

	<b>Heat Pump KEYMARK</b>	
<b>Annex D2</b> 012-021		Rev.-No.: 1 Date: 2016-12-20 Page: 1 of 1

Picture of certificate with main contents


<b>Certificate holder</b>	<b>ATLANTIC GROUP</b> <b>Rue des Fondeurs, BP64</b> <b>59660 Merville, France</b>
<b>Production sites</b>	59660 Merville France and Jianding CHINA
<b>Product</b>	Heat Pumps
<b>Product Type</b>	Air/Water
<b>Sub type and Models</b>	Alféa Hybrid Duo Gaz R8
<b>Testing basis</b>	EN 14511:2013-12 EN 14825:2013-12 EN 12102:2013-10 KEYMARK Certification Scheme for Heat Pumps (2015-06)
<b>Mark of conformity</b>	
<b>Registration No.</b>	012-021
<b>Right of use</b>	This certificate entitles the holder to use the mark of conformity shown above in conjunction with the specified registration number.  See annex D1 for detailed information.
<b>Validity</b>	<b>2026-12-19</b> <b>To check the validity of this certificate, please visit</b> <a href="http://www.sp.se">www.sp.se</a>

	<b>Heat Pump KEYMARK</b>	
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**1. AIR/WATER HEAT PUMPS**


**2**

<b>Certificate data</b>	
Certificate holder name	ATLANTIC GROUP
Address	rue des fondeurs 59660 Merville FRANCE
Type of heat pump	AIR/WATER
Reg. No.	012-021
Certification Body	SP Certifiering
Name of testing laboratory	SP Energy and Bioeconomy


	<b>Heat Pump KEYMARK</b>	
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## 1. Air/Water heat pumps

Alféa Hybrid Duo Gaz R8	
<b>General data</b>	
Refrigerant	R410A
Mass of refrigerant [kg]	1.4
GWP EN 517/2014 (kg equivalents CO <sub>2</sub> )	2087
Frequency [Hz]	50
Voltage [V]	230
<b>Test points EN 14511-2 Air/Water heat pump</b>	
<b>A7/W35</b>	
heat output [kW]	7.50
El input [kW]	1.84
COP	4.08
<b>A7/W55</b>	
heat output [kW]	5.00
El input [kW]	1.94
COP	2.58
<b>Test points EN 14511-4</b>	
operating Range A20/W17 lower limit-lower limit (min)	
Please state if the requirement is passed or failed	Passed
operating Range A35/W55 upper limit- upper limit (min)	
Please state if the requirement is passed or failed	Passed
Shutting off the heat transfer medium flow	
Please state if the requirement is passed or failed	Passed
Complete power supply failure	
Please state if the requirement is passed or failed	Passed
Defrost test only for AirT Water heat pumps	
Please state if the requirement is passed or failed	Passed

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Average Climate Low temperature application		
Declared values EN 14825		
$T_{biv}$ [°C]		
heat output [kW]		7.50
El input [kW]		1.84
COP		4.08
Sound power level according EN 12102		
Sound power level indoor [dB(A)]		46
Sound power level outdoor [dB(A)]		69
Declared data regarding ErP regulation		
$\eta_s$		156
$P_{rated}$ [kW]		7
SCOP		3.97
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
Pdh: $T_j = -7$ °C [kW]		5.8
COPd: $T_j = -7$ °C		2.4
Pdh: $T_j = +2$ °C [kW]		3.5
COPd: $T_j = +2$ °C		3.8
Pdh: $T_j = +7$ °C [kW]		2.3
COPd: $T_j = +7$ °C		5.7
Pdh: $T_j = +12$ °C [kW]		2.4
COPd: $T_j = +12$ °C		8.2
Pdh: $T_j =$ bivalent temperature [kW]		5.8
COPd: $T_j =$ bivalent temperature [kW]		2.4
Pdh: $T_j = TOL$ [kW]		5.6
COPd: $T_j = TOL$		2.0
$T_{biv}$ [°C]		-7
TOL [°C]		-10
WTOL [°C]		80
Annual energy consumption $Q_{HE}$ [kWh]		3375
$P_{OFF}$ [W]		6
$P_{TO}$ [W]		30
$P_{SB}$ [W]		9
$P_{CK}$ [W]		0
$P_{SUP}$ [kW]		0.9
Type of energy input		Gas

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Average Climate Medium temperature application		
Declared values EN 14825		
$T_{biv}$ [°C]		
heat output [kW]		5.00
El input [kW]		1.94
COP		2.58
Sound power level according EN 12102		
Sound power level indoor [dB(A)]		46
Sound power level outdoor [dB(A)]		69
Declared data regarding ErP regulation		
$\eta_s$		118
$P_{rated}$ [kW]		6
SCOP		3.02
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
Pdh: $T_j = -7$ °C [kW]		5.3
COPd: $T_j = -7$ °C		1.8
Pdh: $T_j = +2$ °C [kW]		3.1
COPd: $T_j = +2$ °C		2.9
Pdh: $T_j = +7$ °C [kW]		2.0
COPd: $T_j = +7$ °C		4.1
Pdh: $T_j = +12$ °C [kW]		2.2
COPd: $T_j = +12$ °C		5.8
Pdh: $T_j =$ bivalent temperature [kW]		5.0
COPd: $T_j =$ bivalent temperature [kW]		1.8
Pdh: $T_j = TOL$ [kW]		4.9
COPd: $T_j = TOL$		1.5
$T_{biv}$ [°C]		-7
TOL [°C]		-10
WTOL [°C]		80
Annual energy consumption $Q_{HE}$ [kWh]		3886
$P_{OFF}$ [W]		6
$P_{TO}$ [W]		16
$P_{SB}$ [W]		9
$P_{CK}$ [W]		0
$P_{SUP}$ [kW]		1.2
Type of energy input		Gas