



octopus energy

services

Heat Pump Installation Agreement

16 Sep 2024

between

Frank O'gorman
6;Eddeys Lane;Bordon
GU35 8HU

J-252F1505 - AC-E5F3DFEB

&

Octopus Energy Services Ltd.

UK House
5th Floor
164-182 Oxford Street
London
W1D 1NN

VAT Number: GB358672751



Dear Frank O'gorman,

Octopus Energy Services are pleased to provide you with a final contract for the supply and installation of your new renewable heating system.

We would like to thank you for allowing us to carry out an evaluation and survey of your home to assess your suitability to upgrade to a heat pump system.

The Information provided to you in this document has been set out in accordance with the consumer code under which we operate our services. We advise you to read the offer and supporting documents in full so that you can fully understand the obligation both yourself and Octopus Energy Services are required to meet.

Octopus Energy Services is an MCS accredited installer. Our installations enable you to access funding from the Boiler Upgrade Scheme (BUS). This is a government incentive to allow homeowners to access funding to support the cost of installing the selected renewable technology to their homes.

Your fully installed price

Standard Installation Quote	£ 11,594.65
Non-Standard Upgrades	£ 00.00
<i>Sub-Total</i>	£ 11,594.65
Boiler Upgrade Scheme Grant	-£7,500.00
Radiator Change	-£300
Total Amount You'll Pay	£ 3,794.65

Payment Schedule

Advance Payment Received	£ 200.00
Balance Due On Installation Completion	£ 3,594.65

You can pay by BACS bank transfer, debit or credit card. Please note that payments are made to our Parent Company, Octopus Energy Limited, taken on behalf of Octopus Energy Services through a payment system called Kraken. Invoices will be sent by Octopus Energy Limited on behalf of Octopus Energy Services. Once you have made payment, we will provide you with written confirmation of our receipt of those payments.

To give you peace of mind, the deposit you have paid is insured through HIES Protection.

If you are signing up to a service plan with us, this will be taken monthly via direct debit and auto renewed after 12 months unless you inform us otherwise.

Description of Goods & Services

<i>Goods and Equipment</i>	<i>Details</i>
Heat Pump & Associated Components	Daikin Outdoor Unit Daikin Altherma Monobloc - 8kW (R32 2022 Release) (EDLA08E2V3)
Hot Water Cylinder	Daikin Hot Water Cylinder - 150L (EKHWSU150D3V3)
Radiator Upgrades as required - see your Radiator Schedule (Appendix 1) for details	✓
Plumbing Components	✓
Electrical Installation Components	✓

<i>Services Included</i>	<i>Details</i>
End to End Installation Services	✓
Waste Collection	✓
MCS Registration Certificate	✓
Survey, Design, Testing & Commissioning	✓
BUS Grant Application	✓
5 Year Warranty	✓

Optional Service Plans

To maintain your 5-year heat pump warranty you'll need to get an annual service from an approved installer. We offer comprehensive maintenance plans at the lowest price in the market. You'll be able to choose your preferred plan on signing this document, or anytime up to 60 days following your installation..

You can view these in full on our website: <https://octopus.energy/heat-pump-service-plans/>

Warranty Only	Basic Service Plan
Free	£9 / month
No annual service included	Annual service included
5 Year Warranty on your Heat Pump	5 Year Warranty on your Heat Pump
2 Year Warranty on your Cylinder	5 Year Warranty on your Cylinder
2 Year Warranty on all other components	5 Year Warranty on all other components
2 Year Workmanship Warranty	2 Year Workmanship Warranty

Install Readiness Checklist

The following install readiness activities have been identified as needing to be carried out at your property before Octopus Energy Services can proceed with your air-source heat pump installation.

By signing this document, you confirm and acknowledge these obligations will need to be arranged/completed by you (unless specifically stated otherwise), that evidence will be supplied of the required works having been carried out, and that your install date may be postponed or rescheduled if these are not completed to an acceptable standard prior to installation.

Applicable to all Properties:

- Clear ASHP area - customer to clear area around proposed location of ASHP
- Clear Cylinder area - customer to clear area around proposed location of Hot Water Cylinder
- Radiators - customer to clear access to radiators which require replacement
- Loft Clearance - customer to clear loft where access is required for cable / pipe run
- Make mains stopcock accessible

Applicable to your Property / Installation:

Customer Obligations

✓	Asbestos - customer to arrange asbestos test and notify us on outcome: Soffit
✓	Shower Pump - customer aware shower pump will be disconnected (new cylinder will provide mains pressure to hot)

Custom Obligations

Details	Clear space for ASHP., Plumbing for new radiator in family room., Booked PIV to determine if customer needs to remove wall for new cylinder
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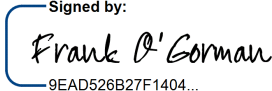
DNO Obligations

✓	Fuse upgrade required
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Ready to switch to low-carbon heating?

To accept this contract and proceed with the installation of your heat pump please sign and return this pack to Octopus Energy Services. We will then introduce you to your install coordinator to begin arranging your installation.

- We / I agree to the quotation and confirm the order for the products and installation services specified. Any changes after this point may require an additional Surveyor visit, and/or additional charges, and/or a delay to your installation.
- We / I agree to the total cost and payment terms set out above.
- We / I have read and agree to abide by Octopus Energy Services Terms and Conditions provided here: <https://octopus.energy/heat-pump-terms-and-conditions-may-2024/>

Customer Name	Frank O'Gorman
Signature	<div>Signed by:  9EAD526B27F1404...</div>
Date	18/9/2024 03:55 PDT
Preferred Service Plan	Basic Service Plan

This contract complies with our obligations as members of both the Home Insulation & Energy Systems Contractors Scheme (HIES) and the Microgeneration Certification Scheme (MCS).

Home Insulation & Energy Systems Contractors Scheme (HIES)

HIES is a consumer protection organisation covering the installation of renewable energy and home energy efficiency products. HIES offer Chartered Trading Standards Institute (CTSI) approved alternative dispute resolution service, thus ensuring customers are protected at every step of their customer journey.

The Microgeneration Certification Scheme

MCS membership demonstrates compliance to industry standards that companies strive to meet. Membership highlights to consumers that companies are able to consistently install to the highest quality every time.

Complaints

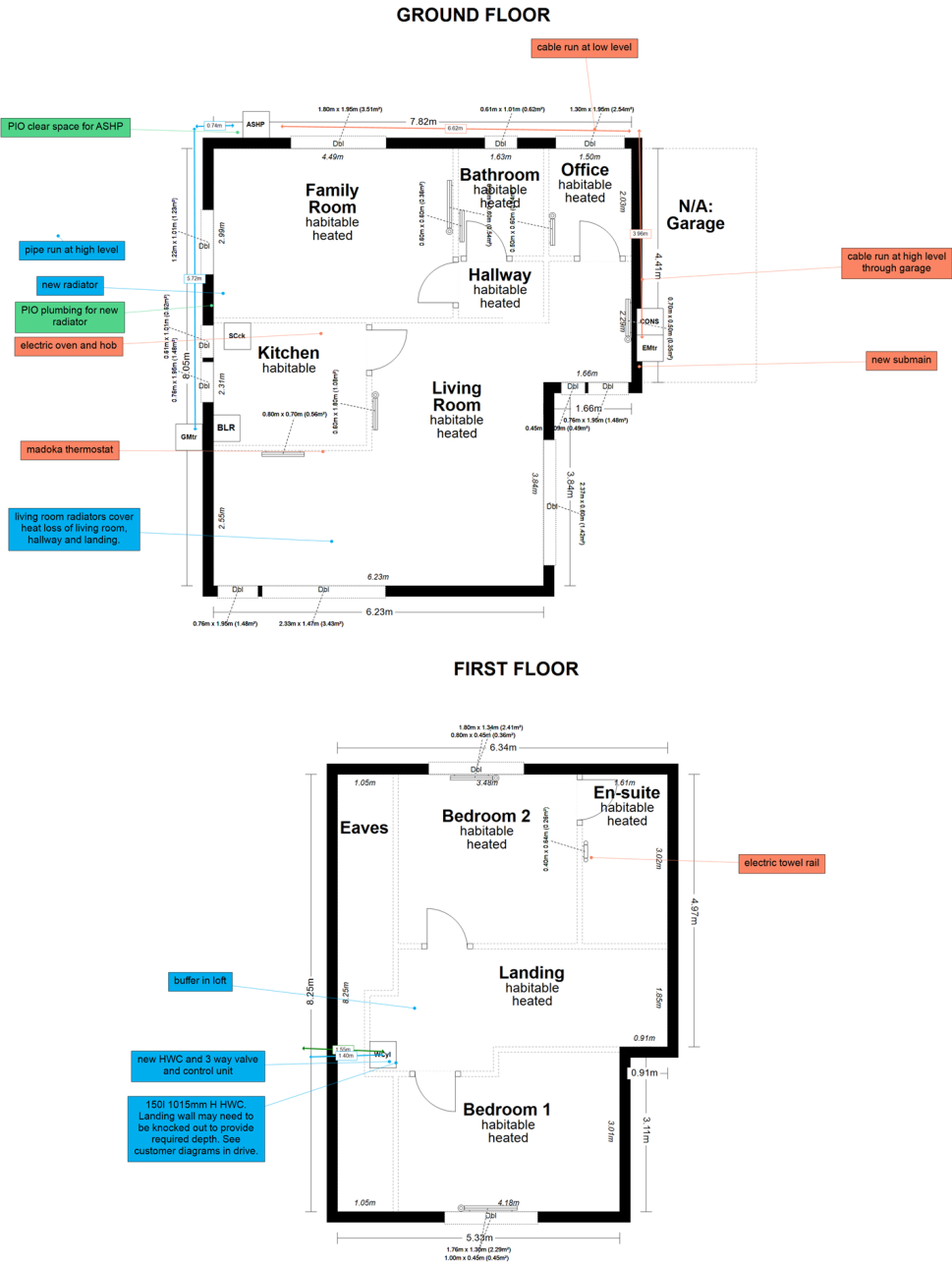
we hope you won't have any reason to complain about any aspect of our service. but if you do, please contact us in one of the following ways:

- Email:** heat@octopus.energy
- Call:** 0808 196 6842
- Write:** Octopus Energy Heat Pumps, Block C, 3 Neptune Square, Edward Street, Brighton BN2 0AT
- Website:** <https://octopus.energy/unhappy/>

If your issue cannot be resolved then you can refer the matter to an independent conciliation as a way of resolving the situation. The Conciliation Service used is that offered by home insulation & Energy Systems Contractors Scheme (HIES) and is described in their consumer code. It aims to reach a non-legal solution to the dispute in a reasonable timescale. For more information on HIES Alternative dispute resolution please visit Alternative Dispute Resolution - HIES Consumer Code (hiesscheme.org.uk)

Total Radiator Output 6298
Design Flow Temperature 50
Design Outside Temperature -2.2

Room Description	No. of Radiators	Design Temperature (°C)	Room Heat Loss (Watts)	Current Radiator		Proposed Radiator				
				Description	Output at Design (Watts)	Description	Output at Design (Watts)	Final Room Output	New Total Room Output (all rads)	Coverage
Bathroom	1	22	311	K2 H600 x L600	465	-	-	465	465	150
Bedroom 1	1	18	513	K2 H450 x L1000	698	-	-	698	698	136
Bedroom 2	1	18	449	K2 H450 x L800	559	-	-	559	559	124
En-suite	1	21	302	TOWEL_RAIL H640 x L400	101	-	-	101	101	33
Family Room	2	21	1258	-	-	* CENTER 60DC80 4664BTU	585	585	1316	47
Family Room	2	21	1258	K2 H600 x L900	731	-	-	731	1316	58
Living Room	3	21	2203	P_PLUS H500 x L700	363	-	-	363	2834	16
Living Room	3	21	2203	K2 H700 x L800	700	-	-	700	2834	32
Living Room	3	21	2203	K2 H1800 x L600	1771	-	-	1771	2834	80
Office	1	21	319	K2 H600 x L400	325	-	-	325	325	102



Heat Pump System Performance Estimate

Energy Performance Certificate (EPC) Information

Does this estimate relate to a new build or proposal for extension or reduction in size of an existing building?	No
EPC No. for building	0000-0000-0000-0000
Energy required to heat property	10000 kWh
Energy required for hot water	2000 kWh

New Renewable System Information

Type of System ¹	Air Source Heat Pump
Manufacturer Name	Daikin
Manufacturer Model	EDLA08E2V3
MCS Certification Number ²	011-1W0529_1
Flow Temperature ³	50
MCS SCOP Heating ⁴	3.48
MCS SCOP Hot Water ⁵	2.754
Renewable System Provides	Heating and Hot Water
Hot Water Immersion Use ⁶	Once per week
Size of Hot Water Cylinder	150 Ltr

Existing System

Existing heating system fuel ⁷	Gas
Hot Water heated by ⁷	Gas
Age of existing system	Pre 1994
Efficiency of existing system	82%

¹ This calculator is not designed to be used for Solar Assisted Heat Pumps

² Available from the MCS Product Directory

³ Determined by the temp. of the water leaving the HP when supplying space heating at the external design temp.

⁴ SCoP - Seasonal Coefficient of Performance. This value is based on the MCS HP SCoP Table below

⁵ If providing space heating and DHW then default value from SAP2012. If DHW only see methodology in MIS3005

⁶ based on 50C up to 60C, 3kW

⁷ If new build model the most likely alternative fuel

Estimated System Performance / Comparison

Energy Requirement for the building

	Heating	Hot Water	Total	
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Net Energy required to heat property	10000	2000	12000	kWh
Existing System Consumption	12195	2439	14634	kWh

New HP System Estimated Consumption

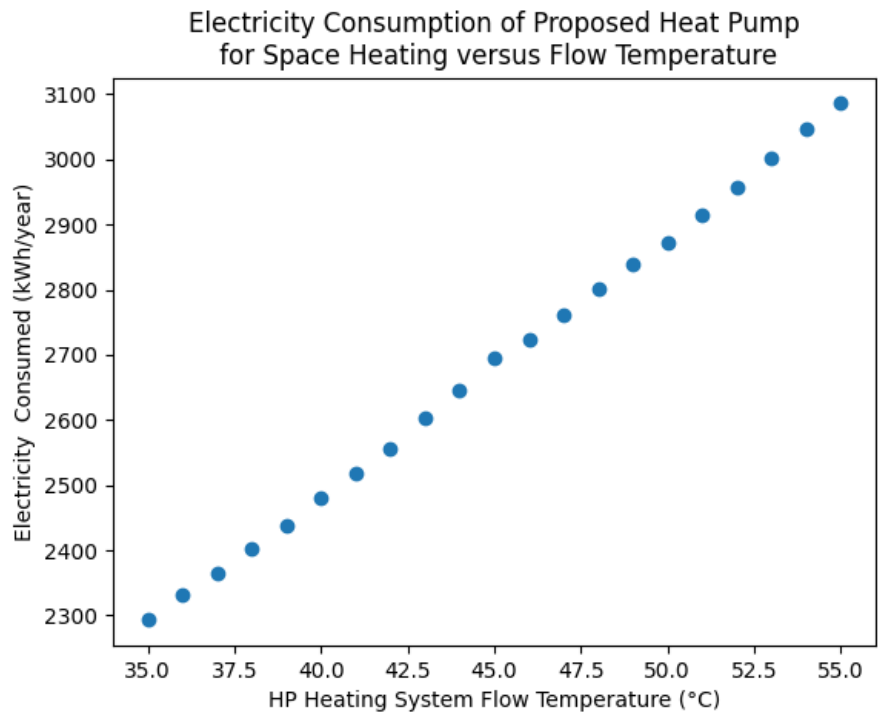
Full Heat Pump System (if selected above)

HP System Electricity Consumption	2874	817	3691	kWh
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Hybrid System (if selected above)

HP System Electricity Consumption	0	0	0	kWh
Hybrid system other consumption	0	0	0	kWh
Hybrid Total Consumption	0	0	0	kWh

Note: There are different types of hybrid system. This calculation presumes a hybrid where both sources of heat supply the same hydraulic circuits (heating and hot water) according to the proportion selected above.



Flow °C	ScOP
35	4.36
36	4.29
37	4.23
38	4.16
39	4.1
40	4.03
41	3.97
42	3.91
43	3.84
44	3.78
45	3.71
46	3.67
47	3.62
48	3.57
49	3.52
50	3.48
51	3.43
52	3.38
53	3.33
54	3.28
55	3.24

SCoP Definition

SCoP = Seasonal Coefficient of Performance:

MCS SCoP is a theoretical indication of the anticipated efficiency of a heat pump aggregated over a year using standard climate data across Europe. It indicates the units of total heat energy generated (output) for each unit of energy (electricity) consumed (input). It is slightly different to ErP SCoP as it contains efficiency losses due to controls and brine pumps (for a GSHP). As a guide a heat pump with an MCS SCoP of 3 generates 3 kWh of heat energy for every 1 kWh of electrical energy it consumes.

Important Information:

This performance estimate should be accompanied by the Key Facts which explain the factors that can affect the performance of a heat pump. Any technical variation to the specification could affect the performance of the Heat Pump System in which case the MCS Contractor MUST update and re-issue this document and advise the customer of their Consumer Rights.

Key Facts

Predicting the heat demand of a building, and therefore the performance and running costs of heating systems, is difficult to predict with certainty due to the variables discussed here. These variables apply to all types of heating systems, although the efficiency of heat pumps is more sensitive to good system design and installation.

For these reasons your estimate is given as guidance only and should not be considered as a guarantee.

Seasonal Coefficient of Performance

MCS Seasonal Coefficient of Performance (SCoP) is derived from the EU ErP labelling requirements, and is a theoretical indication of the anticipated efficiency of a heat pump over a whole year using standard (i.e. not local) climate data for 3 locations in Europe. It is used to compare the relative performance of heat pumps under fixed conditions and indicates the units of total heat energy generated (output) for each unit of electricity consumed (input). As a guide, a heat pump with a MCS SCoP of 3 indicates that 3 kWh of heat energy would be generated for every 1 kWh of electrical energy it consumes over a 'standard' annual cycle.

Energy Performance Certificate

An Energy Performance Certificate (EPC) is produced in accordance with a methodology approved by the government. As with all such calculations, it relies on the accuracy of the information input. Some of this information, such as the insulating and air tightness properties of the building may have to be assumed and this can affect the final figures significantly leading to uncertainty especially with irregular or unusual buildings.

Identifying the uncertainties of energy predictions for heating systems

We have identified 3 key types of factor that can affect how much energy a heating system will consume and how much energy it will deliver into a home. These are 'Fixed', 'Variable' and 'Random'. Most factors are common to ALL heating systems regardless of the type (e.g oil, gas, solid fuel, heat pump etc.) although the degree of effect varies between different types of heating system as given in the following table.

The combined effect of these factors on energy consumption and the running costs makes overall predictions difficult however an accuracy + 25-30% would not be unreasonable in many instances. Under some conditions even this could be exceeded (e.g. considerable opening of windows). Therefore, it is advised that when making choices based on mainly financial criteria (e.g. payback based on capital cost verses net benefits such as fuel savings and financial incentives) this variability is taken into account as it could extend paybacks well beyond the period of any incentives received, intended occupancy period, finance agreement period etc.

Factor	Impact
Fixed which includes:	
Equipment Selection Performance figures (SCoP) from ErP data	System Efficiency
Energy Assessment via the EPC (e.g. assumptions as to fabric construction and levels of insulation; the variation in knowledge and experience of Energy Assessors)	Energy Required
Variable which are affected by the system design and include:	
Accuracy of sizing of heat pump- i.e. closeness of unit output selection (kW) to demand heat requirement (kW)	System Efficiency
Design space and ambient (external) temperatures	Energy Required
Design flow /return water temperatures, and weather compensation	System Efficiency
Type of Heat emitter (e.g. Under-floor; natural convector (e.g. 'radiator'), fan convector etc.)	System Efficiency
Random which cannot be anticipated and include:	
User behaviour:	
• Room temperature settings	Energy Required
• Hot water usage and temperature settings	Energy Required
• Occupancy patterns/times	Energy Required
• Changing the design HP flow temperatures	System Efficiency
• Ventilation (i.e. opening windows)	Energy Required
Annual climatic variations (i.e. warmer and colder years than average)	Energy Required

Key

The statement at the end of each item indicates the major factor affected as follows:

Energy Required:	The heat energy output requirement of the system which directly impacts on running costs. This requirement exists regardless of the heating system chosen as it is the heat required to keep the space comfortable. Opening windows or increasing room temperatures will demand more heat output, which means more energy input but this would NOT directly affect the efficiency. Thus increased energy demand does NOT automatically mean reduced efficiency.
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System
Efficiency:

The efficiency of the system has been directly affected and will therefore demand more input energy to achieve the same heat output thus increasing running costs. However, increased energy input does NOT necessarily mean lower system efficiency (see above).