



Hybrox SE

Outdoor air source heat pump
Heating & cooling



MODELS

3

 R290

OUTPUT (kW)

7.17 - 10.46

Hybrox SE

Hybrox SE is our compact, value-focused air/water heat pump – built for households that want efficiency, quality and low running costs without paying for complexity they don't need. It carries over the proven technology of the wider Hybrox range in a simplified, standard-format unit designed around the essentials.

Available in three sizes (8/11/14), the Hybrox SE covers a broad range of detached-home requirements. Units can be cascaded together – up to 8 devices, for a combined building heating load of up to 112kW – making it a flexible option for both new-build and retrofit projects.

The Hybrox SE utilises natural R290 refrigerant for exceptional energy efficiency and a reduced environmental impact.



Featuring a simplified wall-mounted controller and inverter-driven, modulating operation, Hybrox SE automatically adapts to the home's heating and cooling demand throughout the year, delivering heating, cooling and domestic hot water up to 75°C.

2

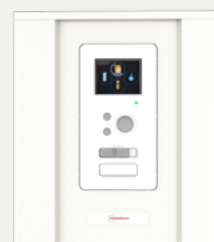
2 Year Parts Warranty*

- Perfect for high temperature heating systems
- Quiet & compact
- Flow temperatures up to 75°C
- Cascadable up to 8 units (up to 112kW)
- Single-phase power supply – simple installation, no three-phase supply required
- Controllable via myUplink app
- Inverter-driven, modulating heating and cooling
- Smart Grid ready and Modbus-TCP capable

Energy efficiency (35°C)	A+++
COP (A7/W35)	up to 5.00
Heating output (A7/W35)	7.17kW / 7.55kW / 10.46kW
Max. flow temperature	75°C
Working range (min/max)	-25 / 38°C
Power supply	220-240V
Sound power level (min/max)	50 / 65 dB(A)

HPC 40 wall controller

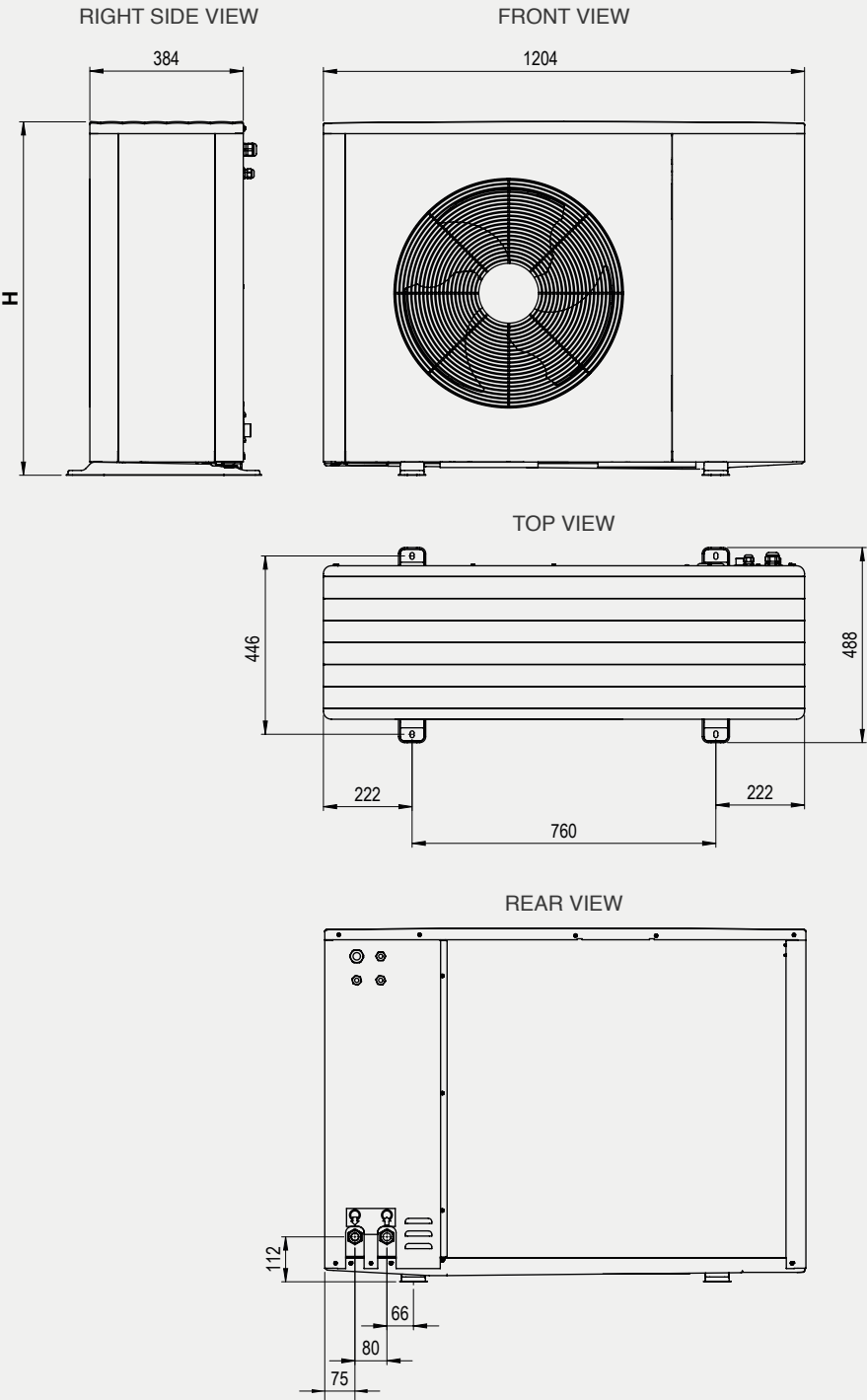
The HPC 40 is a simplified wall-mounted controller designed to make everyday operation straightforward for the homeowner. It communicates with the heat pump's internal control board to manage settings and display system status, and connects to myUplink for remote monitoring, with Modbus-TCP and Smart Grid readiness built in.



*Subject to Terms & Conditions

Dimensions

Dimensions: mm



Model	Height (mm)
8	892
11	1103
14	1397

Clearances (mm)	
Front	1000
Rear	200
Left	400 (600 cascaded)
Right	400 (600 cascaded)
Top	1000

Performance data

8

11

14

Performance

Heating capacity / COP (DIN EN 14511-x)	A10/W35 – Partial load	kW / COP	2.10 / 5.66	2.27 / 6.27	3.70 / 6.35
	A7/W35 – Partial load	kW / COP	7.17 / 4.86	7.55 / 4.86	10.46 / 5.00
	A7/W55 – Partial load	kW / COP	5.38 / 2.98	6.45 / 3.15	9.59 / 3.35
	A2/W35 – Partial load	kW / COP	5.97 / 3.70	7.08 / 4.06	9.52 / 3.96
	A-7/W35 – Full load	kW / COP	7.48 / 2.57	9.19 / 2.85	11.40 / 2.72
	A-7/W55 – Full load	kW / COP	6.70 / 2.07	7.81 / 2.12	9.77 / 1.97
Heating capacity (min/max)	A10/W35	kW	2.10 / 11.52	2.27 / 13.52	3.70 / 17.97
	A7/W35	kW	2.52 / 11.39	2.75 / 12.46	4.24 / 16.74
	A7/W55	kW	2.09 / 8.93	1.88 / 10.59	3.00 / 14.86
	A2/W35	kW	2.01 / 10.50	3.06 / 11.40	4.57 / 15.03
	A-7/W35	kW	2.26 / 7.48	3.31 / 9.19	4.72 / 11.40
	A-7/W55	kW	1.59 / 6.70	2.36 / 7.81	3.47 / 9.77
Cooling capacity / EER	A35/W18 – Partial load	kW / EER	8.39 / 3.80	11.88 / 4.05	15.30 / 4.31
	A35/W7 – Partial load	kW / EER	6.92 / 3.09	9.42 / 3.13	13.02 / 3.22
Cooling capacity (min/max)	A35/W18	kW	2.13 / 9.27	2.22 / 14.88	3.34 / 17.53
	A35/W7	kW	1.25 / 8.02	1.44 / 11.38	2.24 / 13.79
Energy efficiency class	35°C / 55°C		A++ / A+++	A+++ / A+++	
Maximum flow temperature		°C	75		
Air flow rate at max external pressure		m³/h	3350	5600	7100
Flow rate		l/h	1400	2200	2700
Minimum volume buffer tank in series & separation buffer tank		litres	50	100	
Pressure loss at flow rate		bar	0.19	0.30	0.40
Maximum allowable operating pressure		bar	3		
Operating limits					
Heating circuit return/flow (min/max)	Within operating temperatures	°C	20 / 75		
Operating temperature (min/max)	Heating	°C	-25 / 38		
Average bivalence temperature (DIN EN 14825)	Low / Medium	°C	-7 / -7		
Sound					
Sound power level	Nom. / Max. Day / Max. Night	dB(A)	53 / 64 / 50	53 / 64 / 55	51 / 65 / 54
Sound power level (DIN EN 12102-1)		dB(A)	53		51
General					
Total weight		kg	96	113	140
Refrigerating circuit maximum allowable operating pressure	High pressure / low pressure	MPa (g)	3.0 / 3.0		
Refrigerant type			R290		
Refrigerant capacity		kg	0.8	1.1	1.6
Safety valve – heating circuit response pressure		bar	2.5		
Electrical					
Voltage	Heat pump supply		1~N/PE/220-240V/50Hz		
All-pole fuse protection	Compressor only	A	C13	C20	C25
Effective power consumption (DIN EN 14511-x)	A7/W35 – Partial load	kW	1.48	1.55	2.09
Effective power consumption (min/max)	A7/W35	kW	0.47 / 2.59	0.52 / 3.06	0.80 / 3.99
Maximum machine current		A	12.5	16.0	22.0
Maximum power consumption	Within operating limits	kW	2.9	3.7	5.1
IP protection			IP24		
Residual current circuit breaker	If required		Type B		
HPC 40 wall controller					
Dimensions	H x W x D	mm	410 x 355 x 120		
Weight		kg	5.15		

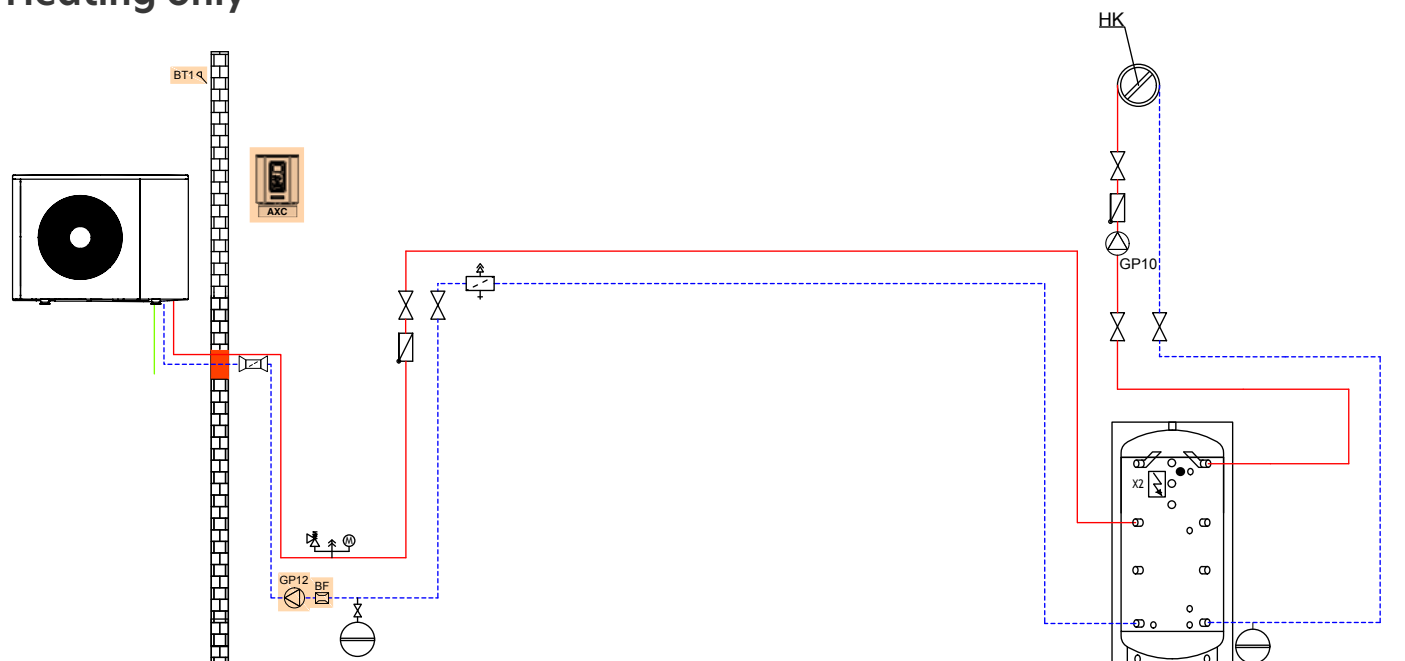
Schematic

Simplified diagram for illustration only -
safety devices may have been omitted for clarity.
For additional schematics, refer to the installation guide.

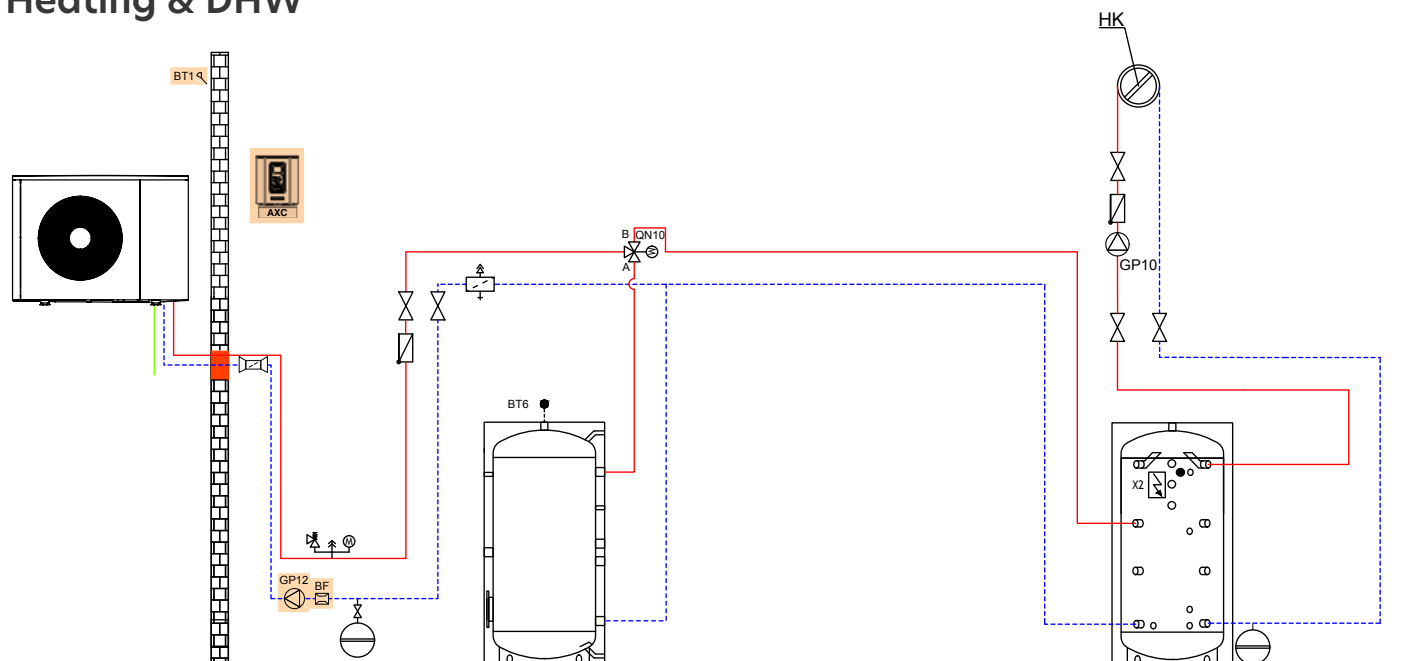
Supplied with heat pump

Symbol	Description	Symbol	Description
GP12	Circulation pump heating circuit		Isolating valve
GP10	Feed circulating pump		Non-return valve
BT1	Outdoor temperature sensor		Dirt-trap
BT6	DHW sensor		Circulation pump
HK	Heating circuit		Shut off device with dirt trap
			Safety group
			3-way mixing valve
			Immersion heater
			Volume flow meter
			Dew-point monitor
			Membrane expansion vessel

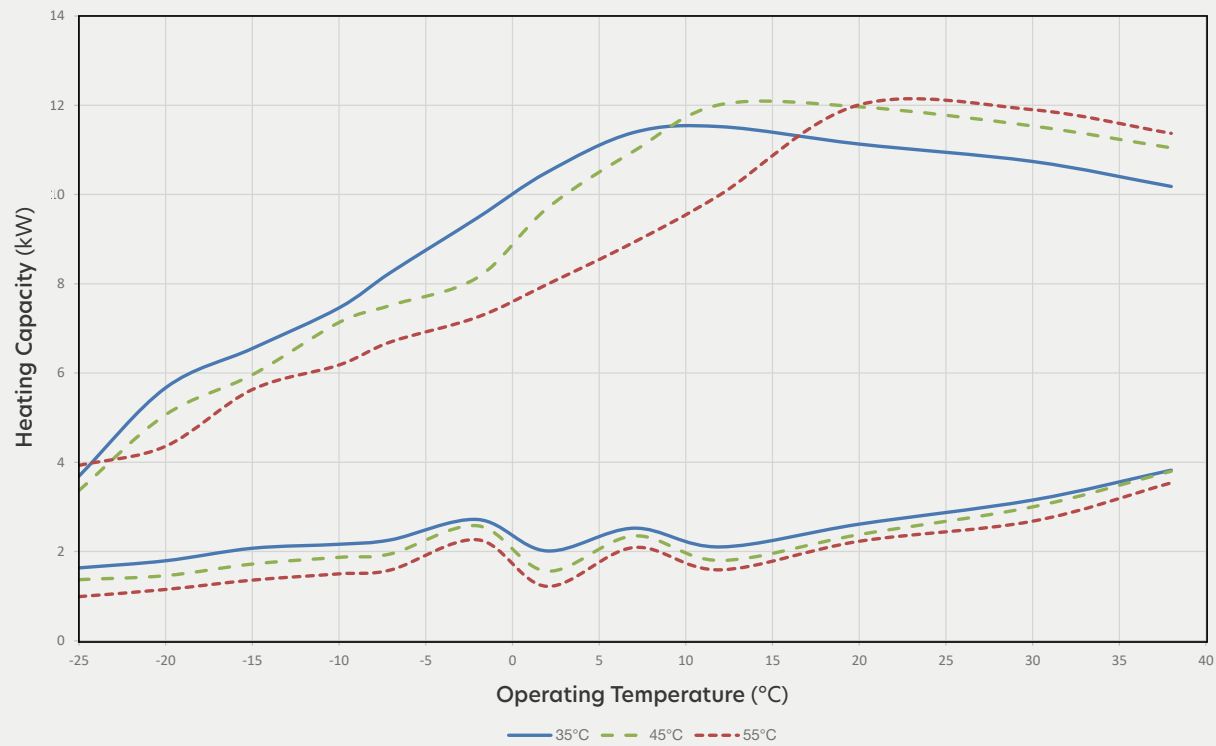
Heating only



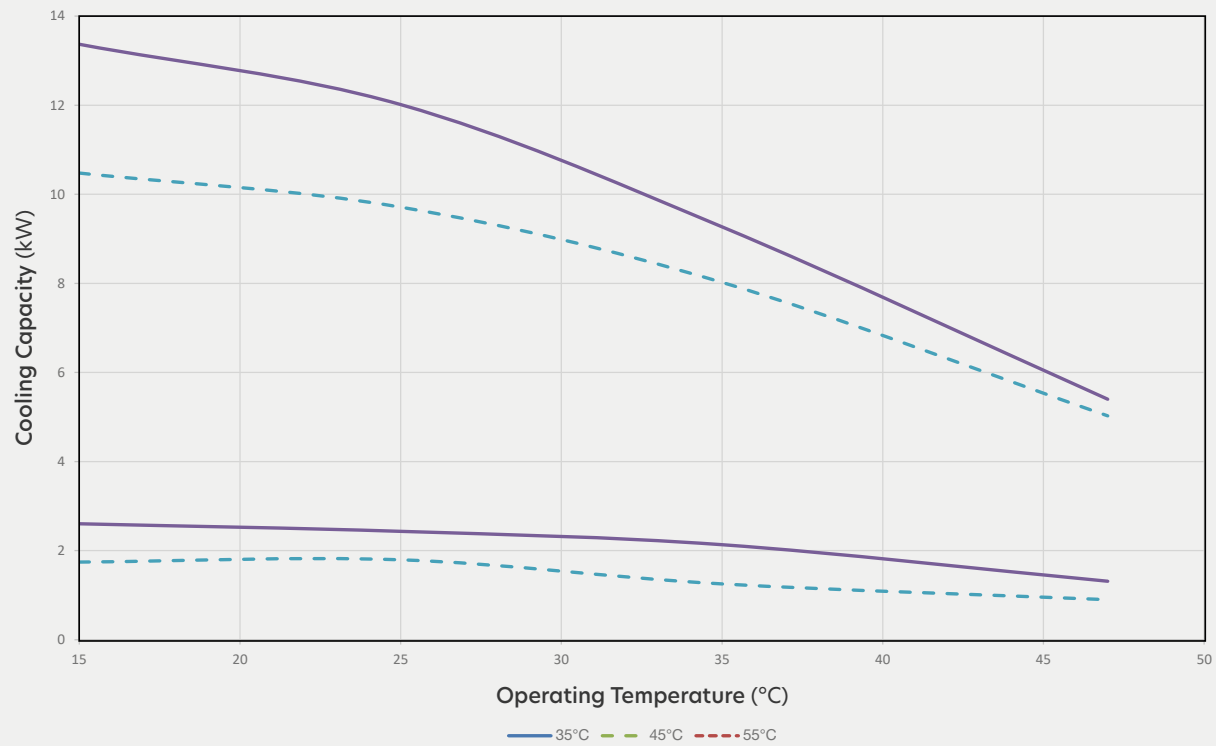
Heating & DHW

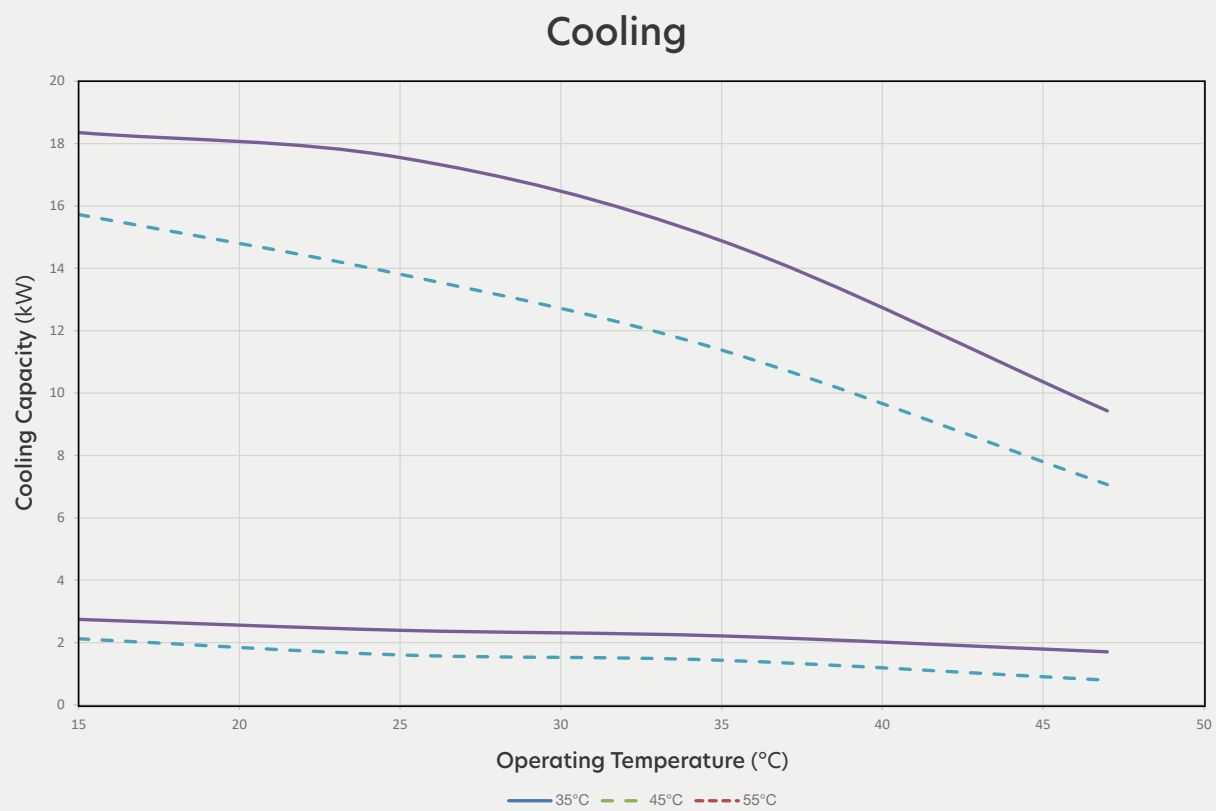
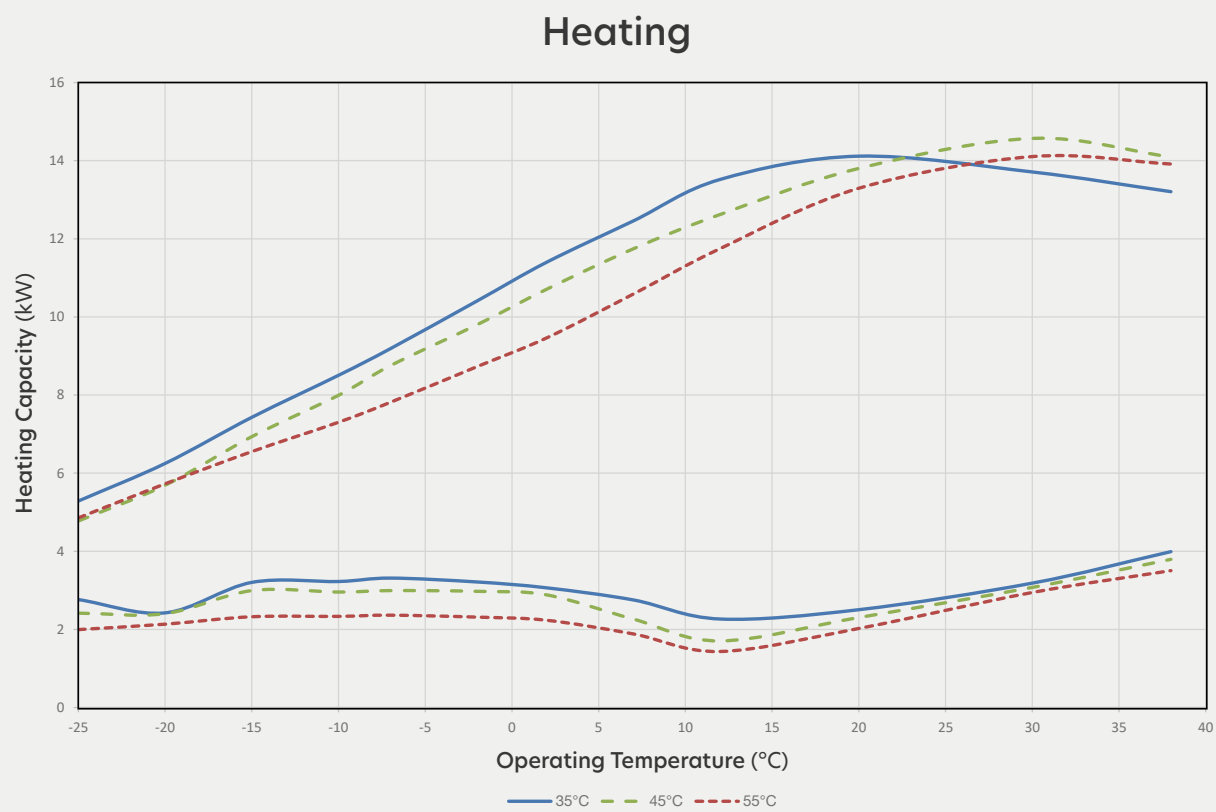


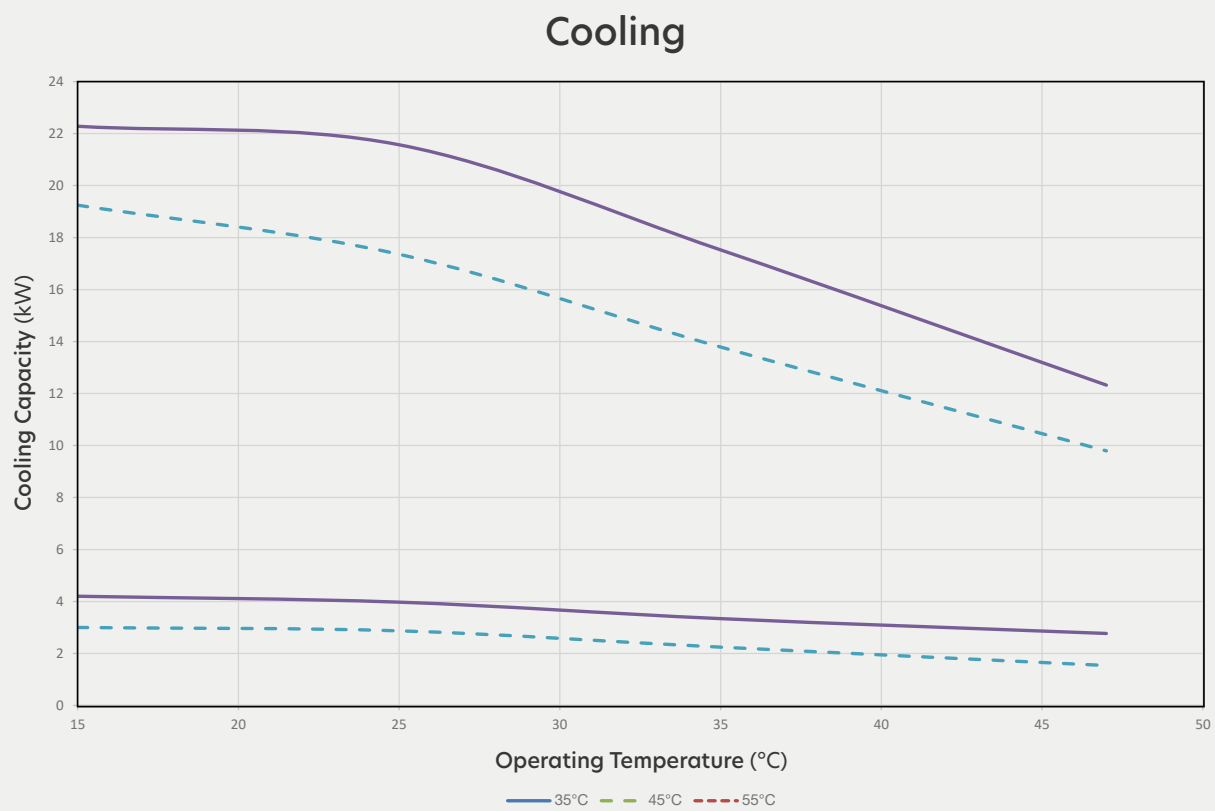
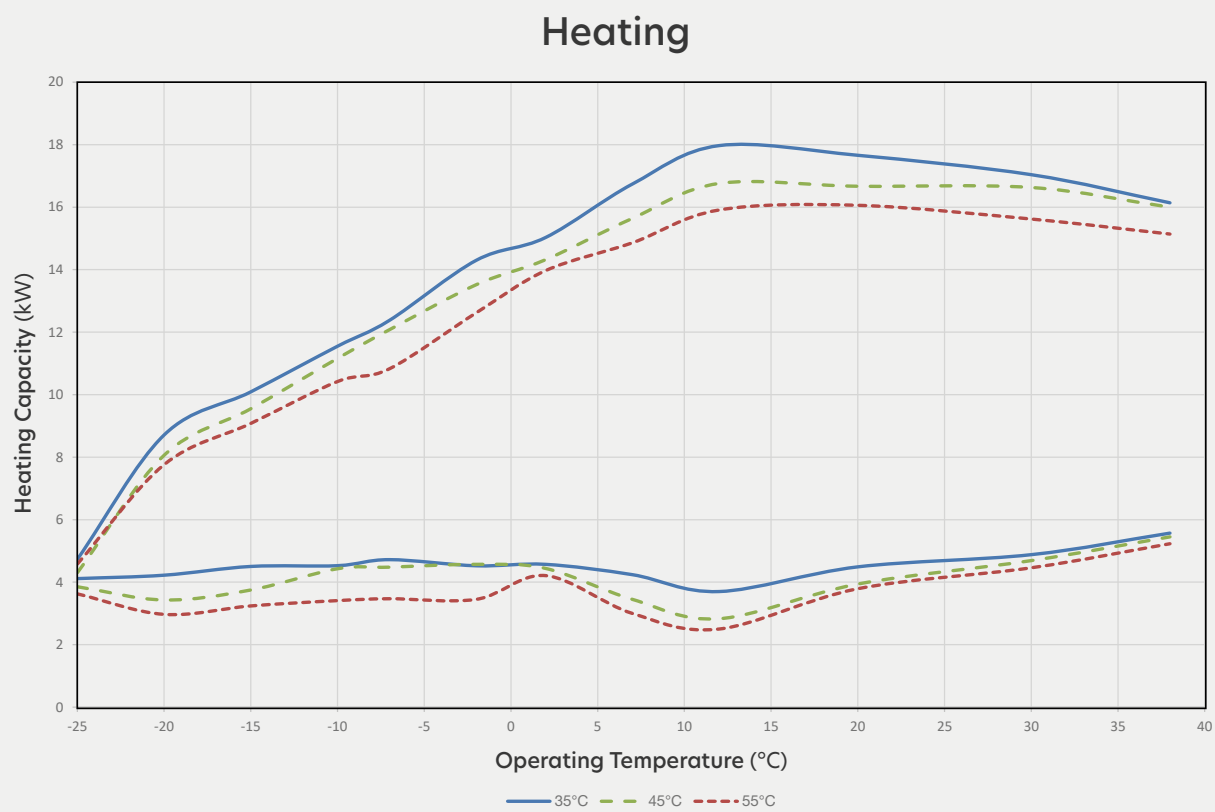
Heating



Cooling

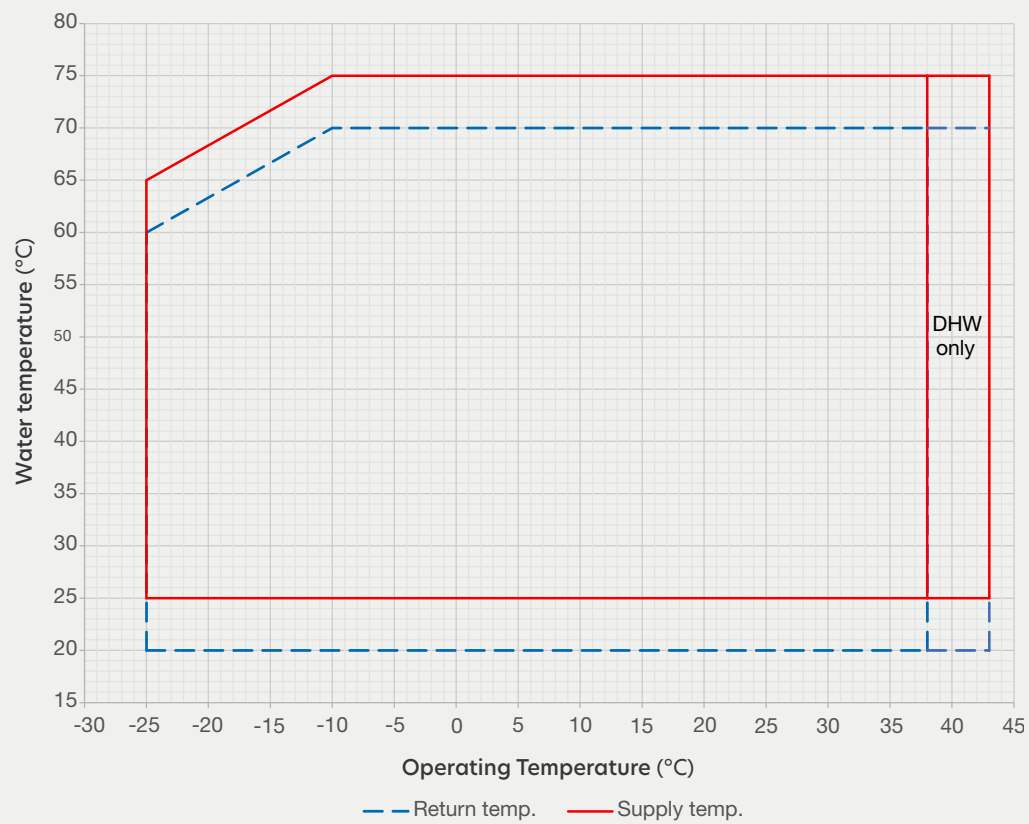




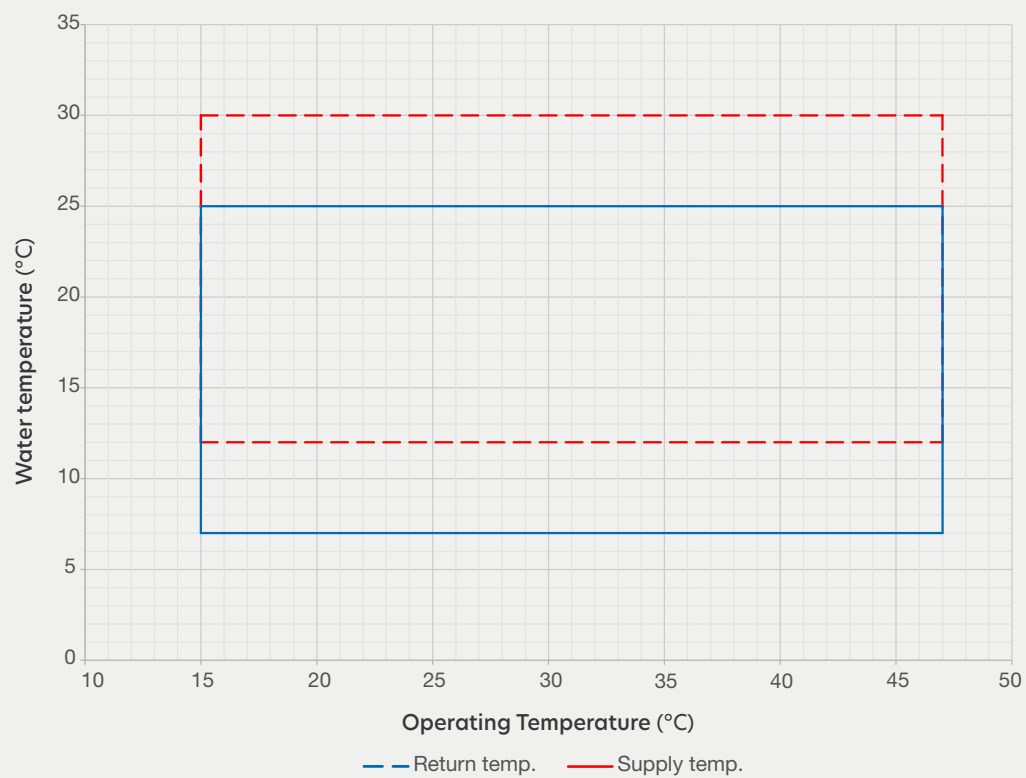


Performance envelopes

Heating



Cooling



Modutherm Limited
Unit 4 Genesis
Endeavour Drive
Basildon, SS14 3WF

modutherm.co.uk
Tel: 0345 521 5666
modutherm@modularhg.co.uk

Your local contact is:

