

# FORM J1

## DATA COLLECTION FORM: Heat Pump Systems (See Flow Chart)

Use this form to apply to connect new or additional heat pump equipment rated up to 75A per phase that complies with two specific standards that cover power quality – EN 61000-3-2 and EN 61000-3-3<sup>1</sup>.

For other situations see Form J2 or J3, as appropriate.

**The application must be made in advance of connection.**

Please note that the normal standard of service for approval of connection are as follows:

- 5 working days - Single domestic property.
- 15 working days - Multiple properties up to 4 or those requiring additional work on the network.
- 25 working days - Larger developments (more than 4) or multiple phase properties.
- 35 working days - Properties requiring high voltage network works.

Please note any reinforcement costs may be recharged to the customer.

Electricity Customer at site	
Customer contact telephone	
Site address	
Post Code	
MPAN - Unique identifying number for electricity meter at property	XX – XXX – XXX- XX –XXXX –XXXX –XXX

Existing Space & Water Heating System				Electric/Gas/Oil/LPG/Other			.....	
If Electric then please complete the following:								
Existing space & water heating equipment	Direct acting heaters <sup>2</sup>	Storage heaters <sup>3</sup>	Hot water immersion heaters		Heat pump system			Other Inc. Flow Boilers
	kVA	kVA	Main	Boost	Compressor	Boost	Back-up	.....
			kVA	kVA	kVA	kVA	kVA	kVA

Existing space & water heating equipment to be retained	Direct acting heaters <sup>2</sup>	Storage heaters <sup>3</sup>	Hot water immersion heaters		Heat pump system			Other Inc. Flow Boilers
	kVA	kVA	Main	Boost	Compressor	Boost	Back-up	.....
			kVA	kVA	kVA	kVA	kVA	kVA

New space & water heating equipment	Direct acting heaters <sup>2</sup>	Storage heaters <sup>3</sup>	Hot water Immersion heaters		Heat pump system			Other Inc. Flow Boilers
	kVA	kVA	Main	Boost	Compressor	Boost	Back-up	.....
			3kVA	kVA	1.9kVA	kVA	kVA	kVA
Heat pump system details		Manufacturer		<b>SAMSUNG ELECTRONICS</b>				
		Type reference		AE050JXYDEH/EU				
Operating Voltage (V):		220~240Volts						
Phases (1 or 3)		1						
Heat pump system maximum electrical power requirement		4.9kVA						
Note: heaters not fitted in the heat pump unit to boost hot water temp or as a back up should be recorded as new equipment above or as existing equipment to be retained below as appropriate.								

<sup>1</sup> The manufacturer must verify this.

<sup>2</sup> Direct acting heaters are permanently connected to the mains (e.g. fixed convector or fixed panel heaters).

<sup>3</sup> Storage heaters retain heat inside the storage heater, are charged over night to store heat and release heat during the day. Storage heaters often use Economy 7 electricity tariff at night.

EC Declaration of Conformity	Attach the heat pump manufacturer's EC Declaration of Conformity as produced in association with the EMC Directive	Attached?
		Yes/No? <b>YES</b>

Required Maximum Capacity for Whole Customer Installation	kVA
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I confirm that the electrical installation noted above will be installed and commissioned as noted above and that the equipment meets the requirements of BS EN 61000-3-2 and BS EN 61000-3-3 for harmonic emissions and voltage change. The customer at the above address has been advised that commissioning of the installation may only take place when the Network Operator has completed any reinforcement works the supply network requires.			
Name		Signed	Date
On behalf of Installer			
Accreditation / Qualification			
Installer address			
Post code			
Contact person		Telephone number	
E-mail address			

<b>DNO Comments - to be completed by DNO representative following application</b>	
As a DNO representative, I give, in principle, permission for the connection of these heat pump units. If no, see comments below.	Yes/No
Comments (Use separate sheet if necessary)	
<p><b>Please See Page 3 – attached is the conclusion of an E-mail from Simon Scarbro, explaining why Samsung products can be applied for on Form A and J1</b></p>	
Signed:	Contact: Date:

So, we deduce that Note 1 of the flow chart is applicable – Form J1 applies and we infer that the equipment connection is not conditional.

One of the points of confusion is that our Planners pick up on is the Declaration of Conformity referring to EN 61000-3-11 and EN 61000-3-12 but a Form J1 has come in. These appear to be in conflict but the reason can simply be that rating puts the equipment within the scope of EN 61000-3-11 and EN 61000-3-12 but the voltage fluctuation/flicker is so low that it meets the limits when tested with the source impedance used in EN 61000-3-3 and the harmonic emission is so low that it does not exceed the limits for Class A in EN 61000-3-2. As the manufacturer has in its Declaration of Conformity to give ‘a dated reference to the specifications under which conformity is declared to ensure the conformity of the apparatus with the provisions of this Directive’, it understandably, will refer to standards it falls within the scope of.

So you can either submit J1 and explain the above or you could submit J2 but say yes to the following questions:

I hope that explains it adequately.

Regards

Simon.

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