/ZB and this module.

In this case, consider resetting the module and re-pairing it with the QWI/ZB using System Manager III.



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6. Technical data

General Specifications

- Power Supply: 100-240V AC / 50 Hz •
- Modulation Encoding: FSK •
- Wireless Protocol: Zigbee 3.0 •
- Range to and from QWI/ZB:
 - Open field: 50m
 - Indoors: 20m •
- Operating Temperature: -20°C to 60°C •
- Maximum Humidity: 93%, non-condensing •
- Maximum Installation Altitude: 2,000 meters above sea level

Maximum Switched Power

Type	Maximum Power
Resistive Incandescent lamp, halogen lamp, ...	6A / 1380VA
Inductive: (Halogen lamp with transformer minimum 85% loaded)	2.6A / 600 VA
Non-compensated or series-compensated fluorescent lamps with ferromagnetic ballast	2.6A / 690 VA
Parallel compensated fluorescent lamps with ferromagnetic ballast	2.6A / 600 VA
Capacitive EB: Electronic ballast, electronic transformer, ...	4A / 920 VA

Physical Specifications:

- Protection Level: IP20
- Dimensions: 45x39x19 mm

CE Marking:

- Qbus declares that this product complies with all relevant European directives and regulations.
- The EU Declaration of Conformity can be accessed on our website www.qbus.be.

7. Sizing diagram

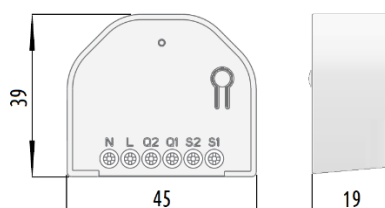


Figure 6 REL04SA Measurements

8. Declaration of symbols



Before connecting the device, it is mandatory to read the manual of the respective product. ISO7000-0434



Intended for indoor use only. IEC 60417-5957



Do not dispose of electronic products through the general waste stream. Directive 2002/96/EC



Grid connection (230V) on power connector. IEC 60417-5036



CE compliance. All declarations of conformity are available upon request.

9. Warranty provisions

Warranty Period: 2 years from the date of delivery. The warranty is void if the module has been opened!

Defective modules must be sent to our service department without any broken seals, along with a description of the defect:

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