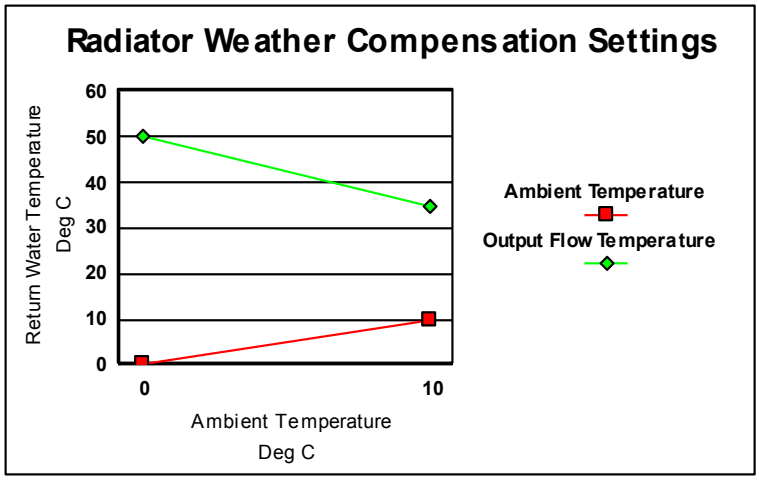
Weather Compensation of Kensa Heat Pumps V1

All Kensa Compact Heat Pumps are supplied with *Weather Compensation* as standard. This function will reduce the return water set-point against a schedule of external ambient temperatures. In more simple terms, the temperature of water flowing into the building's radiators or underfloor heating is reduced in mild weather, which allows the heat pump to run more efficiently. This is particularly important with radiators, as much higher temperatures are required. In cold weather, many people already turn up the temperature of water flowing from their boiler by hand and are therefore weather compensating their heating system manually.



The weather compensation developed by Kensa for use in their heat pumps is very sophisticated as it uses actual temperatures. Weather compensation is largely unknown on North American heat pumps. Increasingly, condensing boilers are also becoming available with weather compensation, as they need to keep the flow temperature down as low as possible, just like heat pumps. In other countries, such as Sweden for example, there is no off-peak electricity, so heat pumps are run in weather compensation mode at all times.

In the UK, the use of banded tariffs such as Economy 7, or more especially Economy 10, makes the use of weather compensation on heat pumps unlikely to give any significant cost savings and can actually increase the cost of running a heat pump. This is because during a banded and cheaper rate of electricity it is desirable to run the heat pump at its maximum heat output so that as much heat is forced into the building as possible, whilst being careful not to overheat it in milder weather. For this reason, Kensa Heat Pumps are supplied with this function disabled in the software. To enable weather compensation on the heat pump you can contact our Technical department, who can run through the reprogramming procedure.

Facts at a glance:

Weather Compensation Function—All Kensa heat pumps are provided with weather compensation as standard. This function will reduce the return water set point against the outside ambient temperature.

Off-Peak Tariffs—The use of off-peak tariffs negates the need for weather compensation as it is desirable to run the heat pump at its maximum heat output to add energy to the screed in which the underfloor is installed.

Kensa Heat Pumps—The weather compensation function is disabled within all Kensa heat pumps, but can be enabled remotely by Kensa's Technical Department.