ErP: An Installers Guide

Understanding & complying with ErP Directives for Ground Source Heat Pumps

Kensa Heat Pumps
A KENSA GROUP COMPANY

Britain's No. 1 manufacturer & supplier of ground source heat pumps

Chapter 3:

How to produce the package fiche & label:

How Kensa can help installers

Kensa Heat Pumps
A KENSA GROUP COMPANY

The package fiche

Kensa Heat Pumps
A KENSA GROUP COMPANY

Package fiche: Who does what

Suppliers (Kensa) are required to:

- Provide a product fiche at the point of sale.
- This allows the production of the package fiche by the installer.
- Kensa will supply product fiches within the packaging of every Kensa unit from the 26th September 2015.

Installers (you) are required to:

- Provide the product fiche and produce and provide a package fiche to the consumer when you complete a ground source heat pump installation.

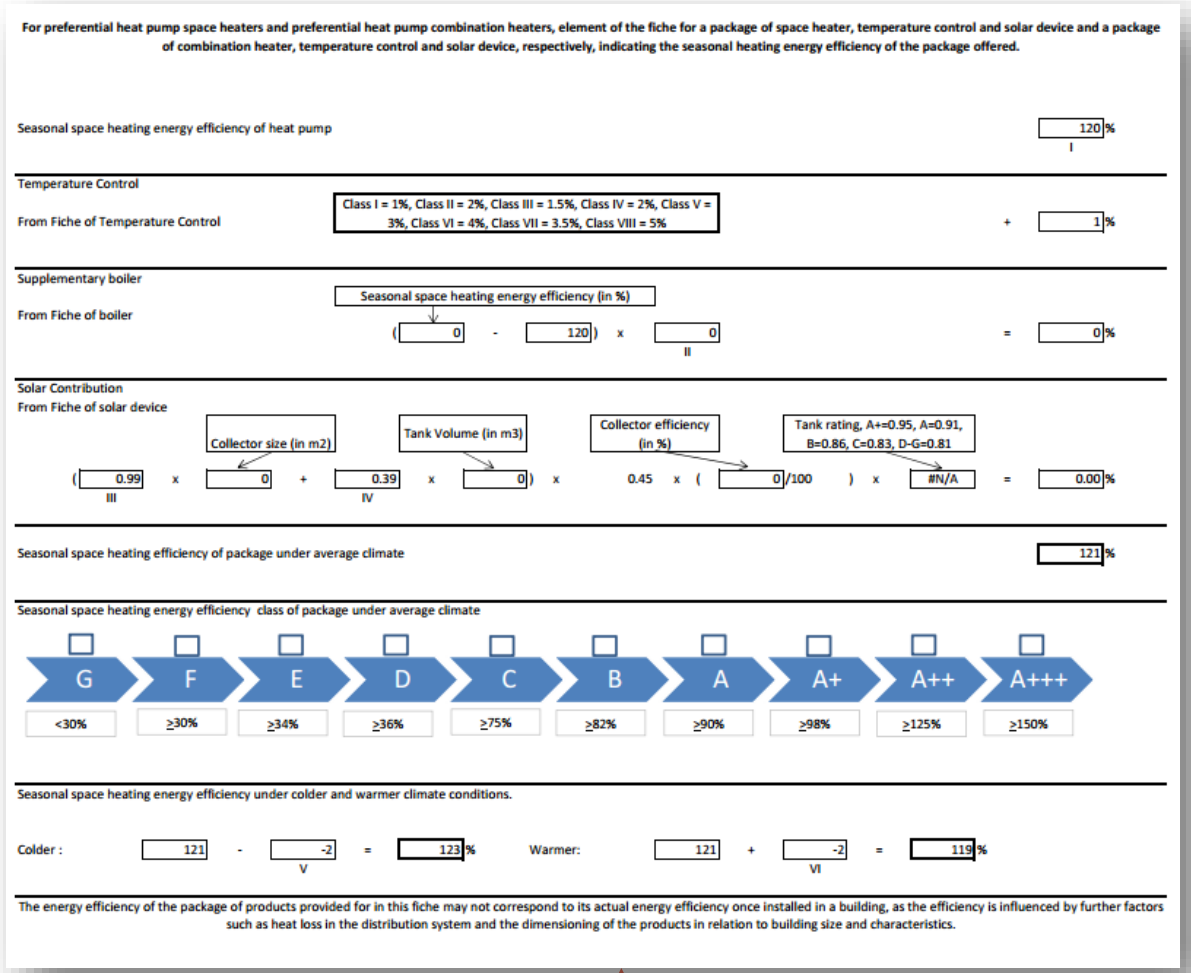
Remember:
If you use Kensa's MCS Umbrella, Kensa will produce the package fiche and label for you to provide to your customer

Package fiche: The basics

- In order to produce the package label you first need to produce the package fiche.
- Installers will be required to complete a package fiche when they complete a ground source heat pump installation featuring new controls (and / or solar thermal or a supplementary boiler).
- All of the data for your ground source heat pump system package fiche is readily available in the product fiches supplied by Kensa and the other component manufacturers.

Kensa Heat Pumps
A KENSA GROUP COMPANY

Package fiche: The basics



For preferential heat pump space heaters and preferential heat pump combination heaters, element of the fiche for a package of space heater, temperature control and solar device and a package of combination heater, temperature control and solar device, respectively, indicating the seasonal heating energy efficiency of the package offered.

Seasonal space heating energy efficiency of heat pump: 120 % (I)

Temperature Control

From Fiche of Temperature Control: Class I = 1%, Class II = 2%, Class III = 1.5%, Class IV = 2%, Class V = 3%, Class VI = 4%, Class VII = 3.5%, Class VIII = 5% → + 1 %

Supplementary boiler

From Fiche of boiler: Seasonal space heating energy efficiency (in %) (0 - 120) x 0 (II) = 0 %

Solar Contribution

From Fiche of solar device: (0.99 (III) x Collector size (in m2): 0 + 0.39 (IV) x Tank Volume (in m3): 0) x 0.45 x (Collector efficiency (in %): 0 /100) x Tank rating, A+=0.95, A=0.91, B=0.86, C=0.83, D-G=0.81: #N/A = 0.00 %

Seasonal space heating efficiency of package under average climate: 121 %

Seasonal space heating energy efficiency class of package under average climate

G	F	E	D	C	B	A	A+	A++	A+++
<30%	≥30%	≥34%	≥36%	≥75%	≥82%	≥90%	≥98%	≥125%	≥150%

Seasonal space heating energy efficiency under colder and warmer climate conditions.

Colder : 121 - -2 (V) = 123 % Warmer: 121 + -2 (VI) = 119 %

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as the efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.

Kensa's package fiche template

- Kensa has created an online template for you to produce a package fiche: www.kensaheatpumps.com/installer-portal/business-support/erp-support/package-fiche-template/
- The package fiche must contain information on the performance and efficiency of the products installed, as detailed in the product fiches supplied by the supplier, manufacturer, or distributor.

Kensa Heat Pumps
A KENSA GROUP COMPANY

How to complete a package fiche

Kensa Heat Pumps
A KENSA GROUP COMPANY

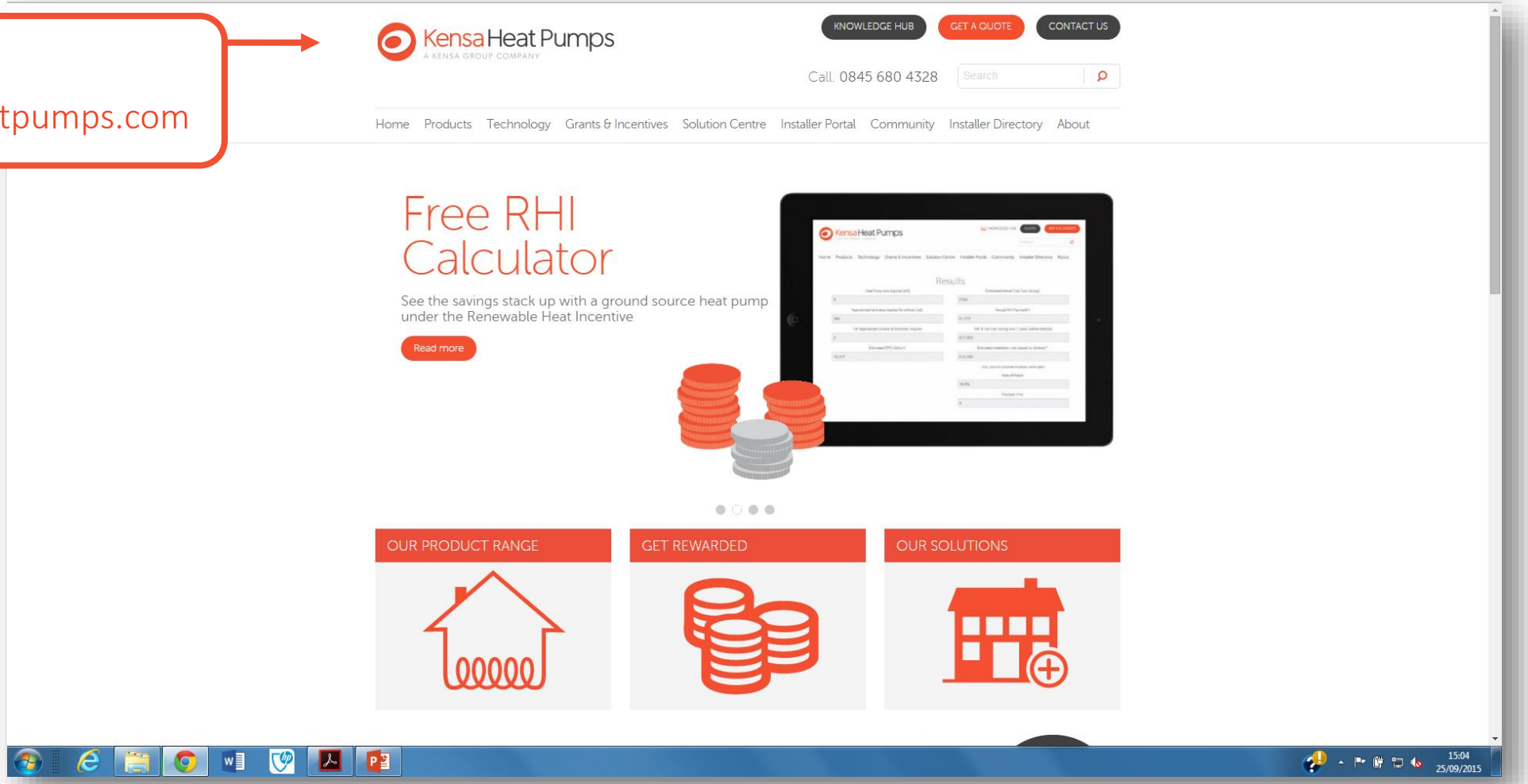
Package fiche: Checklist

What you will need:

- ✓ The product fiche for the Kensa heat pump, and all other system components.
- ✓ A computer to visit www.kensaheatpumps.com/installer-portal/business-support/erp-support/package-fiche-template/ to download the calculation spreadsheet.
- ✓ A printer to produce the package fiche as a hard copy.

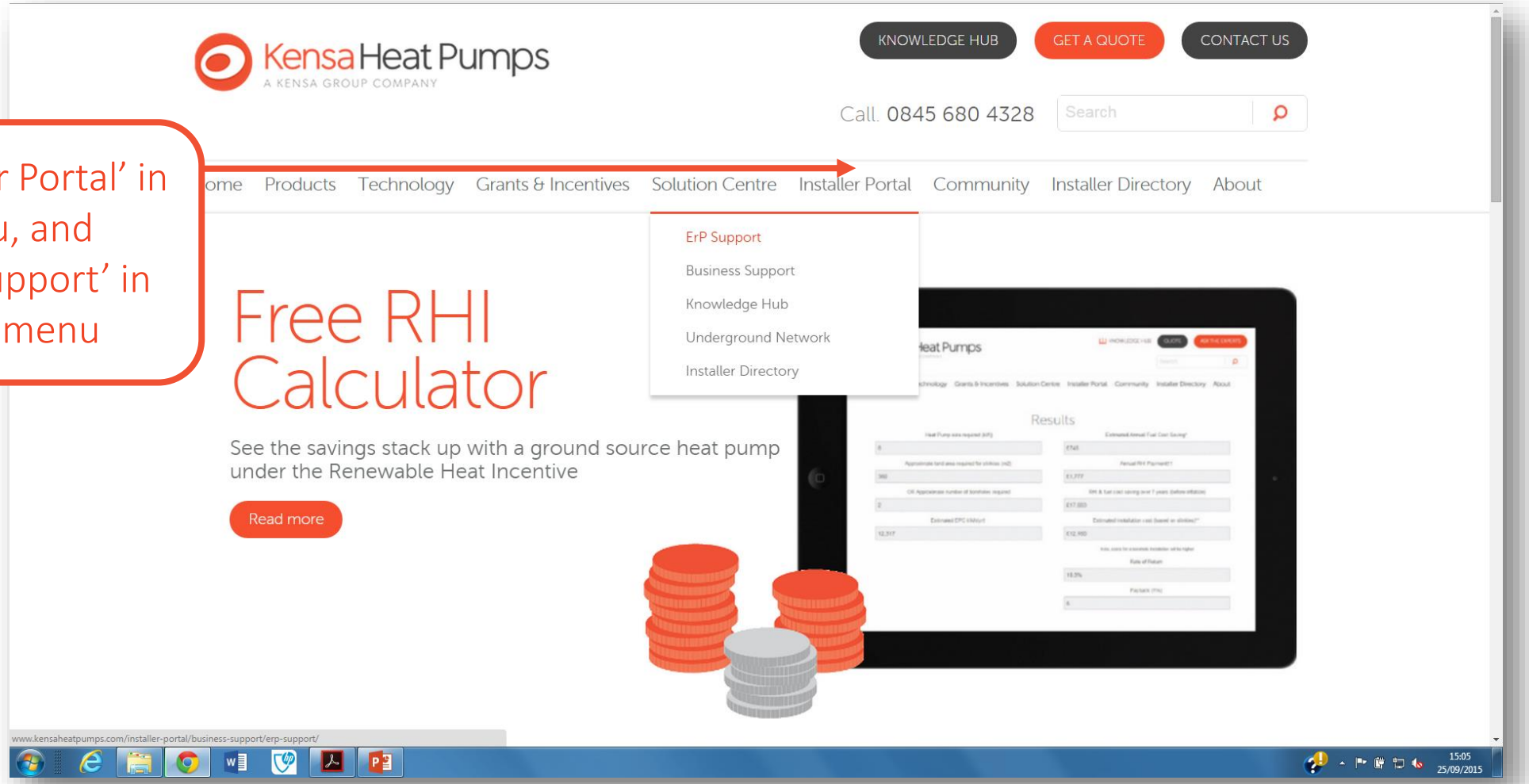
Kensa Heat Pumps
A KENSA GROUP COMPANY

Visit:
www.kensaheatpumps.com



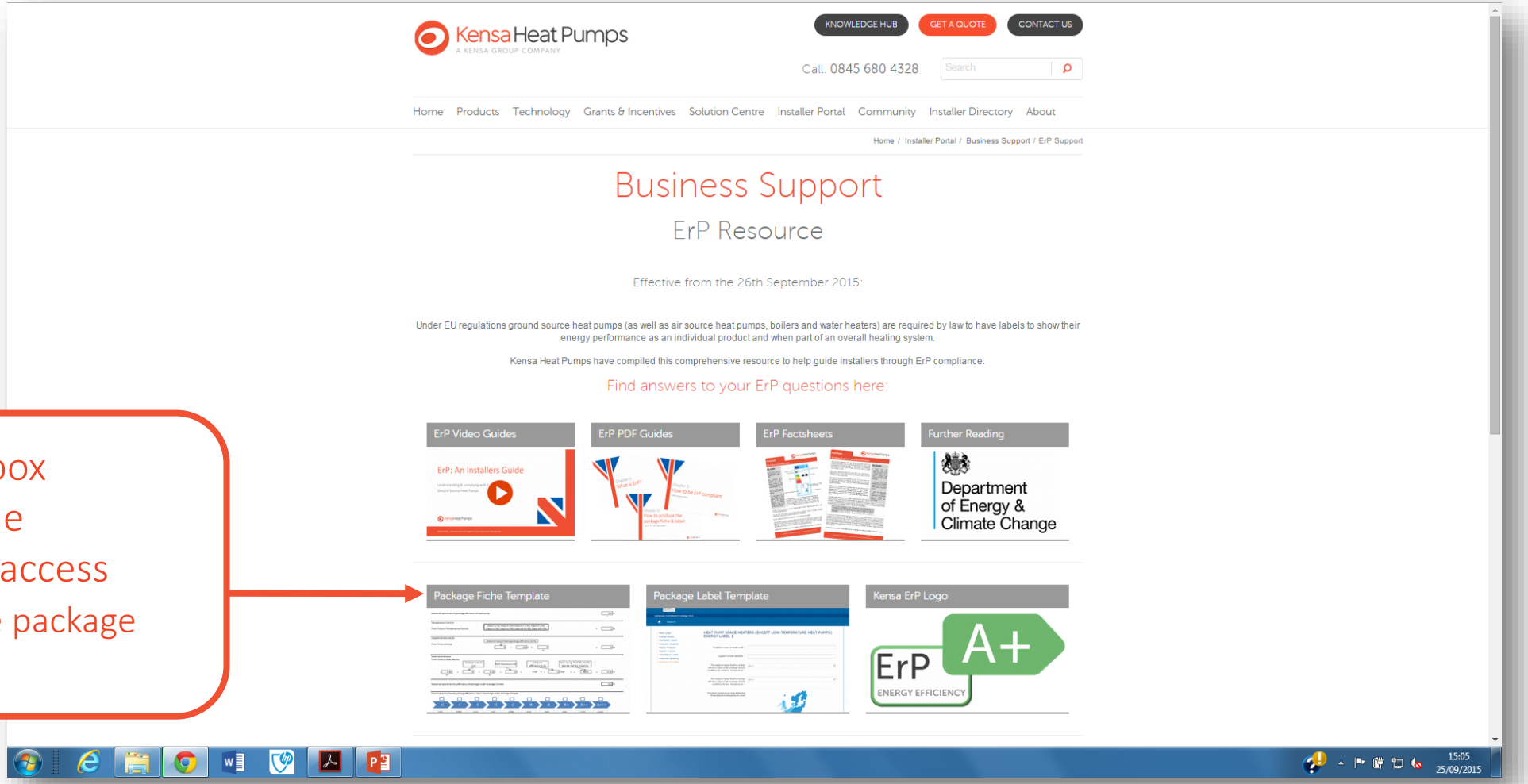
Kensa Heat Pumps
A KENSA GROUP COMPANY

Select ‘Installer Portal’ in the main menu, and click on ‘ErP Support’ in the dropdown menu

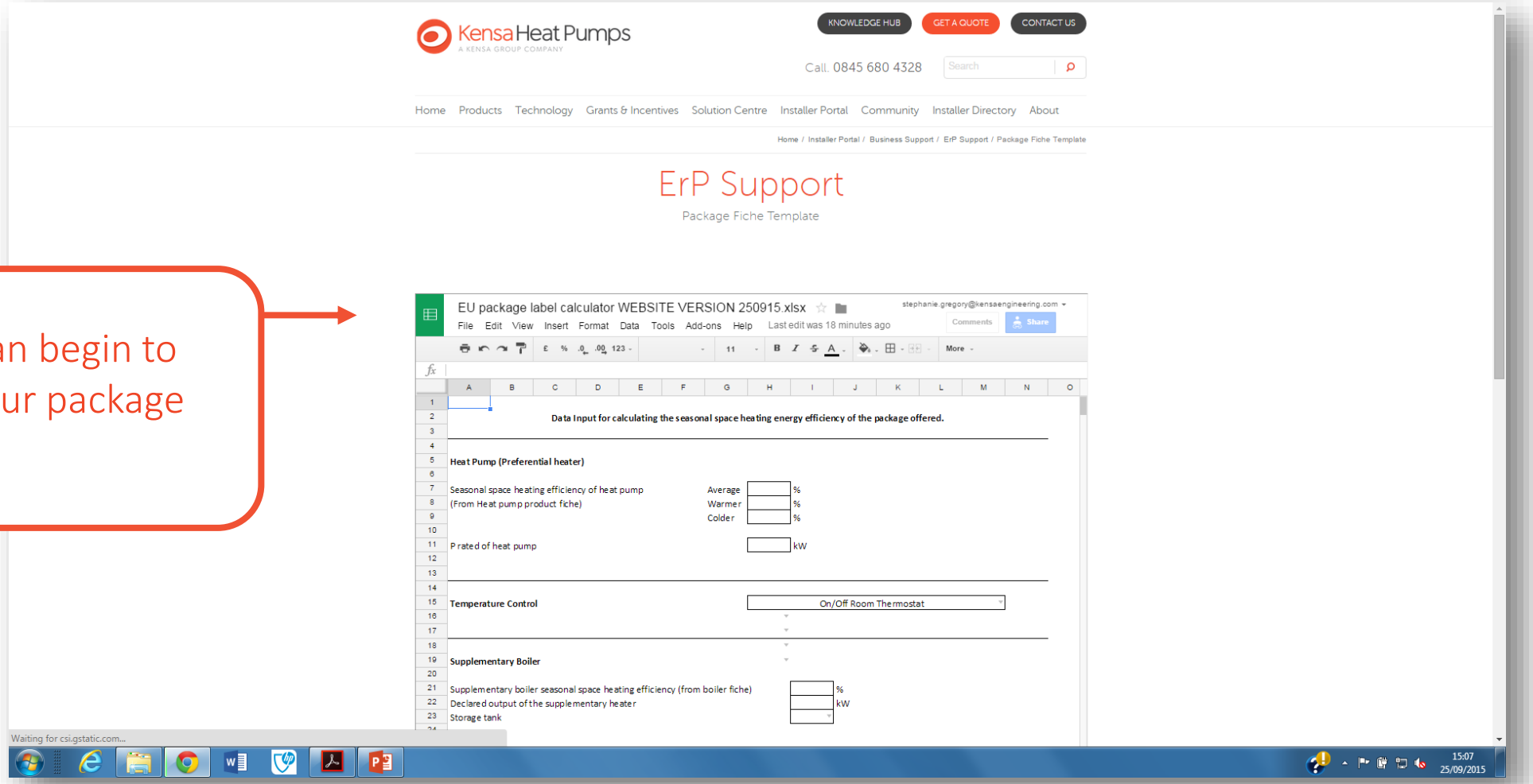


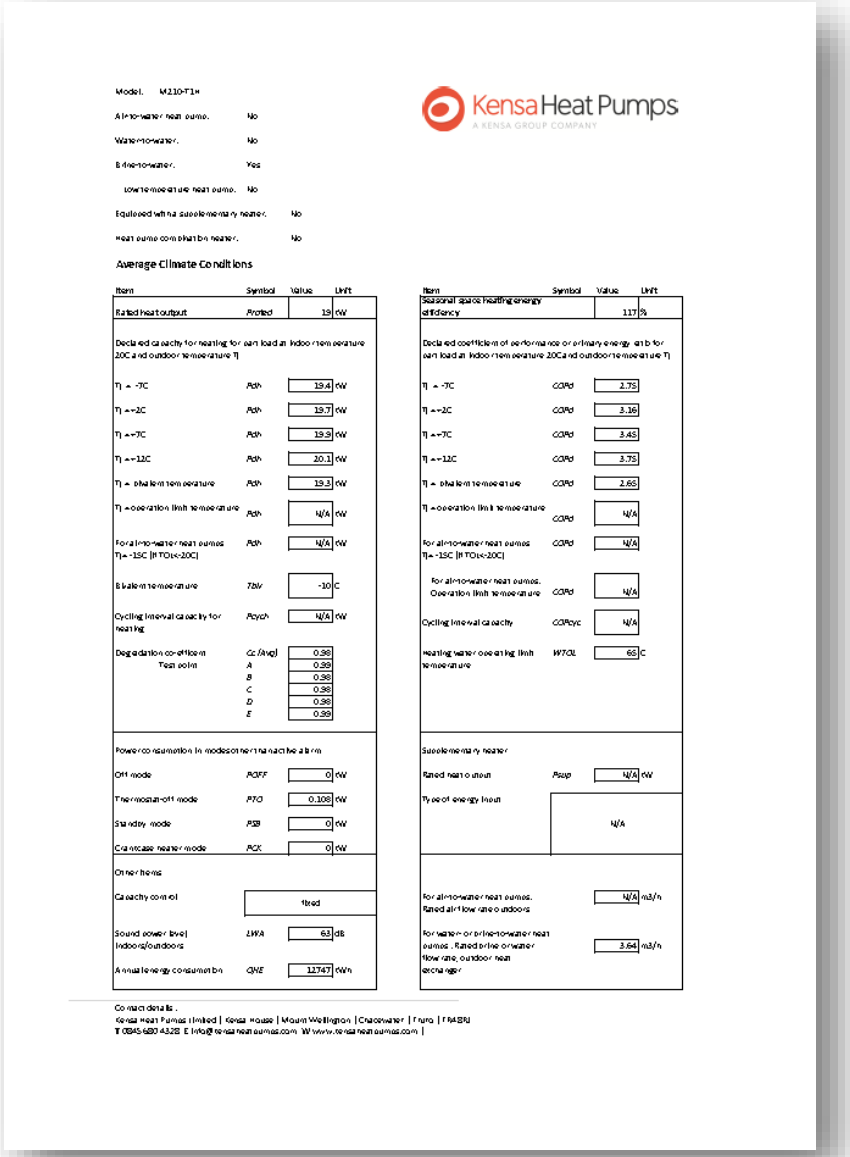
Kensa Heat Pumps
A KENSA GROUP COMPANY

Click on the box ‘Package Fiche Template’ to access Kensa’s online package fiche template



Now you can begin to produce your package fiche





Model: M210-T1H

Air-to-water heat pump:	No
Water-to-water:	No
Brine-to-water:	Yes
Low-temperature heat pump:	No
Equipped with a supplementary heater:	No
Heat pump combination heater:	No

Average Climate Conditions

Item	Symbol	Value	Unit
Rated heat output	Prated	19	kW
Declared capacity for heating for part load at indoor temperature 20C and outdoor temperature Tj			
Tj = -7C	Pdh	19.4	kW
Tj = +2C	Pdh	19.7	kW
Tj = +7C	Pdh	19.9	kW
Tj = +12C	Pdh	20.1	kW
Tj = bivalent temperature	Pdh	19.1	kW
Tj = operation limit temperature	Pdh	N/A	kW
For air-to-water heat pumps: Tj = -15C (if TOL < -20C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-10	C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation coefficient: Test point	Cc (Avg)	0.98	
	A	0.99	
	B	0.98	
	C	0.98	
	D	0.98	
	E	0.99	
Power consumption in modes other than active mode			
Off mode	POFF	0	kW
Thermostat-off mode	PTO	0.108	kW
Standby mode	PSB	0	kW
Crankcase heater mode	PCK	0	kW
Other items			
Capacity control		fixed	
Sound power level, indoors/outdoors	LWA	63	dB
Annual energy consumption	QHE	12747	kWh

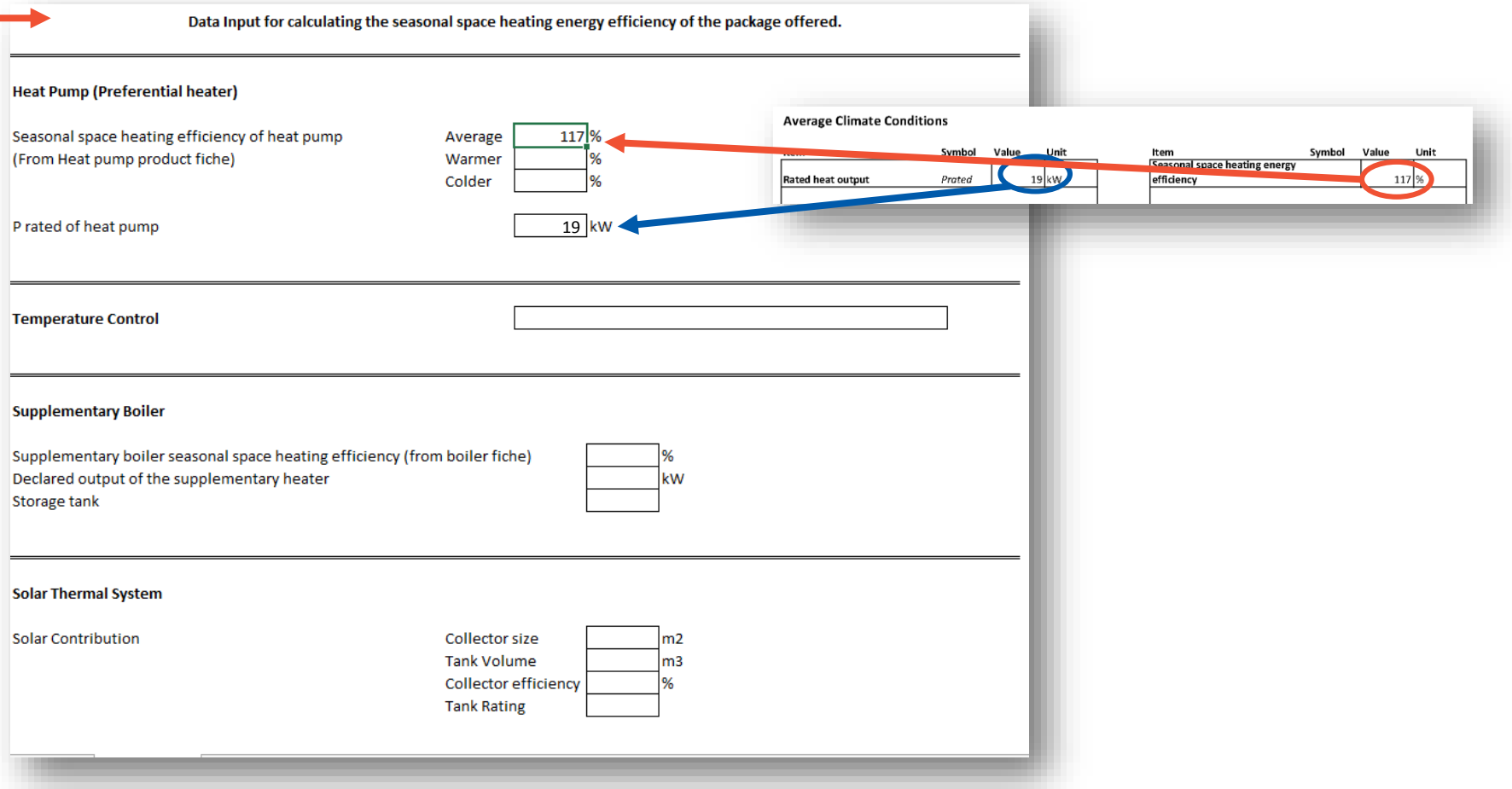
Item	Symbol	Value	Unit
Seasonal space heating energy efficiency		117	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20C and outdoor temperature Tj			
Tj = -7C	COPd	2.75	
Tj = +2C	COPd	3.16	
Tj = +7C	COPd	3.45	
Tj = +12C	COPd	3.75	
Tj = bivalent temperature	COPd	2.65	
Tj = operation limit temperature	COPd	N/A	
For air-to-water heat pumps: Tj = -15C (if TOL < -20C)	COPd	N/A	
For air-to-water heat pumps: Operation limit temperature	COPd	N/A	
Cycling interval capacity	COPcyc	N/A	
Heating water operating limit temperature	WTOL	65	C
Supplementary heater			
Rated heat output	Psup	N/A	kW
Type of energy input		N/A	
For air-to-water heat pumps: Rated air flow rate outdoors		N/A	m3/h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger		3.64	m3/h

Contact details:
Kensa Heat Pumps Limited | Kensa House | Mount Wellington | Chacewater | Truro | TR4 8RN
T 0845 680 4328 E info@kensaheatpumps.com W www.kensaheatpumps.com

- You will need to refer to the product fiche that was supplied in the packaging of your Kensa heat pump, and all other manufacturers components, in order to complete the package fiche spreadsheet.

Kensa Heat Pumps
A KENSA GROUP COMPANY

Enter data from the ground source heat pump product fiche into the package fiche template



Data Input for calculating the seasonal space heating energy efficiency of the package offered.

Heat Pump (Preferential heater)

Seasonal space heating efficiency of heat pump (From Heat pump product fiche)	Average	117	%
	Warmer		%
	Colder		%
P rated of heat pump		19	kW

Temperature Control

Supplementary Boiler

Supplementary boiler seasonal space heating efficiency (from boiler fiche)		%
Declared output of the supplementary heater		kW
Storage tank		

Solar Thermal System

Solar Contribution	Collector size		m2
	Tank Volume		m3
	Collector efficiency		%
	Tank Rating		

Average Climate Conditions

Item	Symbol	Value	Unit
Rated heat output	*Prated*	19	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency		117	%

Kensa Heat Pumps
A KENSA GROUP COMPANY

Data Input for calculating the seasonal space heating energy efficiency of the package offered.

Heat Pump (Preferential heater)

Seasonal space heating efficiency of heat pump	Average	117	%
(From Heat pump product fiche)	Warmer	119	%
	Colder		%
P rated of heat pump		19	kW

Temperature Control

Supplementary Boiler

Supplementary boiler seasonal space heating efficiency (from boiler fiche)		%
Declared output of the supplementary heater		kW
Storage tank		

Solar Thermal System

Solar Contribution	Collector size		m2
	Tank Volume		m3
	Collector efficiency		%
	Tank Rating		

Warmer Climate Conditions

Item	Symbol	Value	Unit
Rated heat output	*Prated*	19	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency		119	%

Data Input for calculating the seasonal space heating energy efficiency of the package offered.

Heat Pump (Preferential heater)

Seasonal space heating efficiency of heat pump (From Heat pump product fiche)	Average	117	%
	Warmer	119	%
	Colder	119	%
P rated of heat pump		19	kW

Temperature Control

Supplementary Boiler

Supplementary boiler seasonal space heating efficiency (from boiler fiche)		%
Declared output of the supplementary heater		kW
Storage tank		

Solar Thermal System

Solar Contribution	Collector size		m2
	Tank Volume		m3
	Collector efficiency		%
	Tank Rating		

Colder Climate Conditions

Item	Symbol	Value	Unit

Item	Symbol	Value	Unit
Seasonal space heating energy		119	%

Kensa Heat Pumps
A KENSA GROUP COMPANY

Select the type of temperature control used

Data Input for calculating the seasonal space heating energy efficiency of the package offered.

Heat Pump (Preferential heater)

Seasonal space heating efficiency of heat pump (From Heat pump product fiche)	Average	117	%
	Warmer	119	%
	Colder	119	%
P rated of heat pump		19	kW

Temperature Control — On/Off Room Thermostat

Supplementary Boiler

Supplementary boiler seasonal space heating efficiency (from boiler fiche)		%
Declared output of the supplementary heater		kW
Storage tank		

Solar Thermal System

Solar Contribution	Collector size		m2
	Tank Volume		m3
	Collector efficiency		%
	Tank Rating		

Input the details from other manufacturers product fiches if a supplementary boiler and / or solar thermal have also been installed

Data Input for calculating the seasonal space heating energy efficiency of the package offered.

Heat Pump (Preferential heater)

Seasonal space heating efficiency of heat pump (From Heat pump product fiche)	Average	117	%
	Warmer	119	%
	Colder	119	%
P rated of heat pump		19	kW

Temperature Control — On/Off Room Thermostat

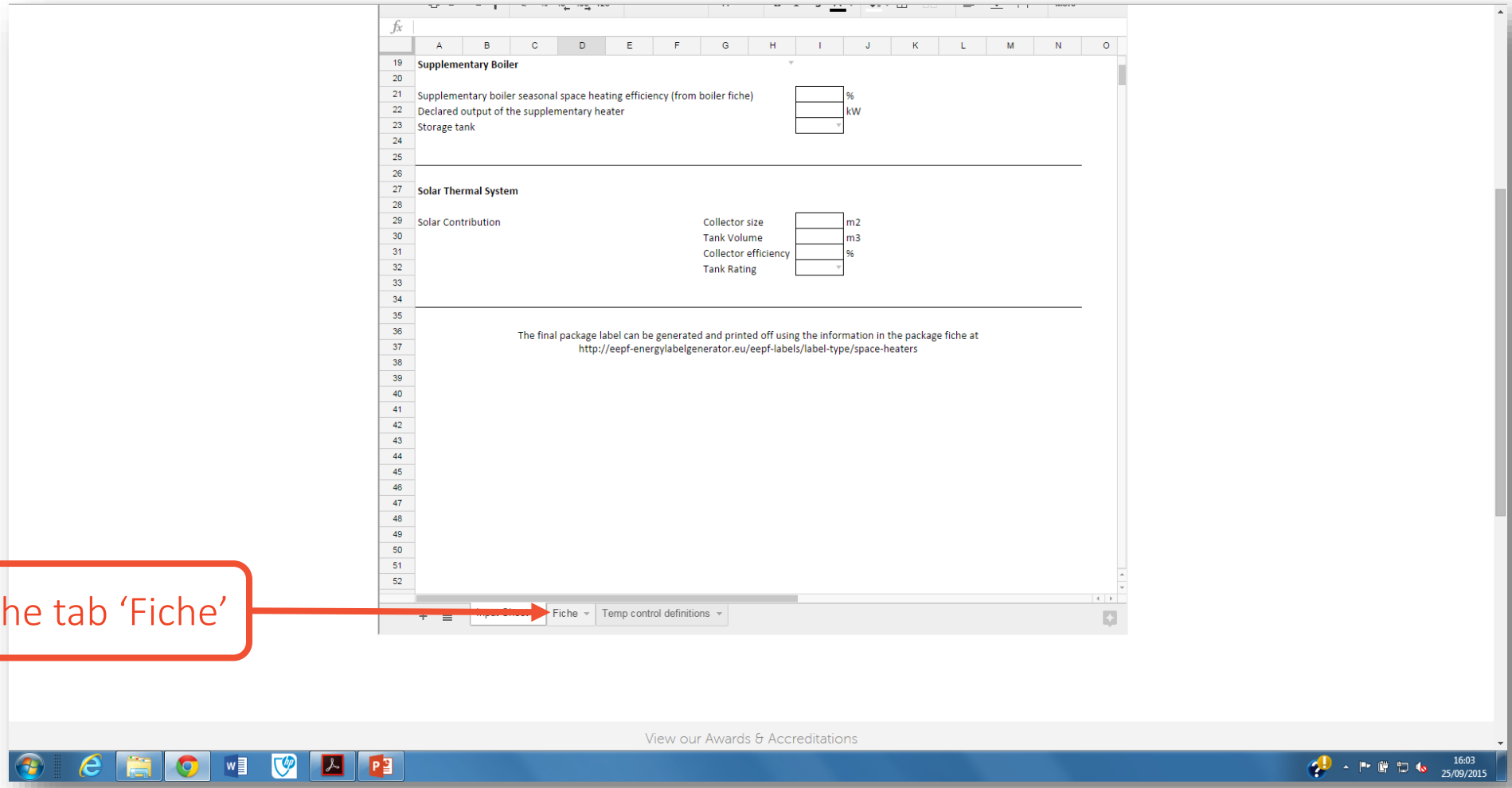
Supplementary Boiler

Supplementary boiler seasonal space heating efficiency (from boiler fiche)		%
Declared output of the supplementary heater		kW
Storage tank		

Solar Thermal System

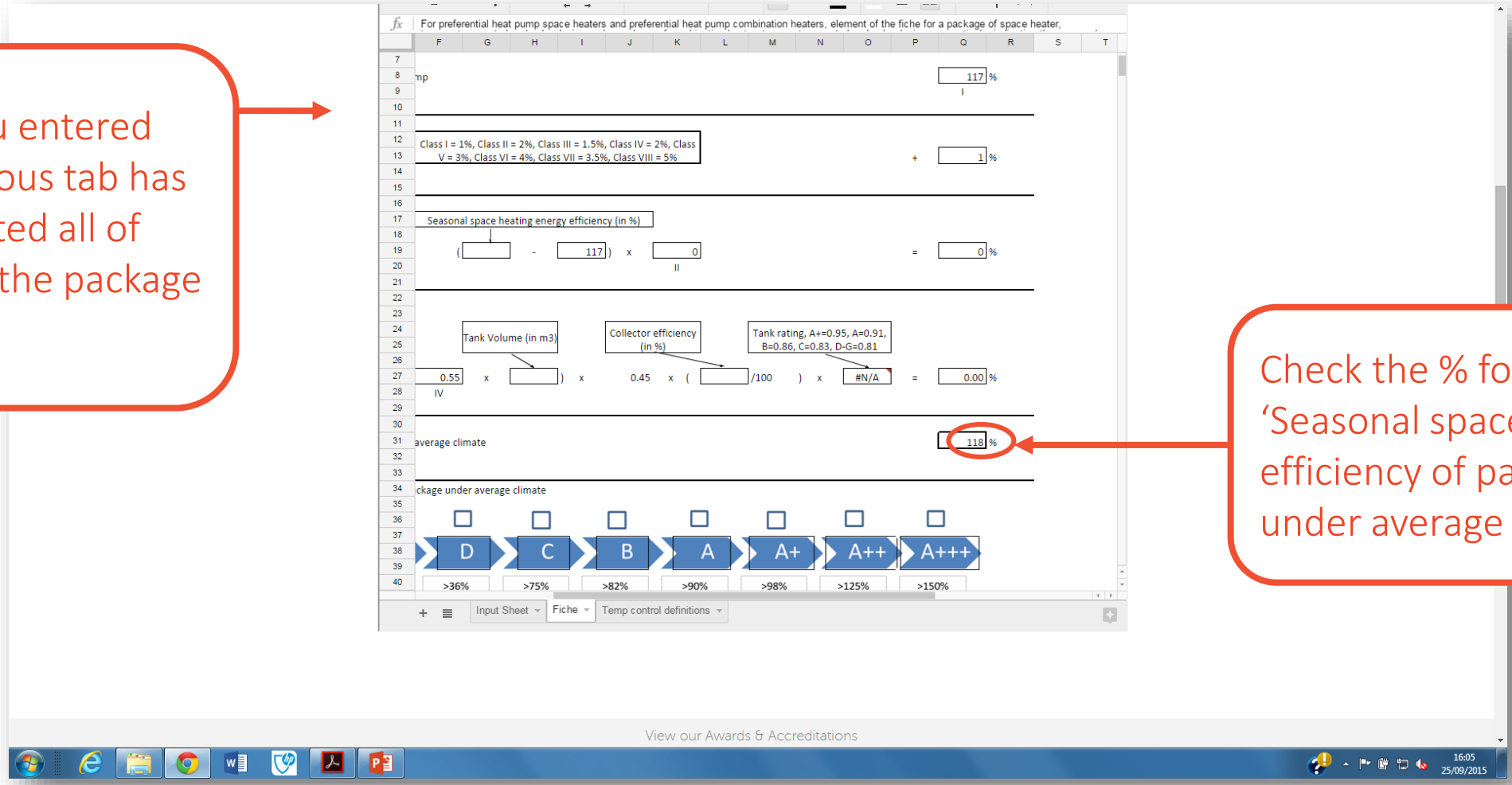
Solar Contribution	Collector size		m2
	Tank Volume		m3
	Collector efficiency		%
	Tank Rating		

Kensa Heat Pumps
A KENSA GROUP COMPANY



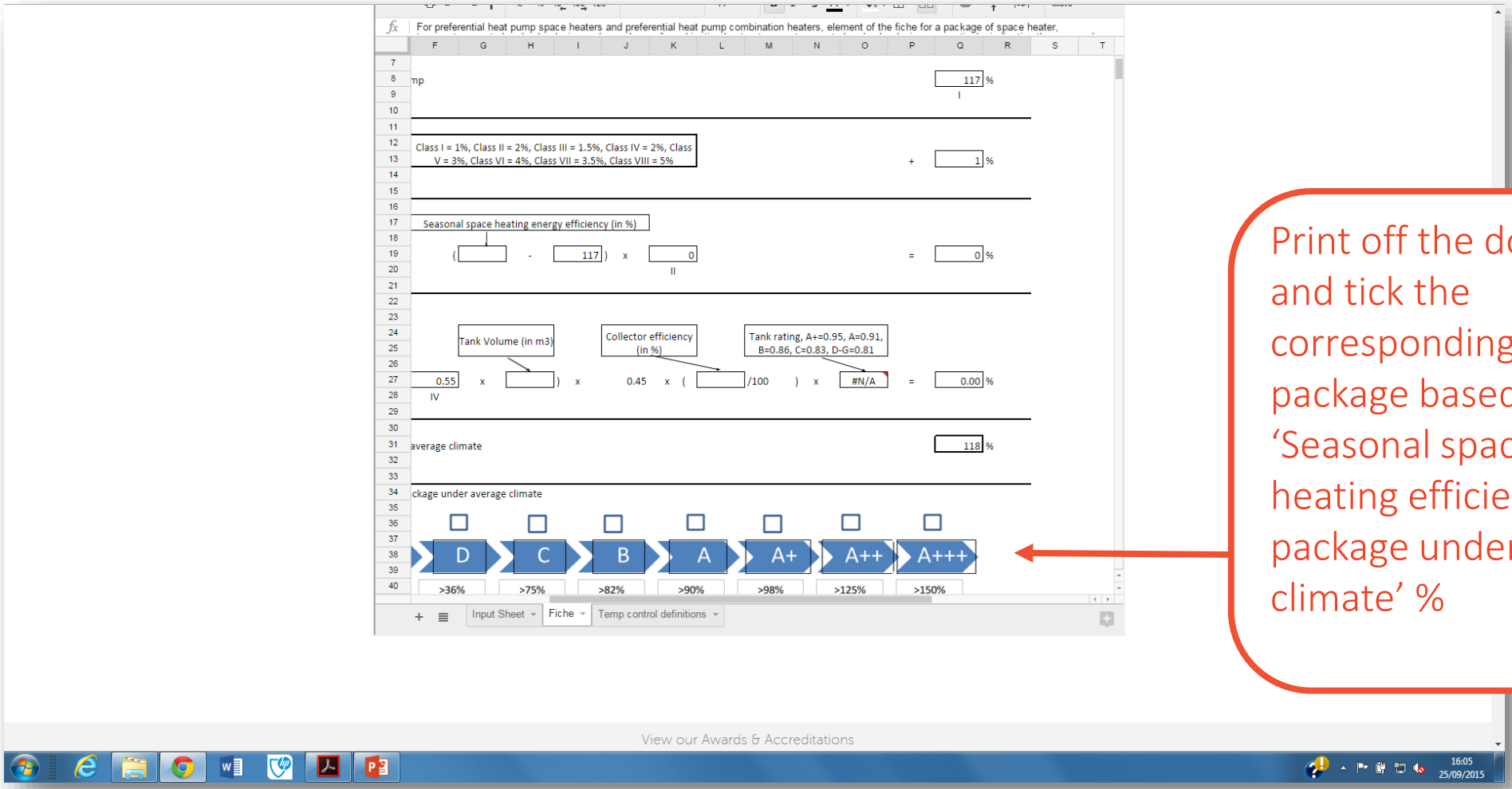
Kensa Heat Pumps
A KENSA GROUP COMPANY

The data you entered on the previous tab has autocompleted all of the fields in the package fiche tab.



Check the % for the ‘Seasonal space heating efficiency of package under average climate’

Kensa Heat Pumps
A KENSA GROUP COMPANY



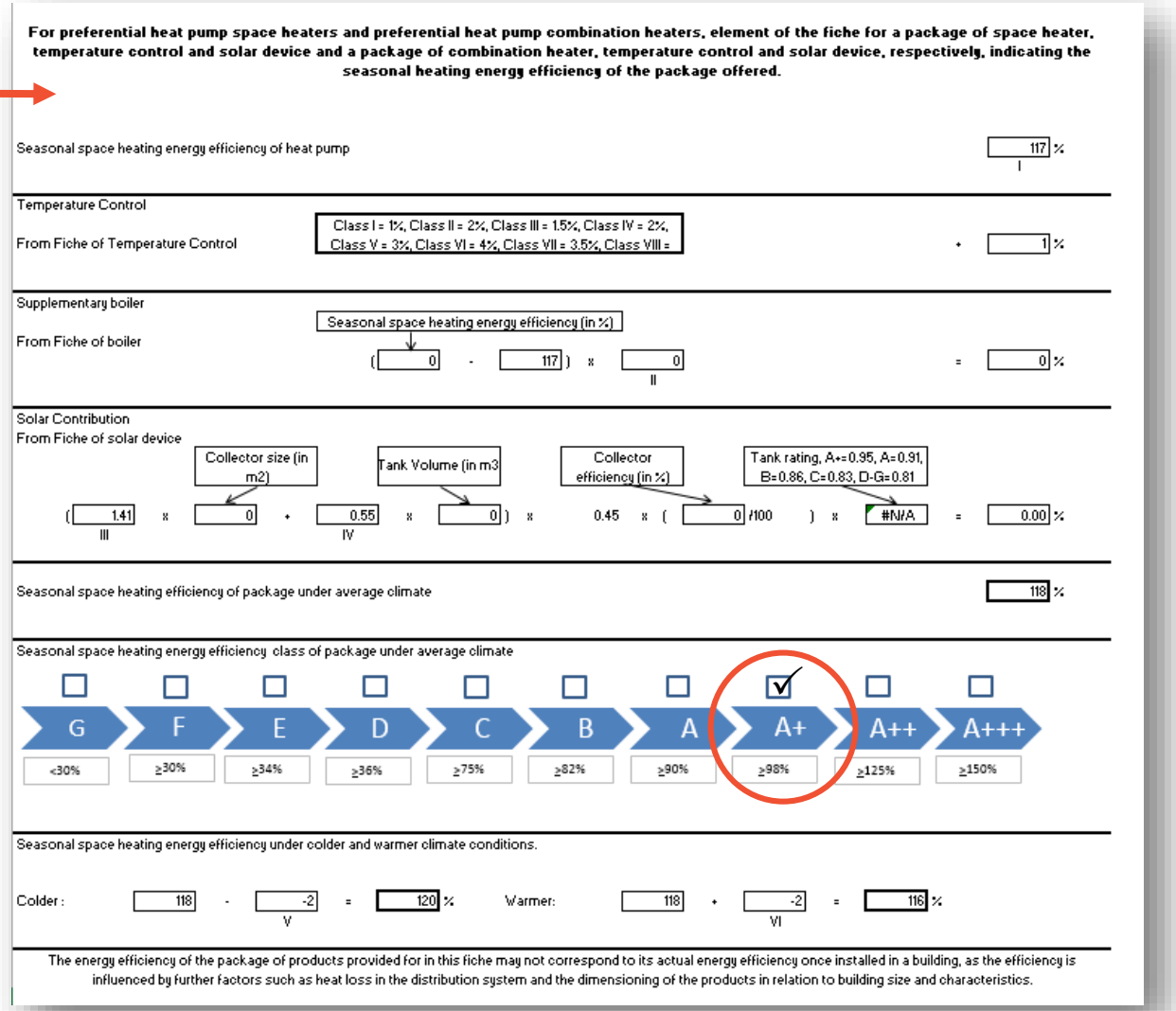
Print off the document and tick the corresponding class of package based on the 'Seasonal space heating efficiency of package under average climate' %

Finished!

You have just produced your package fiche.

You can now file this ready to give to your customer, with the package label.

Next: How to produce the package label.



For preferential heat pump space heaters and preferential heat pump combination heaters, element of the fiche for a package of space heater, temperature control and solar device and a package of combination heater, temperature control and solar device, respectively, indicating the seasonal heating energy efficiency of the package offered.

Seasonal space heating energy efficiency of heat pump: 117 % (I)

Temperature Control

From Fiche of Temperature Control: Class I = 1%, Class II = 2%, Class III = 1.5%, Class IV = 2%, Class V = 3%, Class VI = 4%, Class VII = 3.5%, Class VIII = + 1 %

Supplementary boiler

From Fiche of boiler: Seasonal space heating energy efficiency (in %): (0 - 117) x 0 (II) = 0 %

Solar Contribution

From Fiche of solar device: Collector size (in m2); Tank Volume (in m3; Collector efficiency (in %); Tank rating, A+=0.95, A=0.91, B=0.86, C=0.83, D-G=0.81

(1.41 (III) x 0 + 0.55 (IV) x 0) x 0.45 x (0 /100) x #N/A = 0.00 %

Seasonal space heating efficiency of package under average climate: 118 %

Seasonal space heating energy efficiency class of package under average climate

G	F	E	D	C	B	A	A+	A++	A+++
<30%	≥30%	≥34%	≥36%	≥75%	≥82%	≥90%	≥98%	≥125%	≥150%

Seasonal space heating energy efficiency under colder and warmer climate conditions.

Colder: 118 - -2 (V) = 120 % Warmer: 118 + -2 (VI) = 116 %

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as the efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.

Kensa Heat Pumps
A KENSA GROUP COMPANY

The package label

Kensa Heat Pumps
A KENSA GROUP COMPANY

Package label: Who does what

Suppliers (Kensa) are required to:

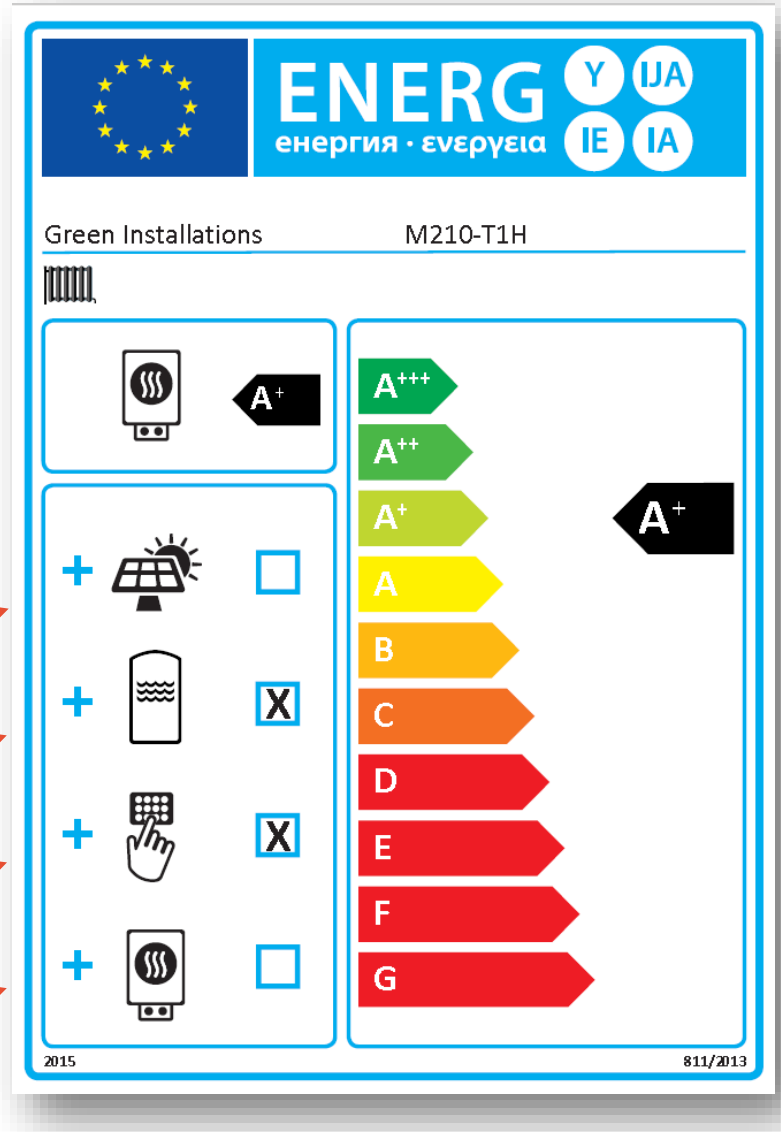
- Provide a product label at the point of sale.
- This allows the production of the package label by the installer.
- Kensa will supply product labels within the packaging of every Kensa unit from the 26th September 2015.

Installers (you) are required to:

- Provide the product label and produce and provide a package label to the consumer when you complete a ground source heat pump installation.

Kensa Heat Pumps
A KENSA GROUP COMPANY

Package label: What it looks like



Installation company (you)

Primary heater rating (ground source heat pump product energy rating)

Solar panels

Hot water storage

Temperature controls

Secondary heating

Manufacturer & model of primary heater

Package energy rating

Remember: If using existing controls and no solar panels you do not need to produce a package label or package fiche

Kensa Heat Pumps
A KENSA GROUP COMPANY

Package label: How Kensa can help you

- The data to produce your package energy label is taken from your package fiche.
- A simple to use online tool for the calculation of the package label is available here: http://eepf-energylabelgenerator.eu
- Kensa is also available to offer advice during the production of your package fiche and package label.

Kensa Heat Pumps
A KENSA GROUP COMPANY

How to complete a package label

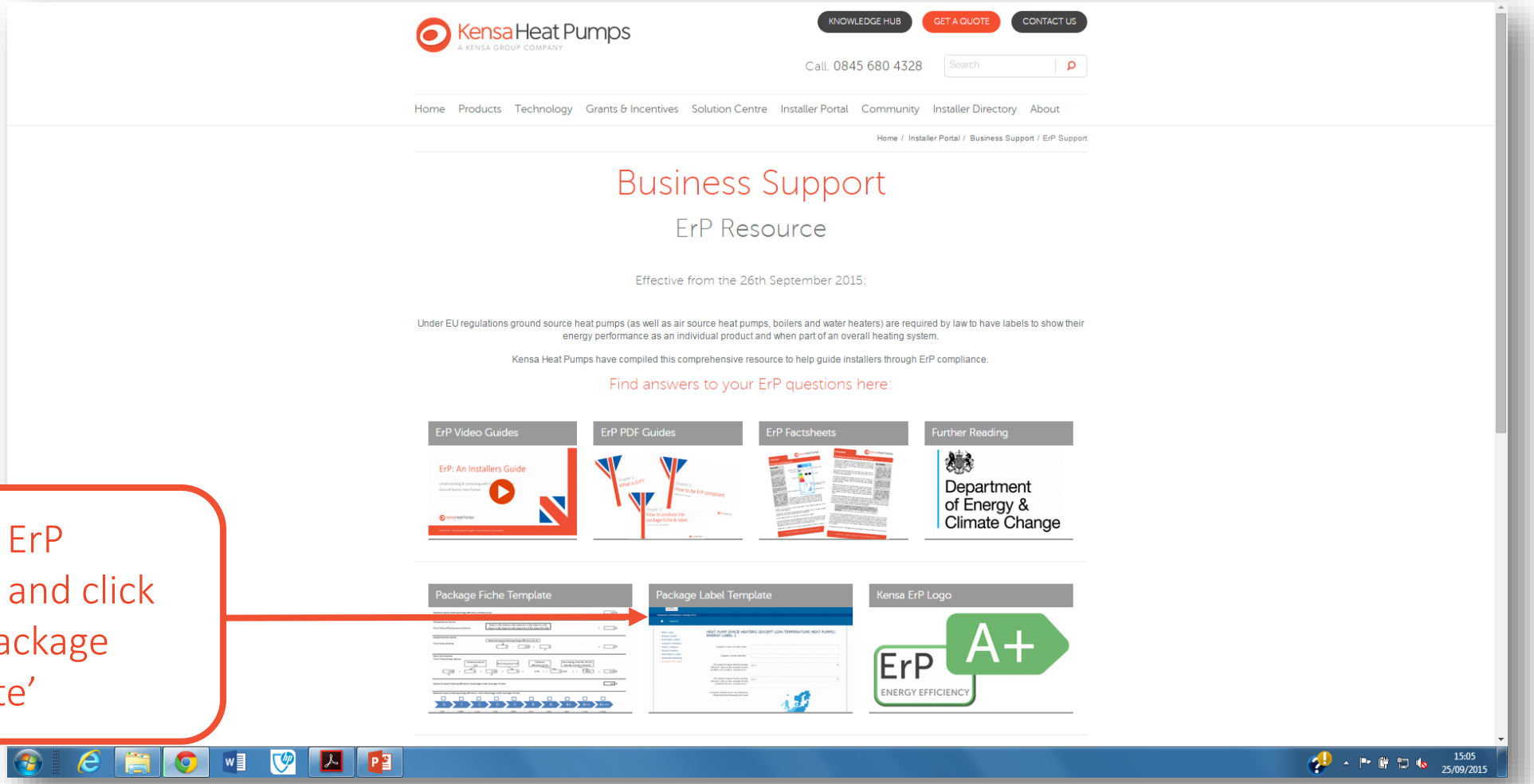
Kensa Heat Pumps
A KENSA GROUP COMPANY

Package label: Checklist

What you will need:

- ✓ The product label.
- ✓ The product fiche.
- ✓ The package fiche.
- ✓ A computer to visit http://eepf-energylabelgenerator.eu to access the label generator.
- ✓ A printer to produce the package label as a hard copy (or save to email).

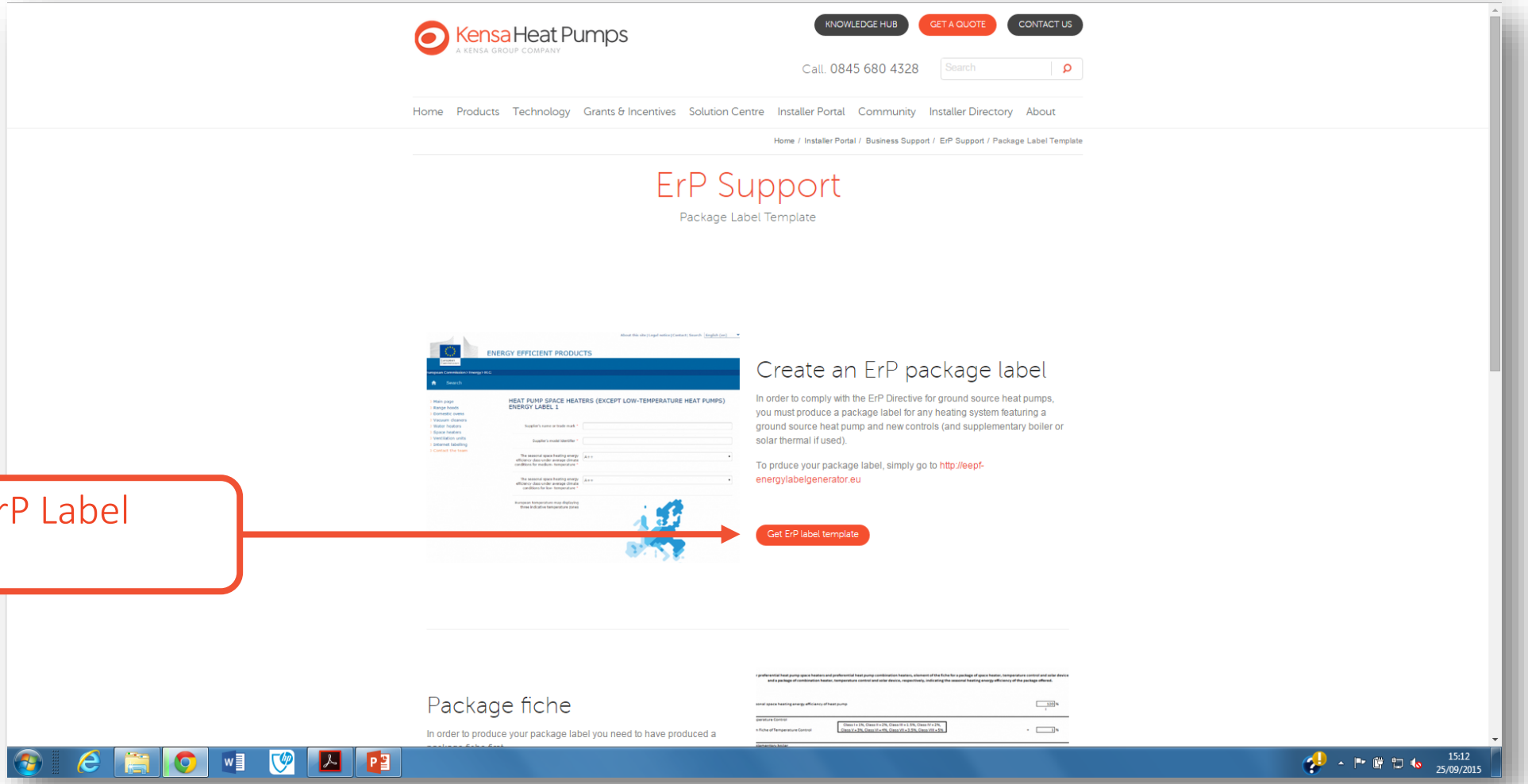
Kensa Heat Pumps
A KENSA GROUP COMPANY



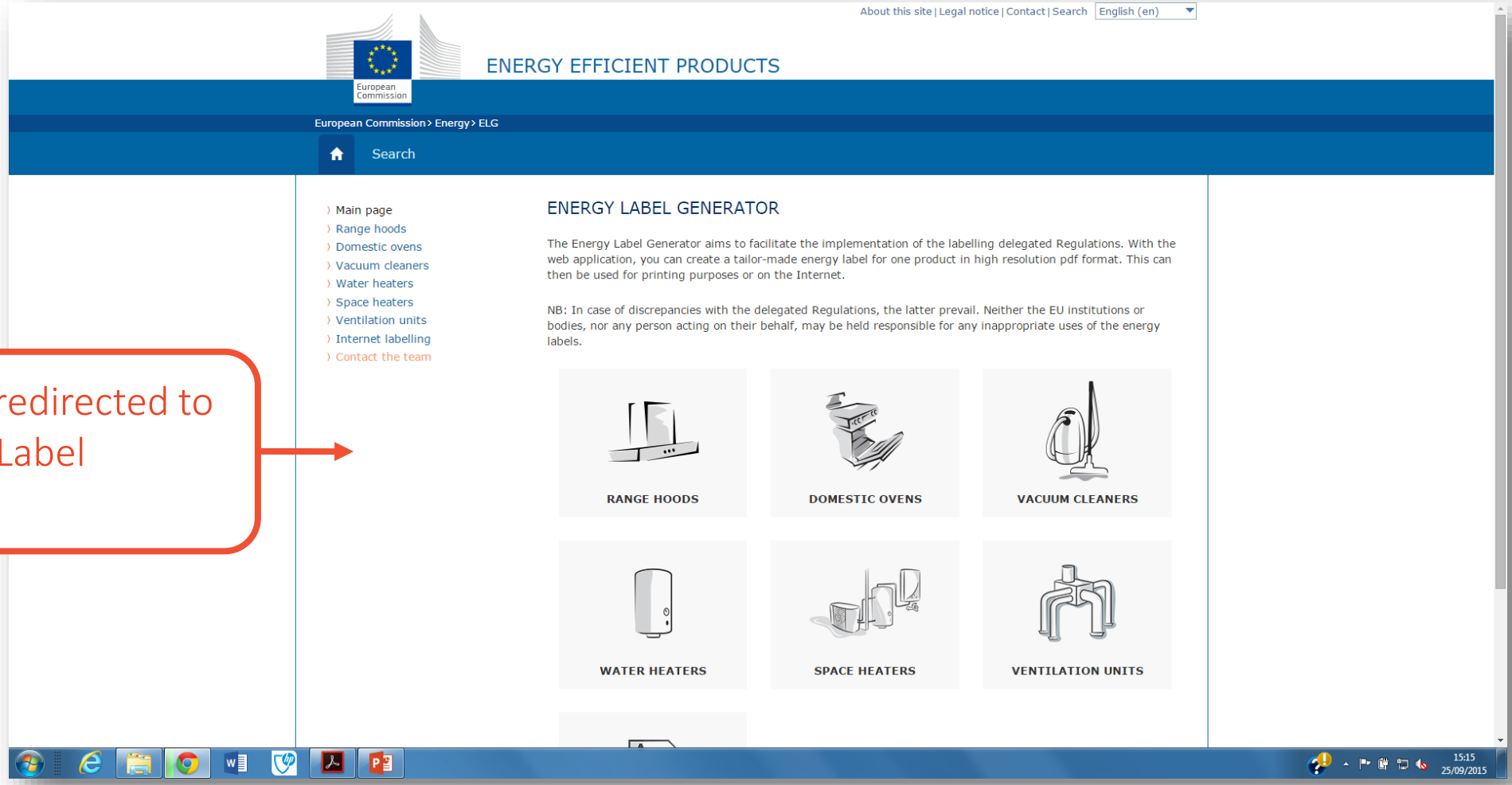
Return to the ErP Support page and click on the box ‘Package Label Template’

Kensa Heat Pumps
A KENSA GROUP COMPANY

Select ‘Get ErP Label Template’

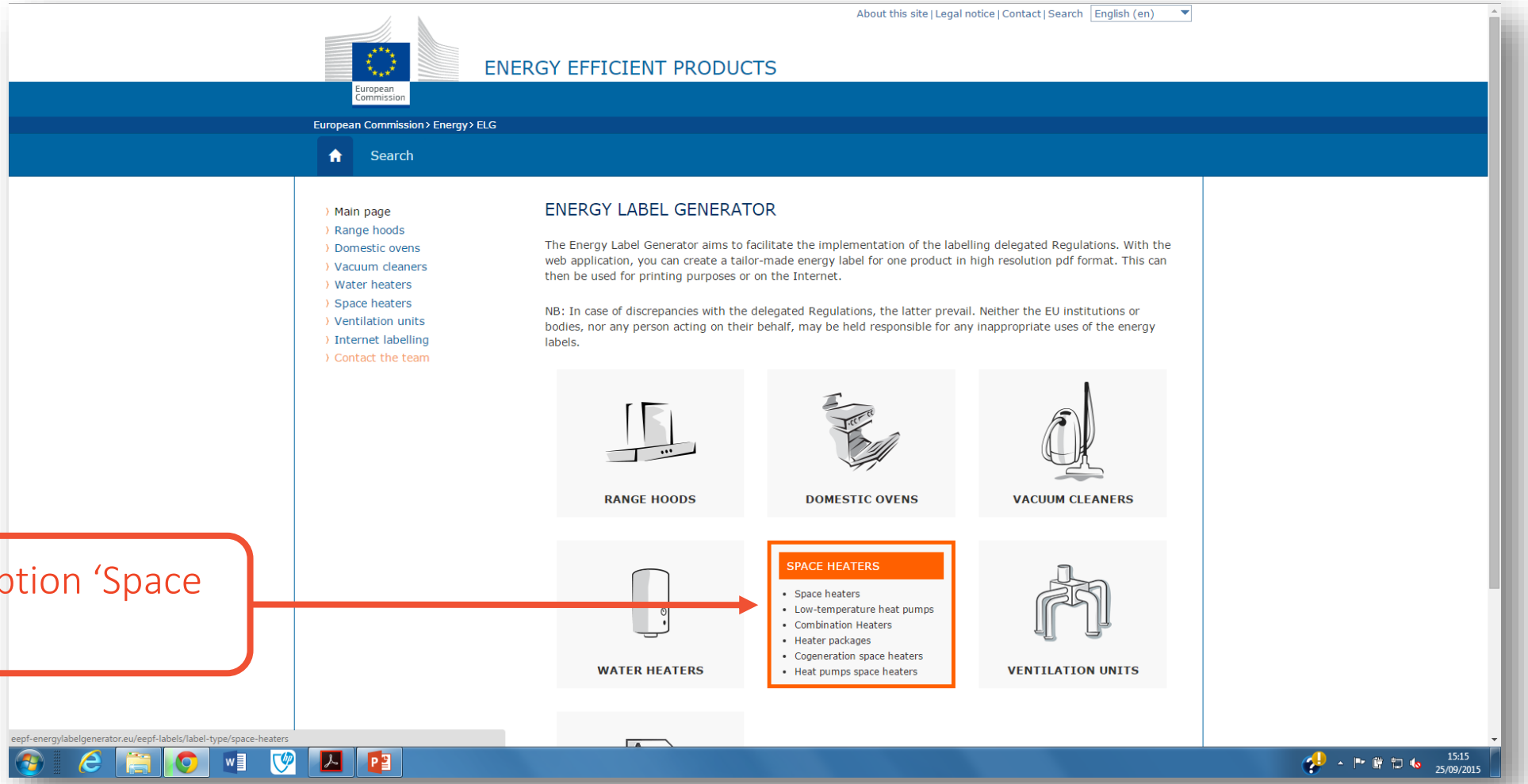


You will be redirected to the Energy Label Generator



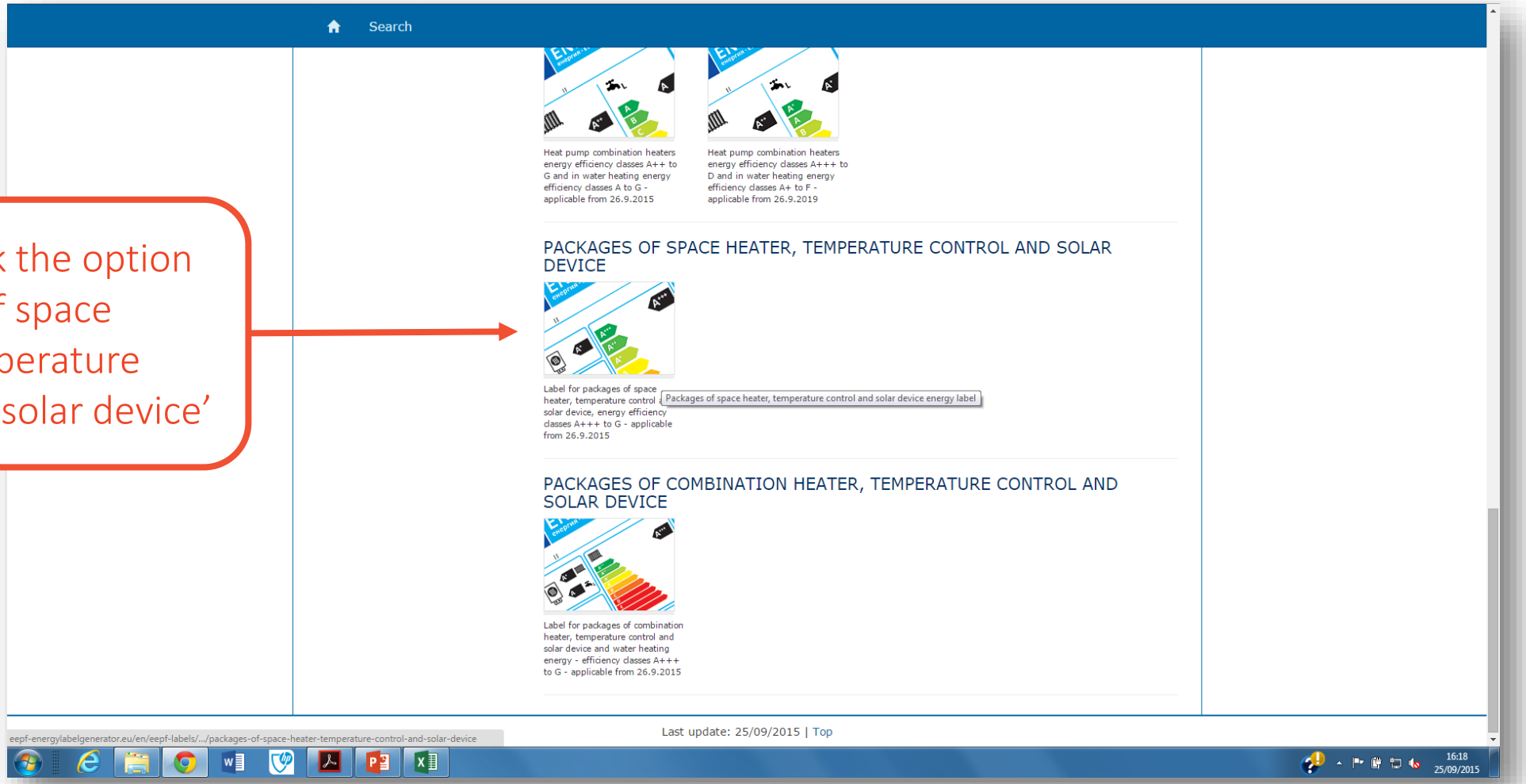
Kensa Heat Pumps
A KENSA GROUP COMPANY

Select the option ‘Space Heaters’



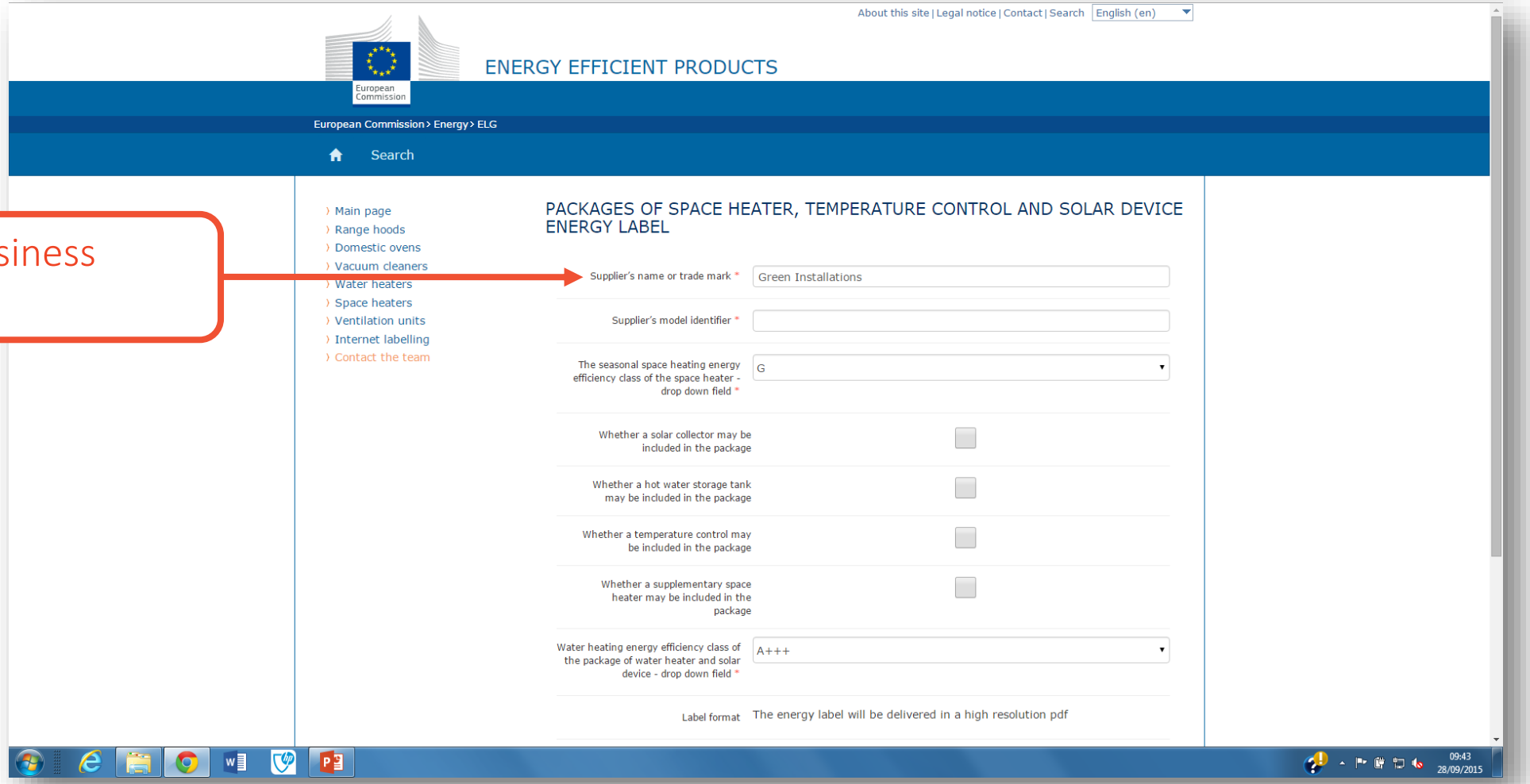
Kensa Heat Pumps
A KENSA GROUP COMPANY

Double-click the option ‘Packages of space heater, temperature control and solar device’



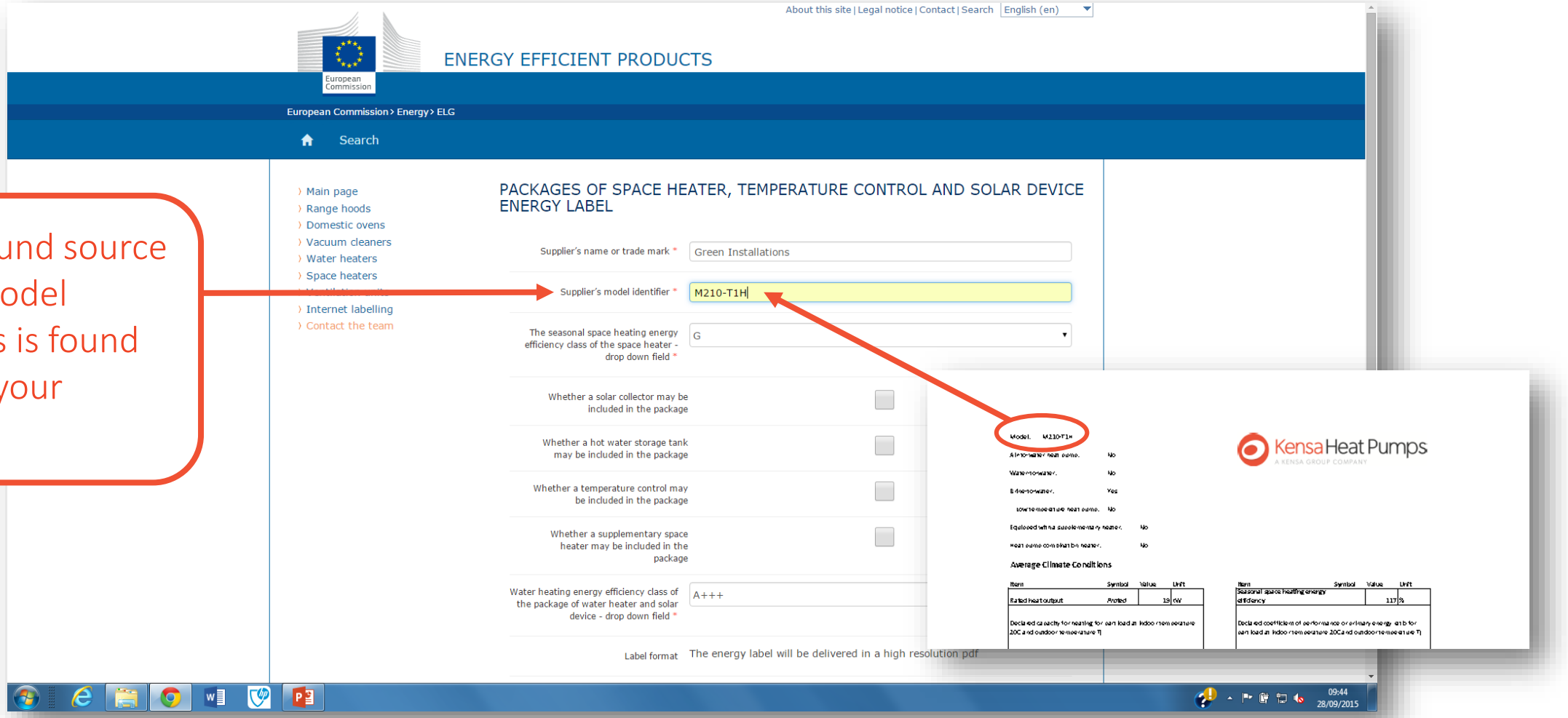
Kensa Heat Pumps
A KENSA GROUP COMPANY

Enter your business trading name



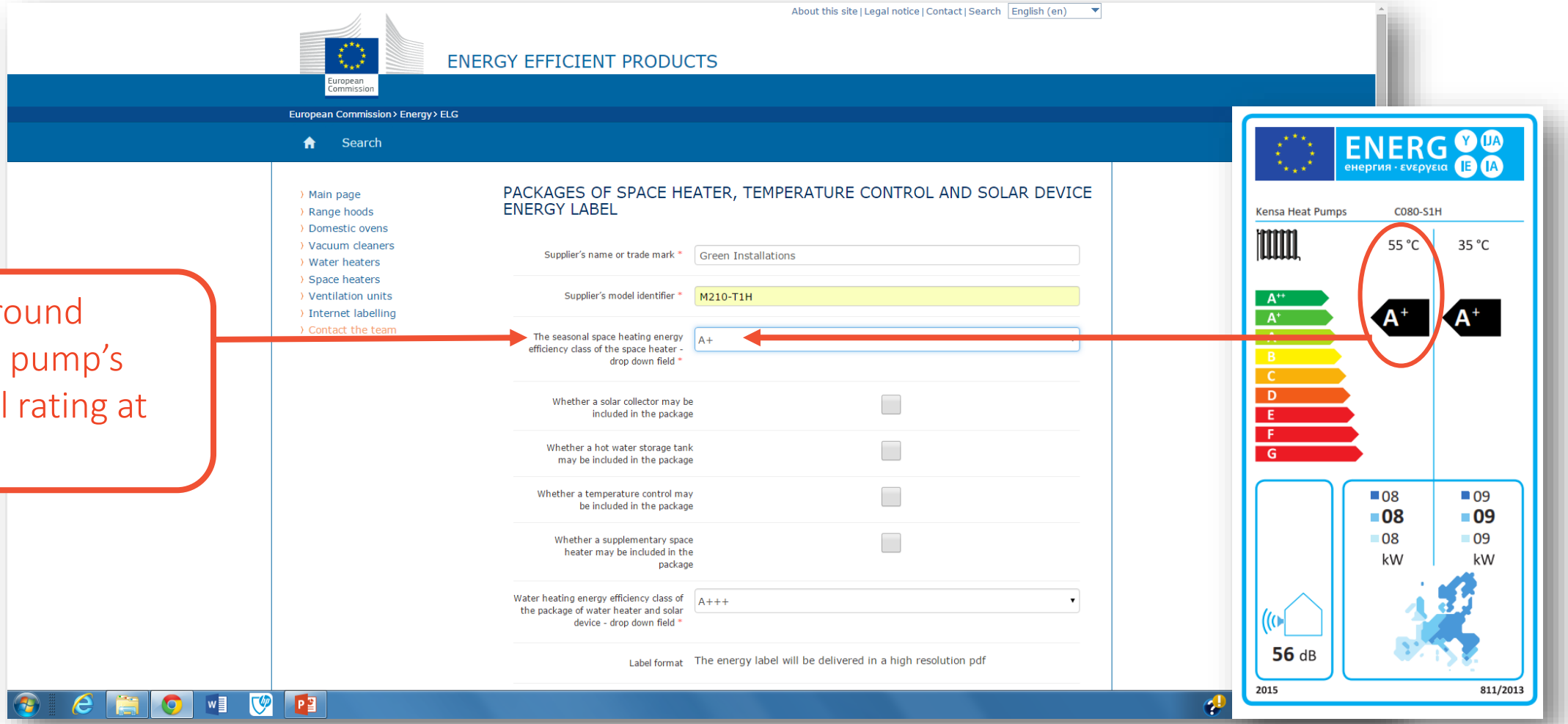
Kensa Heat Pumps
A KENSA GROUP COMPANY

Enter the ground source heat pump model number – this is found at the top of your product fiche

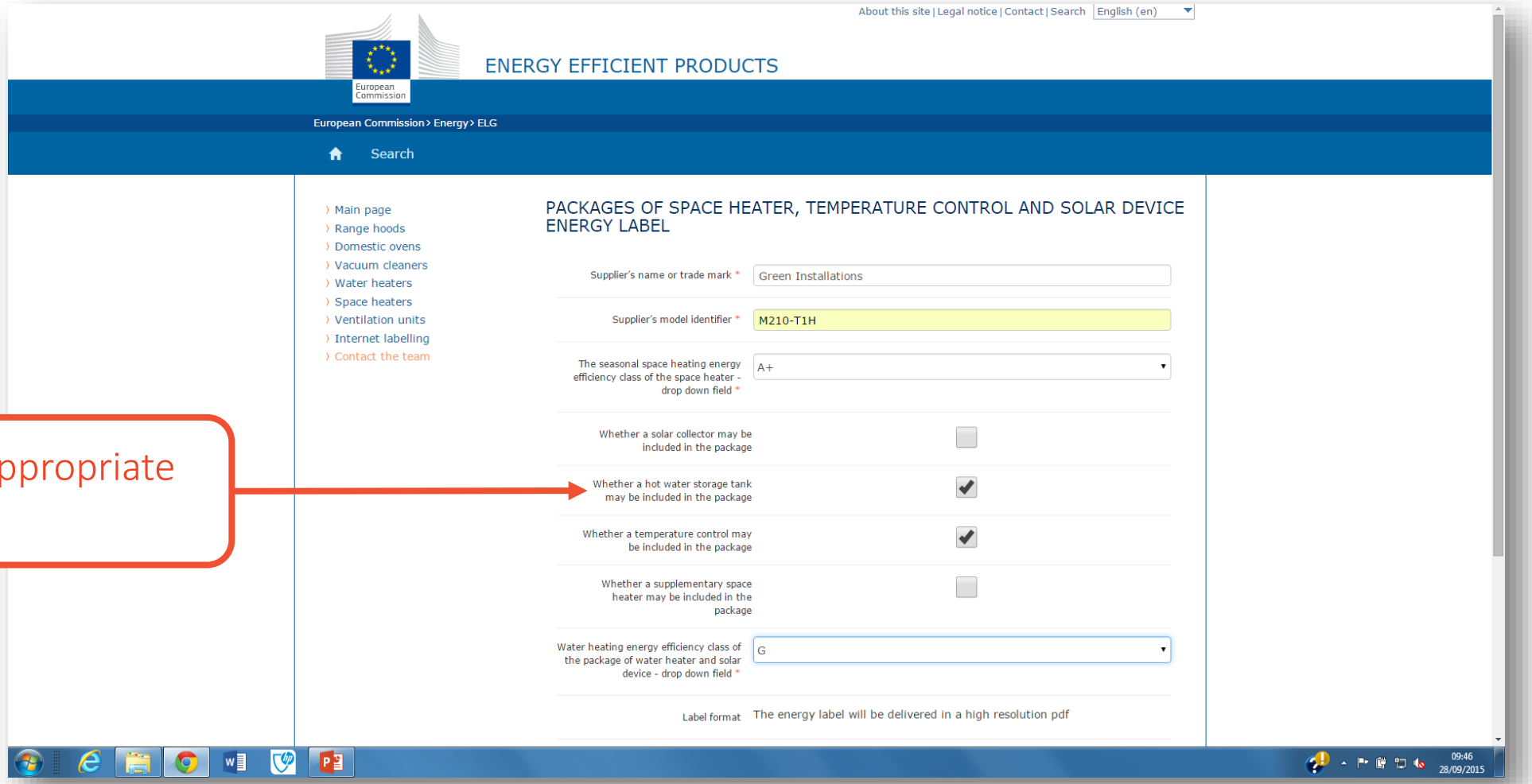


Kensa Heat Pumps
A KENSA GROUP COMPANY

Enter the ground source heat pump's energy label rating at 55°C

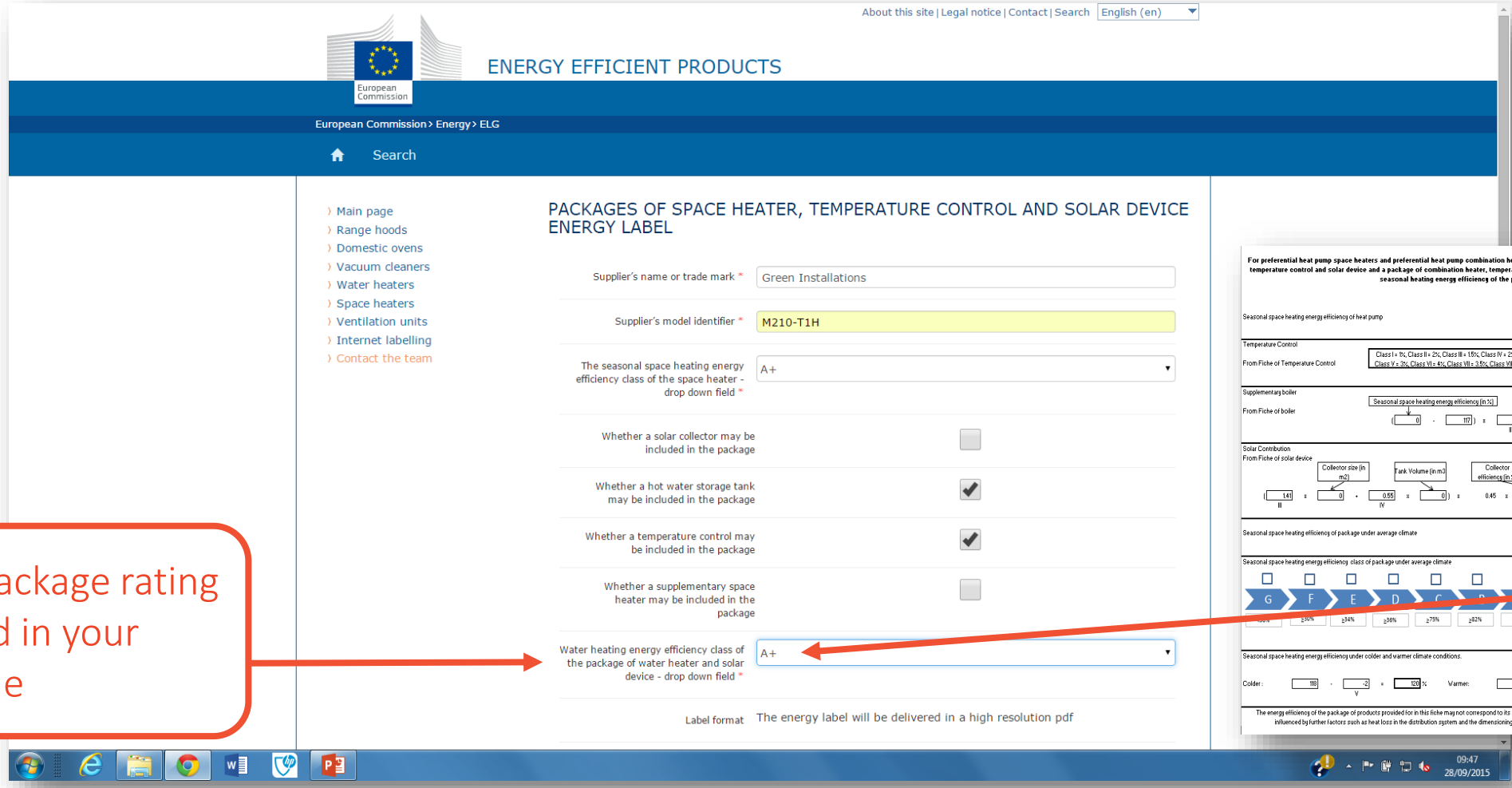


Kensa Heat Pumps
A KENSA GROUP COMPANY



Select the appropriate boxes

Kensa Heat Pumps
A KENSA GROUP COMPANY

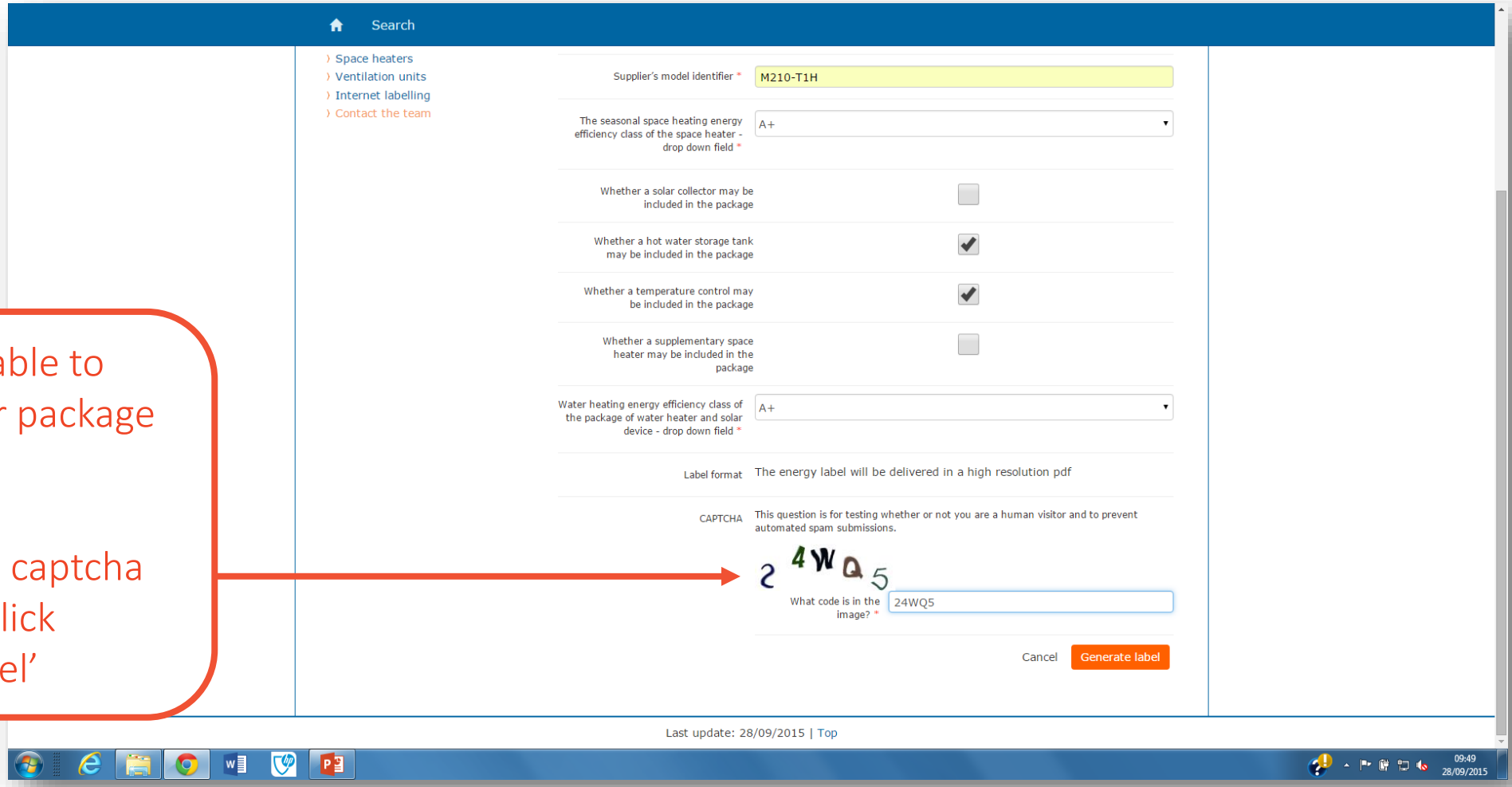


Select the package rating as calculated in your package fiche

Kensa Heat Pumps
A KENSA GROUP COMPANY

You are now able to generate your package label.

Complete the captcha request and click ‘Generate label’

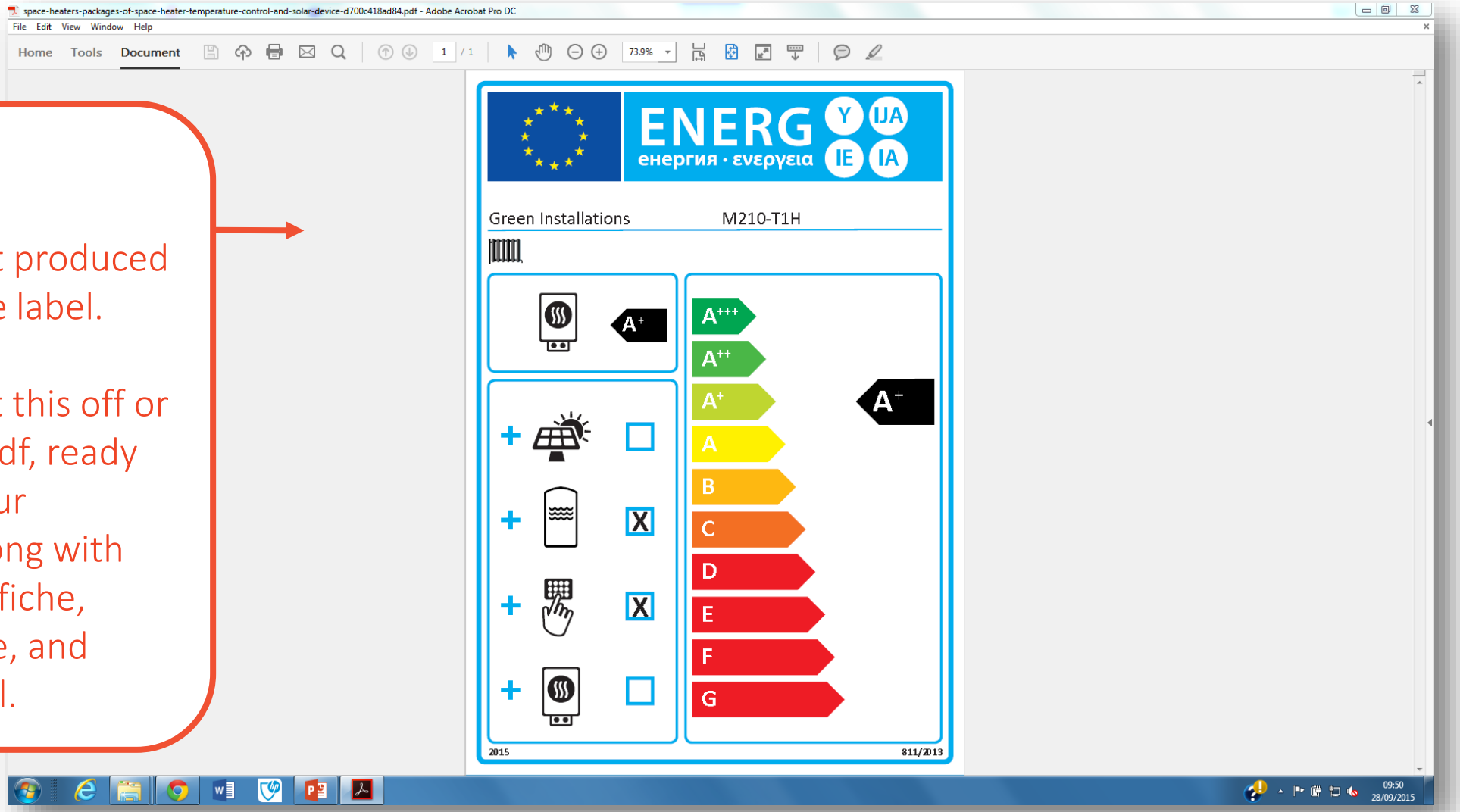


Kensa Heat Pumps
A KENSA GROUP COMPANY

Finished!

You have just produced your package label.

You can print this off or save it as a pdf, ready to give to your customer along with the package fiche, product fiche, and product label.



Kensa Heat Pumps
A KENSA GROUP COMPANY

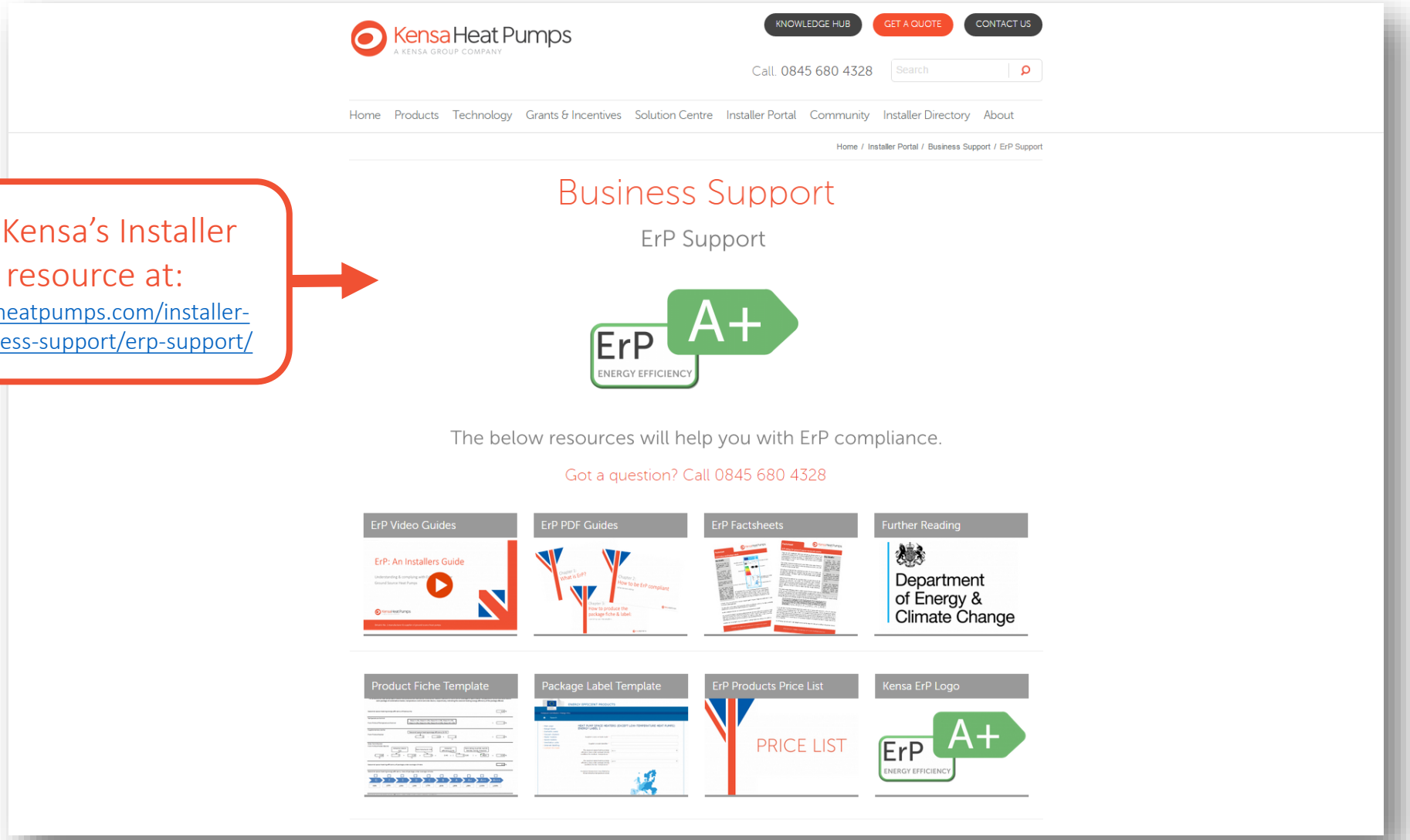
Further reading:

Kensa resources to support you with being ErP compliant

Kensa Heat Pumps
A KENSA GROUP COMPANY

Further resources

Access Kensa's Installer ErP resource at:
www.kensaheatpumps.com/installer-portal/business-support/erp-support/



Kensa Heat Pumps
A KENSA GROUP COMPANY

Further resources

Contact Kensa

Call: 0845 680 4328

Visit: www.kensaheatpumps.com/installer-portal/business-support/erp-support/

Email:

- Darren Veal (darren.veal@thekensagroup.com)
- Alison Harding (alison.harding@thekensagroup.com)
- John Barker-Brown (john.barker-brown@thekensagroup.com)

Kensa Heat Pumps
A KENSA GROUP COMPANY

Chapter 4:
System handover

Click here to continue

Kensa Heat Pumps
A KENSA GROUP COMPANY