

Hot Water control using a Genius Radiator Valve stops working

How is hot water controlled by a Genius Radiator Valve

Some heating systems treat the hot water tank in a similar fashion to a standard radiator. Rather than use zone valves to separate the flow of water from the boiler into heating and hot water, the flow of water goes to both all of the time the boiler is running. This is common in Irish heating systems and some older UK systems, where installing zone valves was not ideal due to the extra electrical works required.

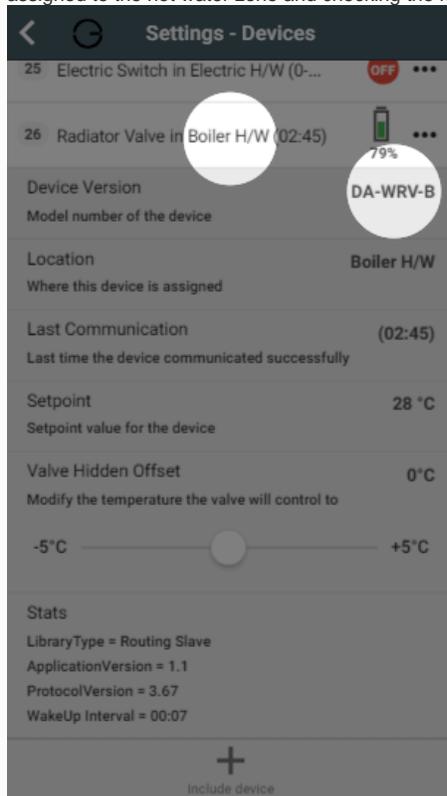
A Genius Radiator Valve is fitted on the flow to the hot water tank, similar to a radiator to control when hot water flows into the hot water tank, and heats the hot water. Instead of the temperature being measured by a Genius Room Sensor, an [Electric Switch with Temperature Probe](#) is used to detect the temperature of the hot water tank and this temperature is used by the Genius Hub to determine whether to open the flow of hot water to the tank.

Why this stops working

If a Genius Radiator Valve (DA-WRV-C, supplied on the Genius Hub website) is used to control the flow of heat to the tank, this solution will work well in all cases as we specifically configure these devices to open and close the plunger, rather than react to the ambient temperature in the hot press/hot water cupboard.

However sometimes a Danfoss Radiator Valve (DA-WRV-B, can be purchased from other websites) is installed by the plumber. These devices do not contain our firmware and so we are unable to turn off the temperature measurement and control on these devices. This means that if the hot press were to get above 28°C (the maximum temperature a Danfoss Radiator Valve controls to), it will shut off the flow of water, irrespective of the temperature of the hot water tank. This scenario occurs in very warm Summers or when the hot water tank has been heated for a long period of time, and so the air in the cupboard has also heated up.

 You can check to see which model of Wireless Radiator Valve you have fitted on the Devices Page, by locating the Wireless Radiator Valve assigned to the hot water zone and checking the model number by tapping on that row.



For more information on the difference between the Wireless Radiator Valves, see [this page](#).

How can this be fixed

The only way to ensure that the hot water tank is always able to receive hot water, irrespective of the temperature of the hot press is to install a [Genius Radiator Valve](#), as these contain our firmware and so the ambient temperature control can be turned off.

As a short term fix, the Danfoss Radiator Valve can be put into Mount Mode, which will disable the temperature sensing and fully retract the plunger for 1 hour.



Whilst in Mount Mode, the Danfoss Radiator Valve will stop communicating with the Genius Hub and so an error will appear on the My House page. Once the Danfoss Radiator Valve exits Mount Mode, it will re-establish communication with the Genius Hub.

Related Information:

- [How to - Remove and refit the Genius Radiator Valve](#)
- [Is my Genius Radiator Valve working correctly?](#)
- [Genius Radiator Valve responding slowly to change in temperature on the app](#)
- [Adjustments you can make with our Genius Hub Devices to fine tune your setup](#)
- [Controlling a Plinth Heater](#)