



HP290 Hybrid

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Features

The HP290 Hybrid system combines our market leading gas boiler range with our highly efficient HP290 monobloc air source heat pump. Controlled from a single hub, the Ideal HP290 hybrid solution is an integrated package offering homeowners the low-carbon, high efficiency heat of a heat pump with the peace of mind and instantaneous hot water of a gas combi boiler.



HP290 hybrid key features

- Integrated controller within the heat pump
- Bivalent control strategy
- Integration with combi, system or heat only controls
- No hydraulic separation required
- Low-GWP R290 refrigerant
- Easy to install
- Boilers designed for UK homes
- Flexible warranties
- UK wide engineer coverage

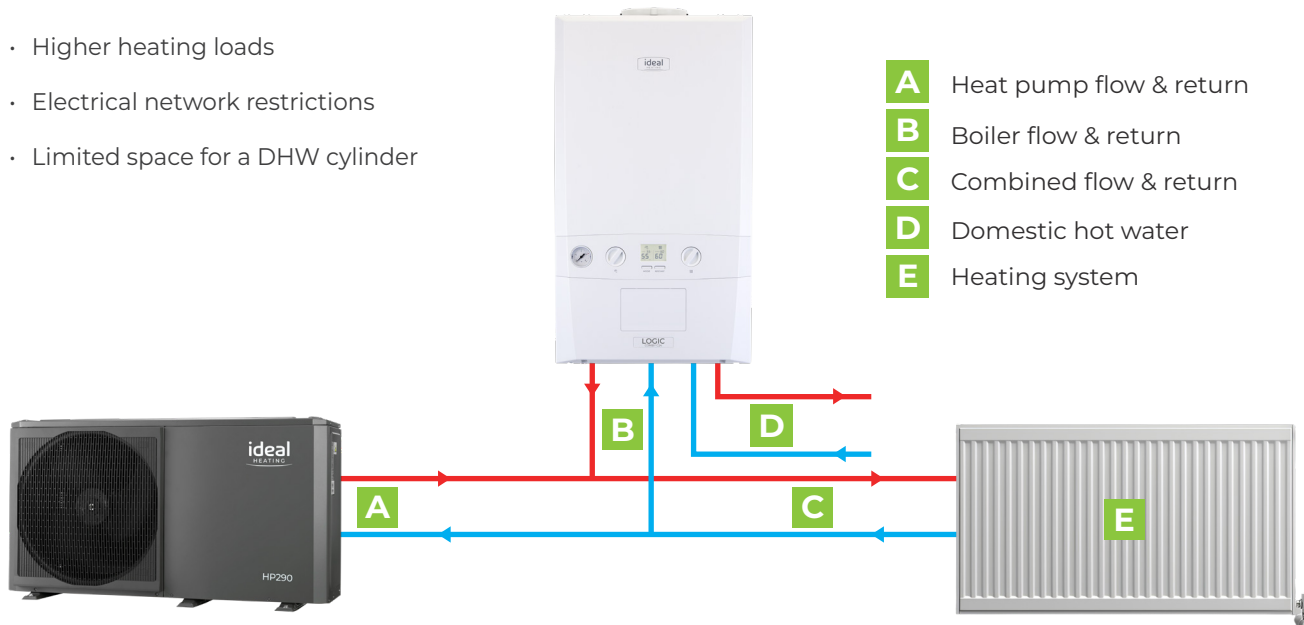


*For further details please see warranty terms and conditions for the specific product at [idealheating.com](https://www.idealheating.com)

Operation

The HP290 integrates seamlessly with a Logic Combi C boiler providing a heating and hot water solution that reaps the efficiency benefits of an air source heat pump with the instantaneous hot water and additional heat provided by a combi boiler. This 'best of both worlds' solution provides a climate friendly solution to properties with:

- Higher heating loads
- Electrical network restrictions
- Limited space for a DHW cylinder



Example

Heat pump



Outdoor unit: Ideal HP290

Accessories:

- HP290 hybrid kit - 240932 (required)
- Antivibration feet - 240903 (required)
- Y-strainer/filter – 936911 (required)
- Control:
 - HP290 control box - 239386
 - or**
 - HP290 controller - 241519
- Buffer tank – AH700436 (optional)

Boiler



Boiler: Logic Combi C30

Accessories:

- Flue (required)
- Filter
- Cylinder (only if system or heat only boiler installed)

HP290 specification

		HP290 4.5kW	HP290 6kW	HP290 8kW	HP290 10kW
Ideal product code		241486	241487	241488	241489
Heating [A 7°C / W 35°C]*	Capacity (kW)	4.5	6.2	10	12
	Power input (kW)	0.87	1.27	2.13	2.5
	COP	5.15	4.9	4.7	4.8
Heating [A 7°C / W 55°C]*	Capacity (kW)	4.6	6.2	9.5	12
	Power input (kW)	1.44	2	3.12	3.87
	COP	3.2	3.1	3.05	3.1
Sound power level (EN 12102 - 1)	dB(A)	56	58	61	65
Pipework connection sizes	Heating F/R	1" BSP	1" BSP	1 1/4" BSP	1 1/4" BSP
Dimensions outdoor unit (mm)	Width	1299	1299	1385	1385
	Depth	426	426	523	523
	Height	717	717	865	865
	Volume (m³)	0.327	0.327	0.495	0.495
	Weight (kg)	90	90	117	135
Electrical data	Electrical supply (50 Hz)	230v	230v	230v	230v
	Phase	Single phase	Single phase	Single phase	Single phase
Refrigerant charge (kg)*	R290	0.7	0.7	1.1	1.25
Logic Combi2	Product code (C24/C30)	228307/228308			
	Max CH output (C24/C30)	24.2/24.2			
	Min CH output (C24/C30)	4.8/6.1			
	DHW output (C24/C30)	24.2/30.2			
	SSHEE (C24/C30)	94/94			
Boiler Dimensions (mm)	Width	395			
	Depth	278			
	Height	700			
Hybrid control	Strategy	Bivalent point			
	System master	Heat pump			

*Performance data in accordance with EN 14825 : 2016, EN 1210, EN 14511 : 2018. The energy efficiency provided may not correspond to the actual energy once installed in a building, as the efficiency is influenced by other factors such as heat loss in the distribution system and the capacity of the products in relation to building size and characteristics.

HP290 hybrid flowchart

Step 1 Outdoor unit



HP290 4.5 kW – 241486
HP290 6 kW – 241487
HP290 8 kW – 241488
HP290 10 kW – 241489
HP290 12 kW – 241490
HP290 14 kW – 241491

Step 2 Boiler



Boiler: Logic Combi C24 - 228307
Logic Combi C30 - 228308



Flue

Step 3 Control



HP290
wall mounted
control box.
235797

or



HP290
standalone
controller.
241519

Step 4 Accessories

Required

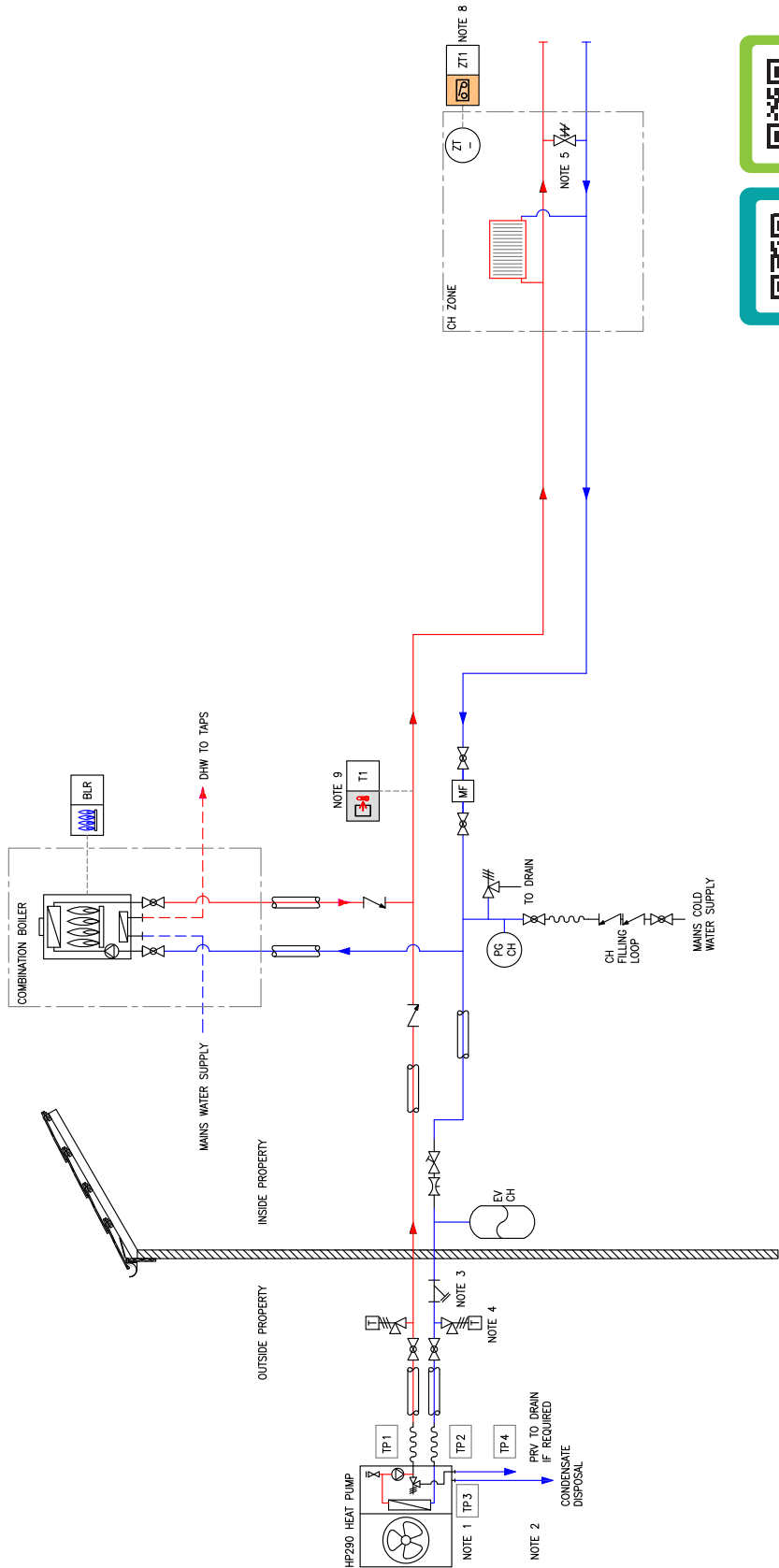
- HP290 hybrid kit – 240932
- Antivibration feet – 240903
- Flexible Hose:
 - 750mm – 236910
 - or
 - 500mm - 236909
- Filter:
 - Magnetic – 236911
 - or
 - Y-strainer - 236740

Optional

- HP290 2-zone kit – 241520
- Buffer tank:
 - 25L – AH700436
 - 50L – AH700437
- Filter ball valve - 236738

HP290 + Combi Boiler
+ Single zone (Bivalent system).

CONNECTION POINT LIST			
TP No	DESCRIPTION	SIZE	TYPE
1	HEAT PUMP FLOW	1" BSP	BRASS
2	HEAT PUMP RETURN	1" BSP	BRASS
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	PLASTIC
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	PVC



Notes:

- Note 1. The heat pump must be installed on a secure level base capable of supporting its weight.
- Note 2. Refer to the installation manual for condensate and pressure relief discharge requirements.
- Note 3. A particle filter is required and can be supplied as an option. It's recommended that a magnetic filter is installed.
- Note 4. Anti-freeze valves are required if glycol is not used in the system.
- Note 5. Install an auto-bypass if no permanent open circuit is available to allow pump overrun and normal operation.
- Note 6. If minimum free system water volume cannot be met, a volumiser or buffer vessel is required. This is installed on the return circuit.
- Note 7. Refer to the installation manual for the heat pump.
- Note 8. Refer to the installation manual for the heat pump.
- Note 9. T1 sensor required (supplied in hybrid kit).
- Note 10. Boiler must be complete with its own integral pump positioned on the return.
- Note 11. Ensure the correct pipe size is installed. Refer to the HP290 heat pump and boiler installation manuals.
- Note 12. It is recommended that the boiler flow temperature is not set above 65°C.

This drawing is for information and guidance only. It is the heating designer/ installers responsibility to adhere to the latest relevant standards. Refer to HP290 heat pump system installation and maintenance manual in conjunction with these schematic drawings.



SCAN HERE
FOR HP290
SCHEMATICS



SCAN HERE
FOR HP290
HYBRID
INSTRUCTIONS



Model name	PCDB index number	
	35°C	55°C
HP290 4.5 kW + generic	190064	190065
HP290 4.5 kW + Combi2 C30	190066	190067
HP290 4.5 kW + Combi2 C24	190068	190069
HP290 6 kW + generic	190058	190059
HP290 6 kW + Combi2 C30	190060	190061
HP290 6 kW + Combi2 C24	190062	190063
HP290 8 kW + generic	190052	190053
HP290 8 kW + Combi2 C30	190054	190055
HP290 8 kW + Combi2 C24	190056	190057
HP290 10 kW + generic	190046	190047
HP290 10 kW + Combi2 C30	190048	190049
HP290 10 kW + Combi2 C24	190050	190051

Customer Service:

01482 498660

Technical Help:

01482 498663

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