

Commissioning Form

Customer Information

Name		Address
Telephone		
Email		

Installer Information

Name		Address
Company		
Telephone		
Email		
MCS Installer Reg No.		
G3 Certification No.		

Building Information

Heating System Peak Heat Loss (kW)			
Peak Hot Water Volume (L)			
Building Regulations Notification No.			
DNO Notification		Connect & Notify <input type="checkbox"/>	Apply to Connect <input type="checkbox"/>

Heat Pump Information

Heat Pump Technology	Air Source <input type="checkbox"/>	Ground Source <input type="checkbox"/>	Water Source <input type="checkbox"/>	Other <input type="checkbox"/>
Model No.		Quantity		Serial No.
Type		Monobloc <input type="checkbox"/>	Split <input type="checkbox"/>	Other <input type="checkbox"/>
Application	Heating & Hot Water <input type="checkbox"/>	Heating Only <input type="checkbox"/>	Hybrid <input type="checkbox"/>	Cascade <input type="checkbox"/>

Hot Water System Information

Manufacturer				
Model No.		Quantity		Serial No.
Type		Vented <input type="checkbox"/>	Un-Vented <input type="checkbox"/>	Thermal Store <input type="checkbox"/>
Application				In-Direct <input type="checkbox"/>

Supplementary Hybrid System Information

Manufacturer							
Model No.		Quantity		Serial No.			
Type		Vented <input type="checkbox"/>	Gas Boiler <input type="checkbox"/>	Oil Boiler <input type="checkbox"/>	Other <input type="checkbox"/>		
Application	Heating & Hot Water <input type="checkbox"/>	Heating Only <input type="checkbox"/>	Hybrid <input type="checkbox"/>	Cascade <input type="checkbox"/>			

Electrical & Hydronic Controls - System & Heat Pump (Tick appropriate boxes if applicable)

1 Time & Temperature Control to Heating	<input type="checkbox"/> Room Thermostat & Programmer/Timer	<input type="checkbox"/> Programmable Room Thermostat	<input type="checkbox"/> Load/Weather Compensation	<input type="checkbox"/> Optimum Start Control
2 Time & Temperature Control to Hot Water	<input type="checkbox"/> Cylinder Thermostat & Programmer/Timer		<input type="checkbox"/> Combined with Heat Pump main controls	
3 Hybrid System - synchronised control of boiler and heat pump fitted	<input type="checkbox"/> Yes If Yes - boiler model switching point (Quote Tariff or Temperature Level)			
4 Heating Zone Valves (including underfloor loops)	<input type="checkbox"/> Pre-existing	<input type="checkbox"/> Fitted	<input type="checkbox"/> Not Required	
5 Hot Water Zone Valves	<input type="checkbox"/> Pre-existing	<input type="checkbox"/> Fitted	<input type="checkbox"/> Not Required	
6 Thermostatic Radiator Valves	<input type="checkbox"/> Pre-existing	<input type="checkbox"/> Fitted	<input type="checkbox"/> Not Required	
7 Outdoor Sensor	<input type="checkbox"/> Pre-existing	<input type="checkbox"/> Built In	<input type="checkbox"/> Provided	
8 Heat Pump Safety Interlock (3)	<input type="checkbox"/> Pre-existing	<input type="checkbox"/> Built In	<input type="checkbox"/> Provided	
9 Flow & Cylinder temperature sensors correctly positioned?	<input type="checkbox"/> No		<input type="checkbox"/> Yes	
10 Automatic Bypass System	<input type="checkbox"/> Pre-existing	<input type="checkbox"/> Fitted	<input type="checkbox"/> Not Required	
11 Buffer Vessel Fitted	<input type="checkbox"/> No	<input type="checkbox"/> Yes If Yes, Volume	Litres	
12 Plate Heat Exchanger fitted to give hydronic separation	<input type="checkbox"/> No		<input type="checkbox"/> Yes	
13 Expansion vessel for heating is sized, fitted & charged in accordance with manufacturers instructions?	<input type="checkbox"/> Yes			
14 Legionella protection for stored hot water provided by timed temperature control?	<input type="checkbox"/> Yes			
15 Weather Compensation Settings	<input type="text"/> °C flow at	<input type="text"/> °C outdoor &	<input type="text"/> °C flow at	<input type="text"/> °C outdoor
16 Third Party Controls?	<input type="checkbox"/> No	<input type="checkbox"/> Yes Manufacturer Name & Mode		
17 Are third party controls correctly interlocked?	<input type="checkbox"/> No		<input type="checkbox"/> Yes	

All Systems (Tick appropriate boxes if applicable)

1 The heating system has been filled and pressure tested				<input type="checkbox"/> Yes
2 Expansion vessel for heating is sized, fitted & charged in accordance with manufacturer's instructions				<input type="checkbox"/> Yes
3 The system has been flushed and cleaned in accordance with BS7593: 2019 and heat pump manufacturer's instructions				<input type="checkbox"/> Yes
4 What system cleaner was used?	Brand		Product	
5 What heating system inhibitor was used?	Brand		Product	
5 What heat pump anti-freeze has been used?	Brand		Product	
6 What heat pump anti-freeze has been used?	Brand		Product	
7 What is the heat pump anti-freeze concentration level?	%			
8 System filter fitted in accordance with BS 7593: 2019?				<input type="checkbox"/> Yes
9 Outdoor fuse rating	A	Type	<input type="checkbox"/> Not Required	
10 Cylinder coil surface area or Plate heat exchanger	<input type="checkbox"/> M ²	<input type="checkbox"/> Plate Heat Exchanger Fitted	<input type="checkbox"/> Not Available Heating Only	
11 Legionella protection	°C every	Days		
12 Circulating pump(s) speed settings?				
13 Measured flowrate	Domestic Hot Water	<input type="checkbox"/> Litres/Min	Heating	<input type="checkbox"/> Litres/Min
14 Measured steady state delta T (Flow and Return)	<input type="checkbox"/> °C	Flow Temperature	<input type="checkbox"/> °C	Return Temperature <input type="checkbox"/> °C

Outdoor Unit

1 Is the heating system adequately frost protected and pipes insulated to prevent heat loss?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2 Split only: The refrigerant circuit has been evacuated and charged in accordance with manufacturer's instructions		<input type="checkbox"/> Yes	
3 The heat pump is fitted on a solid/stable surface capable of taking its weight		<input type="checkbox"/> Yes	
4 The necessary heat pump defrost provision been put in place		<input type="checkbox"/> Yes	
5 The heat pump fan free from obstacles and operational		<input type="checkbox"/> Yes	
6 Is all external pipework insulated?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
7 ASHP only: Does the outdoor unit have adequate airflow as per the manufacturers guidelines?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
8 Has suitable consideration been made for condensate discharge?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
9 Flow and return isolation valves fitted?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
10 Anti-Vibration mounting pads fitted?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
11 Refrigerant type		Weight (kg)	
12 Has the condensate drain been installed to the manufacturers instructions?		<input type="checkbox"/> No	<input type="checkbox"/> Yes

Heating Mode

1 The heating system has been filled and pressure tested				<input type="checkbox"/> Yes
2 Heating Temperatures	Heating Flow Temperature	<input type="checkbox"/> °C	Heating Return Temperature	<input type="checkbox"/> °C
3 Emitter type	Underfloor Heating	<input type="checkbox"/>	Radiators	<input type="checkbox"/>
			Towel Rail	<input type="checkbox"/>
4 Emitters balanced?				<input type="checkbox"/> Yes
5 Air removed from system?				<input type="checkbox"/> Not Required <input type="checkbox"/> Yes
6 System correctly balance/rebalanced				<input type="checkbox"/> Yes

Domestic Hot Water Mode – Measure & Record (Tick appropriate boxes if applicable)

1 Is the heat pump connected to a hot water cylinder?	<input type="checkbox"/> Unvented	<input type="checkbox"/> Vented	<input type="checkbox"/> Thermal store	<input type="checkbox"/> Not Connected
2 Hot water cylinder size				<input type="text"/> Litres
3 Domestic hot water target temperature	<input type="text"/> °C	Cylinder heat up	<input type="text"/> Minutes	
4 Hot water has been checked at all outlets				<input type="checkbox"/> Yes
5 Have Thermostatic blending valves been fitted?	<input type="checkbox"/> Not Required			<input type="checkbox"/> Yes

Additional System Information

1 Water Flow rate setting of the heat pump at commissioning (l/min):				
2 Additional heat sources connected	<input type="checkbox"/> Gas Boiler	<input type="checkbox"/> Oil Boiler	<input type="checkbox"/> Electric Heater	<input type="checkbox"/> Solar Thermal
<input type="checkbox"/> Other				
3 Remove & clean line strainer if present	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Not Applicable	
4 The operation of the heat pump and system controls have been demonstrated to the end-user	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Not Applicable	

All Installations

1 All electrical work complies with the appropriate Regulations	<input type="checkbox"/> Yes
2 The heat pump and associated products have been installed and commissioned in accordance with the manufacturer's instructions	<input type="checkbox"/> Yes
3 The operation of the heat pump and system controls have been demonstrated to and understood by the customer	<input type="checkbox"/> Yes
4 The manufacturer's literature, including Benchmark Checklist and Service Record, has been explained and left with the customer	<input type="checkbox"/> Yes

Mains Pressure Hot Water Storage System Commissioning Form



Domestic Hot Water Mode – Measure & Record (Tick appropriate boxes if applicable)

1 Is the primary circuit a sealed or open vented system?	<input type="checkbox"/> Sealed	<input type="checkbox"/> Open
2 What is the maximum primary flow temperature?	<input type="text"/> °C	

All Systems

1 What is the incoming static cold water pressure at the inlet to the system?	<input type="text"/>	Bar
2 Has a strainer been cleaned on installation debris (if fitted) ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
3 Is the installation in a hard water area (above 200ppm) ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
4 If Yes, has a water scale reducer been fitted ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
5 What type of scale reducer has been fitted ?	<input type="text"/>	
6 What is the hot water thermostat set temperature ?	<input type="text"/> °C	
7 What is the maximum hot water flow rate at set thermostat temperature (measured at high flow outlet) ?	<input type="text"/> l/min	
8 Time and temperature controls have been fitted in compliance with Part L of the Building Regulations?	<input type="checkbox"/> Yes	
9 Type of control system (if applicable)	<input type="checkbox"/> Y Plan	<input type="checkbox"/> S Plan <input type="checkbox"/> Other
10 Is the cylinder solar (or other renewable) compatible ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
11 What is the hot water temperature at the nearest outlet ?	<input type="text"/> °C	
12 All appropriate pipes have been insulated up to 1 metre or the point where they become concealed	<input type="checkbox"/> Yes	

Unvented Systems

1 Where is the pressure reducing valve situated (if fitted) ?	<input type="text"/>	
2 What is the pressure reducing valve setting ?	<input type="text"/>	Bar
3 Has a combined temperature and pressure relief valve and expansion valve been fitted and discharge tested ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
4 The tundish and discharge pipework have been connected and terminated to Part G of the Building Regulations	<input type="checkbox"/> Yes	
5 Are all energy sources fitted with a cut out device ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
6 Has the expansion vessel or internal air space been checked ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Thermal Stores Only (Tick appropriate boxes if applicable)

1 What store temperature is achievable ?	<input type="text"/> °C
2 What is the maximum hot water temperature ?	<input type="text"/> °C

All Installations

1 The hot water system complies with the appropriate Building Regulations	<input type="checkbox"/> Yes
2 The system has been installed and commissioned in accordance with the manufacturer's instructions	<input type="checkbox"/> Yes
3 The system controls have been demonstrated to and understood by the customer	<input type="checkbox"/> Yes
4 The manufacturer's literature, including Benchmark Checklist and Service Record, has been explained and left with the customer	<input type="checkbox"/> Yes

i-290 Gas Compliance

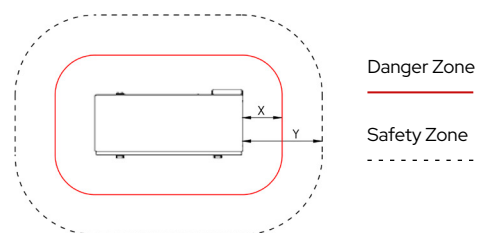
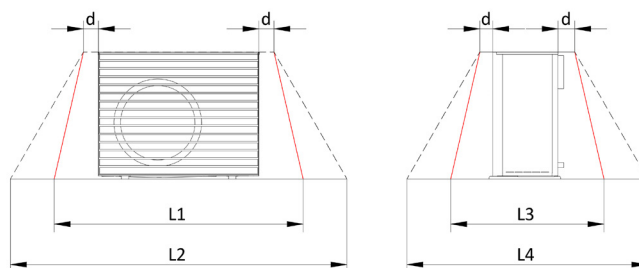
Please attach the following photographs:

- Heat pump data badge
- Heat pump in situ showing clearance zones
- Cylinder data badge
- Cylinder in situ

Free-field ground installation

For unit(s) installed in open field terrain, the danger zone (continuous red line) and the safety zone (dashed black line) are shown in the figures below.

MODEL i-290		X	Y	L1	L2	L3	L4	d
0106 / 0109	mm	1000	1500	3105	4105	2490	3490	250
0112 / 0115 / 0118	mm	1500	2000	4105	5105	3490	4490	250



Danger Zone

Safety Zone

I confirm that I have adhered to the clearance zones in relation to R290 safety guidelines

Commissioning Engineer's Signature

Customer's Signature*

* To confirm satisfactory demonstration and receipt of manufacturers' literature.

Date

Date