

COMPUTHERM Q1RX

**Wireless (Radio-Frequency)
Thermostat-Controlled Socket**



NEW, IMPROVED VERSION

Operating Instructions

1. GENERAL DESCRIPTION OF THE SOCKET

The **COMPUTHERM Q1RX** socket has been developed for thermostats **COMPUTHERM Q3RF, Q5RF, Q7RF** and **Q8RF**, and can be used in addition to/instead of their receiver units. The device is able to control boilers or any other electrical devices operating on 230 V (e.g. fan heaters, pumps, zone valves, etc.). Easy installation and operation, no assembly required. In response to the ON command of **COMPUTHERM Q3RF, Q5RF, Q7RF** and **Q8RF** wireless thermostats, a supply voltage of 230 V appears on the output socket of device **Q1RX** connected to the network, while the OFF command disconnects the device from the network. If more than one **COMPUTHERM** thermostat has been paired to the **Q1RX** socket, 230 V will be displayed on the output if any

thermostat sends an ON signal and the output will only turn off if all thermostats send OFF signal to the socket.

2. PUTTING THE SOCKET INTO OPERATION

It is advisable to install the **COMPUTHERM Q1RX** socket near the device to be controlled, in a place protected from moisture, dust, chemicals and heat. When choosing the location of the socket you should remember that bulky metal objects (e.g. a boiler, buffer tank, etc.) and metal building structures may have an adverse effect on propagation of radio waves. If it is possible, in order to ensure trouble-free RF connection, we recommend that you install the receiving unit at a height of 1.5 to 2 m and at a distance of 1 to 2 m from the boiler or other bulky metal constructions. We recommend that you check reliability of RF connection at the place selected before installing the receiving unit.

ATTENTION! Do not install the socket under the housing of the boiler or near hot pipes because it may damage the parts of the device or compromise wireless (radio-frequency) connection.

WARNING! Modifying the socket can cause electric shock or product failure.

Plug the **COMPUTHERM Q1RX** device into a power socket near the location of the device to be controlled. A few seconds after the LED lights of the device flash once, the device becomes ready for operation. After this, you can start tuning the socket and the thermostat(s) (or the socket, the receiver of the thermostat and the thermostat) together.

3. TUNING THE SOCKET AND THE THERMOSTAT(S) TOGETHER

ATTENTION! If you wish to use the **COMPUTHERM Q1RX** socket in addition to the receiver unit of the thermostat, then the socket, the receiver of the thermostat and the thermostat should be tuned together at the same time, so that they can operate simultaneously.

ATTENTION! The socket can be paired with up to 12 separate **COMPUTHERM** wireless thermostats at the same time. If you do not want a particular thermostat to control the socket, pair the thermostat with another **COMPUTHERM** wireless device or reset the socket.

Press the “**ON/OFF**” button of the socket (for approximately 10 seconds) until the green LED light starts flashing. If you also wish to use the receiver unit of the **Q3RF, Q5RF, Q7RF** or **Q8RF** thermostat,

then start the tuning process on that receiver unit too, as described in its manual, so that its green LED light (or red LED light in case of the receiver of the **Q5RF** or **Q8RF** thermostat) starts flashing. After this, tune the devices together according to the manual of the thermostat. If the LED lights stop flashing, then the devices are tuned together.

If you want to pair more than 1 thermostat with the socket, then repeat the previous steps with the other thermostats too. If you have reached the maximum (12) synchronizable product limit, then the red and green LEDs on the product will flash alternately 3 times after pressing the „**ON/OFF**” button for 10 seconds. In this case, to pair a new thermostat, the socket must be reset by pressing the „**ON/OFF**” and „**Manual**” buttons together for 10 seconds. Both LEDs will then light up for 2 seconds to indicate that the socket has been reset and synchronization of the new thermostats can begin.

Attention! When reset, both the Off and On delays return to the off state.

4. DELAY OF THE OUTPUT

When designing heating zones - in order to protect the pumps - it is advisable to keep at least one heating circuit that is not closed by a zone valve (e.g. bathroom circuit). If this is not made, in order to prevent the heating system from an event in which all heating circuits are closed but a pump is switched on, the socket has two types of delay function.

Turn on delay

In turned on state, if the output of the socket is switched off, in order to open the valve(s) of the given heating circuit before starting the pump, the socket output switches on after a delay of 4 minutes from

the switch-on signal of the first thermostat. During this time, the valves open and then the pump connected to the socket starts. The delay is especially recommended if the zone valves are opened/closed by slow-acting electrothermal actuators, because their opening/closing time is approx. 4 min. If the socket output is already switched on, the Turn on delay function will not be activated when the additional thermostats switch on.

The active state of the Turn on delay function is indicated by the green LED flashing with 3-second intervals.

If the „**MANUAL**” button is pressed while the Turn on delay is active (green LED flashes with 3-second intervals), the LED stops flashing and indicates the current operating mode (Automatic/Manual). Press the „**MANUAL**” button again to change the working mode. After 10 seconds, the green LED continues to flash with 3-second intervals until the delay stops.

Turn off delay

In the activated state, if the output of the socket is switched on, in order to keep the valve(s) open of the given heating circuit during the pump circulation, the output of the socket switches off after a delay of 6 minutes from the switch-off signal of the last thermostat. The delay is especially recommended if the zone valves are opened/closed by quick-acting motorized actuators, as their opening/closing time is only a few seconds. Activating the function in this case ensures that the heating circuits are opened during the circulation of the pump and thus protects the pump from overload. The function is only activated if the last thermostat sends a switch-off signal to the socket.

The active status of the Turn off delay function is indicated by the red LED flashing with 3-second intervals while the red LED is still lit.


Activating/deactivating of the delay functions

To activate/deactivate the Delay on and off functions, press and hold the “**MANUAL**” button on the socket for 5 seconds until the red and green LEDs flash three times alternately. You can activate/deactivate the functions by pressing the “**ON/OFF**” and “**MANUAL**” buttons. The green LED shows the Turn on delay status, while the red LED shows the Turn off delay status. The function is activated when the corresponding LED is lit.

To save the settings and return to the default state wait 10 seconds. After that the green and red LEDs will flash alternately three times and the socket will resume the normal operation.

Attention! By pressing the “**ON/OFF**” and “**MANUAL**” buttons together for 10 seconds, the socket resets to the factory default state, which also resets both delay functions to the off state.

5. TRANSMISSION DISTANCE INSPECTION

With the help of the “**TEST**” button you can check whether the thermostat and the socket are within the transmission distance of the radio-frequency connection. To perform the test, press the “**TEST**” button for approximately 2 seconds. Following this, the thermostat will send, alternating every 5 seconds, switch-on and switch-off control signals for 2 minutes (the  signal appears and disappears alternately on the display). If you want to use the Q1RX socket with a wireless **COMPUTHERM** room thermostat that does not have a „**TEST**” button, first press the + and - buttons to set the desired temperature higher than the room temperature and then lower it after 5 seconds. When detecting the **ON** and **OFF** control signals, the red LED on the socket switches on and off, respectively. When it fails to receive the signals sent by the thermostat, then it is outside the transmission distance of the wireless (radio-frequency) transmitter, thus they have to be placed closer to each other or use a

COMPUTHERM Q2RF signal repeater to increase the communication distance of the thermostat.

6. MANUAL CONTROL OF THE SOCKET

Pressing the “**MANUAL**” button separates the thermostat(s) from the socket. In this case, the device (e.g. pump) connected to the socket can only be turned on and off manually, without any temperature inspection. The continuously illuminated green LED indicates “**MANUAL**” mode. Pressing the “**ON/OFF**” button switches on or off the connected device. (The red LED is illuminated when the output is switched on). By pressing the “**MANUAL**” button again, the socket quits manual control and resumes automatic (thermostat-controlled) operation (the green LED goes out).

Warning! The manufacturer does not assume responsibility for any direct or indirect damages and loss of income occurring while the appliance is being used.

7. TECHNICAL DATA

- **Power consumption:** 0,01 W
- **Power supply voltage:** 230 V AC, 50 Hz
- **Output voltage:** 230 V AC, 50 Hz
- **Loadability:** 16 A (4 A inductive load)
- **Operating frequency:** 868.35 MHz
- **Duration of activable
Delay on function:** 4 minutes
- **Duration of activable
Delay off function:** 6 minutes
- **Protection against
environmental impacts:** IP30
- **Weight:** 108 g
- **Dimensions (L x W x D):** 53 x 53 x 90 mm
- **Storage temperature:** -10 °C to +40 °C

The **COMPUTHERM Q1RX** type wireless thermostat-controlled socket complies with the requirements of directives RED 2014/53/EU and ROHS 2011/65/EU.



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