HOW TO CONTROL PUMP OR BOILER WITH MULTIPLE SHELLY TRV DEVICES

It is often the case in many houses that the hot water pump or boiler has to be switched off when all radiators and heating circuits are closed. This leads to additional energy savings. When we have separate wireless devices in all rooms, they must work simultaneously by sending a signal to the central heating system so that it can turn the pump on and off depending on the condition of all of them.



Shelly TRV and Shelly1 for pump/boiler control

To make this decision, you need a ShellyTRV connected to each radiator and a Shelly1 or ShellyPlus 1, which is connected to the central heating system, according to one of the diagrams below.

How to set Shelly TRV to control Shelly1

Each Shelley TRV can execute HTTP commands to another device on two criteria.

- 1. When the Valve is fully closed This action is performed once, each time the Shelley TRV closes completely and stops the water to the radiator.
- 2. When the Valve is partially or fully open This action is performed every 5 min automatically when Shelly TRV is open at any percentage.

You can set these 2 actions to work through the local interface of the device or through the Shelley Cloud app.

Shelly TRV	● 🗢 🔒	Time: 15:12
Fitness		
தி 20.0 °C		
∂ [‡] 20.2 °C	Disabled	â 33 %
	• •	
		(i)
Sensor Settings Weekly schedul	v Internet & Actions e Security	Settings
6	Actions	
	ED I	~
Enabled		
Valve is opened. This will be repeated every 5 minutes while the valve is partially or fully opened.		
http://	From: 12:00 AM ()	To: 12:00 AM (S)
More than 2 actions can affe the controlled devices.	ct the normal operation of the device depending on	the network infrastructure and
+	ADD	
~	SAVE	
UALVE CLOSE	ED I	~

- You need to find the IP address on the Shelly1 in your local network
- To enable Valve Open and Valve Close Actions
- Enter and Save in Valve Open Action: <u>http://Shelly1-IP/relay/0?turn=on</u>
- Enter and Save in Valve Close Action: <u>http://Shelly1-IP/relay/0?turn=</u>off

This way, every time a radiator closes completely, the Shelley 1 will turn off its outlet, but if another radiator is open, it will turn it on shortly thereafter. This will not affect the operation of the pump or boiler, because the maximum time in which they will be turned off is 5 minutes during which the radiators and heating system will have enough hot water so that there is no change in temperature.

How to wire Shelly1 to your PUMP

Connecting the Shelley 1 to a pump is easy, usually simply interrupting and switching on the current to it.



How to wire Shelly1 to your Boiler

It can be used with the following LOW VOLTAGE system protocols for digital control or AC 110-230V VOLTAGE system.



How to wire Shelly1 to your OpenTherm protocol with AddON

If you have an OpenTerm Boiler, you need to use ShellyPlus1 Add-on and enable in settings OpenTerm control. This feature will be supported from March 2021.