

Technical Bulletin

Installation Advice: Greenstar Compact & Greenstar i ErP pump mapping for Combi & System boilers

Boiler Menus 2.1C, 2.1H, 2.1J & 2.1d

On heating systems with high pressure drops such as those piped with micro-bore, or larger heating systems that require a constant higher pump head pressure to maintain good circulation, the circulating pump within the boiler can be mapped so that it maintains a constant high speed which should help to ensure circulation around the entire system.

An external bypass may be required to prevent system noise if TRVs are fitted to the radiators as the pump, once mapped, will no longer be able to modulate to match system pressure requirements.

Menus **2.1H** & **2.1J** are not included in the Greenstar i ErP installation manuals; however, they are active in the boiler menus. The manuals will be updated to include this information. You must reference the relevant manual to understand how to navigate the boiler menus.

For Greenstar Compact Combi, Greenstar i ErP Combi & Greenstar i ErP System appliances, the following menus are used:

2. 1C - Pump head select	 Selectable values for pump head. 0 = Variable speed
	 1 = Constant pressure low 2 = Constant pressure low/middle 3 = Constant pressure middle/high 4 = Constant pressure high

Fig. 1) Installation Manual extract of menu 2.1C

2.1H	Minimum pump speed (pump speed at maximum CH burner load)	This parameter is only visible when 2.1C is set to 0. Then the min.pump speed can be set.
2.1J	Maximum pump speed (pump speed at maximum burner load)	This parameter is only visible when 2.1C is set to 0. Then the max.pump speed can be set.

Fig. 2) Installation Manual proposal of menu 2.1H and 2.1J

To amend the modulation range of the circulating pump menu: 2.1C must be set to 0 = variable speed. The modulation range can then be set in menus 2.1H & 2.1J.

For systems with high resistance we would recommend that **2.1J** is left at **100%** and that **2.1H** is adjusted to at least **80%**.

If the values are set the same as each other, then the pump will not modulate; it will run at a constant speed. For large or very restrictive systems we would recommend that **2.1H & 2.1J** are both set at **100%**.

Greenstar i System Compact boilers have an additional menu; **2.1d** that needs to be set to **1** = **Min. and Max. speed can be changed manually**.

2.1d	Pump speed setting	This function is only available when
		parameter 2.1C is set to 0.
		1 = Min. and Max. speed can be
		changed manually
		2 - 7 = Constant speeds
		8 - 10 = Predefined min. and max.
		settings (speed depends on burner
		load)

Fig. 3) Installation Manual extract of menu 2.1d

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