

Flow 8500 Indirect HIU Specifier guide

Next generation now



Flow 8500 Indirect HIU **BESA 2023 test regime registered**

Meet the next generation of heat networks: the BESA 2023 tested and registered indirect HIU – the Flow 8500.

The Flow 8500 Indirect HIU is our cutting-edge heat network solution. A system designed to redefine efficiency and sustainability in heating infrastructure. Its innovative technology not only meets the demands of today's energy landscape, but also anticipates the needs of tomorrow, with a focus on a reliable design and performance.

This HIU ensures optimal heat distribution whilst reducing environmental impact. It is the future of energy efficient, community-centred heating.







Why specify the Flow 8500 Indirect HIU?



BESA Registered

BESA 2023 regime test registered, designed for the most energy efficient heat networks.



Improved VWART

More energy efficient due to reduced VWART performance.



Reduced return temp.

Our new precision temperature sensors ensure high performance, accurate control and overall network efficiency.



Reliable design and performance

Built to withstand the demands of future heat networks.



On Demand DHW

Improved domestic hot water response time whilst maintaining HIU efficiency.



DHW peak performance

Perfect for multiple use, without disturbance to the flow rate, even at peak times.

Future-proof your project **Decarbonise with ease**



The Flow 8500 Indirect HIU has been rigorously tested to meet BESA 2023 test regime and standards. This means on demand domestic hot water (DHW) with our improved 'keep warm' function due to variable opening valves that adapt to the installation situation.

New precision temperature sensors ensure high performance and accurate control at very low flow rates. Upgraded thermal insulation also helps reduce thermal heat loss and improved VWART performance makes this HIU more efficient.

Why choose Bosch?



Reliable heating

Enjoy peace of mind from a brand you can trust, with BESA registered products.



Tried and tested

Our HIU's are built to last with a proven track record of reliable operation in projects across Europe.



Project support

Our experts will be there every step of the way. From planning, design, installation and technical support.

2 Introduction 3

Installation flexibility



The Flow 8500 is assembled to the highest quality and utilises state-of-the-art manufacturing controls and assurance to ensure peace of mind for customers and residents.

Production Engineer

Wet temperature sensors

Enhances control performance that ensures consistent low return temperatures, especially under more demanding low flow conditions.



Smart software

Increased flexibility over temperature set points offering improved predictive control, helping you meet the standards required of modern low temperature, high performance heat networks.



More insulation

Keeping heat losses to a minimum is essential for every component of a heat network that's why we have further improved the level of insulation for key sections of the HIU.



Better valve authority

We've upgraded our valve control to meet the new 0.5kW heating test introduced by the BESA 2023 test regime, to increase efficiency in low temperature heat networks.



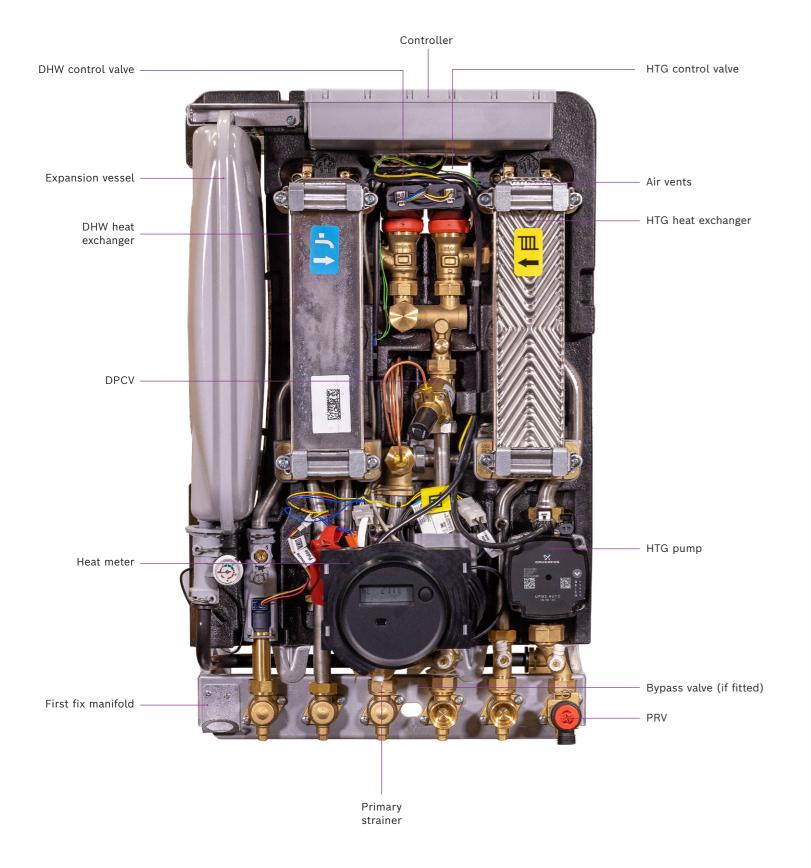
Improved plate heat exchanger

Our high-performance plate heat exchangers are proven to meet many of the best practice requirements under the BESA 2023 Test Regime, ensuring your HIUs are optimised for low temperature heat networks.



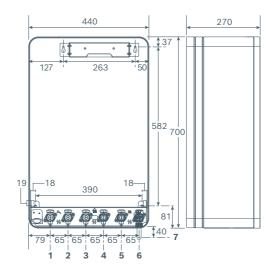
4 Features 5

Flow 8500 HIU The inside story



Flow 8500 HIU **Dimensions and clearances**

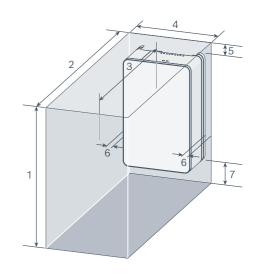
Dimensions and hydraulic connections



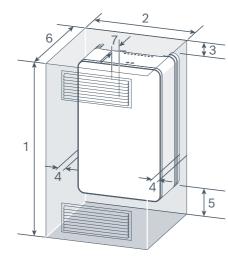
Key	Description		Connection (mm)	
1	Cold mains inlet	Cold mains inlet		
2	Domestic Hot Water	Domestic Hot Water outlet		
3	District heating supp	District heating supply		
4	District heating retur	District heating return		
5	Central heating flow	Central heating flow		
6	Central heating retur	Central heating return		
7	Pressure relief valve	Pressure relief valve		
Weight	(Excluding packaging)	26-27kg (model dependent)		
Weight (Including Packaging)		29-30kg (model dependent)		

Minimum installation and maintenance clearances

Key	Description	Dimensions (mm)
1	Overall clearance height	930
2	Overall clearance depth	870
3	In front of appliance	600
4	Overall clearance width	450
5	Above the appliance	30
6	Either side of appliance	5
7	Below the appliance	200



Minimum compartment clearances



Key	Description	Dimensions (mm)	
1	Compartment height	930	
2	Compartment width	450	
3	Above the appliance	30	
4	Either side of appliance	5	
5	Below the appliance	200	
6	Compartment depth	290	
7	Appliance to removable door	20	

Product data

HIU model	Part Number
Flow 8500 40	7 735 600 739
Flow 8500 40 H	7 735 600 740
Flow 8500 50	7 735 600 741
Flow 8500 50 H	7 735 600 742
Flow 8500 60	7 735 600 743
Flow 8500 60 H	7 735 600 744

Flow temperatures

	Flow 40, 50, 60
Maximum flow temperature of primary circuit	90°C
Maximum flow temperature of heating circuit	70°C
Maximum DHW temperature	60°C
Maximum operating pressure	10 bar
Maximum primary differential pressure	4.5 bar

Accessories

Product		Part Number
	Flow 8500 Pre Fix Kit Flat Faced Flow 8500 Pre Fix Kit Compression	7 735 600 837 7 735 600 836
	Vertical Plumb Kit Hiu (Compression)	7 733 600 127
	HIU Keyless Filling Link (Compression Fix Pack Only)	7 716 192 610
000	Bypass Valve (Summer Bypass)	7 733 600 132
0000	Flushing Valve (Compression)	7 733 600 133
	Flushing Valve (Flat Face)	7 733 601 142
	Accessory HIU Anti-Theft Fixings	7 733 600 281

Product		Part Number
	Greenstar System Filter Mini 22mm	7 733 600 266
	Greenstar System Filter 22mm	7 733 600 236
21: 4	Greenstar Sense II	7 738 111 064
PIO C	Greenstar Sense I	7 738 110 054
	Flow 8500 Water Hammer Arrestor	7 735 600 804
	Over temp shut off valve	7 735 600 808

Technical data

Primary Flow Temp (°C)	DHW Flow Rate (l/min)	Primary Flow Rate (l/min)	Primary Return Temp (°C)	Primary Pressure Drop (kPa)	Output (kW)
Flow 8500 60 - E	DHW Temp 50 °C				
55	9	10	20	25	25
55	12	14	22	47	33
60	9	9	17	17	25
60	12	11	18	30	33
60	15	15	19	49	42
60	18	18	20	70	50
70	9	7	14	11	25
70	12	9	15	18	33
70	15	11	16	28	42
70	18	13	17	40	50
70	21	15	18	53	58
80	9	5	11	6	25
80	12	7	12	11	33
80	15	9	12	18	42
80	18	11	13	26	50
80	21	13	13	36	58
Flow 8500 50 - E	OHW Temp 50 °C				
55	9	11	22	27	25
55	12	15	23	55	33
60	9	9	17	19	25
60	12	12	18	32	33
60	15	15	20	54	42
60	17	17	21	70	47
70	9	7	14	11	25
70	12	9	15	19	33
70	15	11	15	28	42
70	18	13	16	41	50
70	21	15	17	54	58
80	9	6	13	8	25
80	12	7	13	14	33
80	15	9	14	21	42
80	18	11	14	30	50
80	21	13	15	41	58
Flow 8500 40 - E	OHW Temp 50 °C				
55	9	13	27	61	25
60	9	9	20	26	25
60	12	13	24	67	33
70	9	7	16	15	25
70	12	9	17	26	33
70	15	11	18	42	42
80	9	6	15	12	25
80	12	8	16	20	33
80	15	10	17	32	42

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Dedicated support and expertise **Project team**

Our project team are on-hand at every stage, from feasibility to completion:

- ▶ Detailed design support in accordance with CIBSE CP1 (2020)
- ▶ Detailed evaluation of heat source options, feasibility and selection
- ▶ Design meetings and site visits
- ► Support with installation and commissioning
- ► After-sales and nationwide service engineers



Contact us to book your free, no obligation project consultation and site visit.



Website:

bosch-industrial.co.uk/directHIU



Phone:

03330 608 456



Email:

commercial.industrial@uk.bosch.com

Looking for a Direct HIU variant?

Our Flow 8000 Direct HIU is a perfect on-demand solution for heat networks where optimisation for low temperatures is required.



Complete heat network solutions **Plant room heating**

From the property to the plant room, we provide the complete heating solutions for your next heat network project.



Commercial boilers

Our commercial boilers are quick and easy to install with controls for reliable monitoring.

Wall-hung or floor-standing, our boilers come in a wide range of outputs from 50kW to 1MW and can be cascaded up to 8MW.



Commercial heat pumps

Available in outputs ranging from 16kW to 59kW (A-7/W35), our CS3000 commercial heat pump can be cascaded up to 16 units to achieve an output of up to 944kW (A-7/W35).

With the ability to be used for heating, domestic hot water and cooling, it is a versatile heat pump that can be used as standalone or as part of a hybrid system.



Industrial boilers

We provide a range of large peak load boilers to suit the needs of your heat network, including:

- Electric boilers, up to 10MW
- Gas and light fuel oil boilers up to 38MW

10 Project team Plant room solutions 11

Get in touch

Sales

Tel: 0330 123 9669

Email: commercial.industrial@uk.bosch.com

Technical Helpline (Pre & Post Sales)

Tel: 0330 123 3366

Email: technical-advice@uk.bosch.com

Spare Parts

Tel: 0330 123 9779

Email: spares.mailbox@uk.bosch.com

Controls Helpline

Tel: 0330 123 3641

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We would love to see your installations!

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Training

Install with confidence

Learn everything you need to know about our Heat Interface Units (HIU). We specifically tailor all our product training courses to meet your needs. Our hands-on course is ideal for those who want to specify and/or install HIU as part of a heat network/district heating system.

Supporting you

Our courses are here to support your installation from beginning to end. The Heat Interface Unit (HIU) training course covers:

- ▶ The fundamentals of a heat network
- Connections to the district heating, cold water, hot water and the space heating
- Operation, servicing and maintenance
- ► Fault finding including potential network issues
- We also provide CIBSE approved CPDs, helping you keep up to date with industry knowledge and trends.



Training

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