

Subtype Alféa Excellia HP A.I. 16

Certificate Holder	Groupe Atlantic
Address	44 boulevard des Etats-Unis
ZIP	85000
City	La Roche Sur Yon
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	09.12.2022
Testing basis	EN 14511:2013, EN 16147:2017, EN 14825:2016, EN 12102:2013

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
η_s	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 η_{DHW}	109 %
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	250 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
η_s	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
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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