

APPLICATION FORM for the international quality label for electrically driven heat pumps



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© **European Heat Pump Association**
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APPLICATION DATA

1. The applicant:

Company:

Contact person:

Street address:

Town / Country:

Tel.

Fax:

Test Report 2 (to be provided by the test centre) must be submitted along with the above-specified documents, see Chapter 2.

2. Test centre, authorised EHPA test centre:

Company:

Contact person:

Street address:

Town / Country:

Telephone/fax:

3. Test-report number/s

Date:

4. Model/s series description

Date/Place:

Affirmed:

5. Description of main components

The following list must include the declaration of main components in accordance with EHPA regulations, Item 2.2.1. The refrigeration circuit diagram must be marked with the EN 1861 symbol.

Model identification:

Manufacturer:	
Model/type/series designation:	

Refrigeration circuit diagram:

Main components:

This list must be filled out, or a component list must be attached for each type of series.

	Manufacturer	Type designation/ description
Refrigerant		
Mass [kg]	-	
GWP pursuant to EN 378 -1 app. E	-	
Compressor 1		
Theoretical displacement compressor 1 [m ³ /h]		
Compressor 2		
Theoretical displacement compressor 2 [m ³ /h]		
Type of power control	-	
Evaporator		
heat exchanging area condenser [m ²]		
Evaporator fan (number)		
Condenser		
heat exchanging area condenser [m ²]		
Internal heat exchanger		
heat exchanging area condenser [m ²]		
Accumulator		
Expansion valve		
Defrosting method	-	
Four-way-valve		
Defrosting control (Description of the control concept)	-	
Software version		

6.1 Performance data: Brine-to-water heat pumps

Details as listed below in Table 1 must be submitted for inspection, either as separate documents or be filled out in the table. Test conditions defined according to EN 14511.

Technical data, Table 1

Model ->														
Source of data*														
Volume flow Q/N	m ³ /h													
Refrig. mass	R.../kg													
GWP														
Sound power	dB(A)													
B 5/W35	Heat output/kW													
	El. input/ kW													
	COP													
B 0/W35	Heat output/kW													
	El. input/ kW													
	COP													
	Minimum COP									4.30				
B -5/W35	Heat output/kW													
	El. input/ kW													
	COP													
B 5/W45	Heat output/kW													
	El. input/ kW													
	COP													
B 0/W45	Heat output/kW													
	El. input/ kW													
	COP													
B -5/W45	Heat output/kW													
	El. input/ kW													
	COP													
B 5/W55	Heat output/kW													
	El. input/ kW													
	COP													
B 0/W55	Heat output/kW													
	El. input/ kW													
	COP													
B -5/W55	Heat output/kW													
	El. input/ kW													
	COP													

* The source of data must be clearly identified by marking the column with
 "C" for "Certified test data": data from a heat pump unit selected and tested by the test centre
 "M" for "data provided by the manufacturer": data transmitted by the manufacturer and not tested by the test centre.

Technical data in accordance with EHPA application and components as listed in paragraph 5 (Description of main components)

Confirmation

We hereby certify that the named test objects are heat pumps in series production, and that all presented data is correct. We acknowledge that we are obliged to inform the respective quality label commission voluntarily, without request, on all changes to test objects with a quality label.

We agree that the content of the test report level 2 is as a whole or in parts made publicly available on the websites of the EHPA or the national heat pump associations.

Date/place

Applicant/stamp

6.2 Manufacturer's data: Water-to-water heat pumps

Details as listed below in Table 2 must be submitted for inspection, either as separate documents or be filled out in the table. Test conditions according to EN 14511.

Technical data, Table 2

Model ->																			
Source of data*																			
Volume flow Q/N	m ³ /h																		
Refrig. mass	R.../kg																		
GWP																			
Sound power	dB(A)																		
W 10/W35	Heat output/kW																		
	El. input/ kW																		
	COP																		
	Minimum COP	5.10																	
W 15/W35	Heat output/kW																		
	El. input/ kW																		
	COP																		
W 10/W45	Heat output/kW																		
	El. input/ kW																		
	COP																		
W 15/W45	Heat output/kW																		
	El. input/ kW																		
	COP																		
W 10/W55	Heat output/kW																		
	El. input/ kW																		
	COP																		
W 15/W55	Heat output/kW																		
	El. input/ kW																		
	COP																		

* The source of data must be clearly identified by marking the column with

“C” for “Certified test data”: data from a heat pump unit selected and tested by the test centre

“M” for “data provided by the manufacturer”: data transmitted by the manufacturer and not tested by the test centre.

Technical data in accordance with EHPA application and components as listed in paragraph 5 (Description of main components)

Confirmation

We hereby certify that the named test objects are heat pumps in series production, and that all presented data is correct. We acknowledge that we are obliged to inform the respective quality label commission voluntarily, without request, on all changes to test objects with a quality label. .

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Date/place

Applicant/stamp

6.3 Manufacturer's data: Air-to-water heat pumps

Details as listed below in Table 3 must be submitted for inspection, either as separate documents or be filled out in the table. Test conditions according to EN 14511.

Technical data, Table 3

Model ->																					
Source of data*																					
Volume flow, Q/N	m ³ /h																				
Refrig. mass	R.../kg																				
GWP																					
Sound power inside/outside	dB(A)																				
A 7/W35	Heat output/kW																				
	El. input/ kW																				
	COP																				
A 2/W35	COP																				
	Heat output/kW																				
	El. input/ kW																				
	MinimumCOP																				3.10
A -7/W35	Minimum COP																				
	Heat output/kW																				
	El. input/ kW																				
A-15/W35	Heat output/kW																				
	El. input/ kW																				
	COP																				
A7/W45	Heat output/kW																				
	El. input/ kW																				
	COP																				
A -7/W45	Heat output/kW																				
	El. input/ kW																				
	COP																				
A 7/W55	Heat output/kW																				
	El. input/ kW																				
	COP																				
A-7/W55	Heat output/kW																				
	El. input/ kW																				
	COP																				

* The source of data must be clearly identified by marking the column with

“C” for “Certified test data”: data from a heat pump unit selected and tested by the test centre.

“M” for “data provided by the manufacturer”: data transmitted by the manufacturer and not tested by the test centre.

Technical data in accordance with EHPA application and components as listed in paragraph 5 (Description of main components)

Confirmation

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Date/place

Applicant/stamp

6.4 Manufacturer's data: Direct expansion-to-water heat pumps

Details as listed below in Table 4 must be submitted for inspection, either as separate documents or be filled out in the table. Test conditions according to EN 15879-1.

Technical data, Table 4

Model ->											
Source of data*											
Volume flow, Q/N	m ³ /h										
Refrig. mass	R.../kg										
GWP											
Sound power	dB(A)										
E 4/W35	Heat output/kW										
	El. input/ kW										
	COP										
	Minimum COP	4.30									
E 1,5/W35	Heat output/kW										
	El. input/ kW										
	COP										
E4/W45	Heat output/kW										
	El. input/ kW										
	COP										
E 1,5/W45	Heat output/kW										
	El. input/ kW										
	COP										
E 4/W55	Heat output/kW										
	El. input/ kW										
	COP										
E1,5/W55	Heat output/kW										
	El. input/ kW										
	COP										
Evaporator	Number										
	Diameter										
	Length										

* The source of data must be clearly identified by marking the column with

“C” for “Certified test data”: data from a heat pump unit selected and tested by the test centre.

“M” for “data provided by the manufacturer”: data transmitted by the manufacturer and not tested by the test centre.

Technical data in accordance with EHPA application and components as listed in paragraph 5 (Description of main components)

Confirmation

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Date/place

Applicant/stamp

6.5 Manufacturer's data: Heat pumps for domestic hot water production

Details as listed below in Table 5 must be submitted for inspection, either as separate documents or be filled out in the table. Test conditions according to EN 16147.

Technical data, Table 5

Choose type of heat pump resp. testing conditions:

Air to water heat pump:

- A20
 A15
 A7

Brine to water heat pump:

- B0

Water to water heat pump:

- W10

Direct exchange ground coupled to water heat pump:

- E4

Model ->												
Source of data*												
Refrig. mass	R.../kg											
GWP												
Sound power inside/outside	dB(A)											
Tank volume	Litre											
	Heating up time / h											
	COP											
	Minimum COP											
	Standby power input / W											
	Reference hot water temp./°C											
	Max. us. vol. hot water / L											

* The source of data must be clearly identified by marking the column with

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“M” for “data provided by the manufacturer”: data transmitted by the manufacturer and not tested by the test centre.

Technical data in accordance with EHPA application and components as listed in paragraph 5 (Description of main components)

Confirmation

We hereby certify that the named test objects are heat pumps in series production, and that all presented data is correct. We acknowledge that we are obliged to inform the respective quality label commission voluntarily, without request, on all changes to test objects with a quality label. .

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Date/place

Applicant/stamp

6.6 Manufacturer's data: Air-to-air heat pumps

Details as listed below in Table 6, 7 and 8 must be submitted for inspection, either as separate documents or be filled out in the table. Test conditions according to EN 14825.

Technical data for reference heating season "A" = average (Mandatory), Table 6

Model ->									
Source of data*									
Volume flow, Q/N Inside/outside	m ³ /h								
Refrig. mass	R.../kg								
GWP									
Sound power inside/outside	dB(A)								
Fixed capacity	Yes / No								
P _{designh} (at -10°C)	kW								
TOL	°C								
Tbivalent	°C								
C _D	Default = 0,25								
thermostat off mode	El. input/ kW								
standby mode	El. input/ kW								
crankcase heater mode	El. input/ kW								
off mode	El. input/ kW								
A: A-7/A20	Heat output/kW								
Part load ratio	El. input/ kW								
88%	COP _A								
B: A 2/A20	Heat output/kW								
Part load ratio	El. input/ kW								
54%	COP _B								
C: A 7/A20	Heat output/kW								
Part load ratio	El. input/ kW								
35%	COP _C								
D: A12/A20	Heat output/kW								
Part load ratio	El. input/ kW								
15%	COP _D								
E: TOL/A20^{1,2}	Heat output/kW								
Part load ratio	El. input/ kW								
(TOL-16)/(-10-16)	COP _E								
F: Tbivalent/A20¹	Heat output/kW								
Part load ratio	El. input/ kW								
(Tbivalent-16)/(-10-16)	COP _F								

¹ Applies if different from conditions A, B, C or D² If TOL < -10°C the declaration shall be done for an outdoor air temperature of -10°C and a part load ratio of 100% **Additional technical data for reference heating season "W" = warmer, Table 7**

Model ->									
Source of data*									
P _{designh} (at 2°C)	kW								
TOL	°C								
Tbivalent	°C								
B: A 2/A20	Heat output/kW								
Part load ratio	El. input/ kW								
100%	COP _B								
C: A 7/A20	Heat output/kW								
Part load ratio	El. input/ kW								
64%	COP _C								
D: A12/A20	Heat output/kW								
Part load ratio	El. input/ kW								
29%	COP _D								
E: TOL/A20^{1,2}	Heat output/kW								
Part load ratio	El. input/ kW								
(TOL-16)/(2-16)	COP _E								
F: Tbivalent/A20¹	Heat output/kW								
Part load ratio	El. input/ kW								
(Tbivalent-16)/(2-16)	COP _F								

¹ Applies if different from conditions B, C or D

² If TOL < 2°C the declaration shall be done for an outdoor air temperature of 2°C and a part load ratio of 100% **Additional technical data for reference heating season “C” = colder, Table 8**

Model ->										
Source of data*										
Pdesignh (at -- 22°C)	kW									
TOL	°C									
Tbivalent	°C									
A: A-7/A20	Heat output/kW									
Part load ratio	El. input/ kW									
61%	COP _A									
B: A 2/A20	Heat output/kW									
Part load ratio	El. input/ kW									
37%	COP _B									
C: A 7/A20	Heat output/kW									
Part load ratio	El. input/ kW									
24%	COP _C									
D: A12/A20	Heat output/kW									
Part load ratio	El. input/ kW									
11%	COP _D									
E: TOL/A20^{1 2}	Heat output/kW									
Part load ratio	El. input/ kW									
(TOL-16)/(-22-16)	COP _E									
F: Tbivalent/A20¹	Heat output/kW									
Part load ratio	El. input/ kW									
(Tbivalent-16)/(-22-16)	COP _F									
G: -15/A20	Heat output/kW									
Part load ratio	El. input/ kW									
82%	COP _G									

¹ Applies if different from conditions A, B, C, D or G

² If TOL < -22°C the declaration shall be done for an outdoor air temperature of -22°C and a part load ratio of 100%

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“M” for “data provided by the manufacturer”: data transmitted by the manufacturer and not tested by the test centre.

Technical data in accordance with EHPA application and components as listed in paragraph 5 (Description of main components)

Confirmation

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Date/place

Applicant/stamp

7. EU Manufacturer's Declaration of Conformity

CE

The undersigned

confirms that the relevant requirements of the harmonized EU Directives EU- Safety Standards and EU Product Standards and National regulations are fulfilled.

In the case of any change(s) to the equipment not agreed to by us, this declaration is null and void.

A copy of the necessary documents must be included, together with signed EU Manufacturer's Declaration of Conformity.

Company:

Date/place

Applicant/stamp