Subtype Alféa Excellia HP A.I. 16	
Certificate Holder	Groupe Atlantic
Address	Rue des Fondeurs BP 64
ZIP	59660
City	Merville
Country	FR
Certification Body	RISE CERT
Subtype title	Alféa Excellia HP A.I. 16
Registration number	012-SC0755-18
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.8 kg
Certification Date	27.08.2024
Testing basis	EN 14511:2022, EN 16147:2017+A1:2022, EN 14825:2022, EN 12102:2022
Testing laboratory	RISE Research Institutes of Sweden

Model Alféa Excellia HP A.I. 16

Model name	Alféa Excellia HP A.I. 16
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	16.46 kW	14.86 kW
El input	3.94 kW	5.65 kW
COP	4.18	2.63

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	163 %	125 %
Prated	16.10 kW	13.60 kW
SCOP	4.15	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.20 kW	12.00 kW
COP Tj = -7°C	2.79	1.98
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	8.70 kW	7.30 kW
COP Tj = +2°C	4.17	3.15
Cdh Tj = +2 °C	0.950	0.980
Pdh Tj = +7°C	7.00 kW	6.30 kW
COP Tj = +7°C	5.34	4.30

Cdh Tj = +7 °C	0.920	0.970
Pdh Tj = 12°C	8.10 kW	7.60 kW
COP Tj = 12°C	6.76	5.99
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	14.20 kW	12.00 kW
COP Tj = Tbiv	2.79	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	60 °C	60 °C
Poff	19 W	19 W
PTO	100 W	46 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.00 kW	3.00 kW
Annual energy consumption Qhe	8014 kWh	8757 kWh

Model Alféa Excellia HP Duo A.I. 16

Model name	Alféa Excellia HP Duo A.I. 16
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency ηDHW	95 %
COP	2.56
Heating up time	0:54 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	248 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	16.46 kW	14.86 kW
El input	3.94 kW	5.65 kW
COP	4.18	2.63

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	163 %	125 %
Prated	16.10 kW	13.60 kW
SCOP	4.15	3.21

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.20 kW	12.00 kW
COP Tj = -7°C	2.79	1.98
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	8.70 kW	7.30 kW
COP Tj = +2°C	4.17	3.15
Cdh Tj = +2 °C	0.950	0.980
Pdh Tj = +7°C	7.00 kW	6.30 kW
COP Tj = +7°C	5.34	4.30
Cdh Tj = +7 °C	0.920	0.970
Pdh Tj = 12°C	8.10 kW	7.60 kW
COP Tj = 12°C	6.76	5.99
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	14.20 kW	12.00 kW
COP Tj = Tbiv	2.79	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	60 °C	60 °C
Poff	19 W	19 W
PTO	100 W	46 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.00 kW	3.00 kW
Annual energy consumption Qhe	8014 kWh	8757 kWh