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Summary of	Alféa Excellia HP A.I. 16	Reg. No.	012-SC0755-18
Certificate Holder			
Name	Groupe Atlantic		
Address	44 boulevard des Etats-Unis	Zip	85000
City	La Roche Sur Yon	Country	France
Certification Body	RISE CERT		
Subtype title	Alféa Excellia HP A.I. 16		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	3.8 kg		

## Model: Alféa Excellia HP A.I. 16

Configure model	
Model name	Alféa Excellia HP A.I. 16
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	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

### Average Climate

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### EN 12102-1

	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

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Prated	16.00 kW	14.00 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
Pdh Tj = +2°C	8.70 kW	7.30 kW
COP Tj = +2°C	4.17	3.15
Pdh Tj = +7°C	7.00 kW	6.30 kW
COP Tj = +7°C	5.34	4.30
Pdh Tj = 12°C	8.10 kW	7.60 kW
COP Tj = 12°C	6.76	5.99
Pdh Tj = Tbiv	14.20 kW	12.00 kW

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COP $T_j = T_{biv}$	2.79	1.98
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	14.10 kW	10.60 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.54	1.75
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.92	0.96
WTOL	65 °C	65 °C
P <sub>off</sub>	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 Q <sub>he</sub>	8014 kWh	8757 kWh

## Model: Alféa Excellia HP Duo A.I. 16

Configure model	
Model name	Alféa Excellia HP Duo A.I. 16
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	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

### Average Climate

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COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.54	1.75
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.92	0.96
WTOL	65 °C	65 °C
P <sub>off</sub>	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 $Q_{he}$	8014 kWh	8757 kWh

## Domestic Hot Water (DHW)

### Average Climate

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<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	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