



Hiper Heat Interface Units

HIPER4510

HIPER6010

HIPER6015

HIPER7015

Data & Technical Specification

Indirect Heat Interface Units

HIPER4510 HIPER6010 HIPER6015 HIPER7015

General Data	HIU45	HIU60	HIU70
PRIMARY (heat supply from communal heat source) MAXIMUM PRESSURE	16 bar	16 bar	16 bar
PRIMARY (heat supply from communal heat source) MAXIMUM TEMPERATURE	90° C	90° C	90° C
PRIMARY (heat supply from communal heat source) MAXIMUM pressure differential.	4 bar	4 bar	4 bar
SECONDARY (central heating) MAXIMUM PRESSURE	3 bar	3 bar	3 bar
SECONDARY (central heating) MAXIMUM TEMPERATURE	85° C	85° C	85° C
SECONDARY (central heating) TEMPERATURE ADJUSTMENT	20°C to 85°C	20°C to 85°C	20°C to 85°C
DOMESTIC HOT WATER (including cold water supply main) MAXIMUM PRESSURE	10 bar	10 bar	10 bar
DOMESTIC HOT WATER MAXIMUM TEMPERATURE LIMITED by TMV	60° C	60° C	60° C
DOMESTIC HOT WATER TEMPERATURE ADJUSTMENT	30°C to 65°C	30°C to 65°C	30°C to 65°C
DOMESTIC HOT WATER OUTPUT	45kW	60kW	70kW
COLD WATER MAINS SUPPLY RECOMMENDED PRESSURE AT INLET TO THE HIU	2 Bar	2 Bar	2 Bar

Controller factory settings	HIU45	HIU60	HIU70
Domestic Hot Water Services	55°C	55°C	55°C
For Heating to radiators	60°C	60°C	60°C
Central Heating Optimiser AUTO	ON	ON	ON
Instant Response (Timed Trickle at 2 minutes, interlude 20 minutes)	ON	ON	ON
Prepayment Billing function	OFF	OFF	OFF

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Main components	
SECONDARY circulating pump	<p>Wilo Yonos Para RKA 15/7 RKA Variable Pressure Head regulation Constant Pressure Head regulation Air removal commissioning function.</p> <p>or option;</p> <p>Wilo Yonos Para RKA 15/7 RKC Variable Pressure Head regulation Constant speed setting</p>
Pressure Independent Control Valve (PICV)	Frese 220 – 1330 Ltrs/hr
Central Heating - Zilmet Plate Heat Exchanger Wras approved 1403059	ZC 315.18
Domestic Hot Water - Zilmet Plate Heat Exchanger Wras approved 1403059	ZC 315.23 (45.10) ZC 315.33 (60.10 / 60.15 / 70.15)
Zilmet Expansion Vessel 8 Litre - max pressure 3 Bar.	13M0000804-004-14
Thermostatic Mixing Valve - factory set and locked at 60C	Inta 60007CP
Diverting Valve	3VP.SAT stroke 10 mm - 100 N
Flow Sensor	Honeywell C7195A/B
Safety Valve (Secondary Side Heating)	Rbm 3 Bar

Specification information	HIU45	HIU60	HIU70
HIU installation weight	25kg	25.4g	25.4kg
Packaged Weight	31.6kg	32 Kg	32kg
Connections	¾" M	¾" M	¾" M
Room Thermostat	NOT SUPPLIED	NOT SUPPLIED	NOT SUPPLIED
Power supply	230V / 50Hz / 1PH	230V / 50Hz / 1PH	230V / 50Hz / 1PH
Maximum power consumption	53W	53W	53W

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Central Heating Outputs

HEATING Plate Heat Exchanger for all HIU models
General Power Listing

Zilmet ZC315 18 Plates
10 kW

Actual Performance Examples (CH Flow 70°C / Return 50°C and District Primary Flow temperature 80°C)	Actual Performance Examples (CH Flow 60°C / Return 40°C and District Primary Flow temperature 70°C)
<p>Example 1 - DH flow of 0.133 l/s = 480 l/h Primary DP = 2.60 kPa (DH) CH flow of 0.157 l/s = 567 l/h Secondary DP = 6.32 kPa (CH) DH return temperature = 56°C Actual Power for Central Heating = 13.2 kW</p>	<p>Example 4 - DH flow of 0.097 l/s = 350 l/h DH flow of 0.097 l/s = 350 l/h CH flow of 0.119 l/s = 430 l/h Secondary DP = 1.48 kPa (CH) DH return temperature = 45.5°C Actual Power for Central Heating = 10 kW</p>
<p>Example 2 - DH flow of 0.108 l/s = 390 l/h Primary DP = 1.76 kPa (DH) CH flow of 0.131 l/s = 473 l/h Secondary DP = 8.92 kPa (CH) DH return temperature = 55°C Actual Power for Central Heating = 11 kW</p>	<p>Example 5 - DH flow of 0.109 l/s = 395 l/h Primary ΔP = 1.97 kPa (DH) CH flow of 0.132 l/s = 475 l/h Secondary ΔP = 6.42 kPa (CH) DH return temperature = 46°C Actual Power for Central Heating = 11 kW</p>
<p>Example 3 - DH flow of 0.355 l/s = 1280 l/h Primary DP = 16.60 kPa (DH) CH flow of 0.355 l/s = 1280 l/h Secondary DP = 41.60 kPa (CH) DH return temperature = 60°C Actual Power for Central Heating = 30 kW</p>	<p>Example 6 - DH flow of 0.133 l/s = 480 l/h Primary DP = 2.67 kPa (DH) CH flow of 0.158 l/s = 570 l/h Secondary DP = 8.89 kPa (CH) DH return temperature = 46.5°C Actual Power for Central Heating = 13.2 kW</p>
	<p>Example 7 - DH flow of 0.156 l/s = 560 l/h Primary DP = 6.42 kPa (DH) CH flow of 0.179 l/s = 645 l/h Secondary DP = 11.35 kPa (CH) DH return temperature = 47°C Actual Power for Central Heating = 15 kW</p>

Indirect Heat Interface Units

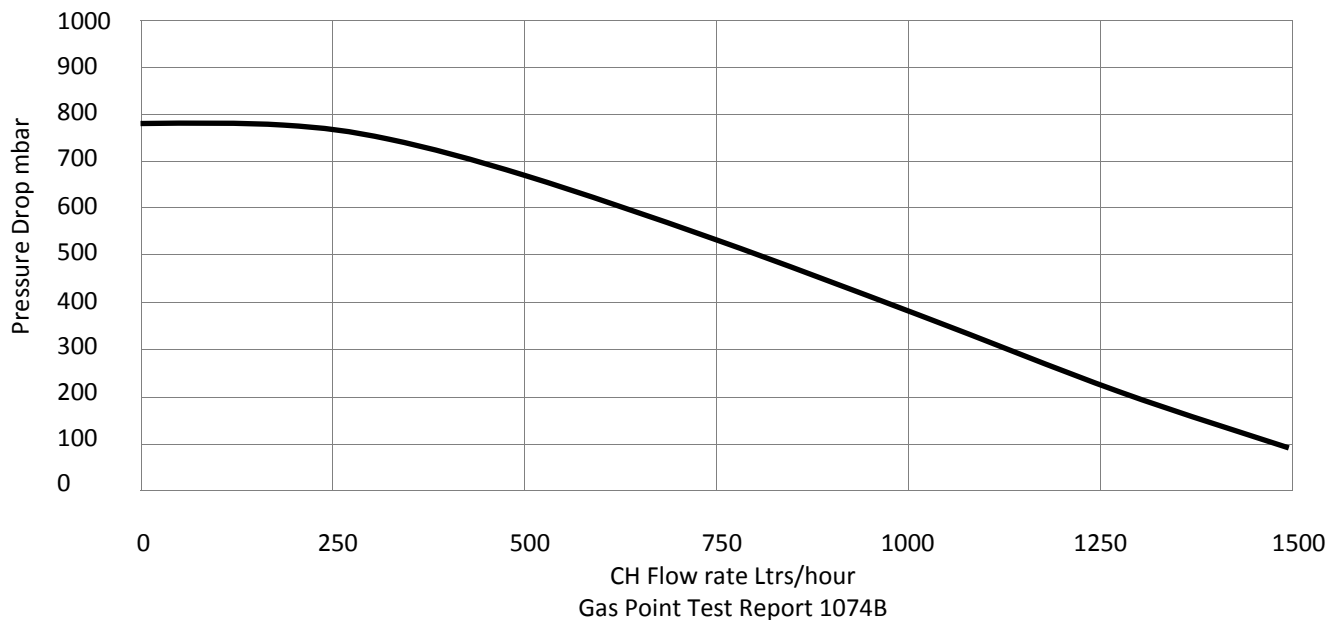
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Central Heating Secondary—available pressure

HEATING Plate Heat Exchanger for all HIU models

Zilmet ZC315 18 Plates

Example—RKC setting number III on CONSTANT



Pump Settings



RKA

Variable Pressure Head regulation
 Constant Pressure Head regulation
 Air removal commissioning function.



$\Delta p-v$

Variable Pressure Head regulation
 Radiators with TRV systems



$\Delta p-c$

Constant Pressure Head regulation
 Underfloor Heating systems

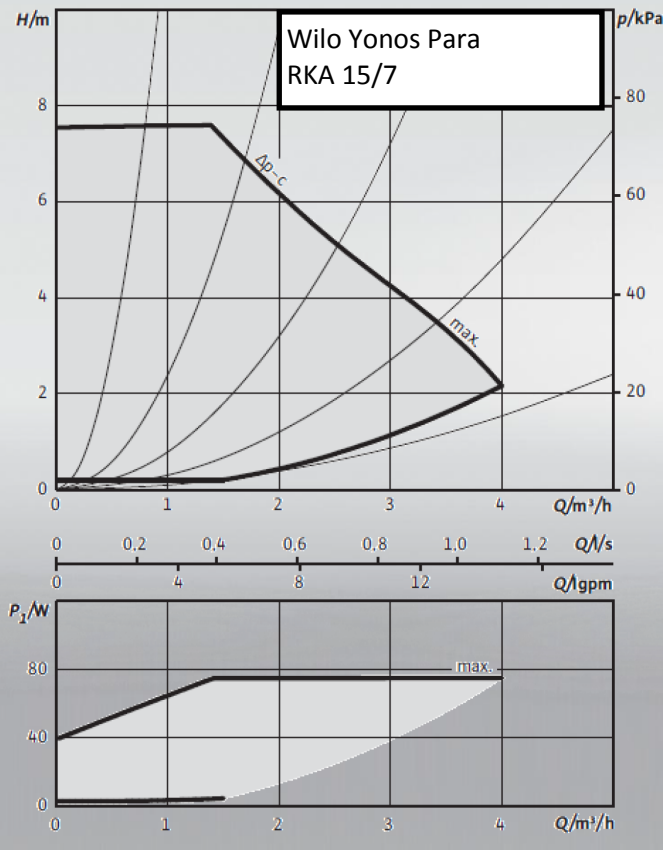


RKC

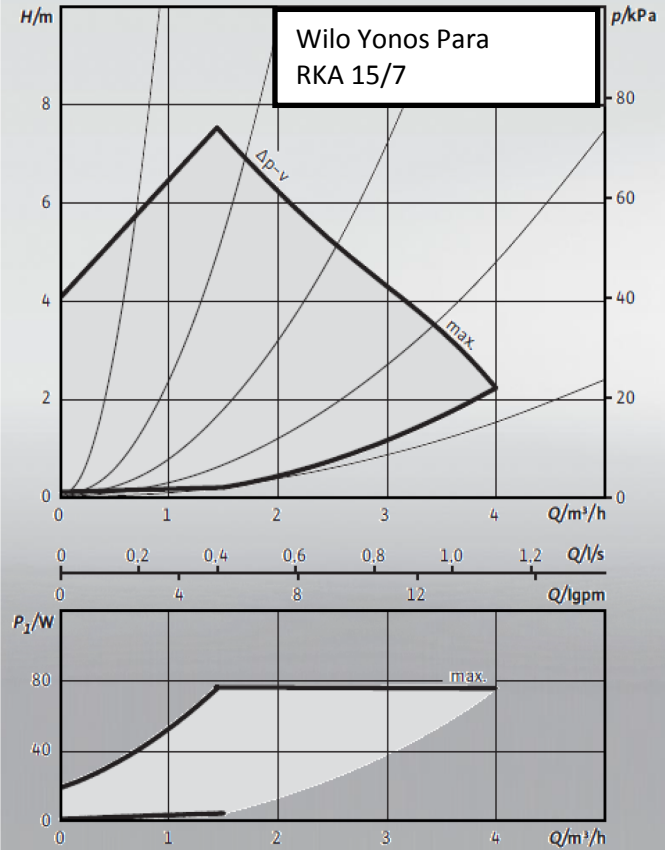
Variable Pressure Head regulation
 Constant speed setting

Hiper Heat Interface Unit—Wilco Pump operational area curves

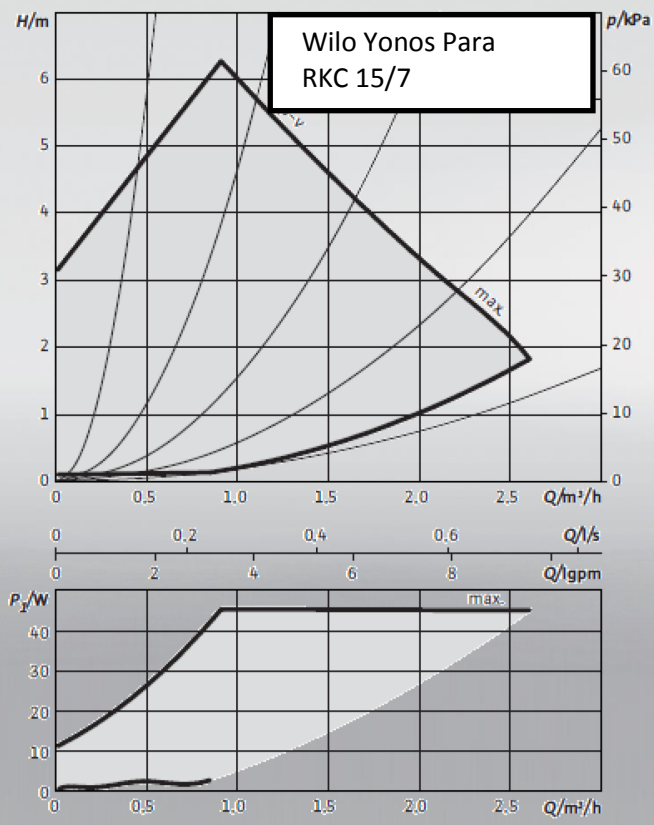
Δp -c (constant)



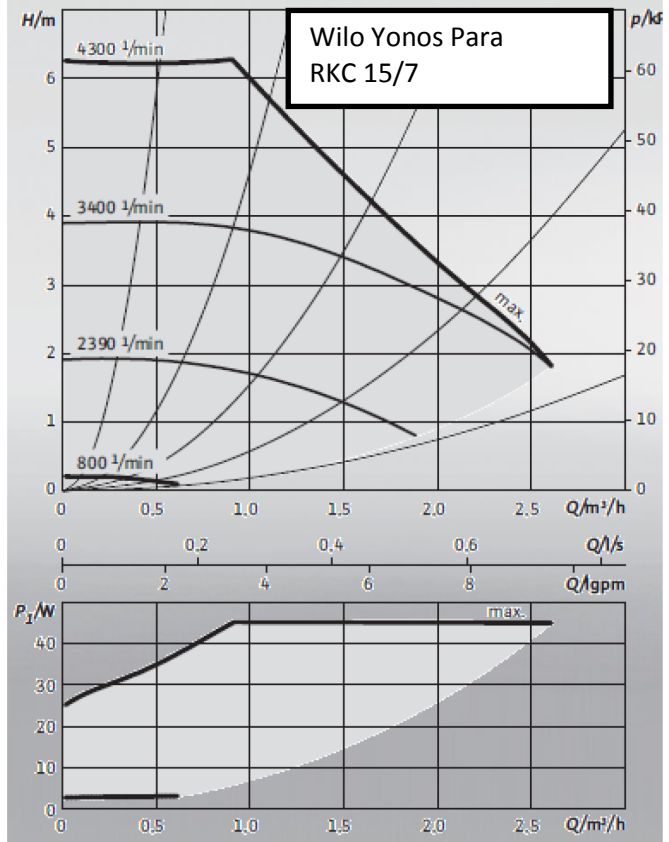
Δp -v (variable)



Δp -v (variable)



Constant speed I, II, III

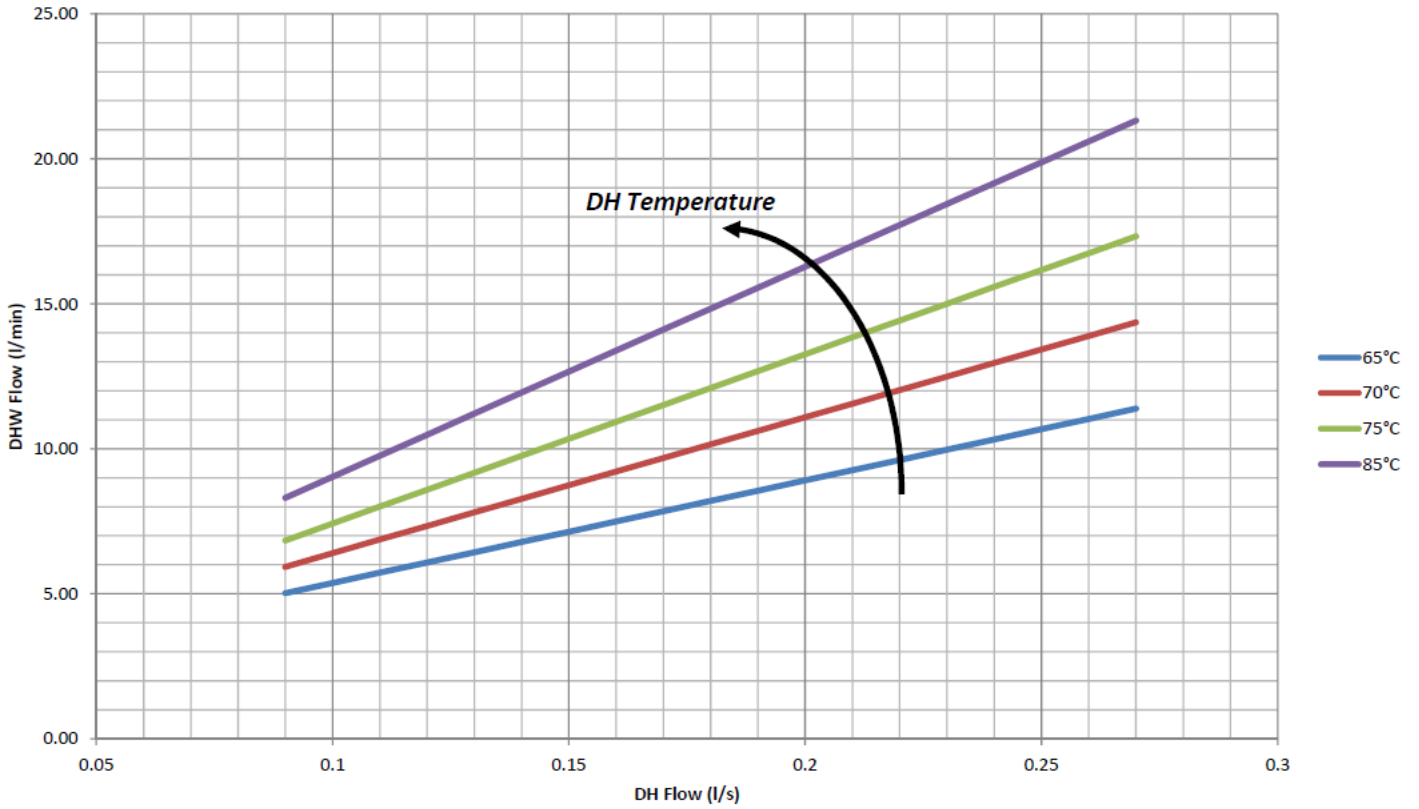


Indirect Heat Interface Units

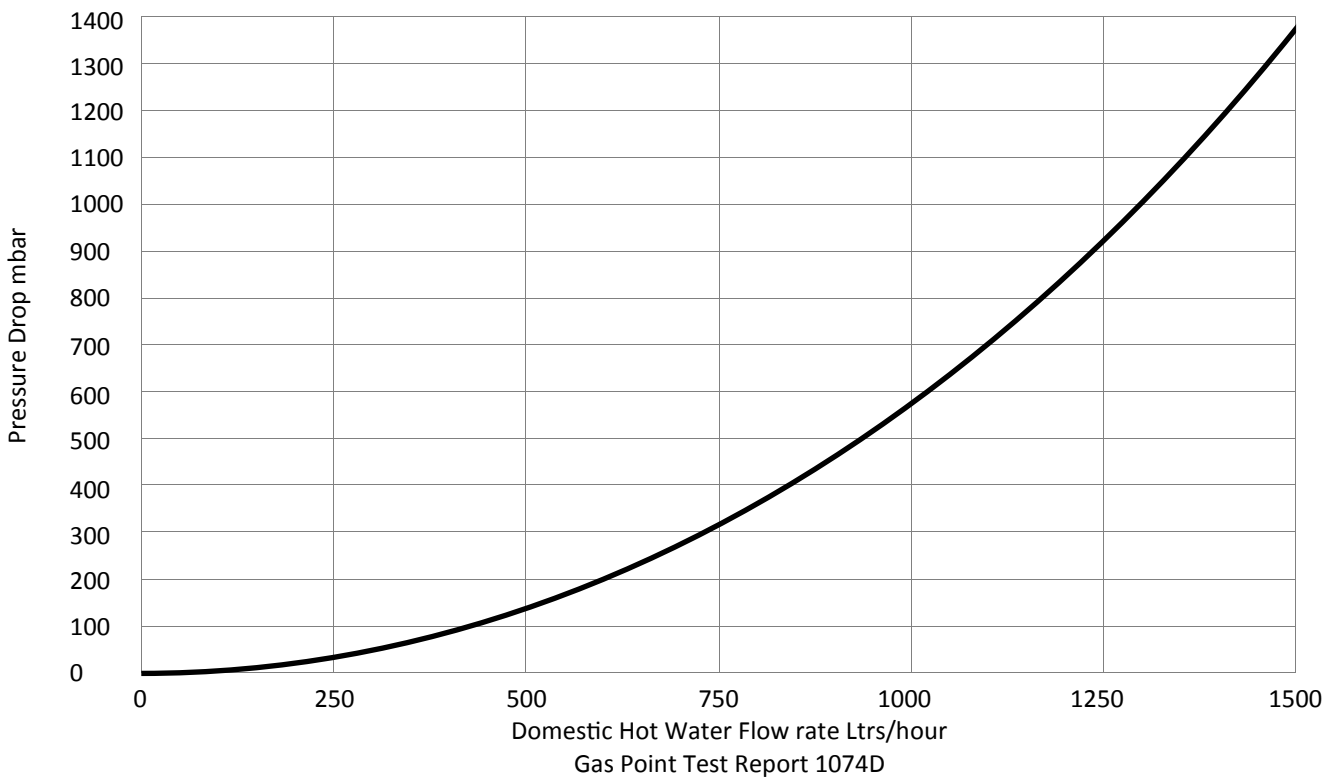
HIPER4510

Domestic Hot Water

Zilmet ZC315 23 Plates



HIPER4510 (DHW 23 Plates)



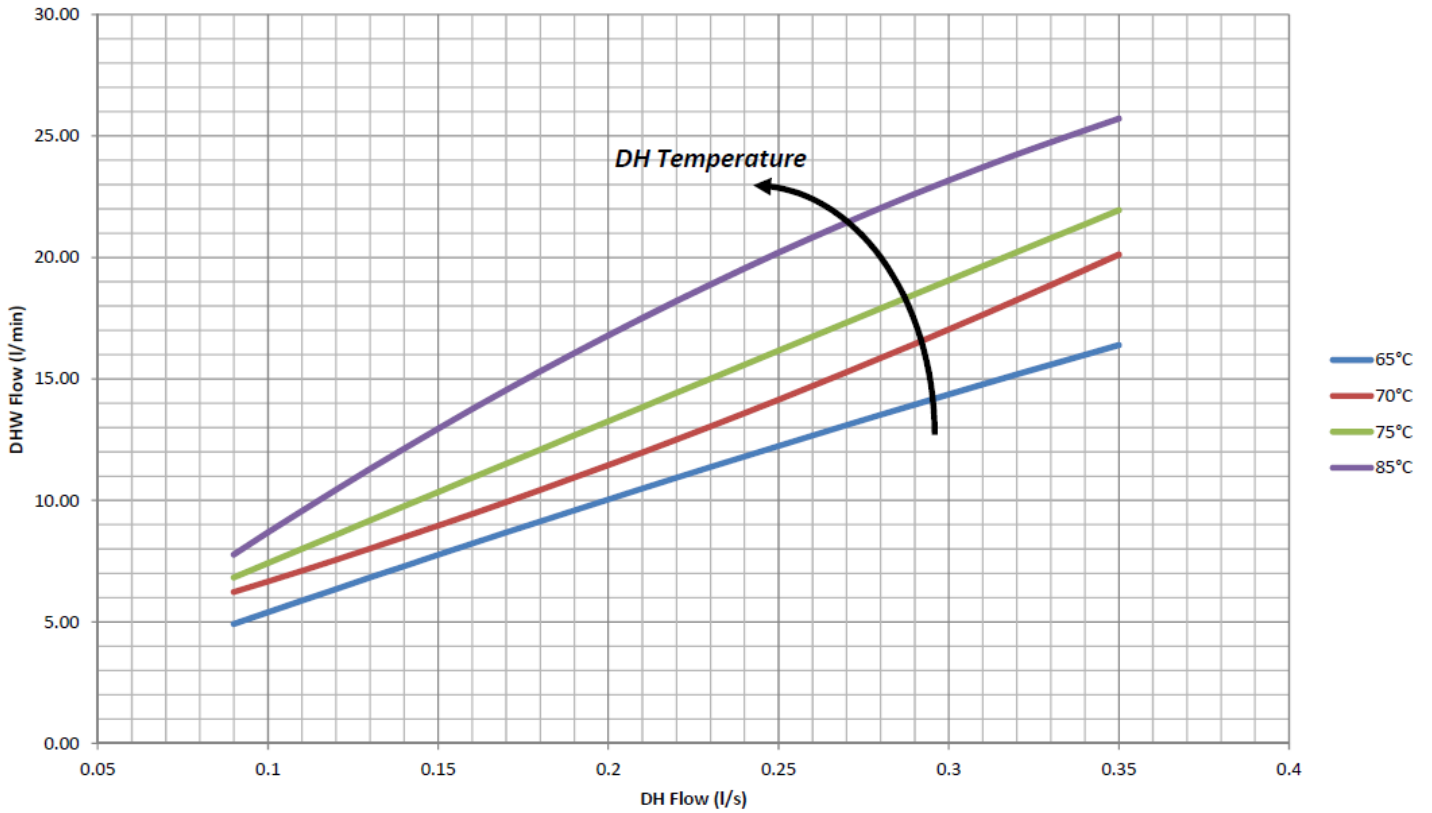
Gas Point Test Report 1074D

Indirect Heat Interface Units

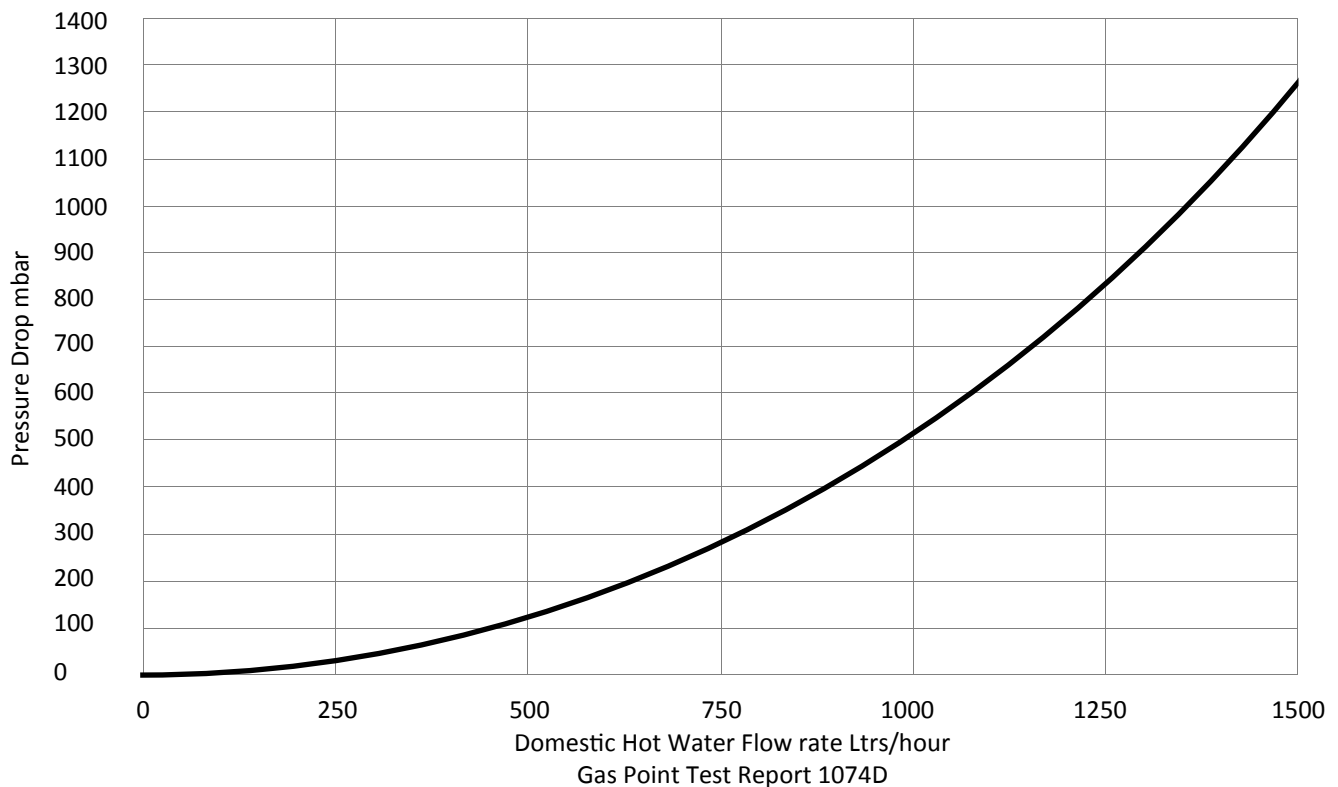
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Domestic Hot Water

Zilmet ZC315 33 Plates



HIPER 60kW (DHW 33 Plates)



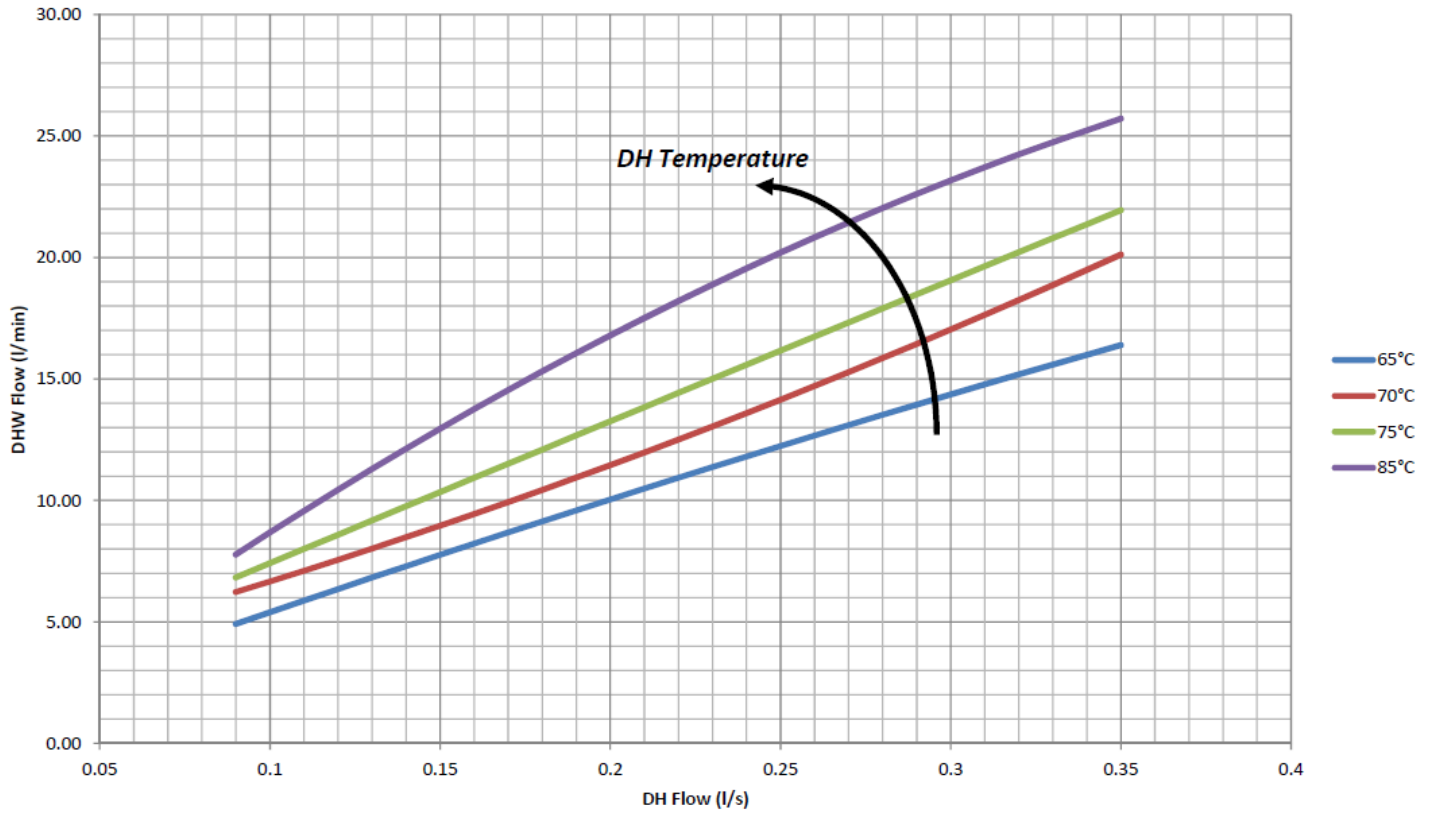
Gas Point Test Report 1074D

Indirect Heat Interface Units

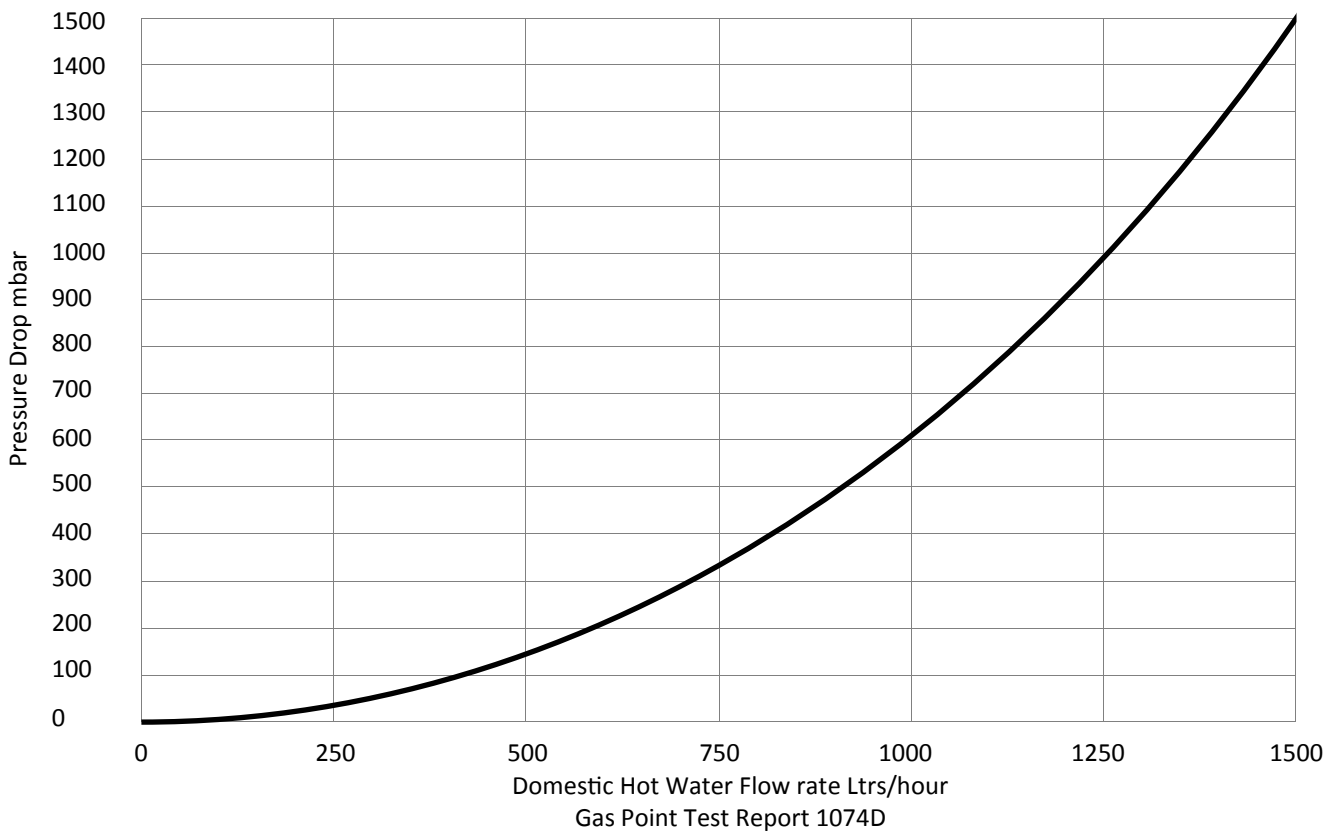
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Domestic Hot Water

Zilmet ZC315 33 Plates



HIPER 70kW (DHW 33 Plates)



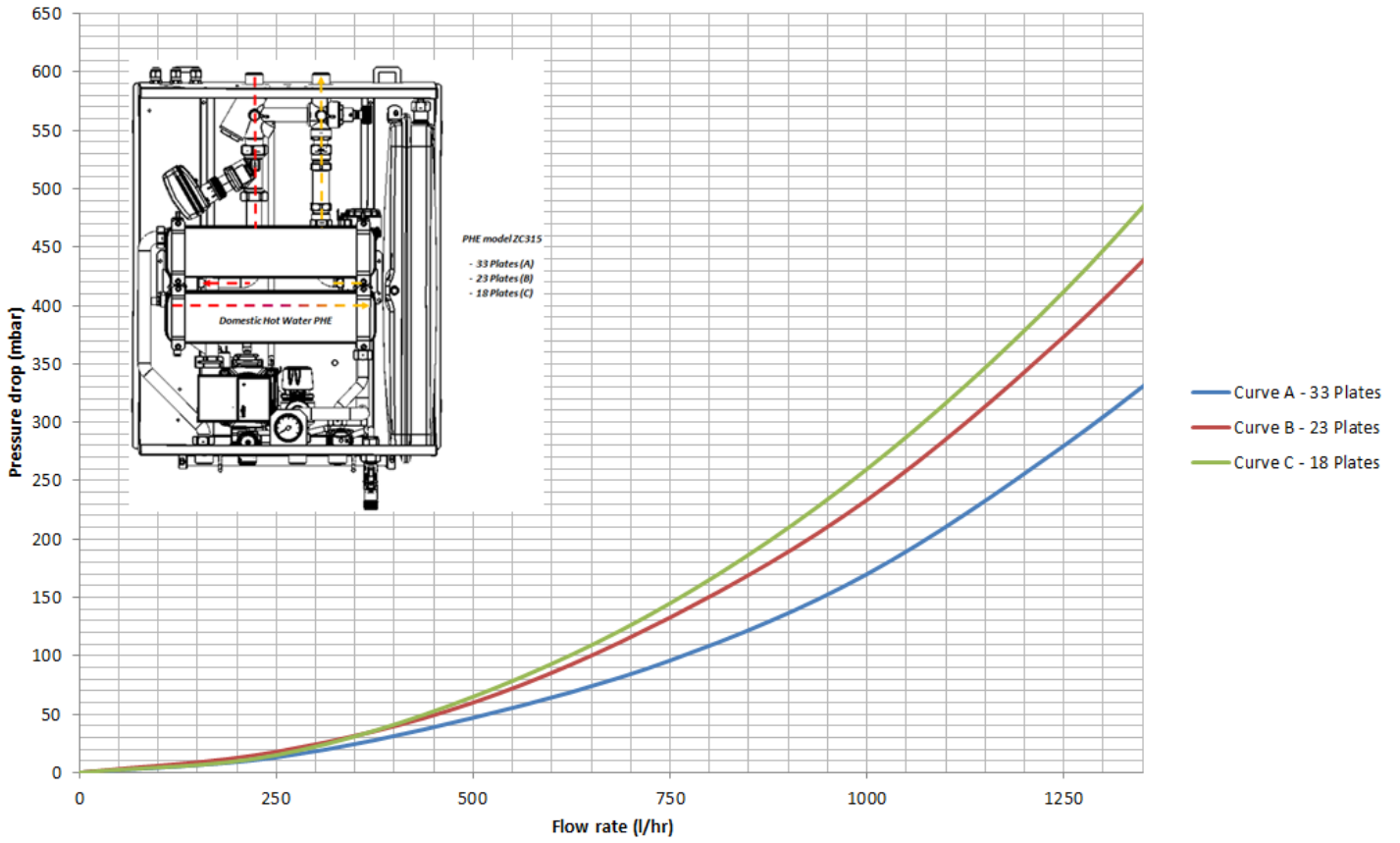
Gas Point Test Report 1074D

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Primary side pressure drops

DH Pressure Drop (mbar)

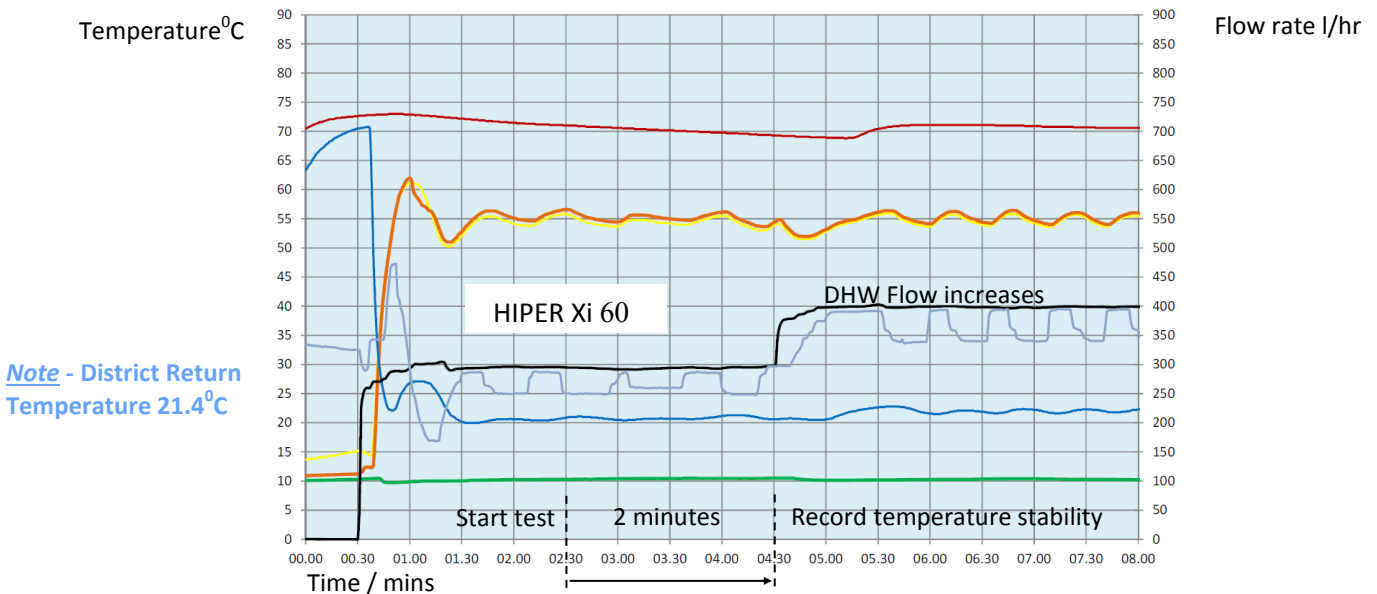
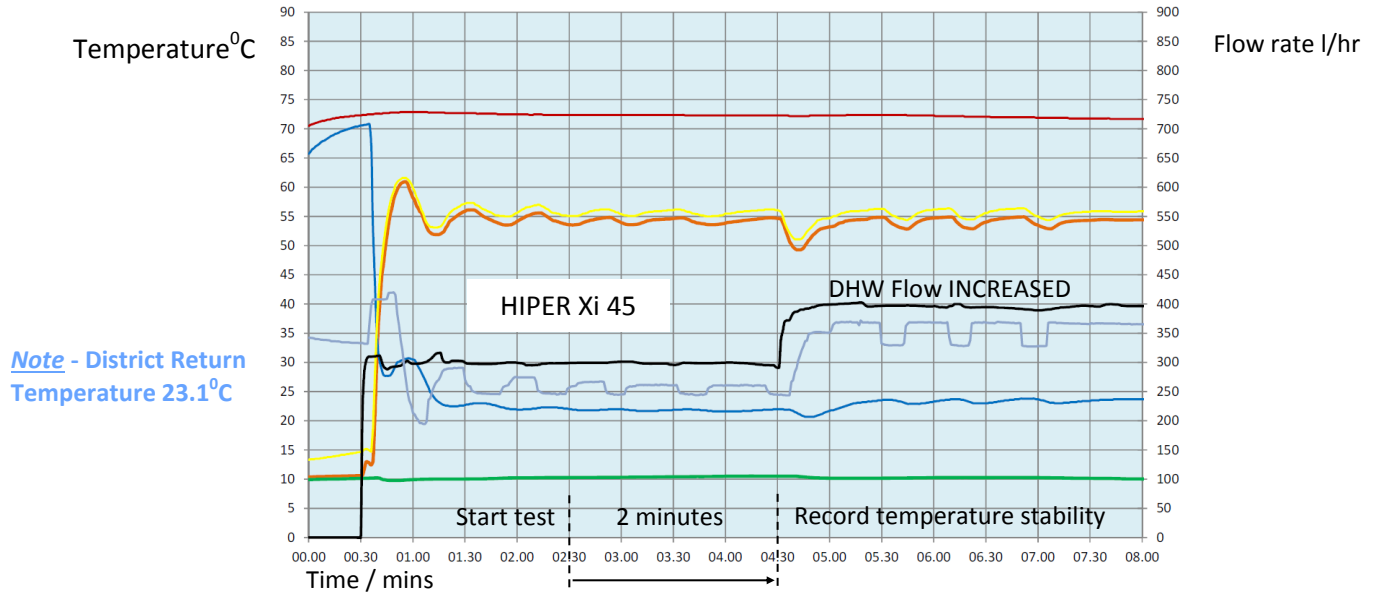


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Primary side Return Temperatures

Test results for 70C Primary Flow Temperature, on DHW production, 55°C hot water set temperature, 10°C cold in.

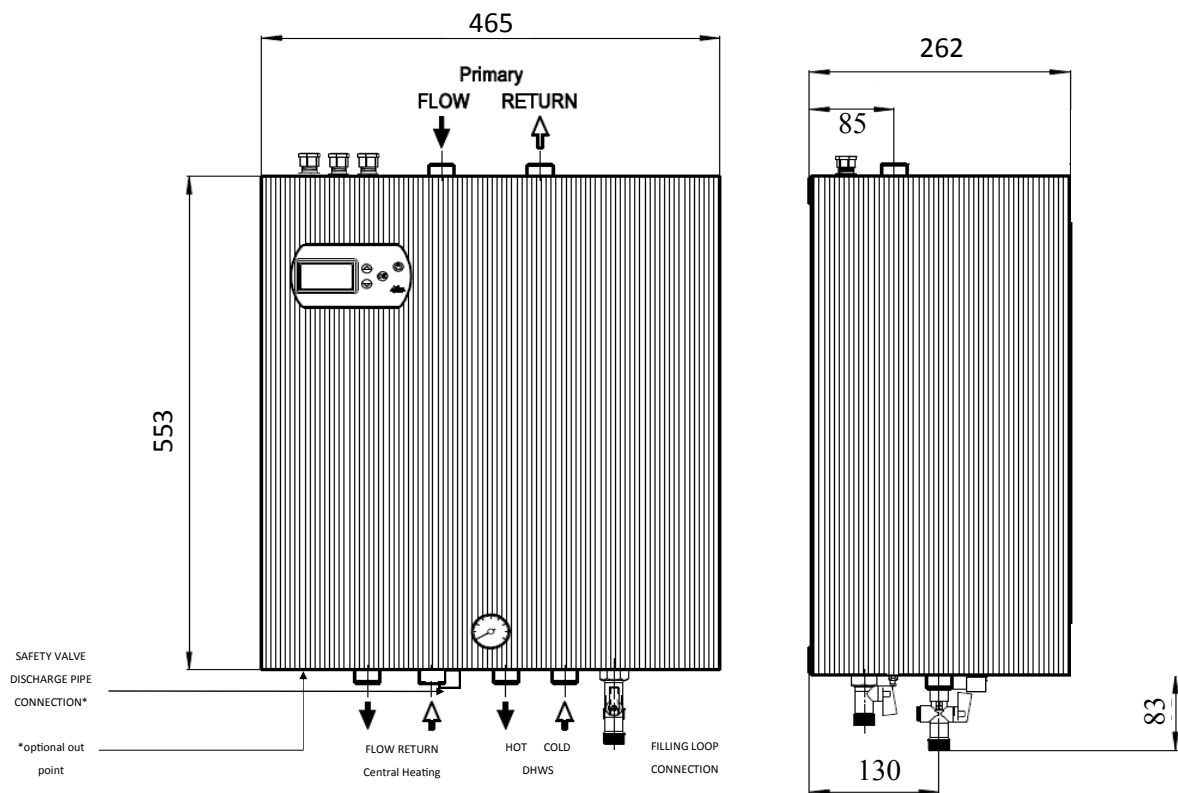


Legend - Temperatures

- RED line - PRIMARY Heating (DH) FLOW
- YELLOW line - line Hot Water supply (DHW) before TMV
- ORANGE line - line Hot Water supply (DHW) after TMV
- BLUE line - PRIMARY Heating (DH) RETURN

Legend - Flow Rates

- BLACK line - Hot Water supply (DHW) Flow rate
- GREY line - PRIMARY Heating (DH) Flow rate



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