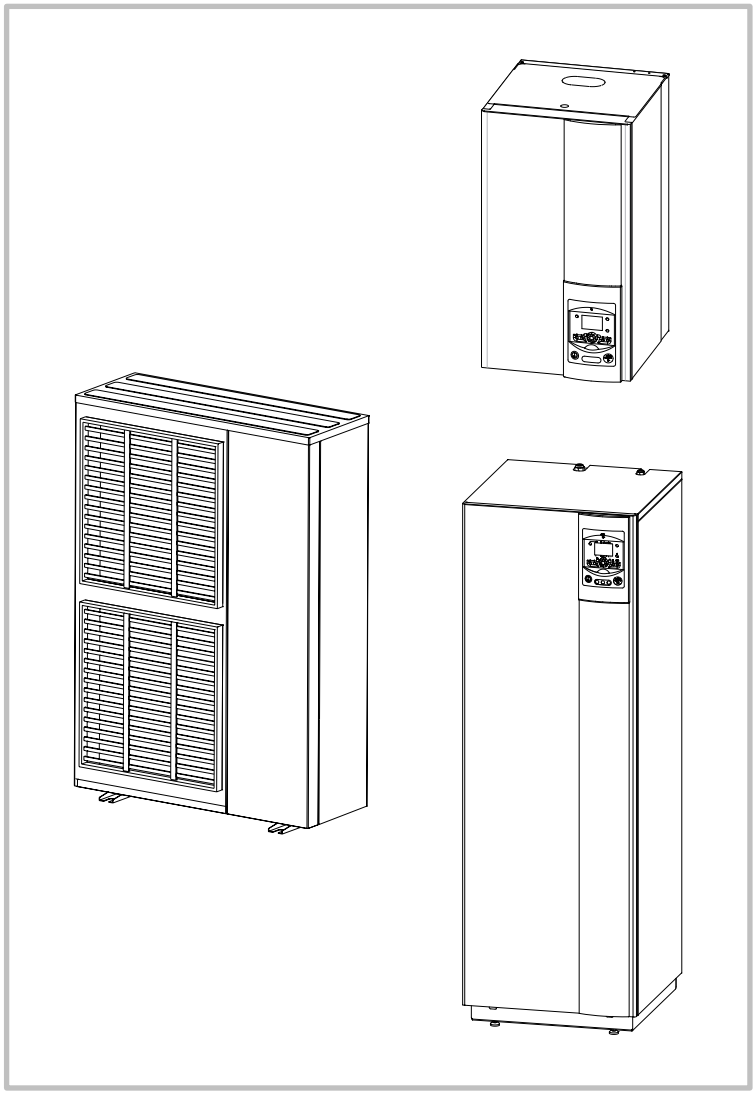
alféa excellia A.I. and alféa excellia duo A.I.

Heat pumps air/water split single phase and 3-phase

alféa excellia A.I. 11 et alféa excellia duo A.I. 11
alféa excellia A.I. 14 et alféa excellia duo A.I. 14
alféa excellia A.I. tri 11 et alféa excellia duo A.I. tri 11
alféa excellia A.I. tri 14 et alféa excellia duo A.I. tri 14
alféa excellia A.I. tri 16 et alféa excellia duo A.I. tri 16



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FR EN

Technical data

Intended for professionals. Completed by the installation and operating manuals 1876, 1877, 1879 and 1880.

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Contents

1. General Description

For more information, please refere to the instructions sheets 1876 / 1877 (one service) and 1879 / 1880 (two services).

- **Table of dimensions and weigth**

	Single phase		3-phase		
	alféa excellia A.I. 11 / alféa excellia duo A.I. 11	**alféa excellia A.I. 14 / alféa excellia duo A.I. 14**	**alféa excellia A.I. tri 11 / alféa excellia duo A.I. tri 11**	**alféa excellia A.I. tri 14 / alféa excellia duo A.I. tri 14**	**alféa excellia A.I. tri 16 / alféa excellia duo A.I. tri 16**
Reference with electrical backup					
1 service	526350	526351	526352	526353	526354
2 services	526355	526356	526357	526358	526359
Reference without electrical backup					
1 service	526360	526361	526362	526363	526364
2 services	526365	526366	526367	526368	526369
Outdoor unit	**WOYG112LHT**	**WOYG140LCTA**	**WOYK112 LCTA**	**WOYK140LCTA**	**WOYK160LCTA**
Reference	700197	700175	700176	700177	700178
Dimensions (H x W x D) (mm)	1290 × 970 × 400	1290 × 970 × 400	1290 x900x400	1290 x900x400	1290 x900x400
Operating weight (kg)	92	92	99	99	99
Air flow rate (Heating) (m^3/h)	6200	6200	6200	6200	6900

Reference with electrical backup

Hydraulic unit	**alféa excellia A.I.**	**alféa excellia A.I.**
Reference	**024114**	**024115**
Dimensions (H x W x D) (mm)	842 x 450 x 480	842 x 450 x 480
Weigth vacuum / water (kg)	46 / 62	46 / 62

Hydraulic unit	**alféa excellia duo A.I.**	**alféa excellia duo A.I.**
Reference	**024216**	**024217**
Dimensions (H x W x D) (mm)	1851 x 648 x 684	1851 x 648 x 684
Weigth vacuum / water (kg)	155 / 373	155 / 373

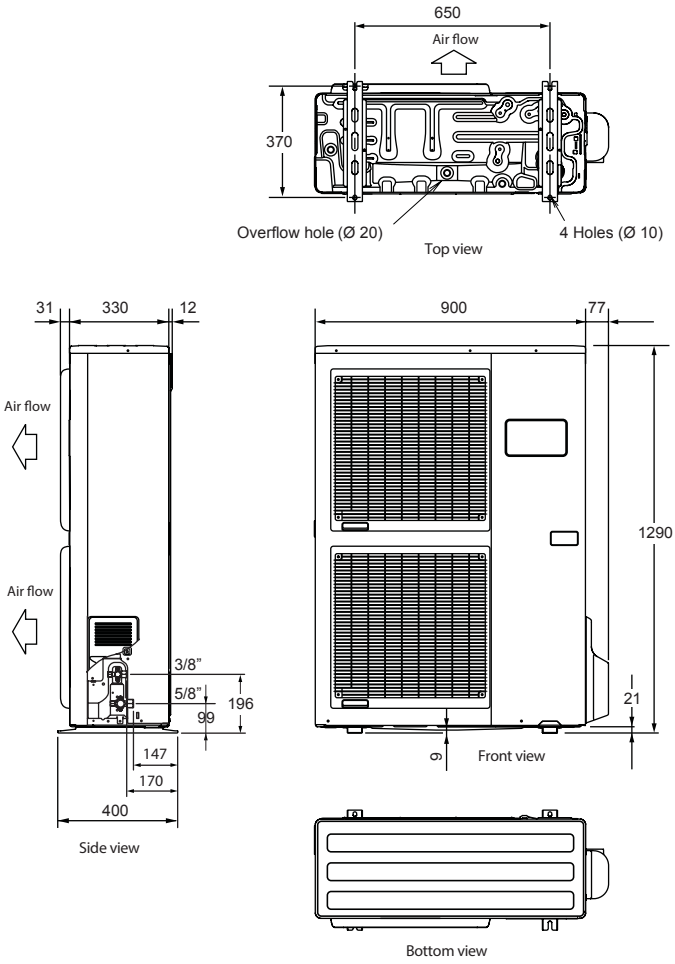
Reference without electrical backup

Hydraulic unit	**alféa excellia A.I. 11 / 14 / tri 11 / tri 14 / tri 16**	**alféa excellia duo A.I. 11 / 14 / tri 11 / tri 14 / tri 16**
Reference	**024211**	**024212**
Dimensions (H x W x D) (mm)	842 x 450 x 480	1851 x 648 x 684
Weigth vacuum / water (kg)	42 / 58	152 / 370

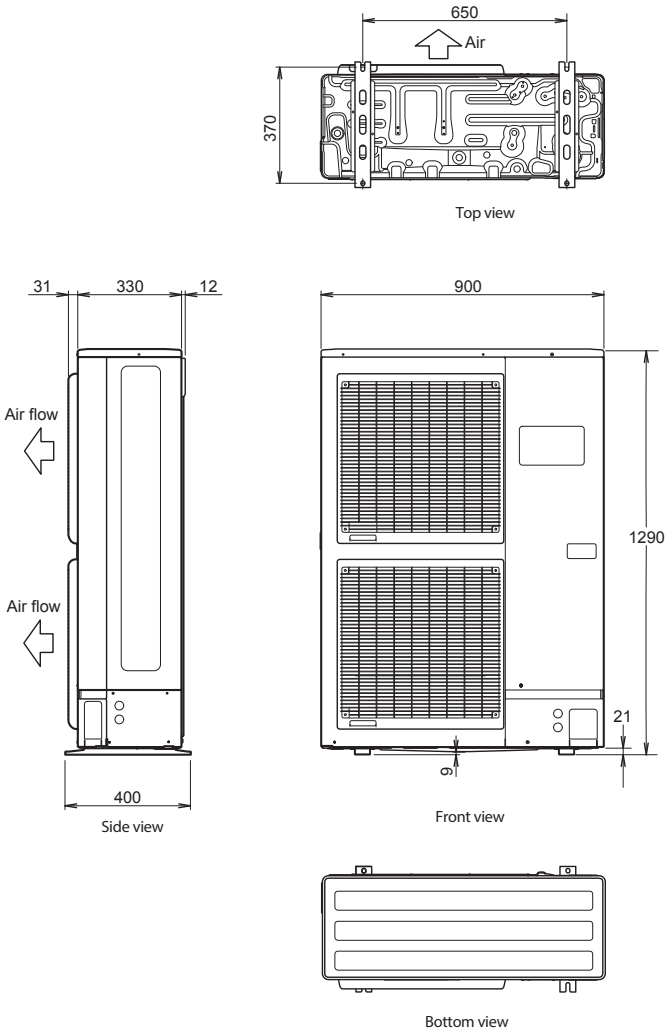
- **Dimensional drawing**

Outdoor unit :

- alféa excellia A.I. 11/14 and alféa excellia duo A.I. 11/14

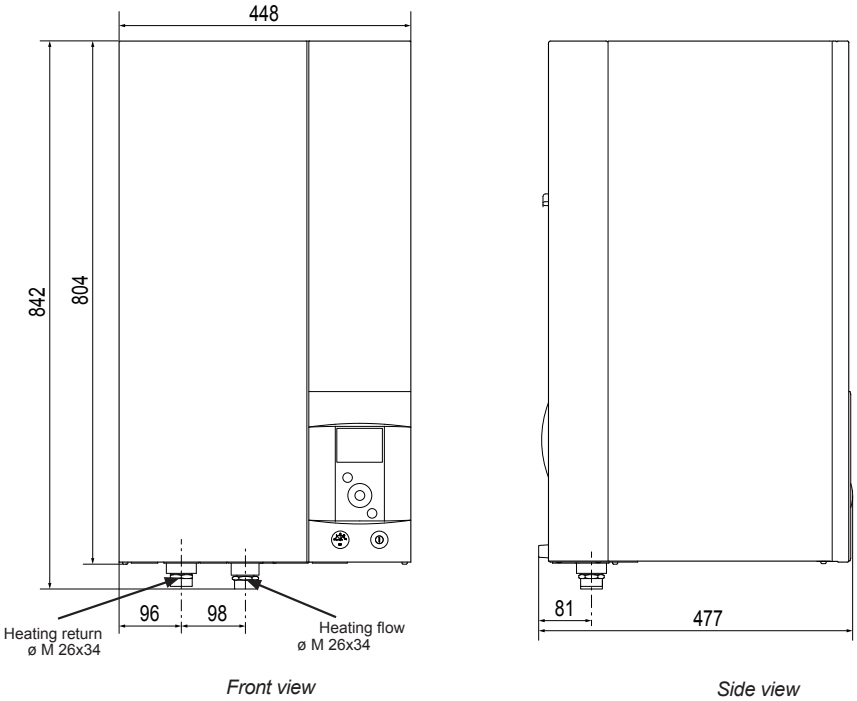


- alféa excellia A.I. tri 11/14/16 and alféa excellia duo A.I. tri 11/14/16



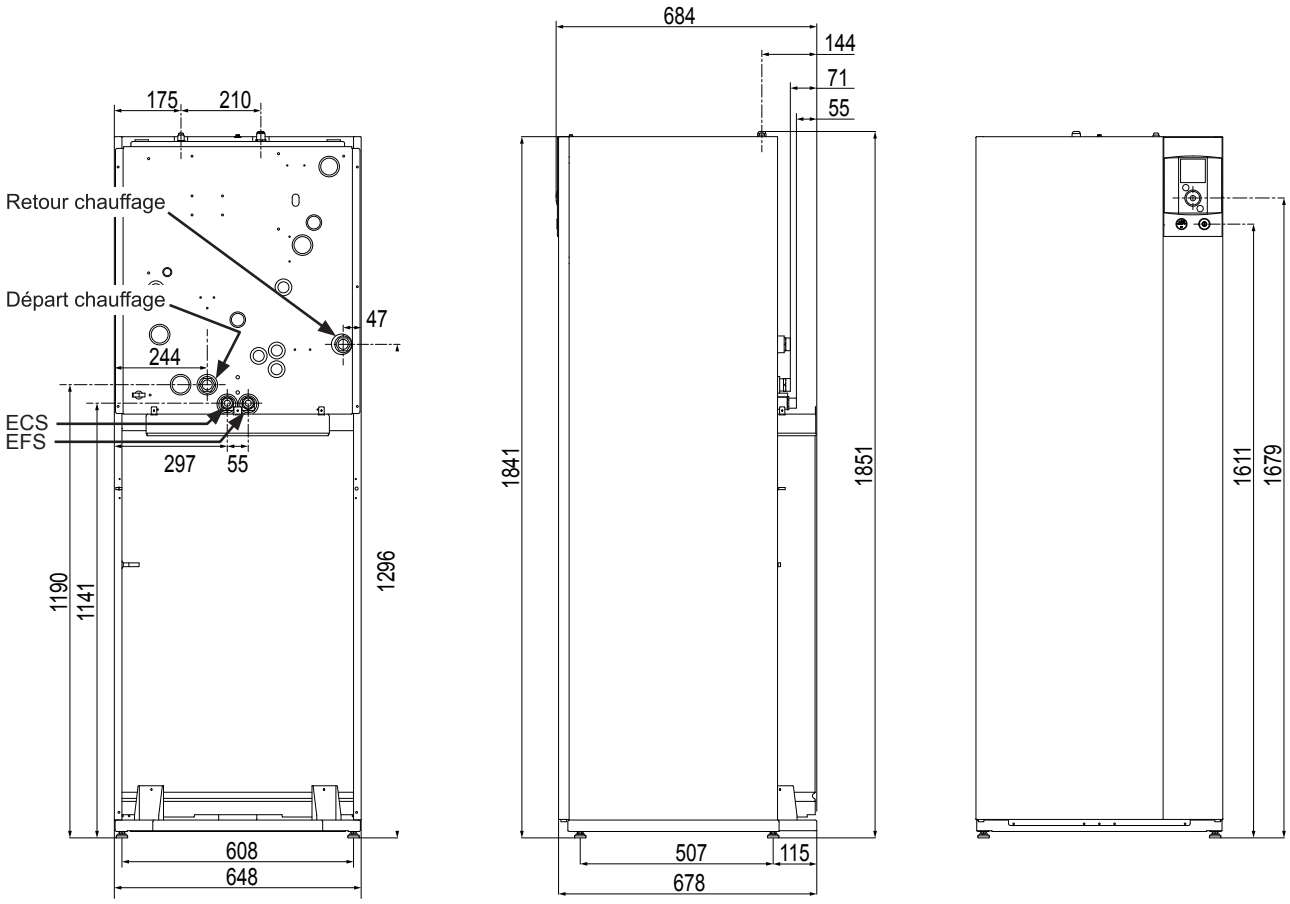
Hydraulic unit :

- alféa excellia A.I. models



Front view *Side view*

- alféa excellia duo A.I. models

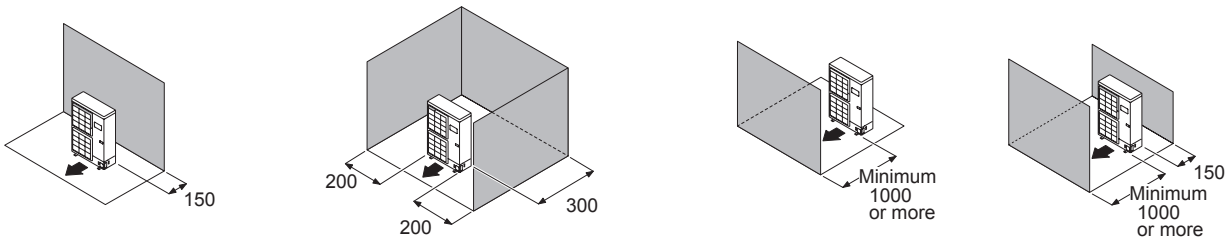


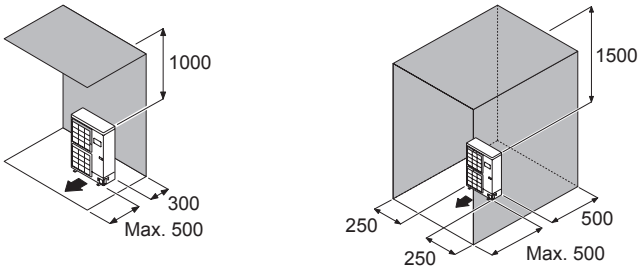
Vue arrière *Vue de côté* *Vue de face*

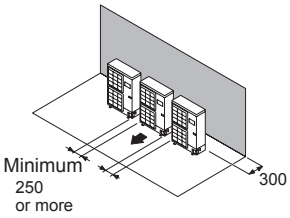
- **Installation place**

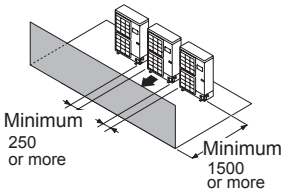
Outdoor unit :

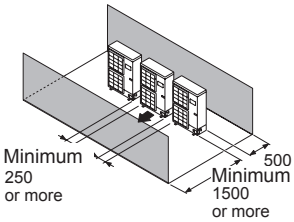
The outdoor unit must only be installed outside (outside). If a shelter is required, it must have broad openings on all 4 sides and following the installation conditions below.

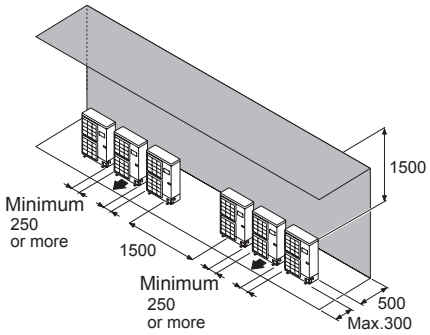


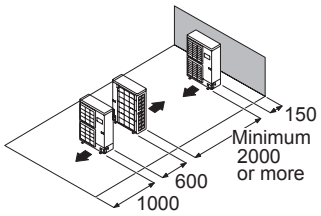


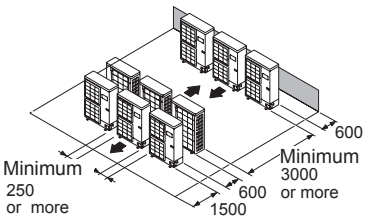






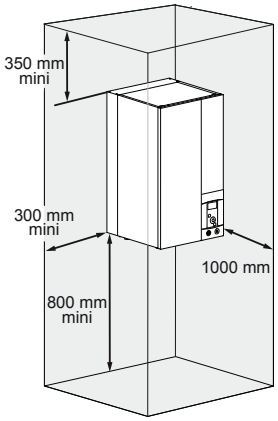




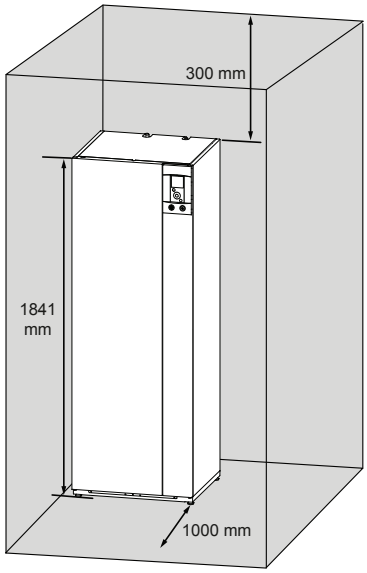


Hydraulic unit :

- alféa excellia A.I. models



- alféa excellia duo A.I. models



In accordance with EN 378-1 -2017 standard (Refrigerating systems and heat pumps - Safety and environmental requirements), the system's hydraulic unit and all refrigeration connections passing through inhabited areas must comply with the minimum room volume requirements shown hereafter.
The minimum volume of a room (in m³) is calculated using the formula: «fluid fill load» (in kg) / 0.39.
Alternatively, you must ensure that
-the location has natural ventilation through another room where the combined volume of the two rooms is greater than «liquid fill load» (in kg) / 0.39 kg/m³. The opening between the two rooms must have a door clearance of at least 1 cm.
-or that the location is mechanically ventilated.

- **Connection pipe**

	Single phase		3-phase		
	alféa excellia A.I. alféa excellia duo A.I. 11	alféa excellia A.I. 14 alféa excellia duo A.I. 14	alféa excellia A.I. tri 11 alféa excellia duo A.I. tri 11	alféa excellia A.I. tri 14 alféa excellia duo A.I. tri 14	alféa excellia A.I. tri 16 alféa excellia duo A.I. tri16
Input and Output Circuit heating diameters (male thread) (inch)	1"	1"	1"	1"	1"
Diameter of «Gaz» pipes (inch)	5/8"	5/8"	5/8"	5/8"	5/8"
Diameter of «Liquid» pipes (inch)	3/8"	3/8"	3/8"	3/8"	3/8"

- **ERP datas**

	Single phase		3-phase		
	alféa excellia 11 alféa excellia duo 11	alféa excellia 14 alféa excellia duo 14	alféa excellia tri 11 alféa excellia duo tri 11	alféa excellia tri 14 alféa excellia duo tri 14	alféa excellia tri 16 alféa excellia duo tri 16
Energy class - heating (35°/55°)	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated heat output (kW)	11 / 9	13 / 11	11 / 9	13 / 11	14 / 13
Energy seasonal efficiency - heating (35°/55°) (%)	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119
Annual energy consumption - heating (35°/55°) (kWh)	6062 / 6623	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062
Acoustic power (indoor / oudoor) (dBa)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69

	Single phase		3-phase		
	alféa excellia duo A.I. 11	alféa excellia duo A.I. 14	alféa excellia duo A.I. tri 11	alféa excellia duo A.I. tri 14	alféa excellia duo A.I. tri 16
Declared load profile - DHW	L	L	L	L	L
Energy class - DHW	A	A	A	A	A
Annual energy consumption - DHW (kWh)	1166	1166	1166	1166	1166
Efficacité énergétique saisonnière - DHW (%)	88	88	88	88	88

2. Performances

2.1 Nominal performances

2.1.1 Heating mode

		Single phase		3-phase		
		alféa excellia A.I. 11 alféa excellia duo A.I. 11	alféa excellia A.I. 14 alféa excellia duo A.I. 14	alféa excellia A.I. tri 11 alféa excellia duo A.I. tri 11	alféa excellia A.I. tri 14 alféa excellia duo A.I. tri 14	alféa excellia A.I. tri 16 alféa excellia duo A.I. tri 16
+7°C/+35°C Floor heating	Heating capacity (kW)	10,80	13,50	10,80	13,00	15,17
	Input power (kW)	2,54	3,23	2,51	3,11	3,70
	COP	4,25	4,18	4,30	4,18	4,10
+7°C/+45°C Radiator low voltage	Heating capacity (kW)	9,05	11,32	9,90	12,10	12,75
	Input power (kW)	2,82	3,69	2,99	3,78	3,97
	COP	3,21	3,07	3,32	3,20	3,21
+7°C/+55°C Radiator high voltage	Heating capacity (kW)	7,59	9,48	9,29	10,60	12.24
	Input power (kW)	3,07	3,95	3,52	4,40	4.93
	COP	2,47	2,40	2,64	2,41	2.48
+7°C/+60°C Radiator high voltage	Heating capacity (kW)	7,05	8,81	9,25	11,50	12,49
	Input power (kW)	3,39	4,31	3,84	4,94	5,43
	COP	2,08	2,04	2,41	2,33	2,30
-7°C/+35°C Floor heating	Heating capacity (kW)	10,38	11,54	10,38	12,20	12,98
	Input power (kW)	4,32	5,08	4,28	5,13	5,40
	COP	2,40	2,27	2,43	2,38	2,40
-7°C/+45°C Radiator low voltage	Heating capacity (kW)	9,16	11,41	9,98	10,70	12,95
	Input power (kW)	4,58	5,92	4,63	5,14	6,37
	COP	2,00	1,93	2,16	2,08	2,03
-7°C/+55°C Radiator high voltage	Heating capacity (kW)	7,57	9,20	9,27	10,10	12,00
	Input power (kW)	4,57	5,08	5,09	5,65	6,89
	COP	1,66	1,81	1,82	1,79	1,74
-7°C/+60°C Radiator high voltage	Heating capacity (kW)	6,71	8,42	8,48	10,10	10,90
	Input power (kW)	4,80	6,04	5,25	6,39	6,98
	COP	1,40	1,39	1,61	1,58	1,56
+2°C/+35°C Floor heating (1)	Heating capacity (kW)	6,97	6,97	7,75	7,75	7,75
	Input power (kW)	2,24	2,24	2,49	2,49	2,49
	COP	3,11	3,11	3,11	3,11	3,11
+2°C/+45°C Radiator low voltage (1)	Heating capacity (kW)	5,82	5,82	6,47	6,47	6,47
	Input power (kW)	2,24	2,24	2,48	2,48	2,48
	COP	2,60	2,60	2,61	2,61	2,61
Sound power (2) (dBA)	Outdoor unit	69	69	68	69	69
	Hydraulic module	46	46	46	46	46

Test conditions comply with EN 14-511. Following 14-511, the defrost cycles are always taken in account in the measure.

(1) alféa excellia (mode Eco)

(2) Sound power at 0/55°C according to EN12102 ; Sound power is a laboratory measurement of the sound power emitted but unlike at sound pressure, it does not correspond to the feel perceived. Used by specialists in acoustics, it allows to calculate the sound pressure level that is a function of the environment.

2.1.2 Cooling mode

			Single phase		3-phase		
			alféa excellia A.I. 11 alféa excellia duo A.I. 11	alféa excellia A.I. 14 alféa excellia duo A.I. 14	alféa excellia A.I. tri 11 alféa excellia duo A.I. tri 11	alféa excellia A.I. tri 14 alféa excellia duo A.I. tri 14	alféa excellia A.I. tri 16 alféa excellia duo A.I. tri 16
+18°C/+35°C High efficiency refreshing floor	Cooling capacity (kW)	Min.	6,56	6,75	6,56	6,75	6,41
		Nom.	9,80	12,50	9,80	12,50	13,50
		Max.	17,05	18,75	17,05	18,75	18,56
	Input power (kW)	Nom.	2,38	3,38	2,57	3,61	4,14
	EER		4,12	3,70	3,82	3,46	3,26
+15°C/+35°C Refreshing floor	Cooling capacity (kW)	Nom.	9,44	11,55	9,45	11,55	12,410
	Input power (kW)		2,55	3,40	2,79	3,56	4,12
	EER		3,70	3,40	3,39	3,25	3,02
+12°C/+35°C Fan coils	Cooling capacity (kW)	Nom.	9,09	10,59	9,09	10,59	11,31
	Input power (kW)		2,74	3,40	3,01	3,56	4,08
	EER		3,32	3,12	3,02	2,98	2,78
+7°C/+35°C Fan coils	Cooling capacity (kW)	Nom.	8,50	9,00	8,50	9,00	9,50
	Input power (kW)		3,11	3,34	3,41	3,66	3,99
	EER		2,73	2,69	2,50	2,46	2,38

Test conditions comply with EN 14-511.

2.2 Performances tables in heating mode whitout the electrical back-up

2.2.1 alféa excellia A.I. single phase models

alféa excellia A.I. 11 / alféa excellia duo A.I. 11

Test conditions comply with EN 14825 whitout electrical backup

Outdoor temperature	Starting temperature																								
	25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
35°C	2.29	15.20	6.64	2.89	14.74	5.10	2.91	14.09	4.83	2.96	13.73	4.64	3.02	13.44	4.46	3.08	13.14	4.27	3.14	12.85	4.09	3.20	12.56	3.92
34°C	2.29	15.13	6.60	2.89	14.67	5.07	2.92	14.03	4.81	2.96	13.67	4.62	3.02	13.38	4.43	3.08	13.09	4.25	3.14	12.80	4.07	3.20	12.51	3.90
33°C	2.29	15.07	6.57	2.90	14.61	5.05	2.92	13.97	4.79	2.96	13.61	4.59	3.02	13.32	4.41	3.08	13.03	4.23	3.14	12.74	4.05	3.21	12.45	3.89
32°C	2.30	15.01	6.54	2.90	14.55	5.02	2.92	13.91	4.76	2.96	13.56	4.57	3.02	13.27	4.39	3.08	12.98	4.21	3.15	12.69	4.03	3.21	12.40	3.87
31°C	2.30	14.95	6.51	2.90	14.49	5.00	2.92	13.86	4.74	2.97	13.50	4.55	3.02	13.21	4.37	3.09	12.92	4.19	3.15	12.64	4.01	3.21	12.35	3.85
30°C	2.30	14.88	6.48	2.90	14.43	4.97	2.93	13.80	4.72	2.97	13.44	4.53	3.03	13.16	4.35	3.09	12.87	4.17	3.15	12.58	3.99	3.21	12.29	3.83
29°C	2.30	14.82	6.44	2.90	14.37	4.95	2.93	13.74	4.69	2.97	13.39	4.51	3.03	13.10	4.33	3.09	12.82	4.15	3.15	12.53	3.97	3.21	12.24	3.81
28°C	2.30	14.76	6.41	2.91	14.31	4.93	2.93	13.69	4.67	2.97	13.33	4.48	3.03	13.05	4.31	3.09	12.76	4.13	3.15	12.48	3.95	3.22	12.19	3.79
27°C	2.30	14.70	6.38	2.91	14.25	4.90	2.93	13.63	4.65	2.98	13.28	4.46	3.03	12.99	4.28	3.10	12.71	4.11	3.16	12.42	3.94	3.22	12.14	3.77
26°C	2.31	14.64	6.35	2.91	14.20	4.88	2.93	13.57	4.63	2.98	13.22	4.44	3.04	12.94	4.26	3.10	12.66	4.09	3.16	12.37	3.92	3.22	12.09	3.75
25°C	2.31	14.58	6.32	2.91	14.14	4.85	2.94	13.52	4.60	2.98	13.17	4.42	3.04	12.89	4.24	3.10	12.60	4.07	3.16	12.32	3.90	3.22	12.04	3.73
24°C	2.31	14.52	6.29	2.91	14.08	4.83	2.94	13.46	4.58	2.98	13.11	4.40	3.04	12.83	4.22	3.10	12.55	4.05	3.16	12.27	3.88	3.23	11.99	3.71
23°C	2.31	14.46	6.26	2.92	14.02	4.81	2.94	13.41	4.56	2.99	13.06	4.38	3.04	12.78	4.20	3.10	12.50	4.03	3.17	12.22	3.86	3.23	11.94	3.70
22°C	2.31	14.40	6.23	2.92	13.97	4.78	2.94	13.35	4.54	2.99	13.01	4.35	3.04	12.73	4.18	3.11	12.45	4.01	3.17	12.17	3.84	3.23	11.89	3.68
21°C	2.31	14.35	6.20	2.92	13.91	4.76	2.95	13.30	4.52	2.99	12.95	4.33	3.05	12.68	4.16	3.11	12.40	3.99	3.17	12.12	3.82	3.23	11.84	3.66
20°C	2.32	14.29	6.17	2.92	13.85	4.74	2.95	13.25	4.49	2.99	12.90	4.31	3.05	12.62	4.14	3.11	12.35	3.97	3.17	12.07	3.80	3.24	11.79	3.64
19°C	2.32	14.23	6.14	2.94	13.80	4.70	2.96	13.19	4.46	3.01	12.85	4.27	3.07	12.57	4.09	3.13	12.30	3.92	3.20	12.02	3.76	3.26	11.74	3.60
18°C	2.32	14.17	6.11	2.95	13.74	4.66	2.97	13.14	4.42	3.03	12.80	4.22	3.09	12.52	4.05	3.16	12.25	3.88	3.22	11.97	3.72	3.28	11.69	3.56
17°C	2.32	14.12	6.08	2.96	13.69	4.62	2.99	13.09	4.38	3.05	12.75	4.18	3.11	12.47	4.01	3.18	12.20	3.84	3.24	11.92	3.68	3.30	11.64	3.53
16°C	2.32	14.06	6.05	2.98	13.63	4.58	3.00	13.04	4.34	3.07	12.70	4.14	3.14	12.42	3.96	3.20	12.15	3.80	3.26	11.87	3.64	3.32	11.60	3.49
15°C	2.33	14.00	6.02	2.99	13.58	4.54	3.01	12.98	4.31	3.09	12.64	4.10	3.16	12.37	3.92	3.22	12.10	3.76	3.28	11.82	3.60	3.35	11.55	3.45
14°C	2.33	13.95	5.99	3.00	13.52	4.50	3.03	12.93	4.27	3.10	12.59	4.06	3.18	12.32	3.88	3.24	12.05	3.72	3.31	11.77	3.56	3.37	11.50	3.41
13°C	2.33	13.89	5.96	3.02	13.47	4.47	3.04	12.88	4.24	3.12	12.54	4.02	3.20	12.27	3.83	3.26	12.00	3.68	3.33	11.73	3.52	3.39	11.45	3.38
12°C	2.33	13.84	5.93	3.03	13.42	4.43	3.05	12.83	4.20	3.14	12.49	3.98	3.22	12.22	3.79	3.29	11.95	3.64	3.35	11.68	3.49	3.41	11.41	3.34
11°C	2.33	13.48	5.77	2.94	13.16	4.48	3.03	12.67	4.19	3.15	12.34	3.91	3.24	12.07	3.72	3.31	11.80	3.57	3.37	11.53	3.42	3.44	11.26	3.27
10°C	2.34	13.12	5.61	2.84	12.90	4.54	3.00	12.52	4.17	3.16	12.19	3.85	3.27	11.92	3.65	3.33	11.65	3.50	3.40	11.38	3.35	3.46	11.11	3.21
9°C	2.34	12.76	5.46	2.75	12.65	4.61	2.97	12.37	4.16	3.17	12.03	3.79	3.29	11.76	3.58	3.35	11.50	3.43	3.42	11.23	3.28	3.48	10.96	3.15
8°C	2.34	12.41	5.30	2.65	12.39	4.68	2.95	12.21	4.14	3.18	11.88	3.73	3.31	11.61	3.51	3.38	11.35	3.36	3.44	11.08	3.22	3.51	10.81	3.08
7°C	2.34	12.06	5.15	2.55	12.14	4.76	2.92	11.87	4.07	3.20	11.61	3.62	3.31	11.34	3.42	3.39	11.07	3.27	3.46	10.80	3.12	3.51	10.54	3.00
6°C	2.68	12.26	4.57	2.91	12.18	4.19	3.24	11.88	3.67	3.50	11.58	3.31	3.63	11.24	3.10	3.73	10.88	2.92	3.83	10.51	2.74	3.86	10.15	2.63
5°C	2.99	12.38	4.15	3.23	12.14	3.76	3.52	11.81	3.35	3.77	11.47	3.04	3.92	11.06	2.82	4.04	10.60	2.62	4.17	10.14	2.43	4.17	9.68	2.32
4°C	3.29	12.53	3.81	3.54	12.14	3.43	3.81	11.73	3.08	4.03	11.31	2.80	4.19	10.81	2.58	4.34	10.26	2.37	4.48	9.72	2.17	4.47	9.17	2.05
3°C	3.45	12.26	3.56	3.71	11.75	3.17	3.92	11.20	2.86	4.10	10.65	2.60	4.24	10.08	2.37	4.40	9.49	2.15	4.56	8.89	1.95	4.54	8.30	1.83
2°C	3.74	12.37	3.31	4.03	11.69	2.90	4.23	11.00	2.60	4.39	10.31	2.35	4.54	9.63	2.12	4.71	8.94	1.90	4.89	8.26	1.69	4.86	7.57	1.56
1°C	3.74	12.33	3.29	4.02	11.64	2.89	4.22	10.95	2.59	4.39	10.26	2.34	4.54	9.57	2.11	4.71	8.88	1.89	4.88	8.19	1.68	4.86	7.50	1.55
0°C	3.74	12.28	3.28	4.02	11.59	2.88	4.21	10.90	2.59	4.38	10.20	2.33	4.52	9.51	2.10	4.69	8.82	1.88	4.87	8.13	1.67	4.86	7.43	1.53
-1°C	3.74	12.24	3.27	4.01	11.54	2.88	4.20	10.85	2.58	4.36	10.15	2.33	4.50	9.45	2.10	4.67	8.76	1.88	4.85	8.06	1.66	4.86	7.36	1.52
-2°C	3.74	12.19	3.26	3.99	11.49	2.88	4.18	10.79	2.59	4.33	10.09	2.33	4.47	9.39	2.10	4.63	8.69	1.88	4.81	7.99	1.66	4.85	7.29	1.50
-3°C	3.74	12.15	3.25	3.97	11.45	2.88	4.15	10.74	2.59	4.29	10.04	2.34	4.43	9.34	2.11	4.58	8.63	1.88	4.77	7.93	1.66	4.85	7.22	1.49
-4°C	3.75	12.11	3.23	3.95	11.40	2.89	4.11	10.69	2.60	4.25	9.98	2.35	4.38	9.28	2.12	4.52	8.57	1.89	4.72	7.86	1.66	4.85	7.15	1.47
-5°C	3.75	12.06	3.22	3.92	11.35	2.89	4.07	10.64	2.62	4.20	9.93	2.37	4.32	9.22	2.13	4.45	8.51	1.91	4.67	7.79	1.67	4.85	7.08	1.46
-6°C	3.75	12.02	3.21	3.89	11.30	2.90	4.02	10.59	2.64	4.14	9.87	2.39	4.25	9.16	2.15	4.38	8.44	1.93	4.60	7.73	1.68	4.85	7.01	1.45
-7°C	3.75	11.98	3.19	3.86	11.26	2.92	3.96	10.54	2.66	4.07	9.82	2.41	4.18	9.10	2.18	4.28	8.38	1.96	4.52	7.66	1.69	4.84	6.94	1.43
-8°C	3.91	11.86	3.03	4.00	11.18	2.79	4.09	10.50	2.57	4.18	9.82	2.35	4.27	9.13	2.14	4.36	8.44	1.94	4.59	7.75	1.69	4.91	7.06	1.44
-9°C	4.08	11.74	2.88	4.15	11.11	2.68	4.22	10.47	2.48	4.29	9.81	2.29	4.36	9.15	2.10	4.43	8.49	1.92	4.65	7.84	1.68	4.97	7.18	1.44
-10°C	4.25	11.63	2.74	4.30	11.03	2.57	4.35	10.44	2.40	4.40	9.81	2.23	4.45	9.18	2.06	4.50	8.55	1.90	4.72	7.92	1.68	5.04	7.29	1.45
-11°C	4.27	11.28	2.64	4.32	10.75	2.49	4.37	10.20	2.33	4.42	9.60	2.17	4.47	9.00	2.01	4.52	8.40	1.86	4.74	7.79	1.64	5.06	7.18	1.42
-12°C	4.29	10.93	2.55	4.34	10.44	2.40	4.39	9.93	2.26	4.44	9.37	2.11	4.50	8.80	1.96	4.55	8.22	1.81	4.76	7.64	1.60	5.09	7.05	1.38
-13°C	4.31	10.56	2.45	4.36	10.12	2.32	4.41	9.65	2.19	4.47	9.12	2.04	4.52	8.58	1.90	4.57	8.03	1.76	4.79	7.47	1.56	5.11	6.89	1.35
-14°C	4.33	10.17	2.35	4.39	9.78	2.23	4.44	9.35	2.11	4.49	8.86	1.97	4.54	8.34	1.84	4.59	7.82	1.70	4.81	7.28	1.51	5.14	6.73	1.31
-15°C	4.35	9.77	2.24	4.41	9.42	2.14	4.46	9.03	2.02	4.51	8.57	1.90	4.56	8.09	1.77	4.62	7.58	1.64	4.83	7.07	1.46	5.17	6.54	1.27
-16°C	4.31	9.37	2.17	4.36	9.05	2.08	4.41	8.69	1.97	4.47	8.27	1.85	4.52	7.81	1.73	4.57	7.34	1.61	4.79	6.84	1.43	5.11	6.34	1.24
-17°C	4.27	8.95	2.10	4.32	8.67	2.01	4.37	8.34	1.91	4.42	7.95	1.80	4.47	7.52	1.68	4.52	7.07	1.56	4.74	6.60	1.39	5.06	6.12	1.21
-18°C	4.23	8.52	2.02	4.28	8.27	1.93	4.33	7.98	1.84	4.38	7.61	1.74	4.43	7.21	1.63	4.48	6.79	1.52	4.69	6.35	1.35	5.01	5.89	1.18
-19°C	4.18	8.08	1.93	4.23	7.87	1.86	4.28	7.60	1.77	4.33	7.26	1.68	4.38	6.89	1.57	4.43	6.49	1.46	4.64	6.08	1.31	4.96	5.64	1.14
-20°C	4.14	7.63	1.84	4.19	7.45	1.78	4.24	7.21	1.70	4.29	6.90	1.61	4.34	6.55	1.51	4.39	6.18	1.41	4.60	5.79	1.26	4.91	5.38	1.10
-21°C	4.10	7.17	1.75	4.15	7.02	1.69	4.20	6.80	1.62	4.25	6.52	1.54	4.30	6.20	1.44	4.34	5.86	1.35	4.55	5.49	1.21	0.00	0.00	0.00
-22°C	4.06	6.71	1.65	4.11	6.58	1.60	4.16	6.39	1.54	4.20	6.13	1.46	4.25	5.84	1.37	4.30	5.52	1.28	4.51	5.18	1.15	0.00	0.00	0.00
-23°C	4.02	6.24	1.55	4.07	6.13	1.51	4.11	5.96	1.45	4.16	5.73	1.38	4.21	5.46	1.30	4.26	5.17	1.21	0.00	0.00	0.00	0.00	0.00	0.00
-24°C	3.98	5.76	1.45	4.03	5.67	1.41	4.07	5.52	1.36	4.12	5.32	1.29	4.17	5.08	1.22	4.22	4.81	1.14	0.00	0.00	0.00	0.00	0.00	0.00
-25°C	3.94	5.28	1.34	3.99	5.20	1.31	4.03	5.08	1.26	4.08	4.89	1.20	4.13	4.68	1.13	4.17	4.44	1.06	0.00	0.00	0.00	0.00	0.00	0.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

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Test conditions comply with EN 14825 whitout electrical backup

		Starting temperature																							
		25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
Outdoor temperature	35°C	2.95	16.71	5.66	3.49	17.66	5.06	3.53	16.82	4.77	3.59	16.29	4.54	3.67	15.83	4.32	3.75	15.38	4.11	3.83	14.92	3.90	3.91	14.47	3.70
	34°C	2.95	16.66	5.64	3.49	17.61	5.04	3.53	16.77	4.75	3.59	16.24	4.52	3.66	15.79	4.31	3.75	15.33	4.09	3.83	14.88	3.89	3.91	14.42	3.69
	33°C	2.95	16.62	5.63	3.49	17.56	5.03	3.53	16.72	4.74	3.59	16.19	4.51	3.66	15.74	4.30	3.74	15.29	4.08	3.83	14.83	3.88	3.91	14.38	3.68
	32°C	2.95	16.57	5.61	3.49	17.51	5.02	3.53	16.67	4.73	3.59	16.14	4.50	3.66	15.69	4.28	3.74	15.24	4.07	3.82	14.79	3.87	3.91	14.34	3.67
	31°C	2.95	16.52	5.60	3.49	17.45	5.00	3.53	16.62	4.71	3.59	16.10	4.49	3.66	15.65	4.27	3.74	15.19	4.06	3.82	14.74	3.86	3.90	14.29	3.66
	30°C	2.95	16.47	5.58	3.49	17.40	4.99	3.53	16.58	4.70	3.59	16.05	4.48	3.66	15.60	4.26	3.74	15.15	4.05	3.82	14.70	3.84	3.90	14.25	3.65
	29°C	2.95	16.42	5.57	3.49	17.35	4.97	3.53	16.53	4.69	3.59	16.00	4.46	3.66	15.55	4.25	3.74	15.10	4.04	3.82	14.65	3.83	3.90	14.20	3.64
	28°C	2.95	16.37	5.55	3.49	17.30	4.96	3.52	16.48	4.68	3.58	15.95	4.45	3.66	15.51	4.24	3.74	15.06	4.03	3.82	14.61	3.82	3.90	14.16	3.63
	27°C	2.95	16.33	5.54	3.49	17.25	4.95	3.52	16.43	4.66	3.58	15.91	4.44	3.66	15.46	4.23	3.74	15.01	4.01	3.82	14.56	3.81	3.90	14.12	3.62
	26°C	2.95	16.28	5.52	3.49	17.20	4.93	3.52	16.38	4.65	3.58	15.86	4.43	3.66	15.41	4.21	3.74	14.97	4.00	3.82	14.52	3.80	3.90	14.07	3.61
	25°C	2.95	16.23	5.51	3.49	17.15	4.92	3.52	16.33	4.64	3.58	15.81	4.41	3.66	15.37	4.20	3.74	14.92	3.99	3.82	14.48	3.79	3.90	14.03	3.60
	24°C	2.95	16.18	5.49	3.48	17.10	4.91	3.52	16.29	4.63	3.58	15.77	4.40	3.66	15.32	4.19	3.74	14.88	3.98	3.82	14.43	3.78	3.90	13.99	3.59
	23°C	2.95	16.14	5.48	3.48	17.05	4.89	3.52	16.24	4.61	3.58	15.72	4.39	3.66	15.28	4.18	3.74	14.83	3.97	3.82	14.39	3.77	3.90	13.94	3.58
	22°C	2.94	16.09	5.46	3.48	17.00	4.88	3.52	16.19	4.60	3.58	15.68	4.38	3.66	15.23	4.17	3.74	14.79	3.96	3.82	14.34	3.76	3.90	13.90	3.57
	21°C	2.94	16.04	5.45	3.48	16.95	4.87	3.52	16.15	4.59	3.58	15.63	4.37	3.65	15.19	4.16	3.74	14.74	3.95	3.82	14.30	3.75	3.90	13.86	3.56
	20°C	2.94	16.00	5.43	3.48	16.90	4.85	3.52	16.10	4.58	3.58	15.58	4.35	3.65	15.14	4.14	3.73	14.70	3.94	3.82	14.26	3.74	3.90	13.82	3.55
	19°C	2.94	15.95	5.42	3.50	16.85	4.82	3.53	16.05	4.54	3.60	15.54	4.32	3.68	15.10	4.11	3.76	14.66	3.90	3.84	14.22	3.70	3.92	13.77	3.51
	18°C	2.94	15.90	5.41	3.51	16.80	4.79	3.55	16.01	4.51	3.62	15.49	4.28	3.70	15.05	4.07	3.78	14.61	3.87	3.86	14.17	3.67	3.94	13.73	3.48
	17°C	2.93	15.86	5.40	3.52	16.76	4.76	3.56	15.96	4.48	3.64	15.45	4.25	3.72	15.01	4.03	3.80	14.57	3.83	3.89	14.13	3.64	3.97	13.69	3.45
	16°C	2.93	15.81	5.39	3.54	16.71	4.72	3.57	15.91	4.45	3.66	15.40	4.21	3.75	14.96	4.00	3.83	14.53	3.80	3.91	14.09	3.60	3.99	13.65	3.42
	15°C	2.93	15.77	5.39	3.55	16.66	4.69	3.59	15.87	4.42	3.68	15.36	4.18	3.77	14.92	3.96	3.85	14.48	3.76	3.93	14.05	3.57	4.01	13.61	3.39
	14°C	2.92	15.72	5.38	3.56	16.61	4.66	3.60	15.82	4.39	3.70	15.31	4.14	3.79	14.88	3.92	3.87	14.44	3.73	3.96	14.00	3.54	4.04	13.57	3.36
	13°C	2.92	15.68	5.37	3.58	16.56	4.63	3.62	15.78	4.36	3.72	15.27	4.11	3.82	14.83	3.89	3.90	14.40	3.69	3.98	13.96	3.51	4.06	13.52	3.33
	12°C	2.92	15.63	5.36	3.59	16.52	4.60	3.63	15.73	4.33	3.74	15.23	4.07	3.84	14.79	3.85	3.92	14.35	3.66	4.00	13.92	3.48	4.08	13.48	3.30
	11°C	2.91	15.50	5.32	3.50	16.22	4.64	3.60	15.54	4.31	3.75	15.04	4.01	3.86	14.61	3.78	3.94	14.17	3.59	4.03	13.74	3.41	4.11	13.30	3.24
	10°C	2.91	15.37	5.28	3.40	15.92	4.68	3.58	15.36	4.29	3.76	14.86	3.95	3.89	14.42	3.71	3.97	13.99	3.53	4.05	13.55	3.35	4.13	13.12	3.17
	9°C	2.91	15.24	5.24	3.31	15.62	4.73	3.55	15.17	4.28	3.77	14.67	3.89	3.91	14.24	3.64	3.99	13.81	3.46	4.07	13.37	3.28	4.16	12.94	3.11
	8°C	2.90	15.11	5.20	3.21	15.33	4.77	3.52	14.99	4.26	3.78	14.49	3.83	3.93	14.06	3.57	4.02	13.62	3.39	4.10	13.19	3.22	4.18	12.76	3.05
	7°C	2.90	14.98	5.16	3.11	15.03	4.83	3.50	14.60	4.18	3.80	14.17	3.73	3.93	13.74	3.49	4.03	13.31	3.30	4.12	12.87	3.12	4.20	12.44	2.96
	6°C	3.33	14.97	4.50	3.53	14.88	4.21	3.91	14.41	3.68	4.23	13.93	3.29	4.40	13.46	3.06	4.53	12.98	2.87	4.65	12.50	2.69	4.73	12.03	2.54
	5°C	3.66	14.64	4.00	3.86	14.41	3.74	4.23	13.90	3.29	4.55	13.39	2.94	4.75	12.88	2.71	4.91	12.37	2.52	5.07	11.87	2.34	5.14	11.36	2.21
	4°C	3.69	13.34	3.62	3.87	13.02	3.36	4.16	12.52	3.01	4.42	12.01	2.72	4.60	11.51	2.50	4.77	11.01	2.31	4.93	10.51	2.13	5.00	10.01	2.00
	3°C	3.80	12.66	3.33	3.98	12.26	3.08	4.21	11.75	2.79	4.41	11.24	2.55	4.57	10.73	2.35	4.74	10.22	2.16	4.92	9.72	1.98	4.98	9.21	1.85
	2°C	4.01	12.13	3.03	4.19	11.59	2.77	4.41	11.06	2.51	4.58	10.53	2.30	4.74	10.00	2.11	4.92	9.47	1.92	5.11	8.93	1.75	5.17	8.40	1.63
	1°C	4.01	12.17	3.03	4.19	11.64	2.78	4.41	11.12	2.52	4.59	10.60	2.31	4.74	10.08	2.13	4.93	9.56	1.94	5.11	9.04	1.77	5.17	8.51	1.65
	0°C	4.02	12.21	3.04	4.20	11.69	2.78	4.42	11.18	2.53	4.59	10.67	2.32	4.75	10.16	2.14	4.93	9.65	1.96	5.11	9.14	1.79	5.18	8.62	1.67
	-1°C	4.04	12.25	3.03	4.22	11.74	2.78	4.43	11.24	2.54	4.61	10.74	2.33	4.77	10.24	2.15	4.95	9.74	1.97	5.12	9.24	1.80	5.18	8.74	1.69
	-2°C	4.06	12.29	3.03	4.24	11.79	2.78	4.45	11.30	2.54	4.63	10.81	2.34	4.79	10.32	2.16	4.97	9.83	1.98	5.13	9.34	1.82	5.19	8.85	1.71
	-3°C	4.09	12.32	3.02	4.27	11.84	2.78	4.47	11.36	2.54	4.65	10.88	2.34	4.81	10.40	2.16	5.00	9.92	1.99	5.15	9.44	1.83	5.20	8.96	1.72
	-4°C	4.12	12.36	3.00	4.30	11.89	2.77	4.50	11.42	2.54	4.68	10.95	2.34	4.85	10.48	2.16	5.03	10.01	1.99	5.17	9.54	1.85	5.21	9.07	1.74
	-5°C	4.16	12.40	2.98	4.34	11.94	2.75	4.54	11.48	2.53	4.72	11.02	2.34	4.89	10.56	2.16	5.07	10.10	1.99	5.19	9.64	1.86	5.22	9.18	1.76
	-6°C	4.21	12.44	2.96	4.39	11.99	2.73	4.58	11.54	2.52	4.76	11.09	2.33	4.93	10.64	2.16	5.11	10.19	1.99	5.21	9.74	1.87	5.24	9.29	1.77
	-7°C	4.26	12.48	2.93	4.44	12.04	2.71	4.62	11.60	2.51	4.80	11.16	2.32	4.98	10.72	2.15	5.16	10.28	1.99	5.24	9.84	1.88	5.26	9.40	1.79
	-8°C	4.21	12.35	2.93	4.40	11.90	2.70	4.59	11.45	2.49	4.78	10.93	2.28	4.97	10.40	2.09	5.16	9.87	1.91	5.25	9.34	1.78	5.26	8.82	1.68
	-9°C	4.17	12.22	2.93	4.36	11.76	2.69	4.56	11.31	2.48	4.76	10.69	2.24	4.96	10.08	2.03	5.16	9.46	1.83	5.25	8.85	1.69	5.26	8.23	1.56
	-10°C	4.12	12.09	2.93	4.33	11.62	2.69	4.54	11.16	2.46	4.74	10.46	2.20	4.95	9.75	1.97	5.16	9.05	1.75	5.25	8.35	1.59	5.26	7.65	1.45
	-11°C	4.14	11.73	2.83	4.35	11.32	2.60	4.56	10.90	2.39	4.77	10.23	2.15	4.98	9.56	1.92	5.19	8.89	1.71	5.28	8.21	1.56	5.29	7.53	1.42
	-12°C	4.16	11.36	2.73	4.37	11.00	2.52	4.58	10.62	2.32	4.79	9.99	2.09	5.00	9.35	1.87	5.21	8.70	1.67	5.30	8.05	1.52	5.32	7.39	1.39
	-13°C	4.18	10.98	2.63	4.39	10.66	2.43	4.60	10.31	2.24	4.82	9.72	2.02	5.03	9.12	1.81	5.24	8.50	1.62	5.33	7.87	1.48	5.34	7.23	1.35
	-14°C	4.20	10.58	2.52	4.41	10.30	2.33	4.63	9.99	2.16	4.84	9.44	1.95	5.05	8.86	1.75	5.26	8.27	1.57	5.36	7.67	1.43	5.37	7.05	1.31
	-15°C	4.22	10.16	2.41	4.44	9.93	2.24	4.65	9.65	2.08	4.86	9.13	1.88	5.08	8.59	1.69	5.29	8.03	1.52	5.38	7.45	1.38	5.40	6.86	1.27
	-16°C	4.18	9.74	2.33	4.39	9.54	2.17	4.60	9.29	2.02	4.81	8.81	1.83	5.03	8.30	1.65	5.24	7.77	1.48	5.33	7.21	1.35	5.34	6.65	1.24
	-17°C	4.14	9.30	2.25	4.35	9.13	2.10	4.56	8.92	1.96	4.77	8.47	1.78	4.98	7.99	1.61	5.19	7.48	1.44	5.28	6.96	1.32	5.29	6.42	1.21
	-18°C	4.10	8.85	2.16	4.30	8.72	2.02	4.51	8.53	1.89	4.72	8.11	1.72	4.93	7.66	1.56	5.13	7.19	1.40	5.22	6.69	1.28	5.24	6.18	1.18
	-19°C	4.06	8.40	2.07	4.26	8.29	1.94	4.47	8.12	1.82	4.67	7.74	1.66	4.88	7.32	1.50	5.08	6.87	1.35	5.17	6.41	1.24	5.18	5.92	1.14
	-20°C	4.02	7.93	1.98	4.22	7.84	1.86	4.42	7.70	1.74	4.63	7.35	1.59	4.83	6.96	1.44	5.03	6.55	1.30	5.12	6.11	1.19	5.13	5.65	1.10
	-21°C	3.98	7.46	1.88	4.18	7.39	1.77	4.38	7.27	1.66	4.58	6.95	1.52	4.78	6.59	1.38	4.98	6.20	1.25	5.07	5.79	1.14	0.00	0.00	0.00
	-22°C	3.94	6.98	1.77	4.14	6.93	1.68	4.33	6.83	1.58	4.53	6.53	1.44	4.73	6.20	1.31	4.93	5.85	1.19	5.02	5.46	1.09	0.00	0.00	0.00
	-23°C	3.90	6.49	1.66	4.09	6.45	1.58	4.29	6.37	1.48	4.49	6.11	1.36	4.68	5.81	1.24	4.88	5.47	1.12	0.00	0.00	0.00	0.00	0.00	0.00
	-24°C	3.86	5.99	1.55	4.05	5.97	1.47	4.25	5.90	1.39	4.44	5.67	1.28	4.64	5.39	1.16	4.83	5.09	1.05	0.00	0.00	0.00	0.00	0.00	0.00
	-25°C	3.82	5.49	1.44	4.01	5.48	1.37	4.21	5.43	1.29	4.40	5.21	1.19	4.59	4.97	1.08	4.78	4.70	0.98	0.00	0.00	0.00	0.00	0.00	0.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

2.2.2 alféa excellia A.I. 3-phases models

alféa excellia A.I. tri 11 / alféa excellia duo A.I. tri 11

Test conditions comply with EN 14825 whitout electrical backup

		Starting temperature																							
		25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
Outdoor temperature	35°C	2.52	15.44	6.14	2.90	14.70	5.08	2.89	13.96	4.83	2.92	13.35	4.57	2.97	12.77	4.30	3.03	12.19	4.02	3.09	11.61	3.76	3.15	11.03	3.51
	34°C	2.52	15.38	6.11	2.90	14.65	5.05	2.89	13.91	4.80	2.92	13.30	4.55	2.97	12.72	4.28	3.03	12.14	4.01	3.09	11.56	3.74	3.15	10.99	3.49
	33°C	2.52	15.32	6.08	2.90	14.59	5.03	2.90	13.85	4.78	2.93	13.24	4.53	2.98	12.67	4.26	3.03	12.09	3.99	3.09	11.52	3.73	3.15	10.94	3.47
	32°C	2.52	15.25	6.05	2.90	14.53	5.01	2.90	13.80	4.76	2.93	13.19	4.51	2.98	12.62	4.24	3.04	12.04	3.97	3.09	11.47	3.71	3.15	10.89	3.46
	31°C	2.52	15.19	6.03	2.90	14.47	4.99	2.90	13.74	4.74	2.93	13.14	4.49	2.98	12.57	4.22	3.04	11.99	3.95	3.09	11.42	3.69	3.15	10.85	3.44
	30°C	2.52	15.13	6.00	2.90	14.41	4.96	2.90	13.69	4.72	2.93	13.09	4.46	2.98	12.52	4.20	3.04	11.94	3.93	3.10	11.37	3.67	3.15	10.80	3.42
	29°C	2.52	15.07	5.97	2.91	14.36	4.94	2.90	13.64	4.70	2.93	13.04	4.44	2.98	12.47	4.18	3.04	11.90	3.91	3.10	11.33	3.66	3.16	10.76	3.41
	28°C	2.53	15.02	5.94	2.91	14.30	4.92	2.91	13.58	4.68	2.93	12.98	4.42	2.98	12.42	4.16	3.04	11.85	3.89	3.10	11.28	3.64	3.16	10.71	3.39
	27°C	2.53	14.96	5.92	2.91	14.25	4.90	2.91	13.53	4.65	2.94	12.93	4.40	2.99	12.37	4.14	3.04	11.80	3.88	3.10	11.23	3.62	3.16	10.67	3.38
	26°C	2.53	14.90	5.89	2.91	14.19	4.87	2.91	13.48	4.63	2.94	12.88	4.38	2.99	12.32	4.12	3.05	11.75	3.86	3.10	11.19	3.60	3.16	10.62	3.36
	25°C	2.53	14.84	5.86	2.91	14.13	4.85	2.91	13.42	4.61	2.94	12.83	4.36	2.99	12.27	4.10	3.05	11.70	3.84	3.11	11.14	3.59	3.16	10.58	3.34
	24°C	2.53	14.78	5.84	2.92	14.08	4.83	2.91	13.37	4.59	2.94	12.78	4.34	2.99	12.22	4.08	3.05	11.66	3.82	3.11	11.10	3.57	3.17	10.54	3.33
	23°C	2.53	14.73	5.81	2.92	14.03	4.81	2.91	13.32	4.57	2.94	12.73	4.32	2.99	12.17	4.07	3.05	11.61	3.80	3.11	11.05	3.55	3.17	10.49	3.31
	22°C	2.54	14.67	5.78	2.92	13.97	4.79	2.92	13.27	4.55	2.95	12.68	4.30	3.00	12.12	4.05	3.05	11.56	3.79	3.11	11.01	3.54	3.17	10.45	3.30
	21°C	2.54	14.61	5.76	2.92	13.92	4.76	2.92	13.22	4.53	2.95	12.63	4.28	3.00	12.07	4.03	3.06	11.52	3.77	3.11	10.96	3.52	3.17	10.41	3.28
	20°C	2.54	14.55	5.73	2.92	13.86	4.74	2.92	13.16	4.51	2.95	12.58	4.27	3.00	12.03	4.01	3.06	11.47	3.75	3.12	10.92	3.50	3.17	10.36	3.26
	19°C	2.54	14.50	5.71	2.93	13.81	4.71	2.93	13.11	4.48	2.97	12.53	4.23	3.02	11.98	3.97	3.08	11.43	3.71	3.14	10.87	3.47	3.19	10.32	3.23
	18°C	2.54	14.44	5.69	2.94	13.76	4.68	2.93	13.06	4.45	2.98	12.48	4.19	3.04	11.93	3.93	3.10	11.38	3.67	3.16	10.83	3.43	3.21	10.28	3.20
	17°C	2.54	14.39	5.67	2.94	13.70	4.65	2.94	13.01	4.42	3.00	12.44	4.15	3.06	11.89	3.89	3.12	11.34	3.64	3.18	10.79	3.40	3.24	10.24	3.16
	16°C	2.54	14.33	5.65	2.95	13.65	4.62	2.95	12.96	4.40	3.01	12.39	4.11	3.08	11.84	3.84	3.14	11.29	3.60	3.20	10.74	3.36	3.26	10.19	3.13
	15°C	2.53	14.28	5.63	2.96	13.60	4.60	2.96	12.91	4.37	3.03	12.34	4.08	3.10	11.79	3.81	3.16	11.25	3.56	3.22	10.70	3.33	3.28	10.15	3.10
	14°C	2.53	14.22	5.62	2.97	13.55	4.57	2.96	12.87	4.34	3.04	12.29	4.04	3.12	11.75	3.77	3.18	11.20	3.52	3.24	10.66	3.29	3.30	10.11	3.07
	13°C	2.53	14.17	5.60	2.97	13.50	4.54	2.97	12.82	4.31	3.06	12.25	4.00	3.14	11.70	3.73	3.20	11.16	3.49	3.26	10.61	3.26	3.32	10.07	3.04
	12°C	2.53	14.12	5.58	2.98	13.44	4.51	2.98	12.77	4.29	3.08	12.20	3.97	3.16	11.66	3.69	3.22	11.11	3.45	3.28	10.57	3.22	3.34	10.03	3.00
	11°C	2.53	13.78	5.45	2.92	13.23	4.54	2.96	12.60	4.26	3.09	12.03	3.90	3.18	11.49	3.61	3.24	10.95	3.38	3.30	10.41	3.15	3.36	9.87	2.94
	10°C	2.53	13.44	5.32	2.85	13.01	4.57	2.94	12.43	4.23	3.10	11.86	3.83	3.20	11.32	3.54	3.26	10.78	3.31	3.32	10.24	3.08	3.38	9.70	2.87
	9°C	2.53	13.11	5.19	2.78	12.80	4.60	2.92	12.26	4.20	3.11	11.69	3.76	3.22	11.16	3.46	3.28	10.62	3.24	3.34	10.08	3.02	3.40	9.54	2.81
	8°C	2.53	12.78	5.06	2.72	12.59	4.64	2.90	12.09	4.17	3.12	11.53	3.70	3.24	10.99	3.39	3.30	10.46	3.17	3.36	9.92	2.95	3.42	9.38	2.74
	7°C	2.53	12.45	4.93	2.65	12.38	4.68	2.88	11.84	4.12	3.10	11.31	3.65	3.23	10.77	3.34	3.31	10.24	3.10	3.38	9.70	2.87	3.46	9.17	2.65
	6°C	2.81	12.64	4.50	2.90	12.50	4.31	3.13	11.94	3.81	3.34	11.39	3.41	3.48	10.86	3.12	3.60	10.35	2.87	3.73	9.84	2.64	3.86	9.34	2.42
	5°C	3.07	12.73	4.14	3.13	12.53	4.00	3.37	11.95	3.55	3.56	11.39	3.20	3.71	10.87	2.93	3.88	10.39	2.68	4.04	9.91	2.45	4.21	9.43	2.24
	4°C	3.25	12.45	3.84	3.28	12.19	3.72	3.52	11.66	3.31	3.71	11.13	3.00	3.88	10.66	2.75	4.08	10.21	2.51	4.27	9.77	2.29	4.48	9.33	2.08
	3°C	3.28	11.71	3.58	3.29	11.42	3.47	3.55	10.99	3.10	3.76	10.57	2.81	3.93	10.16	2.58	4.15	9.76	2.35	4.36	9.36	2.15	4.58	8.96	1.95
	2°C	3.49	11.39	3.27	3.50	11.03	3.15	3.78	10.68	2.82	4.01	10.32	2.58	4.20	9.96	2.37	4.44	9.60	2.17	4.67	9.25	1.98	4.91	8.89	1.81
	1°C	3.49	11.39	3.27	3.50	11.00	3.14	3.78	10.61	2.81	4.00	10.22	2.55	4.20	9.83	2.34	4.43	9.44	2.13	4.67	9.05	1.94	4.92	8.66	1.76
	0°C	3.49	11.40	3.26	3.51	10.97	3.13	3.78	10.55	2.79	4.00	10.12	2.53	4.19	9.70	2.31	4.42	9.28	2.10	4.67	8.85	1.90	4.93	8.43	1.71
	-1°C	3.50	11.40	3.26	3.52	10.94	3.11	3.79	10.49	2.77	4.00	10.03	2.51	4.19	9.57	2.29	4.41	9.11	2.07	4.66	8.66	1.86	4.94	8.20	1.66
	-2°C	3.51	11.40	3.25	3.54	10.91	3.08	3.79	10.42	2.75	3.99	9.93	2.49	4.17	9.44	2.26	4.39	8.95	2.04	4.65	8.46	1.82	4.96	7.97	1.61
	-3°C	3.52	11.40	3.24	3.56	10.88	3.05	3.80	10.36	2.73	3.99	9.83	2.47	4.16	9.31	2.24	4.36	8.79	2.02	4.64	8.27	1.78	4.99	7.74	1.55
	-4°C	3.53	11.41	3.23	3.59	10.85	3.02	3.80	10.29	2.71	3.98	9.74	2.45	4.14	9.18	2.22	4.32	8.63	1.99	4.63	8.07	1.74	5.03	7.52	1.49
	-5°C	3.55	11.41	3.21	3.63	10.82	2.98	3.81	10.23	2.69	3.97	9.64	2.43	4.12	9.05	2.20	4.29	8.46	1.98	4.62	7.88	1.70	5.07	7.29	1.44
	-6°C	3.57	11.41	3.20	3.66	10.79	2.94	3.82	10.17	2.66	3.96	9.54	2.41	4.10	8.92	2.18	4.24	8.30	1.96	4.60	7.68	1.67	5.12	7.06	1.38
	-7°C	3.59	11.41	3.18	3.71	10.76	2.90	3.83	10.10	2.64	3.95	9.45	2.39	4.07	8.79	2.16	4.19	8.14	1.94	4.59	7.48	1.63	5.17	6.83	1.32
	-8°C	3.75	11.35	3.02	3.87	10.76	2.78	3.98	10.17	2.56	4.09	9.51	2.33	4.20	8.85	2.11	4.31	8.18	1.90	4.70	7.52	1.60	5.29	6.86	1.30
	-9°C	3.92	11.29	2.88	4.02	10.76	2.68	4.12	10.23	2.48	4.23	9.56	2.26	4.33	8.90	2.06	4.43	8.23	1.86	4.82	7.56	1.57	5.41	6.90	1.28
	-10°C	4.09	11.23	2.75	4.18	10.76	2.58	4.27	10.29	2.41	4.36	9.62	2.20	4.46	8.95	2.01	4.55	8.28	1.82	4.94	7.60	1.54	5.52	6.93	1.26
	-11°C	4.11	10.90	2.65	4.20	10.48	2.50	4.29	10.05	2.34	4.39	9.42	2.15	4.48	8.77	1.96	4.57	8.13	1.78	4.96	7.48	1.51	5.55	6.82	1.23
	-12°C	4.13	10.55	2.56	4.22	10.18	2.41	4.31	9.79	2.27	4.41	9.19	2.09	4.50	8.58	1.91	4.59	7.96	1.73	4.99	7.33	1.47	5.58	6.70	1.20
	-13°C	4.15	10.20	2.46	4.24	9.87	2.33	4.34	9.51	2.19	4.43	8.95	2.02	4.52	8.37	1.85	4.62	7.77	1.68	5.01	7.17	1.43	5.61	6.55	1.17
	-14°C	4.17	9.82	2.36	4.26	9.54	2.24	4.36	9.22	2.12	4.45	8.69	1.95	4.55	8.13	1.79	4.64	7.57	1.63	5.04	6.98	1.39	5.63	6.39	1.13
	-15°C	4.19	9.44	2.25	4.28	9.19	2.15	4.38	8.90	2.03	4.47	8.40	1.88	4.57	7.88	1.73	4.66	7.34	1.57	5.06	6.79	1.34	5.66	6.22	1.10
	-16°C	4.15	9.04	2.18	4.24	8.83	2.08	4.34	8.57	1.98	4.43	8.11	1.83	4.52	7.61	1.68	4.62	7.10	1.54	5.01	6.57	1.31	5.61	6.03	1.07
	-17°C	4.11	8.64	2.10	4.20	8.46	2.01	4.29	8.23	1.92	4.38	7.79	1.78	4.48	7.33	1.64	4.57	6.84	1.50	4.96	6.34	1.28	5.55	5.82	1.05
	-18°C	4.06	8.22	2.02	4.16	8.07	1.94	4.25	7.87	1.85	4.34	7.46	1.72	4.43	7.03	1.59	4.53	6.57	1.45	4.91	6.09	1.24	5.49	5.60	1.02
	-19°C	4.02	7.80	1.94	4.11	7.67	1.86	4.21	7.49	1.78	4.30	7.12	1.66	4.39	6.72	1.53	4.48	6.29	1.40	4.86	5.83	1.20	5.44	5.36	0.99
	-20°C	3.98	7.37	1.85	4.07	7.26	1.78	4.16	7.11	1.71	4.25	6.76	1.59	4.35	6.39	1.47	4.44	5.99	1.35	4.81	5.56	1.15	5.39	5.12	0.95
	-21°C	3.94	6.93	1.76	4.03	6.84	1.70	4.12	6.71	1.63	4.21	6.39	1.52	4.30	6.05	1.41	4.39	5.67	1.29	4.77	5.27	1.11	0.00	0.00	0.00
	-22°C	3.90	6.48	1.66	3.99	6.41	1.61	4.08	6.30	1.54	4.17	6.01	1.44	4.26	5.69	1.34	4.35	5.35	1.23	4.72	4.97	1.05	0.00	0.00	0.00
	-23°C	3.87	6.02	1.56	3.95	5.98	1.51	4.04	5.88	1.45	4.13	5.62	1.36	4.22	5.33	1.26	4.30	5.01	1.16	0.00	0.00	0.00	0.00	0.00	0.00
	-24°C	3.83	5.56	1.45	3.91	5.53	1.41	4.00	5.45	1.36	4.09	5.21	1.28	4.17	4.95	1.19	4.26	4.66	1.09	0.00	0.00	0.00	0.00	0.00	0.00
	-25°C	3.79	5.10	1.35	3.87	5.07	1.31	3.96	5.01	1.26	4.05	4.80	1.19	4.13	4.56	1.10	4.22	4.29	1.02	0.00	0.00	0.00	0.00	0.00	0.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

alféa excellia A.I. tri 14 / alféa excellia duo A.I. tri 14

Test conditions comply with EN 14825 whitout electrical backup

Outdoor temperature	Starting temperature																							
	25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
35°C	2.53	17.74	7.01	3.30	17.28	5.23	3.29	16.43	4.99	3.35	15.75	4.69	3.46	15.10	4.37	3.58	14.45	4.04	3.70	13.80	3.73	3.81	13.15	3.45
34°C	2.53	17.68	6.98	3.30	17.22	5.22	3.29	16.38	4.97	3.36	15.69	4.68	3.46	15.04	4.35	3.58	14.40	4.03	3.70	13.75	3.72	3.82	13.10	3.43
33°C	2.53	17.62	6.96	3.30	17.17	5.20	3.30	16.32	4.95	3.36	15.64	4.66	3.46	14.99	4.34	3.58	14.35	4.01	3.70	13.70	3.71	3.82	13.05	3.42
32°C	2.53	17.56	6.93	3.30	17.11	5.18	3.30	16.27	4.94	3.36	15.58	4.64	3.46	14.94	4.32	3.58	14.29	4.00	3.70	13.65	3.69	3.82	13.01	3.41
31°C	2.53	17.50	6.91	3.30	17.05	5.16	3.30	16.21	4.92	3.36	15.53	4.63	3.46	14.89	4.30	3.58	14.24	3.98	3.70	13.60	3.68	3.82	12.96	3.39
30°C	2.53	17.44	6.88	3.30	16.99	5.14	3.30	16.16	4.90	3.36	15.48	4.61	3.46	14.83	4.29	3.58	14.19	3.97	3.70	13.55	3.66	3.82	12.91	3.38
29°C	2.53	17.38	6.86	3.31	16.93	5.12	3.30	16.10	4.88	3.36	15.42	4.59	3.46	14.78	4.27	3.58	14.14	3.95	3.70	13.50	3.65	3.82	12.86	3.37
28°C	2.53	17.32	6.83	3.31	16.87	5.10	3.30	16.05	4.86	3.36	15.37	4.58	3.46	14.73	4.26	3.58	14.09	3.94	3.70	13.46	3.64	3.82	12.82	3.36
27°C	2.53	17.26	6.81	3.31	16.82	5.09	3.30	15.99	4.85	3.36	15.32	4.56	3.46	14.68	4.24	3.58	14.04	3.92	3.70	13.41	3.62	3.82	12.77	3.34
26°C	2.54	17.20	6.79	3.31	16.76	5.07	3.30	15.94	4.83	3.36	15.26	4.54	3.46	14.63	4.23	3.58	13.99	3.91	3.70	13.36	3.61	3.82	12.72	3.33
25°C	2.54	17.14	6.76	3.31	16.70	5.05	3.30	15.88	4.81	3.36	15.21	4.53	3.46	14.58	4.21	3.58	13.95	3.89	3.70	13.31	3.60	3.82	12.68	3.32
24°C	2.54	17.09	6.74	3.31	16.65	5.03	3.30	15.83	4.80	3.36	15.16	4.51	3.46	14.53	4.19	3.58	13.90	3.88	3.70	13.26	3.58	3.82	12.63	3.30
23°C	2.54	17.03	6.71	3.31	16.59	5.01	3.30	15.78	4.78	3.36	15.11	4.49	3.46	14.48	4.18	3.58	13.85	3.86	3.70	13.22	3.57	3.82	12.59	3.29
22°C	2.54	16.97	6.69	3.31	16.54	5.00	3.30	15.72	4.76	3.36	15.06	4.48	3.47	14.43	4.16	3.58	13.80	3.85	3.70	13.17	3.56	3.82	12.54	3.28
21°C	2.54	16.91	6.66	3.31	16.48	4.98	3.30	15.67	4.74	3.36	15.01	4.46	3.47	14.38	4.15	3.59	13.75	3.84	3.71	13.12	3.54	3.82	12.50	3.27
20°C	2.54	16.86	6.64	3.31	16.42	4.96	3.30	15.62	4.73	3.36	14.96	4.45	3.47	14.33	4.13	3.59	13.70	3.82	3.71	13.08	3.53	3.83	12.45	3.25
19°C	2.57	16.80	6.54	3.32	16.37	4.93	3.31	15.57	4.70	3.39	14.90	4.40	3.50	14.28	4.08	3.62	13.66	3.77	3.74	13.03	3.49	3.86	12.41	3.22
18°C	2.60	16.74	6.45	3.32	16.31	4.91	3.32	15.51	4.68	3.41	14.85	4.36	3.53	14.23	4.03	3.65	13.61	3.73	3.77	12.99	3.44	3.89	12.36	3.18
17°C	2.63	16.69	6.35	3.33	16.26	4.88	3.32	15.46	4.66	3.43	14.80	4.31	3.56	14.18	3.98	3.68	13.56	3.68	3.80	12.94	3.40	3.92	12.32	3.14
16°C	2.66	16.63	6.26	3.33	16.21	4.86	3.33	15.41	4.63	3.46	14.75	4.27	3.59	14.13	3.93	3.72	13.51	3.64	3.84	12.89	3.36	3.96	12.27	3.10
15°C	2.69	16.58	6.17	3.34	16.15	4.83	3.33	15.36	4.61	3.48	14.70	4.23	3.63	14.09	3.88	3.75	13.47	3.59	3.87	12.85	3.32	3.99	12.23	3.07
14°C	2.72	16.52	6.08	3.35	16.10	4.81	3.34	15.31	4.58	3.50	14.66	4.18	3.66	14.04	3.84	3.78	13.42	3.55	3.90	12.80	3.28	4.02	12.19	3.03
13°C	2.75	16.47	6.00	3.35	16.05	4.79	3.35	15.26	4.56	3.53	14.61	4.14	3.69	13.99	3.79	3.81	13.37	3.51	3.93	12.76	3.24	4.06	12.14	2.99
12°C	2.78	16.41	5.91	3.36	15.99	4.76	3.35	15.21	4.54	3.55	14.56	4.10	3.72	13.94	3.74	3.85	13.33	3.47	3.97	12.71	3.20	4.09	12.10	2.96
11°C	2.81	16.09	5.74	3.30	15.74	4.76	3.33	15.01	4.50	3.57	14.37	4.02	3.76	13.75	3.66	3.88	13.14	3.39	4.00	12.53	3.13	4.12	11.92	2.89
10°C	2.84	15.77	5.56	3.25	15.50	4.77	3.32	14.82	4.47	3.59	14.18	3.95	3.79	13.57	3.58	3.91	12.95	3.31	4.03	12.34	3.06	4.16	11.73	2.82
9°C	2.87	15.45	5.39	3.20	15.25	4.77	3.30	14.63	4.43	3.61	13.99	3.88	3.82	13.38	3.50	3.95	12.77	3.24	4.07	12.16	2.99	4.19	11.55	2.76
8°C	2.90	15.14	5.23	3.14	15.00	4.78	3.28	14.44	4.40	3.63	13.80	3.81	3.86	13.19	3.42	3.98	12.58	3.16	4.10	11.97	2.92	4.23	11.37	2.69
7°C	2.93	14.82	5.06	3.09	14.76	4.78	3.27	14.15	4.33	3.57	13.55	3.79	3.85	12.94	3.36	3.99	12.33	3.09	4.14	11.72	2.83	4.25	11.12	2.62
6°C	3.27	14.98	4.58	3.37	14.79	4.40	3.60	14.17	3.94	3.92	13.55	3.46	4.22	12.94	3.07	4.42	12.32	2.79	4.62	11.70	2.53	4.72	11.08	2.34
5°C	3.58	15.02	4.19	3.63	14.72	4.06	3.91	14.09	3.60	4.25	13.46	3.17	4.56	12.83	2.81	4.81	12.21	2.54	5.07	11.58	2.29	5.17	10.95	2.12
4°C	3.63	14.02	3.87	3.62	13.64	3.76	3.92	13.04	3.32	4.24	12.45	2.93	4.55	11.86	2.61	4.83	11.27	2.33	5.11	10.68	2.09	5.20	10.08	1.94
3°C	3.69	13.28	3.60	3.66	12.83	3.51	3.96	12.27	3.09	4.27	11.70	2.74	4.57	11.13	2.44	4.87	10.57	2.17	5.16	10.00	1.94	5.24	9.44	1.80
2°C	3.90	12.85	3.29	3.86	12.29	3.18	4.18	11.74	2.81	4.50	11.19	2.49	4.81	10.63	2.21	5.13	10.08	1.97	5.44	9.53	1.75	5.53	8.97	1.62
1°C	3.91	12.80	3.28	3.87	12.26	3.17	4.19	11.71	2.80	4.50	11.16	2.48	4.81	10.61	2.21	5.13	10.07	1.96	5.44	9.52	1.75	5.53	8.97	1.62
0°C	3.93	12.76	3.25	3.90	12.22	3.14	4.21	11.68	2.78	4.51	11.14	2.47	4.82	10.60	2.20	5.12	10.05	1.96	5.44	9.51	1.75	5.54	8.97	1.62
-1°C	3.96	12.72	3.21	3.94	12.18	3.09	4.24	11.65	2.75	4.53	11.11	2.45	4.82	10.58	2.19	5.12	10.04	1.96	5.43	9.51	1.75	5.54	8.97	1.62
-2°C	4.00	12.67	3.17	4.00	12.14	3.04	4.28	11.61	2.71	4.56	11.09	2.43	4.83	10.56	2.19	5.11	10.03	1.96	5.41	9.50	1.75	5.55	8.97	1.62
-3°C	4.06	12.63	3.11	4.07	12.11	2.97	4.33	11.58	2.67	4.59	11.06	2.41	4.84	10.54	2.18	5.10	10.02	1.96	5.40	9.49	1.76	5.57	8.97	1.61
-4°C	4.13	12.58	3.05	4.16	12.07	2.90	4.40	11.55	2.63	4.63	11.04	2.38	4.86	10.52	2.17	5.09	10.00	1.97	5.38	9.49	1.76	5.58	8.97	1.61
-5°C	4.21	12.54	2.98	4.27	12.03	2.82	4.47	11.52	2.57	4.67	11.01	2.36	4.87	10.50	2.15	5.07	9.99	1.97	5.35	9.48	1.77	5.60	8.97	1.60
-6°C	4.31	12.49	2.90	4.40	11.99	2.73	4.56	11.49	2.52	4.73	10.99	2.32	4.89	10.48	2.14	5.06	9.98	1.97	5.33	9.48	1.78	5.62	8.97	1.60
-7°C	4.42	12.45	2.82	4.54	11.95	2.63	4.67	11.46	2.46	4.79	10.96	2.29	4.91	10.46	2.13	5.04	9.97	1.98	5.30	9.47	1.79	5.65	8.97	1.59
-8°C	4.31	12.34	2.86	4.47	11.86	2.66	4.62	11.37	2.46	4.78	10.79	2.26	4.94	10.20	2.07	5.09	9.62	1.89	5.37	9.03	1.68	5.72	8.44	1.48
-9°C	4.20	12.23	2.91	4.39	11.76	2.68	4.58	11.29	2.47	4.77	10.62	2.23	4.96	9.94	2.00	5.15	9.27	1.80	5.44	8.59	1.58	5.79	7.91	1.37
-10°C	4.09	12.12	2.96	4.31	11.66	2.70	4.54	11.21	2.47	4.76	10.44	2.19	4.98	9.68	1.94	5.21	8.91	1.71	5.51	8.15	1.48	5.86	7.39	1.26
-11°C	4.11	11.77	2.86	4.34	11.36	2.62	4.56	10.95	2.40	4.78	10.22	2.14	5.01	9.49	1.89	5.23	8.75	1.67	5.53	8.01	1.45	5.89	7.27	1.24
-12°C	4.13	11.40	2.76	4.36	11.04	2.53	4.58	10.66	2.33	4.81	9.98	2.08	5.03	9.28	1.84	5.26	8.57	1.63	5.56	7.86	1.41	5.91	7.14	1.21
-13°C	4.15	11.01	2.65	4.38	10.70	2.44	4.61	10.36	2.25	4.83	9.71	2.01	5.06	9.05	1.79	5.29	8.37	1.58	5.59	7.68	1.37	5.94	6.98	1.17
-14°C	4.17	10.61	2.54	4.40	10.34	2.35	4.63	10.03	2.17	4.86	9.43	1.94	5.08	8.80	1.73	5.31	8.15	1.53	5.62	7.49	1.33	5.97	6.81	1.14
-15°C	4.19	10.19	2.43	4.42	9.96	2.25	4.65	9.69	2.08	4.88	9.12	1.87	5.11	8.53	1.67	5.34	7.91	1.48	5.65	7.27	1.29	6.00	6.62	1.10
-16°C	4.15	9.77	2.35	4.38	9.57	2.19	4.61	9.33	2.03	4.83	8.80	1.82	5.06	8.24	1.63	5.29	7.65	1.45	5.59	7.04	1.26	5.94	6.42	1.08
-17°C	4.11	9.33	2.27	4.33	9.17	2.11	4.56	8.96	1.96	4.78	8.46	1.77	5.01	7.93	1.58	5.23	7.37	1.41	5.53	6.79	1.23	5.88	6.20	1.05
-18°C	4.07	8.88	2.18	4.29	8.75	2.04	4.51	8.56	1.90	4.74	8.10	1.71	4.96	7.60	1.53	5.18	7.08	1.37	5.48	6.53	1.19	5.83	5.97	1.02
-19°C	4.03	8.42	2.09	4.25	8.32	1.96	4.47	8.16	1.83	4.69	7.73	1.65	4.91	7.26	1.48	5.13	6.77	1.32	5.42	6.25	1.15	5.77	5.72	0.99
-20°C	3.99	7.96	1.99	4.21	7.87	1.87	4.42	7.74	1.75	4.64	7.34	1.58	4.86	6.91	1.42	5.08	6.45	1.27	5.37	5.96	1.11	5.71	5.45	0.95
-21°C	3.95	7.48	1.89	4.16	7.42	1.78	4.38	7.30	1.67	4.60	6.94	1.51	4.81	6.54	1.36	5.03	6.11	1.22	5.32	5.65	1.06	0.00	0.00	0.00
-22°C	3.91	7.00	1.79	4.12	6.95	1.69	4.34	6.86	1.58	4.55	6.53	1.43	4.76	6.16	1.29	4.98	5.76	1.16	5.26	5.33	1.01	0.00	0.00	0.00
-23°C	3.87	6.51	1.68	4.08	6.48	1.59	4.29	6.40	1.49	4.50	6.10	1.35	4.72	5.76	1.22	4.93	5.39	1.09	0.00	0.00	0.00	0.00	0.00	0.00
-24°C	3.83	6.01	1.57	4.04	5.99	1.48	4.25	5.93	1.40	4.46	5.66	1.27	4.67	5.35	1.15	4.88	5.01	1.03	0.00	0.00	0.00	0.00	0.00	0.00
-25°C	3.79	5.50	1.45	4.00	5.50	1.38	4.21	5.45	1.30	4.41	5.21	1.18	4.62	4.93	1.07	4.83	4.62	0.96	0.00	0.00	0.00	0.00	0.00	0.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

alféa excellia A.I. tri 16 / alféa excellia duo A.I. tri 16

Test conditions comply with EN 14825 whitout electrical backup

Outdoor temperature	Starting temperature 25°C IP	25°C HC	25°C COP	30°C IP	30°C HC	30°C COP	35°C IP	35°C HC	35°C COP	40°C IP	40°C HC	40°C COP	45°C IP	45°C HC	45°C COP	50°C IP	50°C HC	50°C COP	55°C IP	55°C HC	55°C COP	60°C Pabs	60°C Pcal	60°C COP
35°C	3.43	20.45	5.97	3.73	19.31	5.17	3.80	18.28	4.81	3.96	17.45	4.40	4.17	16.67	4.00	4.41	15.89	3.61	4.64	15.11	3.26	4.87	14.33	2.94
34°C	3.42	20.41	5.96	3.73	19.27	5.17	3.80	18.24	4.80	3.96	17.41	4.40	4.17	16.64	3.99	4.40	15.86	3.60	4.63	15.08	3.25	4.87	14.30	2.94
33°C	3.42	20.36	5.95	3.72	19.23	5.16	3.80	18.20	4.79	3.95	17.38	4.39	4.17	16.60	3.98	4.40	15.82	3.60	4.63	15.04	3.25	4.86	14.26	2.93
32°C	3.42	20.32	5.95	3.72	19.19	5.16	3.79	18.17	4.79	3.95	17.34	4.39	4.16	16.56	3.98	4.39	15.78	3.59	4.62	15.01	3.25	4.86	14.23	2.93
31°C	3.41	20.28	5.94	3.72	19.15	5.15	3.79	18.13	4.78	3.95	17.30	4.38	4.16	16.53	3.97	4.39	15.75	3.59	4.62	14.97	3.24	4.85	14.20	2.93
30°C	3.41	20.23	5.93	3.71	19.11	5.14	3.79	18.09	4.78	3.94	17.26	4.38	4.15	16.49	3.97	4.38	15.71	3.58	4.62	14.94	3.24	4.85	14.16	2.92
29°C	3.41	20.19	5.93	3.71	19.07	5.14	3.78	18.05	4.77	3.94	17.23	4.37	4.15	16.45	3.96	4.38	15.68	3.58	4.61	14.90	3.23	4.84	14.13	2.92
28°C	3.40	20.15	5.92	3.71	19.03	5.13	3.78	18.01	4.77	3.94	17.19	4.37	4.15	16.42	3.96	4.38	15.64	3.57	4.61	14.87	3.23	4.84	14.09	2.91
27°C	3.40	20.10	5.91	3.70	18.99	5.13	3.78	17.97	4.76	3.93	17.15	4.36	4.14	16.38	3.95	4.37	15.61	3.57	4.60	14.83	3.22	4.83	14.06	2.91
26°C	3.40	20.06	5.90	3.70	18.95	5.12	3.77	17.94	4.75	3.93	17.12	4.36	4.14	16.34	3.95	4.37	15.57	3.56	4.60	14.80	3.22	4.83	14.03	2.90
25°C	3.39	20.02	5.90	3.70	18.91	5.11	3.77	17.90	4.75	3.93	17.08	4.35	4.13	16.31	3.94	4.36	15.54	3.56	4.59	14.77	3.21	4.82	13.99	2.90
24°C	3.39	19.98	5.89	3.69	18.87	5.11	3.77	17.86	4.74	3.92	17.04	4.35	4.13	16.27	3.94	4.36	15.50	3.55	4.59	14.73	3.21	4.82	13.96	2.90
23°C	3.39	19.93	5.88	3.69	18.83	5.10	3.76	17.82	4.74	3.92	17.01	4.34	4.13	16.24	3.93	4.36	15.47	3.55	4.59	14.70	3.20	4.82	13.93	2.89
22°C	3.39	19.89	5.88	3.69	18.79	5.09	3.76	17.78	4.73	3.92	16.97	4.33	4.12	16.20	3.93	4.35	15.43	3.55	4.58	14.66	3.20	4.81	13.89	2.89
21°C	3.38	19.85	5.87	3.68	18.75	5.09	3.76	17.75	4.73	3.91	16.93	4.33	4.12	16.16	3.92	4.35	15.40	3.54	4.58	14.63	3.20	4.81	13.86	2.88
20°C	3.38	19.81	5.86	3.68	18.71	5.08	3.75	17.71	4.72	3.91	16.90	4.32	4.12	16.13	3.92	4.34	15.36	3.54	4.57	14.60	3.19	4.80	13.83	2.88
19°C	3.38	19.77	5.85	3.70	18.67	5.05	3.77	17.67	4.69	3.95	16.86	4.27	4.17	16.09	3.86	4.40	15.33	3.49	4.62	14.56	3.15	4.85	13.80	2.84
18°C	3.38	19.72	5.84	3.72	18.63	5.01	3.79	17.63	4.65	3.99	16.82	4.22	4.22	16.06	3.81	4.45	15.29	3.44	4.68	14.53	3.11	4.90	13.76	2.81
17°C	3.37	19.68	5.83	3.74	18.59	4.98	3.81	17.60	4.62	4.03	16.79	4.17	4.27	16.02	3.76	4.50	15.26	3.39	4.73	14.49	3.07	4.96	13.73	2.77
16°C	3.37	19.64	5.82	3.75	18.55	4.94	3.83	17.56	4.59	4.07	16.75	4.12	4.32	15.99	3.70	4.55	15.22	3.35	4.78	14.46	3.03	5.01	13.70	2.74
15°C	3.37	19.60	5.81	3.77	18.51	4.91	3.84	17.52	4.56	4.11	16.72	4.07	4.37	15.95	3.65	4.60	15.19	3.30	4.83	14.43	2.99	5.06	13.67	2.70
14°C	3.37	19.56	5.81	3.79	18.47	4.87	3.86	17.49	4.53	4.15	16.68	4.02	4.42	15.92	3.60	4.65	15.16	3.26	4.88	14.39	2.95	5.11	13.63	2.67
13°C	3.37	19.52	5.80	3.81	18.43	4.84	3.88	17.45	4.49	4.19	16.64	3.98	4.47	15.88	3.55	4.70	15.12	3.22	4.93	14.36	2.91	5.16	13.60	2.63
12°C	3.37	19.48	5.79	3.83	18.39	4.80	3.90	17.41	4.46	4.23	16.61	3.93	4.52	15.85	3.51	4.75	15.09	3.17	4.98	14.33	2.88	5.21	13.57	2.60
11°C	3.36	18.99	5.65	3.77	18.11	4.80	3.89	17.20	4.42	4.26	16.39	3.85	4.57	15.64	3.42	4.80	14.88	3.10	5.03	14.12	2.80	5.27	13.36	2.54
10°C	3.36	18.51	5.51	3.71	17.82	4.80	3.88	16.98	4.38	4.29	16.18	3.77	4.62	15.42	3.34	4.86	14.66	3.02	5.09	13.91	2.73	5.32	13.15	2.47
9°C	3.36	18.03	5.37	3.65	17.54	4.80	3.87	16.77	4.33	4.33	15.97	3.69	4.68	15.21	3.25	4.91	14.45	2.95	5.14	13.69	2.67	5.37	12.94	2.41
8°C	3.36	17.55	5.23	3.59	17.25	4.80	3.86	16.56	4.29	4.36	15.75	3.61	4.73	15.00	3.17	4.96	14.24	2.87	5.19	13.48	2.60	5.42	12.73	2.35
7°C	3.36	17.07	5.09	3.54	16.97	4.80	3.85	16.21	4.21	4.33	15.45	3.57	4.76	14.70	3.09	5.00	13.94	2.79	5.24	13.19	2.52	5.44	12.43	2.29
6°C	3.69	16.65	4.51	3.89	16.44	4.23	4.25	15.74	3.70	4.75	15.04	3.17	5.20	14.34	2.76	5.48	13.64	2.49	5.77	12.93	2.24	5.91	12.23	2.07
5°C	3.79	15.45	4.07	4.00	15.17	3.79	4.35	14.55	3.35	4.79	13.93	2.91	5.20	13.31	2.56	5.50	12.69	2.31	5.79	12.07	2.08	5.88	11.45	1.95
4°C	3.90	14.58	3.74	4.12	14.24	3.46	4.43	13.68	3.09	4.82	13.12	2.73	5.19	12.57	2.42	5.50	12.01	2.18	5.80	11.45	1.97	5.85	10.89	1.86
3°C	4.06	14.19	3.49	4.29	13.80	3.22	4.58	13.28	2.90	4.93	12.76	2.59	5.28	12.24	2.32	5.60	11.72	2.09	5.92	11.20	1.89	5.94	10.68	1.80
2°C	4.23	13.70	3.24	4.47	13.23	2.96	4.76	12.76	2.68	5.10	12.29	2.41	5.45	11.82	2.17	5.78	11.35	1.96	6.11	10.88	1.78	6.13	10.41	1.70
1°C	4.23	13.69	3.24	4.47	13.22	2.96	4.77	12.75	2.68	5.10	12.28	2.41	5.46	11.80	2.16	5.79	11.33	1.96	6.11	10.86	1.78	6.13	10.39	1.70
0°C	4.24	13.69	3.23	4.49	13.22	2.95	4.78	12.74	2.67	5.12	12.26	2.40	5.47	11.79	2.15	5.80	11.31	1.95	6.12	10.83	1.77	6.13	10.36	1.69
-1°C	4.26	13.69	3.21	4.51	13.21	2.93	4.80	12.73	2.65	5.14	12.25	2.38	5.49	11.77	2.14	5.82	11.29	1.94	6.12	10.81	1.77	6.13	10.33	1.68
-2°C	4.29	13.69	3.19	4.54	13.21	2.91	4.84	12.72	2.63	5.17	12.24	2.37	5.52	11.76	2.13	5.85	11.27	1.93	6.13	10.79	1.76	6.14	10.30	1.68
-3°C	4.32	13.69	3.17	4.58	13.20	2.88	4.88	12.71	2.60	5.21	12.23	2.35	5.56	11.74	2.11	5.88	11.25	1.91	6.15	10.76	1.75	6.14	10.28	1.67
-4°C	4.36	13.69	3.14	4.63	13.20	2.85	4.94	12.71	2.57	5.26	12.21	2.32	5.60	11.72	2.09	5.93	11.23	1.89	6.16	10.74	1.74	6.15	10.25	1.67
-5°C	4.41	13.69	3.11	4.69	13.19	2.81	5.00	12.70	2.54	5.32	12.20	2.29	5.66	11.71	2.07	5.98	11.21	1.88	6.18	10.72	1.74	6.16	10.22	1.66
-6°C	4.46	13.69	3.07	4.76	13.19	2.77	5.07	12.69	2.50	5.39	12.19	2.26	5.72	11.69	2.04	6.04	11.19	1.85	6.19	10.69	1.73	6.18	10.19	1.65
-7°C	4.52	13.69	3.03	4.84	13.18	2.72	5.16	12.68	2.46	5.47	12.18	2.23	5.79	11.67	2.02	6.11	11.17	1.83	6.22	10.67	1.72	6.19	10.17	1.64
-8°C	4.58	13.55	2.96	4.88	13.05	2.67	5.19	12.55	2.42	5.49	11.99	2.18	5.80	11.43	1.97	6.11	10.87	1.78	6.21	10.32	1.66	6.18	9.76	1.58
-9°C	4.63	13.42	2.90	4.93	12.92	2.62	5.22	12.42	2.38	5.51	11.81	2.14	5.81	11.19	1.93	6.10	10.58	1.73	6.21	9.96	1.61	6.18	9.35	1.51
-10°C	4.68	13.29	2.84	4.97	12.79	2.57	5.25	12.29	2.34	5.54	11.62	2.10	5.82	10.95	1.88	6.10	10.28	1.68	6.20	9.61	1.55	6.17	8.94	1.45
-11°C	4.71	12.90	2.74	4.99	12.46	2.49	5.28	12.00	2.27	5.56	11.37	2.04	5.85	10.74	1.84	6.13	10.10	1.65	6.23	9.45	1.52	6.20	8.80	1.42
-12°C	4.73	12.49	2.64	5.02	12.10	2.41	5.30	11.69	2.20	5.59	11.10	1.99	5.88	10.50	1.79	6.16	9.89	1.60	6.26	9.26	1.48	6.23	8.64	1.39
-13°C	4.76	12.07	2.54	5.04	11.73	2.33	5.33	11.36	2.13	5.62	10.81	1.92	5.91	10.24	1.73	6.20	9.65	1.56	6.29	9.06	1.44	6.27	8.45	1.35
-14°C	4.78	11.63	2.43	5.07	11.34	2.24	5.36	11.00	2.05	5.65	10.49	1.86	5.94	9.95	1.68	6.23	9.40	1.51	6.32	8.83	1.40	6.30	8.25	1.31
-15°C	4.80	11.17	2.33	5.09	10.92	2.14	5.38	10.63	1.97	5.68	10.15	1.79	5.97	9.65	1.62	6.26	9.12	1.46	6.36	8.57	1.35	6.33	8.02	1.27
-16°C	4.76	10.71	2.25	5.04	10.50	2.08	5.33	10.23	1.92	5.62	9.79	1.74	5.91	9.32	1.58	6.19	8.82	1.42	6.29	8.30	1.32	6.27	7.77	1.24
-17°C	4.71	10.23	2.17	4.99	10.05	2.01	5.28	9.82	1.86	5.56	9.41	1.69	5.85	8.97	1.53	6.13	8.50	1.39	6.23	8.01	1.29	6.20	7.51	1.21
-18°C	4.66	9.73	2.09	4.94	9.59	1.94	5.22	9.39	1.80	5.51	9.02	1.64	5.79	8.60	1.49	6.07	8.16	1.34	6.17	7.70	1.25	6.14	7.22	1.18
-19°C	4.61	9.23	2.00	4.89	9.12	1.86	5.17	8.95	1.73	5.45	8.60	1.58	5.73	8.22	1.43	6.01	7.81	1.30	6.11	7.37	1.21	6.08	6.92	1.14
-20°C	4.57	8.72	1.91	4.84	8.63	1.78	5.12	8.48	1.66	5.40	8.17	1.51	5.67	7.82	1.38	5.95	7.43	1.25	6.05	7.03	1.16	6.02	6.60	1.10
-21°C	4.52	8.20	1.81	4.80	8.13	1.70	5.07	8.01	1.58	5.34	7.72	1.45	5.62	7.40	1.32	5.89	7.04	1.20	5.98	6.67	1.11	0.00	0.00	0.00
-22°C	4.48	7.67	1.71	4.75	7.62	1.61	5.02	7.52	1.50	5.29	7.26	1.37	5.56	6.97	1.25	5.83	6.64	1.14	5.92	6.29	1.06	0.00	0.00	0.00
-23°C	4.43	7.13	1.61	4.70	7.10	1.51	4.97	7.02	1.41	5.24	6.79	1.30	5.51	6.52	1.18	5.77	6.22	1.08	0.00	0.00	0.00	0.00	0.00	0.00
-24°C	4.39	6.59	1.50	4.65	6.57	1.41	4.92	6.50	1.32	5.18	6.30	1.21	5.45	6.06	1.11	5.72	5.78	1.01	0.00	0.00	0.00	0.00	0.00	0.00
-25°C	4.34	6.03	1.39	4.61	6.03	1.31	4.87	5.98	1.23	5.13	5.80	1.13	5.40	5.58	1.03	5.66	5.33	0.94	0.00	0.00	0.00	0.00	0.00	0.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

2.3 Performances tables in heating mode including progressively electrical back-up

2.3.1 alféa excellia A.I. single phase models

alféa excellia A.I. 11 / alféa excellia duo A.I. 11

Test conditions comply with EN 14825 with 6 kW electrical backup

Electrical backup mono (ref 074044) availiable in accessory.

Outdoor temperature	Starting temperature																							
	25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
35°C	2.29	15.20	6.64	2.89	14.74	5.10	2.91	14.09	4.83	2.96	13.73	4.64	3.02	13.44	4.46	3.08	13.14	4.27	3.14	12.85	4.09	3.20	12.56	3.92
34°C	2.29	15.13	6.60	2.89	14.67	5.07	2.92	14.03	4.81	2.96	13.67	4.62	3.02	13.38	4.43	3.08	13.09	4.25	3.14	12.80	4.07	3.20	12.51	3.90
33°C	2.29	15.07	6.57	2.90	14.61	5.05	2.92	13.97	4.79	2.96	13.61	4.59	3.02	13.32	4.41	3.08	13.03	4.23	3.14	12.74	4.05	3.21	12.45	3.89
32°C	2.30	15.01	6.54	2.90	14.55	5.02	2.92	13.91	4.76	2.96	13.56	4.57	3.02	13.27	4.39	3.08	12.98	4.21	3.15	12.69	4.03	3.21	12.40	3.87
31°C	2.30	14.95	6.51	2.90	14.49	5.00	2.92	13.86	4.74	2.97	13.50	4.55	3.02	13.21	4.37	3.09	12.92	4.19	3.15	12.64	4.01	3.21	12.35	3.85
30°C	2.30	14.88	6.48	2.90	14.43	4.97	2.93	13.80	4.72	2.97	13.44	4.53	3.03	13.16	4.35	3.09	12.87	4.17	3.15	12.58	3.99	3.21	12.29	3.83
29°C	2.30	14.82	6.44	2.90	14.37	4.95	2.93	13.74	4.69	2.97	13.39	4.51	3.03	13.10	4.33	3.09	12.82	4.15	3.15	12.53	3.97	3.21	12.24	3.81
28°C	2.30	14.76	6.41	2.91	14.31	4.93	2.93	13.69	4.67	2.97	13.33	4.48	3.03	13.05	4.31	3.09	12.76	4.13	3.15	12.48	3.95	3.22	12.19	3.79
27°C	2.30	14.70	6.38	2.91	14.25	4.90	2.93	13.63	4.65	2.98	13.28	4.46	3.03	12.99	4.28	3.10	12.71	4.11	3.16	12.42	3.94	3.22	12.14	3.77
26°C	2.31	14.64	6.35	2.91	14.20	4.88	2.93	13.57	4.63	2.98	13.22	4.44	3.04	12.94	4.26	3.10	12.66	4.09	3.16	12.37	3.92	3.22	12.09	3.75
25°C	2.31	14.58	6.32	2.91	14.14	4.85	2.94	13.52	4.60	2.98	13.17	4.42	3.04	12.89	4.24	3.10	12.60	4.07	3.16	12.32	3.90	3.22	12.04	3.73
24°C	2.31	14.52	6.29	2.91	14.08	4.83	2.94	13.46	4.58	2.98	13.11	4.40	3.04	12.83	4.22	3.10	12.55	4.05	3.16	12.27	3.88	3.23	11.99	3.71
23°C	2.31	14.46	6.26	2.92	14.02	4.81	2.94	13.41	4.56	2.99	13.06	4.38	3.04	12.78	4.20	3.10	12.50	4.03	3.17	12.22	3.86	3.23	11.94	3.70
22°C	2.31	14.40	6.23	2.92	13.97	4.78	2.94	13.35	4.54	2.99	13.01	4.35	3.04	12.73	4.18	3.11	12.45	4.01	3.17	12.17	3.84	3.23	11.89	3.68
21°C	2.31	14.35	6.20	2.92	13.91	4.76	2.95	13.30	4.52	2.99	12.95	4.33	3.05	12.68	4.16	3.11	12.40	3.99	3.17	12.12	3.82	3.23	11.84	3.66
20°C	2.32	14.29	6.17	2.92	13.85	4.74	2.95	13.25	4.49	2.99	12.90	4.31	3.05	12.62	4.14	3.11	12.35	3.97	3.17	12.07	3.80	3.24	11.79	3.64
19°C	2.32	14.23	6.14	2.94	13.80	4.70	2.96	13.19	4.46	3.01	12.85	4.27	3.07	12.57	4.09	3.13	12.30	3.92	3.20	12.02	3.76	3.26	11.74	3.60
18°C	2.32	14.17	6.11	2.95	13.74	4.66	2.97	13.14	4.42	3.03	12.80	4.22	3.09	12.52	4.05	3.16	12.25	3.88	3.22	11.97	3.72	3.28	11.69	3.56
17°C	2.32	14.12	6.08	2.96	13.69	4.62	2.99	13.09	4.38	3.05	12.75	4.18	3.11	12.47	4.01	3.18	12.20	3.84	3.24	11.92	3.68	3.30	11.64	3.53
16°C	2.32	14.06	6.05	2.98	13.63	4.58	3.00	13.04	4.34	3.07	12.70	4.14	3.14	12.42	3.96	3.20	12.15	3.80	3.26	11.87	3.64	3.32	11.60	3.49
15°C	2.33	14.00	6.02	2.99	13.58	4.54	3.01	12.98	4.31	3.09	12.64	4.10	3.16	12.37	3.92	3.22	12.10	3.76	3.28	11.82	3.60	3.35	11.55	3.45
14°C	2.33	13.95	5.99	3.00	13.52	4.50	3.03	12.93	4.27	3.10	12.59	4.06	3.18	12.32	3.88	3.24	12.05	3.72	3.31	11.77	3.56	3.37	11.50	3.41
13°C	2.33	13.89	5.96	3.02	13.47	4.47	3.04	12.88	4.24	3.12	12.54	4.02	3.20	12.27	3.83	3.26	12.00	3.68	3.33	11.73	3.52	3.39	11.45	3.38
12°C	2.33	13.84	5.93	3.03	13.42	4.43	3.05	12.83	4.20	3.14	12.49	3.98	3.22	12.22	3.79	3.29	11.95	3.64	3.35	11.68	3.49	3.41	11.41	3.34
11°C	2.54	13.69	5.38	3.15	13.37	4.25	3.24	12.88	3.98	3.36	12.55	3.73	3.45	12.28	3.55	3.52	12.01	3.41	3.58	11.74	3.28	3.65	11.47	3.14
10°C	2.73	13.51	4.95	3.23	13.29	4.11	3.39	12.91	3.81	3.55	12.58	3.54	3.66	12.31	3.37	3.72	12.04	3.23	3.79	11.77	3.11	3.85	11.50	2.99
9°C	2.94	13.36	4.55	3.35	13.25	3.96	3.57	12.97	3.63	3.77	12.63	3.35	3.89	12.36	3.18	3.95	12.10	3.06	4.02	11.83	2.94	4.08	11.56	2.83
8°C	3.12	13.19	4.23	3.43	13.17	3.84	3.73	12.99	3.49	3.96	12.66	3.19	4.09	12.39	3.03	4.16	12.13	2.92	4.22	11.86	2.81	4.29	11.59	2.70
7°C	3.42	13.14	3.84	3.63	13.22	3.64	4.00	12.95	3.24	4.28	12.69	2.96	4.39	12.42	2.83	4.47	12.15	2.72	4.54	11.88	2.62	4.59	11.62	2.53
6°C	4.48	14.06	3.14	4.71	13.98	2.97	5.04	13.68	2.72	5.30	13.38	2.52	5.43	13.04	2.40	5.53	12.68	2.29	5.63	12.31	2.19	5.66	11.95	2.11
5°C	6.23	15.62	2.51	6.47	15.38	2.38	6.76	15.05	2.23	7.01	14.71	2.10	7.16	14.30	2.00	7.28	13.84	1.90	7.41	13.38	1.81	7.41	12.92	1.74
4°C	7.97	17.21	2.16	8.22	16.82	2.05	8.49	16.41	1.93	8.71	15.99	1.83	8.87	15.49	1.75	9.02	14.94	1.66	9.16	14.40	1.57	9.15	13.85	1.51
3°C	8.85	17.66	2.00	9.11	17.15	1.88	9.32	16.60	1.78	9.50	16.05	1.69	9.64	15.48	1.60	9.80	14.89	1.52	9.96	14.29	1.44	9.94	13.70	1.38
2°C	9.74	18.37	1.89	10.03	17.69	1.76	10.23	17.00	1.66	10.39	16.31	1.57	10.54	15.63	1.48	10.71	14.94	1.39	10.89	14.26	1.31	10.86	13.57	1.25
1°C	9.74	18.33	1.88	10.02	17.64	1.76	10.22	16.95	1.66	10.39	16.26	1.56	10.54	15.57	1.48	10.71	14.88	1.39	10.88	14.19	1.30	10.86	13.50	1.24
0°C	9.74	18.28	1.88	10.02	17.59	1.76	10.21	16.90	1.65	10.38	16.20	1.56	10.52	15.51	1.47	10.69	14.82	1.39	10.87	14.13	1.30	10.86	13.43	1.24
-1°C	9.74	18.24	1.87	10.01	17.54	1.75	10.20	16.85	1.65	10.36	16.15	1.56	10.50	15.45	1.47	10.67	14.76	1.38	10.85	14.06	1.30	10.86	13.36	1.23
-2°C	9.74	18.19	1.87	9.99	17.49	1.75	10.18	16.79	1.65	10.33	16.09	1.56	10.47	15.39	1.47	10.63	14.69	1.38	10.81	13.99	1.29	10.85	13.29	1.22
-3°C	9.74	18.15	1.86	9.97	17.45	1.75	10.15	16.74	1.65	10.29	16.04	1.56	10.43	15.34	1.47	10.58	14.63	1.38	10.77	13.93	1.29	10.85	13.22	1.22
-4°C	9.75	18.11	1.86	9.95	17.40	1.75	10.11	16.69	1.65	10.25	15.98	1.56	10.38	15.28	1.47	10.52	14.57	1.38	10.72	13.86	1.29	10.85	13.15	1.21
-5°C	9.75	18.06	1.85	9.92	17.35	1.75	10.07	16.64	1.65	10.20	15.93	1.56	10.32	15.22	1.47	10.45	14.51	1.39	10.67	13.79	1.29	10.85	13.08	1.21
-6°C	9.75	18.02	1.85	9.89	17.30	1.75	10.02	16.59	1.66	10.14	15.87	1.57	10.25	15.16	1.48	10.38	14.44	1.39	10.60	13.73	1.30	10.85	13.01	1.20
-7°C	9.75	17.98	1.84	9.86	17.26	1.75	9.96	16.54	1.66	10.07	15.82	1.57	10.18	15.10	1.48	10.28	14.38	1.40	10.52	13.66	1.30	10.84	12.94	1.19
-8°C	9.91	17.86	1.80	10.00	17.18	1.72	10.09	16.50	1.64	10.18	15.82	1.55	10.27	15.13	1.47	10.36	14.44	1.39	10.59	13.75	1.30	10.91	13.06	1.20
-9°C	10.08	17.74	1.76	10.15	17.11	1.69	10.22	16.47	1.61	10.29	15.81	1.54	10.36	15.15	1.46	10.43	14.49	1.39	10.65	13.84	1.30	10.97	13.18	1.20
-10°C	10.25	17.63	1.72	10.30	17.03	1.65	10.35	16.44	1.59	10.40	15.81	1.52	10.45	15.18	1.45	10.50	14.55	1.39	10.72	13.92	1.30	11.04	13.29	1.20
-11°C	10.27	17.28	1.68	10.32	16.75	1.62	10.37	16.20	1.56	10.42	15.60	1.50	10.47	15.00	1.43	10.52	14.40	1.37	10.74	13.79	1.28	11.06	13.18	1.19
-12°C	10.29	16.93	1.65	10.34	16.44	1.59	10.39	15.93	1.53	10.44	15.37	1.47	10.50	14.80	1.41	10.55	14.22	1.35	10.76	13.64	1.27	11.09	13.05	1.18
-13°C	10.31	16.56	1.61	10.36	16.12	1.56	10.41	15.65	1.50	10.47	15.12	1.44	10.52	14.58	1.39	10.57	14.03	1.33	10.79	13.47	1.25	11.11	12.89	1.16
-14°C	10.33	16.17	1.57	10.39	15.78	1.52	10.44	15.35	1.47	10.49	14.86	1.42	10.54	14.34	1.36	10.59	13.82	1.30	10.81	13.28	1.23	11.14	12.73	1.14
-15°C	10.35	15.77	1.52	10.41	15.42	1.48	10.46	15.03	1.44	10.51	14.57	1.39	10.56	14.09	1.33	10.62	13.58	1.28	10.83	13.07	1.21	11.17	12.54	1.12
-16°C	10.31	15.37	1.49	10.36	15.05	1.45	10.41	14.69	1.41	10.47	14.27	1.36	10.52	13.81	1.31	10.57	13.34	1.26	10.79	12.84	1.19	11.11	12.34	1.11
-17°C	10.27	14.95	1.46	10.32	14.67	1.42	10.37	14.34	1.38	10.42	13.95	1.34	10.47	13.52	1.29	10.52	13.07	1.24	10.74	12.60	1.17	11.06	12.12	1.10
-18°C	10.23	14.52	1.42	10.28	14.27	1.39	10.33	13.98	1.35	10.38	13.61	1.31	10.43	13.21	1.27	10.48	12.79	1.22	10.69	12.35	1.16	11.01	11.89	1.08
-19°C	10.18	14.08	1.38	10.23	13.87	1.35	10.28	13.60	1.32	10.33	13.26	1.28	10.38	12.89	1.24	10.43	12.49	1.20	10.64	12.08	1.13	10.96	11.64	1.06
-20°C	10.14	13.63	1.34	10.19	13.45	1.32	10.24	13.21	1.29	10.29	12.90	1.25	10.34	12.55	1.21	10.39	12.18	1.17	10.60	11.79	1.11	10.91	11.38	1.04
-21°C	10.10	13.17	1.30	10.15	13.02	1.28	10.20	12.80	1.26	10.25	12.52	1.22	10.30	12.20	1.19	10.34	11.86	1.15	10.55	11.49	1.09	6.00	6.00	1.00
-22°C	10.06	12.71	1.26	10.11	12.58	1.24	10.16	12.39	1.22	10.20	12.13	1.19	10.25	11.84	1.15	10.30	11.52	1.12	10.51	11.18	1.06	6.00	6.00	1.00
-23°C	10.02	12.24	1.22	10.07	12.13	1.20	10.11	11.96	1.18	10.16	11.73	1.15	10.21	11.46	1.12	10.26	11.17	1.09	6.00	6.00	1.00	6.00	6.00	1.00
-24°C	9.98	11.76	1.18	10.03	11.67	1.16	10.07	11.52	1.14	10.12	11.32	1.12	10.17	11.08	1.09	10.22	10.81	1.06	6.00	6.00	1.00	6.00	6.00	1.00
-25°C	9.94	11.28	1.13	9.99	11.20	1.12	10.03	11.08	1.10	10.08	10.89	1.08	10.13	10.68	1.05	10.17	10.44	1.03	6.00	6.00	1.00	6.00	6.00	1.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

alféa excellia A.I. 14 / alféa excellia duo A.I. 14

Test conditions comply with EN 14825 with 6 kW electrical backup

Electrical backup mono (ref 074044) availiable in accessory.

		Starting temperature																							
		25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
Outdoor temperature	35°C	2.95	16.71	5.66	3.49	17.66	5.06	3.53	16.82	4.77	3.59	16.29	4.54	3.67	15.83	4.32	3.75	15.38	4.11	3.83	14.92	3.90	3.91	14.47	3.70
	34°C	2.95	16.66	5.64	3.49	17.61	5.04	3.53	16.77	4.75	3.59	16.24	4.52	3.66	15.79	4.31	3.75	15.33	4.09	3.83	14.88	3.89	3.91	14.42	3.69
	33°C	2.95	16.62	5.63	3.49	17.56	5.03	3.53	16.72	4.74	3.59	16.19	4.51	3.66	15.74	4.30	3.74	15.29	4.08	3.83	14.83	3.88	3.91	14.38	3.68
	32°C	2.95	16.57	5.61	3.49	17.51	5.02	3.53	16.67	4.73	3.59	16.14	4.50	3.66	15.69	4.28	3.74	15.24	4.07	3.82	14.79	3.87	3.91	14.34	3.67
	31°C	2.95	16.52	5.60	3.49	17.45	5.00	3.53	16.62	4.71	3.59	16.10	4.49	3.66	15.65	4.27	3.74	15.19	4.06	3.82	14.74	3.86	3.90	14.29	3.66
	30°C	2.95	16.47	5.58	3.49	17.40	4.99	3.53	16.58	4.70	3.59	16.05	4.48	3.66	15.60	4.26	3.74	15.15	4.05	3.82	14.70	3.84	3.90	14.25	3.65
	29°C	2.95	16.42	5.57	3.49	17.35	4.97	3.53	16.53	4.69	3.59	16.00	4.46	3.66	15.55	4.25	3.74	15.10	4.04	3.82	14.65	3.83	3.90	14.20	3.64
	28°C	2.95	16.37	5.55	3.49	17.30	4.96	3.52	16.48	4.68	3.58	15.95	4.45	3.66	15.51	4.24	3.74	15.06	4.03	3.82	14.61	3.82	3.90	14.16	3.63
	27°C	2.95	16.33	5.54	3.49	17.25	4.95	3.52	16.43	4.66	3.58	15.91	4.44	3.66	15.46	4.23	3.74	15.01	4.01	3.82	14.56	3.81	3.90	14.12	3.62
	26°C	2.95	16.28	5.52	3.49	17.20	4.93	3.52	16.38	4.65	3.58	15.86	4.43	3.66	15.41	4.21	3.74	14.97	4.00	3.82	14.52	3.80	3.90	14.07	3.61
	25°C	2.95	16.23	5.51	3.49	17.15	4.92	3.52	16.33	4.64	3.58	15.81	4.41	3.66	15.37	4.20	3.74	14.92	3.99	3.82	14.48	3.79	3.90	14.03	3.60
	24°C	2.95	16.18	5.49	3.48	17.10	4.91	3.52	16.29	4.63	3.58	15.77	4.40	3.66	15.32	4.19	3.74	14.88	3.98	3.82	14.43	3.78	3.90	13.99	3.59
	23°C	2.95	16.14	5.48	3.48	17.05	4.89	3.52	16.24	4.61	3.58	15.72	4.39	3.66	15.28	4.18	3.74	14.83	3.97	3.82	14.39	3.77	3.90	13.94	3.58
	22°C	2.94	16.09	5.46	3.48	17.00	4.88	3.52	16.19	4.60	3.58	15.68	4.38	3.66	15.23	4.17	3.74	14.79	3.96	3.82	14.34	3.76	3.90	13.90	3.57
	21°C	2.94	16.04	5.45	3.48	16.95	4.87	3.52	16.15	4.59	3.58	15.63	4.37	3.65	15.19	4.16	3.74	14.74	3.95	3.82	14.30	3.75	3.90	13.86	3.56
	20°C	2.94	16.00	5.43	3.48	16.90	4.85	3.52	16.10	4.58	3.58	15.58	4.35	3.65	15.14	4.14	3.73	14.70	3.94	3.82	14.26	3.74	3.90	13.82	3.55
	19°C	2.94	15.95	5.42	3.50	16.85	4.82	3.53	16.05	4.54	3.60	15.54	4.32	3.68	15.10	4.11	3.76	14.66	3.90	3.84	14.22	3.70	3.92	13.77	3.51
	18°C	2.94	15.90	5.41	3.51	16.80	4.79	3.55	16.01	4.51	3.62	15.49	4.28	3.70	15.05	4.07	3.78	14.61	3.87	3.86	14.17	3.67	3.94	13.73	3.48
	17°C	2.93	15.86	5.40	3.52	16.76	4.76	3.56	15.96	4.48	3.64	15.45	4.25	3.72	15.01	4.03	3.80	14.57	3.83	3.89	14.13	3.64	3.97	13.69	3.45
	16°C	2.93	15.81	5.39	3.54	16.71	4.72	3.57	15.91	4.45	3.66	15.40	4.21	3.75	14.96	4.00	3.83	14.53	3.80	3.91	14.09	3.60	3.99	13.65	3.42
	15°C	2.93	15.77	5.39	3.55	16.66	4.69	3.59	15.87	4.42	3.68	15.36	4.18	3.77	14.92	3.96	3.85	14.48	3.76	3.93	14.05	3.57	4.01	13.61	3.39
	14°C	2.92	15.72	5.38	3.56	16.61	4.66	3.60	15.82	4.39	3.70	15.31	4.14	3.79	14.88	3.92	3.87	14.44	3.73	3.96	14.00	3.54	4.04	13.57	3.36
	13°C	2.92	15.68	5.37	3.58	16.56	4.63	3.62	15.78	4.36	3.72	15.27	4.11	3.82	14.83	3.89	3.90	14.40	3.69	3.98	13.96	3.51	4.06	13.52	3.33
	12°C	2.92	15.63	5.36	3.59	16.52	4.60	3.63	15.73	4.33	3.74	15.23	4.07	3.84	14.79	3.85	3.92	14.35	3.66	4.00	13.92	3.48	4.08	13.48	3.30
	11°C	3.12	15.71	5.03	3.71	16.43	4.43	3.81	15.75	4.13	3.96	15.25	3.85	4.07	14.82	3.64	4.15	14.38	3.46	4.24	13.95	3.29	4.32	13.51	3.13
	10°C	3.30	15.76	4.77	3.79	16.31	4.30	3.97	15.75	3.97	4.15	15.25	3.67	4.28	14.81	3.46	4.36	14.38	3.30	4.44	13.94	3.14	4.52	13.51	2.99
	9°C	3.51	15.84	4.52	3.91	16.22	4.15	4.15	15.77	3.80	4.37	15.27	3.49	4.51	14.84	3.29	4.59	14.41	3.14	4.67	13.97	2.99	4.76	13.54	2.85
	8°C	3.68	15.89	4.31	3.99	16.11	4.04	4.30	15.77	3.67	4.56	15.27	3.35	4.71	14.84	3.15	4.80	14.40	3.00	4.88	13.97	2.86	4.96	13.54	2.73
	7°C	3.98	16.06	4.04	4.19	16.11	3.84	4.58	15.68	3.43	4.88	15.25	3.12	5.01	14.82	2.95	5.11	14.39	2.82	5.20	13.95	2.68	5.28	13.52	2.56
	6°C	5.13	16.77	3.27	5.33	16.68	3.13	5.71	16.21	2.84	6.03	15.73	2.61	6.20	15.26	2.46	6.33	14.78	2.34	6.45	14.30	2.22	6.53	13.83	2.12
	5°C	6.90	17.88	2.59	7.10	17.65	2.49	7.47	17.14	2.30	7.79	16.63	2.13	7.99	16.12	2.02	8.15	15.61	1.92	8.31	15.11	1.82	8.38	14.60	1.74
	4°C	8.37	18.02	2.15	8.55	17.70	2.07	8.84	17.20	1.94	9.10	16.69	1.83	9.28	16.19	1.75	9.45	15.69	1.66	9.61	15.19	1.58	9.68	14.69	1.52
	3°C	9.20	18.06	1.96	9.38	17.66	1.88	9.61	17.15	1.78	9.81	16.64	1.70	9.97	16.13	1.62	10.14	15.62	1.54	10.32	15.12	1.47	10.38	14.61	1.41
	2°C	10.01	18.13	1.81	10.19	17.59	1.73	10.41	17.06	1.64	10.58	16.53	1.56	10.74	16.00	1.49	10.92	15.47	1.42	11.11	14.93	1.34	11.17	14.40	1.29
	1°C	10.01	18.17	1.81	10.19	17.64	1.73	10.41	17.12	1.65	10.59	16.60	1.57	10.74	16.08	1.50	10.93	15.56	1.42	11.11	15.04	1.35	11.17	14.51	1.30
	0°C	10.02	18.21	1.82	10.20	17.69	1.73	10.42	17.18	1.65	10.59	16.67	1.57	10.75	16.16	1.50	10.93	15.65	1.43	11.11	15.14	1.36	11.18	14.62	1.31
	-1°C	10.04	18.25	1.82	10.22	17.74	1.74	10.43	17.24	1.65	10.61	16.74	1.58	10.77	16.24	1.51	10.95	15.74	1.44	11.12	15.24	1.37	11.18	14.74	1.32
	-2°C	10.06	18.29	1.82	10.24	17.79	1.74	10.45	17.30	1.66	10.63	16.81	1.58	10.79	16.32	1.51	10.97	15.83	1.44	11.13	15.34	1.38	11.19	14.85	1.33
	-3°C	10.09	18.32	1.82	10.27	17.84	1.74	10.47	17.36	1.66	10.65	16.88	1.59	10.81	16.40	1.52	11.00	15.92	1.45	11.15	15.44	1.38	11.20	14.96	1.34
	-4°C	10.12	18.36	1.81	10.30	17.89	1.74	10.50	17.42	1.66	10.68	16.95	1.59	10.85	16.48	1.52	11.03	16.01	1.45	11.17	15.54	1.39	11.21	15.07	1.34
	-5°C	10.16	18.40	1.81	10.34	17.94	1.74	10.54	17.48	1.66	10.72	17.02	1.59	10.89	16.56	1.52	11.07	16.10	1.45	11.19	15.64	1.40	11.22	15.18	1.35
	-6°C	10.21	18.44	1.81	10.39	17.99	1.73	10.58	17.54	1.66	10.76	17.09	1.59	10.93	16.64	1.52	11.11	16.19	1.46	11.21	15.74	1.40	11.24	15.29	1.36
	-7°C	10.26	18.48	1.80	10.44	18.04	1.73	10.62	17.60	1.66	10.80	17.16	1.59	10.98	16.72	1.52	11.16	16.28	1.46	11.24	15.84	1.41	11.26	15.40	1.37
	-8°C	10.21	18.35	1.80	10.40	17.90	1.72	10.59	17.45	1.65	10.78	16.93	1.57	10.97	16.40	1.49	11.16	15.87	1.42	11.25	15.34	1.36	11.26	14.82	1.32
	-9°C	10.17	18.22	1.79	10.36	17.76	1.71	10.56	17.31	1.64	10.76	16.69	1.55	10.96	16.08	1.47	11.16	15.46	1.39	11.25	14.85	1.32	11.26	14.23	1.26
	-10°C	10.12	18.09	1.79	10.33	17.62	1.71	10.54	17.16	1.63	10.74	16.46	1.53	10.95	15.75	1.44	11.16	15.05	1.35	11.25	14.35	1.28	11.26	13.65	1.21
	-11°C	10.14	17.73	1.75	10.35	17.32	1.67	10.56	16.90	1.60	10.77	16.23	1.51	10.98	15.56	1.42	11.19	14.89	1.33	11.28	14.21	1.26	11.29	13.53	1.20
	-12°C	10.16	17.36	1.71	10.37	17.00	1.64	10.58	16.62	1.57	10.79	15.99	1.48	11.00	15.35	1.40	11.21	14.70	1.31	11.30	14.05	1.24	11.32	13.39	1.18
	-13°C	10.18	16.98	1.67	10.39	16.66	1.60	10.60	16.31	1.54	10.82	15.72	1.45	11.03	15.12	1.37	11.24	14.50	1.29	11.33	13.87	1.22	11.34	13.23	1.17
	-14°C	10.20	16.58	1.62	10.41	16.30	1.57	10.63	15.99	1.50	10.84	15.44	1.42	11.05	14.86	1.35	11.26	14.27	1.27	11.36	13.67	1.20	11.37	13.05	1.15
	-15°C	10.22	16.16	1.58	10.44	15.93	1.53	10.65	15.65	1.47	10.86	15.13	1.39	11.08	14.59	1.32	11.29	14.03	1.24	11.38	13.45	1.18	11.40	12.86	1.13
	-16°C	10.18	15.74	1.55	10.39	15.54	1.50	10.60	15.29	1.44	10.81	14.81	1.37	11.03	14.30	1.30	11.24	13.77	1.22	11.33	13.21	1.17	11.34	12.65	1.12
	-17°C	10.14	15.30	1.51	10.35	15.13	1.46	10.56	14.92	1.41	10.77	14.47	1.34	10.98	13.99	1.27	11.19	13.48	1.21	11.28	12.96	1.15	11.29	12.42	1.10
	-18°C	10.10	14.85	1.47	10.30	14.72	1.43	10.51	14.53	1.38	10.72	14.11	1.32	10.93	13.66	1.25	11.13	13.19	1.18	11.22	12.69	1.13	11.24	12.18	1.08
	-19°C	10.06	14.40	1.43	10.26	14.29	1.39	10.47	14.12	1.35	10.67	13.74	1.29	10.88	13.32	1.22	11.08	12.87	1.16	11.17	12.41	1.11	11.18	11.92	1.07
	-20°C	10.02	13.93	1.39	10.22	13.84	1.35	10.42	13.70	1.31	10.63	13.35	1.26	10.83	12.96	1.20	11.03	12.55	1.14	11.12	12.11	1.09	11.13	11.65	1.05
	-21°C	9.98	13.46	1.35	10.18	13.39	1.32	10.38	13.27	1.28	10.58	12.95	1.22	10.78	12.59	1.17	10.98	12.20	1.11	11.07	11.79	1.07	6.00	6.00	1.00
	-22°C	9.94	12.98	1.31	10.14	12.93	1.28	10.33	12.83	1.24	10.53	12.53	1.19	10.73	12.20	1.14	10.93	11.85	1.08	11.02	11.46	1.04	6.00	6.00	1.00
	-23°C	9.90	12.49	1.26	10.09	12.45	1.23	10.29	12.37	1.20	10.49	12.11	1.15	10.68	11.81	1.10	10.88	11.47	1.05	6.00	6.00	1.00	6.00	6.00	1.00
	-24°C	9.86	11.99	1.22	10.05	11.97	1.19	10.25	11.90	1.16	10.44	11.67	1.12	10.64	11.39	1.07	10.83	11.09	1.02	6.00	6.00	1.00	6.00	6.00	1.00
	-25°C	9.82	11.49	1.17	10.01	11.48	1.15	10.21	11.43	1.12	10.40	11.21	1.08	10.59	10.97	1.04	10.78	10.70	0.99	6.00	6.00	1.00	6.00	6.00	1.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

2.3.2 alféa excellia A.I. 3-phases models

alféa excellia A.I. tri 11 / alféa excellia duo A.I. tri 11

Test conditions comply with EN 14825 with 9 kW electrical backup

Electrical backup tri (ref 074045) availiable in accessory.

Outdoor temperature	Starting temperature																							
	25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
35°C	2.52	15.44	6.14	2.90	14.70	5.08	2.89	13.96	4.83	2.92	13.35	4.57	2.97	12.77	4.30	3.03	12.19	4.02	3.09	11.61	3.76	3.15	11.03	3.51
34°C	2.52	15.38	6.11	2.90	14.65	5.05	2.89	13.91	4.80	2.92	13.30	4.55	2.97	12.72	4.28	3.03	12.14	4.01	3.09	11.56	3.74	3.15	10.99	3.49
33°C	2.52	15.32	6.08	2.90	14.59	5.03	2.90	13.85	4.78	2.93	13.24	4.53	2.98	12.67	4.26	3.03	12.09	3.99	3.09	11.52	3.73	3.15	10.94	3.47
32°C	2.52	15.25	6.05	2.90	14.53	5.01	2.90	13.80	4.76	2.93	13.19	4.51	2.98	12.62	4.24	3.04	12.04	3.97	3.09	11.47	3.71	3.15	10.89	3.46
31°C	2.52	15.19	6.03	2.90	14.47	4.99	2.90	13.74	4.74	2.93	13.14	4.49	2.98	12.57	4.22	3.04	11.99	3.95	3.09	11.42	3.69	3.15	10.85	3.44
30°C	2.52	15.13	6.00	2.90	14.41	4.96	2.90	13.69	4.72	2.93	13.09	4.46	2.98	12.52	4.20	3.04	11.94	3.93	3.10	11.37	3.67	3.15	10.80	3.42
29°C	2.52	15.07	5.97	2.91	14.36	4.94	2.90	13.64	4.70	2.93	13.04	4.44	2.98	12.47	4.18	3.04	11.90	3.91	3.10	11.33	3.66	3.16	10.76	3.41
28°C	2.53	15.02	5.94	2.91	14.30	4.92	2.91	13.58	4.68	2.93	12.98	4.42	2.98	12.42	4.16	3.04	11.85	3.89	3.10	11.28	3.64	3.16	10.71	3.39
27°C	2.53	14.96	5.92	2.91	14.25	4.90	2.91	13.53	4.65	2.94	12.93	4.40	2.99	12.37	4.14	3.04	11.80	3.88	3.10	11.23	3.62	3.16	10.67	3.38
26°C	2.53	14.90	5.89	2.91	14.19	4.87	2.91	13.48	4.63	2.94	12.88	4.38	2.99	12.32	4.12	3.05	11.75	3.86	3.10	11.19	3.60	3.16	10.62	3.36
25°C	2.53	14.84	5.86	2.91	14.13	4.85	2.91	13.42	4.61	2.94	12.83	4.36	2.99	12.27	4.10	3.05	11.70	3.84	3.11	11.14	3.59	3.16	10.58	3.34
24°C	2.53	14.78	5.84	2.92	14.08	4.83	2.91	13.37	4.59	2.94	12.78	4.34	2.99	12.22	4.08	3.05	11.66	3.82	3.11	11.10	3.57	3.17	10.54	3.33
23°C	2.53	14.73	5.81	2.92	14.03	4.81	2.91	13.32	4.57	2.94	12.73	4.32	2.99	12.17	4.07	3.05	11.61	3.80	3.11	11.05	3.55	3.17	10.49	3.31
22°C	2.54	14.67	5.78	2.92	13.97	4.79	2.92	13.27	4.55	2.95	12.68	4.30	3.00	12.12	4.05	3.05	11.56	3.79	3.11	11.01	3.54	3.17	10.45	3.30
21°C	2.54	14.61	5.76	2.92	13.92	4.76	2.92	13.22	4.53	2.95	12.63	4.28	3.00	12.07	4.03	3.06	11.52	3.77	3.11	10.96	3.52	3.17	10.41	3.28
20°C	2.54	14.55	5.73	2.92	13.86	4.74	2.92	13.16	4.51	2.95	12.58	4.27	3.00	12.03	4.01	3.06	11.47	3.75	3.12	10.92	3.50	3.17	10.36	3.26
19°C	2.54	14.50	5.71	2.93	13.81	4.71	2.93	13.11	4.48	2.97	12.53	4.23	3.02	11.98	3.97	3.08	11.43	3.71	3.14	10.87	3.47	3.19	10.32	3.23
18°C	2.54	14.44	5.69	2.94	13.76	4.68	2.93	13.06	4.45	2.98	12.48	4.19	3.04	11.93	3.93	3.10	11.38	3.67	3.16	10.83	3.43	3.21	10.28	3.20
17°C	2.54	14.39	5.67	2.94	13.70	4.65	2.94	13.01	4.42	3.00	12.44	4.15	3.06	11.89	3.89	3.12	11.34	3.64	3.18	10.79	3.40	3.24	10.24	3.16
16°C	2.54	14.33	5.65	2.95	13.65	4.62	2.95	12.96	4.40	3.01	12.39	4.11	3.08	11.84	3.84	3.14	11.29	3.60	3.20	10.74	3.36	3.26	10.19	3.13
15°C	2.53	14.28	5.63	2.96	13.60	4.60	2.96	12.91	4.37	3.03	12.34	4.08	3.10	11.79	3.81	3.16	11.25	3.56	3.22	10.70	3.33	3.28	10.15	3.10
14°C	2.53	14.22	5.62	2.97	13.55	4.57	2.96	12.87	4.34	3.04	12.29	4.04	3.12	11.75	3.77	3.18	11.20	3.52	3.24	10.66	3.29	3.30	10.11	3.07
13°C	2.53	14.17	5.60	2.97	13.50	4.54	2.97	12.82	4.31	3.06	12.25	4.00	3.14	11.70	3.73	3.20	11.16	3.49	3.26	10.61	3.26	3.32	10.07	3.04
12°C	2.53	14.12	5.58	2.98	13.44	4.51	2.98	12.77	4.29	3.08	12.20	3.97	3.16	11.66	3.69	3.22	11.11	3.45	3.28	10.57	3.22	3.34	10.03	3.00
11°C	2.85	14.09	4.95	3.23	13.54	4.19	3.27	12.91	3.94	3.40	12.34	3.63	3.50	11.80	3.38	3.56	11.26	3.17	3.61	10.72	2.97	3.67	10.18	2.77
10°C	3.11	14.03	4.50	3.43	13.60	3.96	3.52	13.01	3.69	3.68	12.45	3.38	3.79	11.91	3.14	3.85	11.37	2.96	3.91	10.83	2.77	3.97	10.29	2.59
9°C	3.43	14.01	4.09	3.68	13.70	3.72	3.82	13.16	3.45	4.01	12.59	3.14	4.12	12.06	2.92	4.18	11.52	2.75	4.24	10.98	2.59	4.30	10.44	2.43
8°C	3.70	13.95	3.77	3.89	13.76	3.54	4.07	13.26	3.26	4.29	12.70	2.96	4.41	12.16	2.76	4.47	11.63	2.60	4.53	11.09	2.45	4.59	10.55	2.30
7°C	4.15	14.07	3.39	4.27	14.00	3.28	4.50	13.46	2.99	4.72	12.93	2.74	4.85	12.39	2.56	4.93	11.86	2.41	5.00	11.32	2.26	5.08	10.79	2.12
6°C	5.51	15.34	2.78	5.60	15.20	2.72	5.83	14.64	2.51	6.04	14.09	2.33	6.18	13.56	2.19	6.30	13.05	2.07	6.43	12.54	1.95	6.56	12.04	1.84
5°C	7.93	17.59	2.22	7.99	17.39	2.18	8.23	16.81	2.04	8.42	16.25	1.93	8.57	15.73	1.83	8.74	15.25	1.75	8.90	14.77	1.66	9.07	14.29	1.58
4°C	10.27	19.47	1.90	10.30	19.21	1.87	10.54	18.68	1.77	10.73	18.15	1.69	10.90	17.68	1.62	11.10	17.23	1.55	11.29	16.79	1.49	11.50	16.35	1.42
3°C	11.38	19.81	1.74	11.39	19.52	1.71	11.65	19.09	1.64	11.86	18.67	1.57	12.03	18.26	1.52	12.25	17.86	1.46	12.46	17.46	1.40	12.68	17.06	1.35
2°C	12.49	20.39	1.63	12.50	20.03	1.60	12.78	19.68	1.54	13.01	19.32	1.49	13.20	18.96	1.44	13.44	18.60	1.38	13.67	18.25	1.33	13.91	17.89	1.29
1°C	12.49	20.39	1.63	12.50	20.00	1.60	12.78	19.61	1.53	13.00	19.22	1.48	13.20	18.83	1.43	13.43	18.44	1.37	13.67	18.05	1.32	13.92	17.66	1.27
0°C	12.49	20.40	1.63	12.51	19.97	1.60	12.78	19.55	1.53	13.00	19.12	1.47	13.19	18.70	1.42	13.42	18.28	1.36	13.67	17.85	1.31	13.93	17.43	1.25
-1°C	12.50	20.40	1.63	12.52	19.94	1.59	12.79	19.49	1.52	13.00	19.03	1.46	13.19	18.57	1.41	13.41	18.11	1.35	13.66	17.66	1.29	13.94	17.20	1.23
-2°C	12.51	20.40	1.63	12.54	19.91	1.59	12.79	19.42	1.52	12.99	18.93	1.46	13.17	18.44	1.40	13.39	17.95	1.34	13.65	17.46	1.28	13.96	16.97	1.22
-3°C	12.52	20.40	1.63	12.56	19.88	1.58	12.80	19.36	1.51	12.99	18.83	1.45	13.16	18.31	1.39	13.36	17.79	1.33	13.64	17.27	1.27	13.99	16.74	1.20
-4°C	12.53	20.41	1.63	12.59	19.85	1.58	12.80	19.29	1.51	12.98	18.74	1.44	13.14	18.18	1.38	13.32	17.63	1.32	13.63	17.07	1.25	14.03	16.52	1.18
-5°C	12.55	20.41	1.63	12.63	19.82	1.57	12.81	19.23	1.50	12.97	18.64	1.44	13.12	18.05	1.38	13.29	17.46	1.31	13.62	16.88	1.24	14.07	16.29	1.16
-6°C	12.57	20.41	1.62	12.66	19.79	1.56	12.82	19.17	1.50	12.96	18.54	1.43	13.10	17.92	1.37	13.24	17.30	1.31	13.60	16.68	1.23	14.12	16.06	1.14
-7°C	12.59	20.41	1.62	12.71	19.76	1.55	12.83	19.10	1.49	12.95	18.45	1.42	13.07	17.79	1.36	13.19	17.14	1.30	13.59	16.48	1.21	14.17	15.83	1.12
-8°C	12.75	20.35	1.60	12.87	19.76	1.54	12.98	19.17	1.48	13.09	18.51	1.41	13.20	17.85	1.35	13.31	17.18	1.29	13.70	16.52	1.21	14.29	15.86	1.11
-9°C	12.92	20.29	1.57	13.02	19.76	1.52	13.12	19.23	1.47	13.23	18.56	1.40	13.33	17.90	1.34	13.43	17.23	1.28	13.82	16.56	1.20	14.41	15.90	1.10
-10°C	13.09	20.23	1.55	13.18	19.76	1.50	13.27	19.29	1.45	13.36	18.62	1.39	13.46	17.95	1.33	13.55	17.28	1.28	13.94	16.60	1.19	14.52	15.93	1.10
-11°C	13.11	19.90	1.52	13.20	19.48	1.48	13.29	19.05	1.43	13.39	18.42	1.38	13.48	17.77	1.32	13.57	17.13	1.26	13.96	16.48	1.18	14.55	15.82	1.09
-12°C	13.13	19.55	1.49	13.22	19.18	1.45	13.31	18.79	1.41	13.41	18.19	1.36	13.50	17.58	1.30	13.59	16.96	1.25	13.99	16.33	1.17	14.58	15.70	1.08
-13°C	13.15	19.20	1.46	13.24	18.87	1.42	13.34	18.51	1.39	13.43	17.95	1.34	13.52	17.37	1.28	13.62	16.77	1.23	14.01	16.17	1.15	14.61	15.55	1.06
-14°C	13.17	18.82	1.43	13.26	18.54	1.40	13.36	18.22	1.36	13.45	17.69	1.31	13.55	17.13	1.26	13.64	16.57	1.21	14.04	15.98	1.14	14.63	15.39	1.05
-15°C	13.19	18.44	1.40	13.28	18.19	1.37	13.38	17.90	1.34	13.47	17.40	1.29	13.57	16.88	1.24	13.66	16.34	1.20	14.06	15.79	1.12	14.66	15.22	1.04
-16°C	13.15	18.04	1.37	13.24	17.83	1.35	13.34	17.57	1.32	13.43	17.11	1.27	13.52	16.61	1.23	13.62	16.10	1.18	14.01	15.57	1.11	14.61	15.03	1.03
-17°C	13.11	17.64	1.35	13.20	17.46	1.32	13.29	17.23	1.30	13.38	16.79	1.25	13.48	16.33	1.21	13.57	15.84	1.17	13.96	15.34	1.10	14.55	14.82	1.02
-18°C	13.06	17.22	1.32	13.16	17.07	1.30	13.25	16.87	1.27	13.34	16.46	1.23	13.43	16.03	1.19	13.53	15.57	1.15	13.91	15.09	1.08	14.49	14.60	1.01
-19°C	13.02	16.80	1.29	13.11	16.67	1.27	13.21	16.49	1.25	13.30	16.12	1.21	13.39	15.72	1.17	13.48	15.29	1.13	13.86	14.83	1.07	14.44	14.36	0.99
-20°C	12.98	16.37	1.26	13.07	16.26	1.24	13.16	16.11	1.22	13.25	15.76	1.19	13.35	15.39	1.15	13.44	14.99	1.12	13.81	14.56	1.05	14.39	14.12	0.98
-21°C	12.94	15.93	1.23	13.03	15.84	1.22	13.12	15.71	1.20	13.21	15.39	1.17	13.30	15.05	1.13	13.39	14.67	1.10	13.77	14.27	1.04	9.00	9.00	1.00
-22°C	12.90	15.48	1.20	12.99	15.41	1.19	13.08	15.30	1.17	13.17	15.01	1.14	13.26	14.69	1.11	13.35	14.35	1.07	13.72	13.97	1.02	9.00	9.00	1.00
-23°C	12.87	15.02	1.17	12.95	14.98	1.16	13.04	14.88	1.14	13.13	14.62	1.11	13.22	14.33	1.08	13.30	14.01	1.05	9.00	9.00	1.00	9.00	9.00	1.00
-24°C	12.83	14.56	1.14	12.91	14.53	1.13	13.00	14.45	1.11	13.09	14.21	1.09	13.17	13.95	1.06	13.26	13.66	1.03	9.00	9.00	1.00	9.00	9.00	1.00
-25°C	12.79	14.10	1.10	12.87	14.07	1.09	12.96	14.01	1.08	13.05	13.80	1.06	13.13	13.56	1.03	13.22	13.29	1.01	9.00	9.00	1.00	9.00	9.00	1.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

alféa excellia A.I. tri 14 / alféa excellia duo A.I. tri 14

Test conditions comply with EN 14825 with 9 kW electrical backup

Electrical backup tri (ref 074045) availiable in accessory.

		Starting temperature																								
		25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
Outdoor temperature	35°C	2.53	17.74	7.01	3.30	17.28	5.23	3.29	16.43	4.99	3.35	15.75	4.69	3.46	15.10	4.37	3.58	14.45	4.04	3.70	13.80	3.73	3.81	13.15	3.45
	34°C	2.53	17.68	6.98	3.30	17.22	5.22	3.29	16.38	4.97	3.36	15.69	4.68	3.46	15.04	4.35	3.58	14.40	4.03	3.70	13.75	3.72	3.82	13.10	3.43
	33°C	2.53	17.62	6.96	3.30	17.17	5.20	3.30	16.32	4.95	3.36	15.64	4.66	3.46	14.99	4.34	3.58	14.35	4.01	3.70	13.70	3.71	3.82	13.05	3.42
	32°C	2.53	17.56	6.93	3.30	17.11	5.18	3.30	16.27	4.94	3.36	15.58	4.64	3.46	14.94	4.32	3.58	14.29	4.00	3.70	13.65	3.69	3.82	13.01	3.41
	31°C	2.53	17.50	6.91	3.30	17.05	5.16	3.30	16.21	4.92	3.36	15.53	4.63	3.46	14.89	4.30	3.58	14.24	3.98	3.70	13.60	3.68	3.82	12.96	3.39
	30°C	2.53	17.44	6.88	3.30	16.99	5.14	3.30	16.16	4.90	3.36	15.48	4.61	3.46	14.83	4.29	3.58	14.19	3.97	3.70	13.55	3.66	3.82	12.91	3.38
	29°C	2.53	17.38	6.86	3.31	16.93	5.12	3.30	16.10	4.88	3.36	15.42	4.59	3.46	14.78	4.27	3.58	14.14	3.95	3.70	13.50	3.65	3.82	12.86	3.37
	28°C	2.53	17.32	6.83	3.31	16.87	5.10	3.30	16.05	4.86	3.36	15.37	4.58	3.46	14.73	4.26	3.58	14.09	3.94	3.70	13.46	3.64	3.82	12.82	3.36
	27°C	2.53	17.26	6.81	3.31	16.82	5.09	3.30	15.99	4.85	3.36	15.32	4.56	3.46	14.68	4.24	3.58	14.04	3.92	3.70	13.41	3.62	3.82	12.77	3.34
	26°C	2.54	17.20	6.79	3.31	16.76	5.07	3.30	15.94	4.83	3.36	15.26	4.54	3.46	14.63	4.23	3.58	13.99	3.91	3.70	13.36	3.61	3.82	12.72	3.33
	25°C	2.54	17.14	6.76	3.31	16.70	5.05	3.30	15.88	4.81	3.36	15.21	4.53	3.46	14.58	4.21	3.58	13.95	3.89	3.70	13.31	3.60	3.82	12.68	3.32
	24°C	2.54	17.09	6.74	3.31	16.65	5.03	3.30	15.83	4.80	3.36	15.16	4.51	3.46	14.53	4.19	3.58	13.90	3.88	3.70	13.26	3.58	3.82	12.63	3.30
	23°C	2.54	17.03	6.71	3.31	16.59	5.01	3.30	15.78	4.78	3.36	15.11	4.49	3.46	14.48	4.18	3.58	13.85	3.86	3.70	13.22	3.57	3.82	12.59	3.29
	22°C	2.54	16.97	6.69	3.31	16.54	5.00	3.30	15.72	4.76	3.36	15.06	4.48	3.47	14.43	4.16	3.58	13.80	3.85	3.70	13.17	3.56	3.82	12.54	3.28
	21°C	2.54	16.91	6.66	3.31	16.48	4.98	3.30	15.67	4.74	3.36	15.01	4.46	3.47	14.38	4.15	3.59	13.75	3.84	3.71	13.12	3.54	3.82	12.50	3.27
	20°C	2.54	16.86	6.64	3.31	16.42	4.96	3.30	15.62	4.73	3.36	14.96	4.45	3.47	14.33	4.13	3.59	13.70	3.82	3.71	13.08	3.53	3.83	12.45	3.25
	19°C	2.57	16.80	6.54	3.32	16.37	4.93	3.31	15.57	4.70	3.39	14.90	4.40	3.50	14.28	4.08	3.62	13.66	3.77	3.74	13.03	3.49	3.86	12.41	3.22
	18°C	2.60	16.74	6.45	3.32	16.31	4.91	3.32	15.51	4.68	3.41	14.85	4.36	3.53	14.23	4.03	3.65	13.61	3.73	3.77	12.99	3.44	3.89	12.36	3.18
	17°C	2.63	16.69	6.35	3.33	16.26	4.88	3.32	15.46	4.66	3.43	14.80	4.31	3.56	14.18	3.98	3.68	13.56	3.68	3.80	12.94	3.40	3.92	12.32	3.14
	16°C	2.66	16.63	6.26	3.33	16.21	4.86	3.33	15.41	4.63	3.46	14.75	4.27	3.59	14.13	3.93	3.72	13.51	3.64	3.84	12.89	3.36	3.96	12.27	3.10
	15°C	2.69	16.58	6.17	3.34	16.15	4.83	3.33	15.36	4.61	3.48	14.70	4.23	3.63	14.09	3.88	3.75	13.47	3.59	3.87	12.85	3.32	3.99	12.23	3.07
	14°C	2.72	16.52	6.08	3.35	16.10	4.81	3.34	15.31	4.58	3.50	14.66	4.18	3.66	14.04	3.84	3.78	13.42	3.55	3.90	12.80	3.28	4.02	12.19	3.03
	13°C	2.75	16.47	6.00	3.35	16.05	4.79	3.35	15.26	4.56	3.53	14.61	4.14	3.69	13.99	3.79	3.81	13.37	3.51	3.93	12.76	3.24	4.06	12.14	2.99
	12°C	2.78	16.41	5.91	3.36	15.99	4.76	3.35	15.21	4.54	3.55	14.56	4.10	3.72	13.94	3.74	3.85	13.33	3.47	3.97	12.71	3.20	4.09	12.10	2.96
	11°C	3.12	16.41	5.26	3.62	16.06	4.44	3.65	15.33	4.20	3.88	14.68	3.78	4.07	14.07	3.45	4.19	13.46	3.21	4.32	12.84	2.98	4.44	12.23	2.76
	10°C	3.42	16.36	4.78	3.84	16.08	4.19	3.90	15.41	3.95	4.17	14.76	3.54	4.38	14.15	3.23	4.50	13.54	3.01	4.62	12.93	2.80	4.74	12.32	2.60
	9°C	3.77	16.35	4.34	4.10	16.15	3.94	4.20	15.53	3.70	4.51	14.89	3.30	4.72	14.28	3.02	4.85	13.67	2.82	4.97	13.06	2.63	5.09	12.45	2.45
	8°C	4.07	16.31	4.01	4.31	16.17	3.75	4.45	15.61	3.50	4.80	14.97	3.12	5.03	14.36	2.86	5.15	13.75	2.67	5.27	13.14	2.49	5.40	12.54	2.32
	7°C	4.55	16.44	3.62	4.71	16.38	3.48	4.89	15.77	3.23	5.19	15.17	2.92	5.47	14.56	2.66	5.61	13.95	2.49	5.76	13.34	2.32	5.87	12.74	2.17
	6°C	5.97	17.68	2.96	6.07	17.49	2.88	6.30	16.87	2.68	6.62	16.25	2.46	6.92	15.64	2.26	7.12	15.02	2.11	7.32	14.40	1.97	7.42	13.78	1.86
	5°C	8.44	19.88	2.35	8.49	19.58	2.31	8.77	18.95	2.16	9.11	18.32	2.01	9.42	17.69	1.88	9.67	17.07	1.76	9.93	16.44	1.66	10.03	15.81	1.58
	4°C	10.65	21.04	1.98	10.64	20.66	1.94	10.94	20.06	1.83	11.26	19.47	1.73	11.57	18.88	1.63	11.85	18.29	1.54	12.13	17.70	1.46	12.22	17.10	1.40
	3°C	11.79	21.38	1.81	11.76	20.93	1.78	12.06	20.37	1.69	12.37	19.80	1.60	12.67	19.23	1.52	12.97	18.67	1.44	13.26	18.10	1.37	13.34	17.54	1.31
	2°C	12.90	21.85	1.69	12.86	21.29	1.66	13.18	20.74	1.57	13.50	20.19	1.50	13.81	19.63	1.42	14.13	19.08	1.35	14.44	18.53	1.28	14.53	17.97	1.24
	1°C	12.91	21.80	1.69	12.87	21.26	1.65	13.19	20.71	1.57	13.50	20.16	1.49	13.81	19.61	1.42	14.13	19.07	1.35	14.44	18.52	1.28	14.53	17.97	1.24
	0°C	12.93	21.76	1.68	12.90	21.22	1.65	13.21	20.68	1.57	13.51	20.14	1.49	13.82	19.60	1.42	14.12	19.05	1.35	14.44	18.51	1.28	14.54	17.97	1.24
	-1°C	12.96	21.72	1.68	12.94	21.18	1.64	13.24	20.65	1.56	13.53	20.11	1.49	13.82	19.58	1.42	14.12	19.04	1.35	14.43	18.51	1.28	14.54	17.97	1.24
	-2°C	13.00	21.67	1.67	13.00	21.14	1.63	13.28	20.61	1.55	13.56	20.09	1.48	13.83	19.56	1.41	14.11	19.03	1.35	14.41	18.50	1.28	14.55	17.97	1.24
	-3°C	13.06	21.63	1.66	13.07	21.11	1.61	13.33	20.58	1.54	13.59	20.06	1.48	13.84	19.54	1.41	14.10	19.02	1.35	14.40	18.49	1.28	14.57	17.97	1.23
	-4°C	13.13	21.58	1.64	13.16	21.07	1.60	13.40	20.55	1.53	13.63	20.04	1.47	13.86	19.52	1.41	14.09	19.00	1.35	14.38	18.49	1.29	14.58	17.97	1.23
	-5°C	13.21	21.54	1.63	13.27	21.03	1.58	13.47	20.52	1.52	13.67	20.01	1.46	13.87	19.50	1.41	14.07	18.99	1.35	14.35	18.48	1.29	14.60	17.97	1.23
	-6°C	13.31	21.49	1.61	13.40	20.99	1.57	13.56	20.49	1.51	13.73	19.99	1.46	13.89	19.48	1.40	14.06	18.98	1.35	14.33	18.48	1.29	14.62	17.97	1.23
	-7°C	13.42	21.45	1.60	13.54	20.95	1.55	13.67	20.46	1.50	13.79	19.96	1.45	13.91	19.46	1.40	14.04	18.97	1.35	14.30	18.47	1.29	14.65	17.97	1.23
	-8°C	13.31	21.34	1.60	13.47	20.86	1.55	13.62	20.37	1.50	13.78	19.79	1.44	13.94	19.20	1.38	14.09	18.62	1.32	14.37	18.03	1.25	14.72	17.44	1.19
	-9°C	13.20	21.23	1.61	13.39	20.76	1.55	13.58	20.29	1.49	13.77	19.62	1.42	13.96	18.94	1.36	14.15	18.27	1.29	14.44	17.59	1.22	14.79	16.91	1.14
	-10°C	13.09	21.12	1.61	13.31	20.66	1.55	13.54	20.21	1.49	13.76	19.44	1.41	13.98	18.68	1.34	14.21	17.91	1.26	14.51	17.15	1.18	14.86	16.39	1.10
	-11°C	13.11	20.77	1.58	13.34	20.36	1.53	13.56	19.95	1.47	13.78	19.22	1.39	14.01	18.49	1.32	14.23	17.75	1.25	14.53	17.01	1.17	14.89	16.27	1.09
	-12°C	13.13	20.40	1.55	13.36	20.04	1.50	13.58	19.66	1.45	13.81	18.98	1.37	14.03	18.28	1.30	14.26	17.57	1.23	14.56	16.86	1.16	14.91	16.14	1.08
	-13°C	13.15	20.01	1.52	13.38	19.70	1.47	13.61	19.36	1.42	13.83	18.71	1.35	14.06	18.05	1.28	14.29	17.37	1.22	14.59	16.68	1.14	14.94	15.98	1.07
	-14°C	13.17	19.61	1.49	13.40	19.34	1.44	13.63	19.03	1.40	13.86	18.43	1.33	14.08	17.80	1.26	14.31	17.15	1.20	14.62	16.49	1.13	14.97	15.81	1.06
	-15°C	13.19	19.19	1.45	13.42	18.96	1.41	13.65	18.69	1.37	13.88	18.12	1.31	14.11	17.53	1.24	14.34	16.91	1.18	14.65	16.27	1.11	15.00	15.62	1.04
	-16°C	13.15	18.77	1.43	13.38	18.57	1.39	13.61	18.33	1.35	13.83	17.80	1.29	14.06	17.24	1.23	14.29	16.65	1.17	14.59	16.04	1.10	14.94	15.42	1.03
	-17°C	13.11	18.33	1.40	13.33	18.17	1.36	13.56	17.96	1.32	13.78	17.46	1.27	14.01	16.93	1.21	14.23	16.37	1.15	14.53	15.79	1.09	14.88	15.20	1.02
	-18°C	13.07	17.88	1.37	13.29	17.75	1.34	13.51	17.56	1.30	13.74	17.10	1.25	13.96	16.60	1.19	14.18	16.08	1.13	14.48	15.53	1.07	14.83	14.97	1.01
	-19°C	13.03	17.42	1.34	13.25	17.32	1.31	13.47	17.16	1.27	13.69	16.73	1.22	13.91	16.26	1.17	14.13	15.77	1.12	14.42	15.25	1.06	14.77	14.72	1.00
	-20°C	12.99	16.96	1.31	13.21	16.87	1.28	13.42	16.74	1.25	13.64	16.34	1.20	13.86	15.91	1.15	14.08	15.45	1.10	14.37	14.96	1.04	14.71	14.45	0.98
	-21°C	12.95	16.48	1.27	13.16	16.42	1.25	13.38	16.30	1.22	13.60	15.94	1.17	13.81	15.54	1.13	14.03	15.11	1.08	14.32	14.65	1.02	9.00	9.00	1.00
	-22°C	12.91	16.00	1.24	13.12	15.95	1.22	13.34	15.86	1.19	13.55	15.53	1.15	13.76	15.16	1.10	13.98	14.76	1.06	14.26	14.33	1.00	9.00	9.00	1.00
	-23°C	12.87	15.51	1.20	13.08	15.48	1.18	13.29	15.40	1.16	13.50	15.10	1.12	13.72	14.76	1.08	13.93	14.39	1.03	9.00	9.00	1.00	9.00	9.00	1.00
	-24°C	12.83	15.01	1.17	13.04	14.99	1.15	13.25	14.93	1.13	13.46	14.66	1.09	13.67	14.35	1.05	13.88	14.01	1.01	9.00	9.00	1.00	9.00	9.00	1.00
	-25°C	12.79	14.50	1.13	13.00	14.50	1.12	13.21	14.45	1.09	13.41	14.21	1.06	13.62	13.93	1.02	13.83	13.62	0.99	9.00	9.00	1.00	9.00	9.00	1.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

alféa excellia A.I. tri 16 / alféa excellia duo A.I. tri 16

Test conditions comply with EN 14825 with 9 kW electrical backup

Electrical backup tri (ref 074045) availiable in accessory.

Outdoor temperature	Starting temperature																							
	25°C			30°C			35°C			40°C			45°C			50°C			55°C			60°C		
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	Pabs	Pcal	COP
35°C	3.43	20.45	5.97	3.73	19.31	5.17	3.80	18.28	4.81	3.96	17.45	4.40	4.17	16.67	4.00	4.41	15.89	3.61	4.64	15.11	3.26	4.87	14.33	2.94
34°C	3.42	20.41	5.96	3.73	19.27	5.17	3.80	18.24	4.80	3.96	17.41	4.40	4.17	16.64	3.99	4.40	15.86	3.60	4.63	15.08	3.25	4.87	14.30	2.94
33°C	3.42	20.36	5.95	3.72	19.23	5.16	3.80	18.20	4.79	3.95	17.38	4.39	4.17	16.60	3.98	4.40	15.82	3.60	4.63	15.04	3.25	4.86	14.26	2.93
32°C	3.42	20.32	5.95	3.72	19.19	5.16	3.79	18.17	4.79	3.95	17.34	4.39	4.16	16.56	3.98	4.39	15.78	3.59	4.62	15.01	3.25	4.86	14.23	2.93
31°C	3.41	20.28	5.94	3.72	19.15	5.15	3.79	18.13	4.78	3.95	17.30	4.38	4.16	16.53	3.97	4.39	15.75	3.59	4.62	14.97	3.24	4.85	14.20	2.93
30°C	3.41	20.23	5.93	3.71	19.11	5.14	3.79	18.09	4.78	3.94	17.26	4.38	4.15	16.49	3.97	4.38	15.71	3.58	4.62	14.94	3.24	4.85	14.16	2.92
29°C	3.41	20.19	5.93	3.71	19.07	5.14	3.78	18.05	4.77	3.94	17.23	4.37	4.15	16.45	3.96	4.38	15.68	3.58	4.61	14.90	3.23	4.84	14.13	2.92
28°C	3.40	20.15	5.92	3.71	19.03	5.13	3.78	18.01	4.77	3.94	17.19	4.37	4.15	16.42	3.96	4.38	15.64	3.57	4.61	14.87	3.23	4.84	14.09	2.91
27°C	3.40	20.10	5.91	3.70	18.99	5.13	3.78	17.97	4.76	3.93	17.15	4.36	4.14	16.38	3.95	4.37	15.61	3.57	4.60	14.83	3.22	4.83	14.06	2.91
26°C	3.40	20.06	5.90	3.70	18.95	5.12	3.77	17.94	4.75	3.93	17.12	4.36	4.14	16.34	3.95	4.37	15.57	3.56	4.60	14.80	3.22	4.83	14.03	2.90
25°C	3.39	20.02	5.90	3.70	18.91	5.11	3.77	17.90	4.75	3.93	17.08	4.35	4.13	16.31	3.94	4.36	15.54	3.56	4.59	14.77	3.21	4.82	13.99	2.90
24°C	3.39	19.98	5.89	3.69	18.87	5.11	3.77	17.86	4.74	3.92	17.04	4.35	4.13	16.27	3.94	4.36	15.50	3.55	4.59	14.73	3.21	4.82	13.96	2.90
23°C	3.39	19.93	5.88	3.69	18.83	5.10	3.76	17.82	4.74	3.92	17.01	4.34	4.13	16.24	3.93	4.36	15.47	3.55	4.59	14.70	3.20	4.82	13.93	2.89
22°C	3.39	19.89	5.88	3.69	18.79	5.09	3.76	17.78	4.73	3.92	16.97	4.33	4.12	16.20	3.93	4.35	15.43	3.55	4.58	14.66	3.20	4.81	13.89	2.89
21°C	3.38	19.85	5.87	3.68	18.75	5.09	3.76	17.75	4.73	3.91	16.93	4.33	4.12	16.16	3.92	4.35	15.40	3.54	4.58	14.63	3.20	4.81	13.86	2.88
20°C	3.38	19.81	5.86	3.68	18.71	5.08	3.75	17.71	4.72	3.91	16.90	4.32	4.12	16.13	3.92	4.34	15.36	3.54	4.57	14.60	3.19	4.80	13.83	2.88
19°C	3.38	19.77	5.85	3.70	18.67	5.05	3.77	17.67	4.69	3.95	16.86	4.27	4.17	16.09	3.86	4.40	15.33	3.49	4.62	14.56	3.15	4.85	13.80	2.84
18°C	3.38	19.72	5.84	3.72	18.63	5.01	3.79	17.63	4.65	3.99	16.82	4.22	4.22	16.06	3.81	4.45	15.29	3.44	4.68	14.53	3.11	4.90	13.76	2.81
17°C	3.37	19.68	5.83	3.74	18.59	4.98	3.81	17.60	4.62	4.03	16.79	4.17	4.27	16.02	3.76	4.50	15.26	3.39	4.73	14.49	3.07	4.96	13.73	2.77
16°C	3.37	19.64	5.82	3.75	18.55	4.94	3.83	17.56	4.59	4.07	16.75	4.12	4.32	15.99	3.70	4.55	15.22	3.35	4.78	14.46	3.03	5.01	13.70	2.74
15°C	3.37	19.60	5.81	3.77	18.51	4.91	3.84	17.52	4.56	4.11	16.72	4.07	4.37	15.95	3.65	4.60	15.19	3.30	4.83	14.43	2.99	5.06	13.67	2.70
14°C	3.37	19.56	5.81	3.79	18.47	4.87	3.86	17.49	4.53	4.15	16.68	4.02	4.42	15.92	3.60	4.65	15.16	3.26	4.88	14.39	2.95	5.11	13.63	2.67
13°C	3.37	19.52	5.80	3.81	18.43	4.84	3.88	17.45	4.49	4.19	16.64	3.98	4.47	15.88	3.55	4.70	15.12	3.22	4.93	14.36	2.91	5.16	13.60	2.63
12°C	3.37	19.48	5.79	3.83	18.39	4.80	3.90	17.41	4.46	4.23	16.61	3.93	4.52	15.85	3.51	4.75	15.09	3.17	4.98	14.33	2.88	5.21	13.57	2.60
11°C	3.68	19.31	5.25	4.09	18.42	4.51	4.21	17.51	4.16	4.58	16.71	3.65	4.89	15.95	3.26	5.12	15.19	2.97	5.35	14.43	2.70	5.58	13.67	2.45
10°C	3.95	19.10	4.84	4.30	18.41	4.28	4.47	17.57	3.93	4.88	16.77	3.44	5.21	16.01	3.07	5.44	15.25	2.80	5.67	14.49	2.55	5.90	13.73	2.33
9°C	4.26	18.93	4.44	4.55	18.44	4.05	4.77	17.67	3.70	5.23	16.87	3.23	5.58	16.11	2.89	5.81	15.35	2.64	6.04	14.59	2.42	6.27	13.84	2.21
8°C	4.53	18.72	4.13	4.76	18.42	3.87	5.03	17.73	3.52	5.53	16.92	3.06	5.90	16.17	2.74	6.13	15.41	2.51	6.36	14.65	2.30	6.59	13.90	2.11
7°C	4.98	18.69	3.76	5.16	18.59	3.61	5.47	17.83	3.26	5.95	17.07	2.87	6.38	16.32	2.56	6.62	15.56	2.35	6.86	14.81	2.16	7.06	14.05	1.99
6°C	6.39	19.35	3.03	6.59	19.14	2.90	6.95	18.44	2.65	7.45	17.74	2.38	7.90	17.04	2.16	8.18	16.34	2.00	8.47	15.63	1.85	8.61	14.93	1.74
5°C	8.65	20.31	2.35	8.86	20.03	2.26	9.21	19.41	2.11	9.65	18.79	1.95	10.06	18.17	1.81	10.36	17.55	1.69	10.65	16.93	1.59	10.74	16.31	1.52
4°C	10.92	21.60	1.98	11.14	21.26	1.91	11.45	20.70	1.81	11.84	20.14	1.70	12.21	19.59	1.60	12.52	19.03	1.52	12.82	18.47	1.44	12.87	17.91	1.39
3°C	12.16	22.29	1.83	12.39	21.90	1.77	12.68	21.38	1.69	13.03	20.86	1.60	13.38	20.34	1.52	13.70	19.82	1.45	14.02	19.30	1.38	14.04	18.78	1.34
2°C	13.23	22.70	1.72	13.47	22.23	1.65	13.76	21.76	1.58	14.10	21.29	1.51	14.45	20.82	1.44	14.78	20.35	1.38	15.11	19.88	1.32	15.13	19.41	1.28
1°C	13.23	22.69	1.72	13.47	22.22	1.65	13.77	21.75	1.58	14.10	21.28	1.51	14.46	20.80	1.44	14.79	20.33	1.37	15.11	19.86	1.31	15.13	19.39	1.28
0°C	13.24	22.69	1.71	13.49	22.22	1.65	13.78	21.74	1.58	14.12	21.26	1.51	14.47	20.79	1.44	14.80	20.31	1.37	15.12	19.83	1.31	15.13	19.36	1.28
-1°C	13.26	22.69	1.71	13.51	22.21	1.64	13.80	21.73	1.57	14.14	21.25	1.50	14.49	20.77	1.43	14.82	20.29	1.37	15.12	19.81	1.31	15.13	19.33	1.28
-2°C	13.29	22.69	1.71	13.54	22.21	1.64	13.84	21.72	1.57	14.17	21.24	1.50	14.52	20.76	1.43	14.85	20.27	1.37	15.13	19.79	1.31	15.14	19.30	1.28
-3°C	13.32	22.69	1.70	13.58	22.20	1.63	13.88	21.71	1.56	14.21	21.23	1.49	14.56	20.74	1.42	14.88	20.25	1.36	15.15	19.76	1.30	15.14	19.28	1.27
-4°C	13.36	22.69	1.70	13.63	22.20	1.63	13.94	21.71	1.56	14.26	21.21	1.49	14.60	20.72	1.42	14.93	20.23	1.36	15.16	19.74	1.30	15.15	19.25	1.27
-5°C	13.41	22.69	1.69	13.69	22.19	1.62	14.00	21.70	1.55	14.32	21.20	1.48	14.66	20.71	1.41	14.98	20.21	1.35	15.18	19.72	1.30	15.16	19.22	1.27
-6°C	13.46	22.69	1.69	13.76	22.19	1.61	14.07	21.69	1.54	14.39	21.19	1.47	14.72	20.69	1.41	15.04	20.19	1.34	15.19	19.69	1.30	15.18	19.19	1.26
-7°C	13.52	22.69	1.68	13.84	22.18	1.60	14.16	21.68	1.53	14.47	21.18	1.46	14.79	20.67	1.40	15.11	20.17	1.34	15.22	19.67	1.29	15.19	19.17	1.26
-8°C	13.58	22.55	1.66	13.88	22.05	1.59	14.19	21.55	1.52	14.49	20.99	1.45	14.80	20.43	1.38	15.11	19.87	1.32	15.21	19.32	1.27	15.18	18.76	1.24
-9°C	13.63	22.42	1.64	13.93	21.92	1.57	14.22	21.42	1.51	14.51	20.81	1.43	14.81	20.19	1.36	15.10	19.58	1.30	15.21	18.96	1.25	15.18	18.35	1.21
-10°C	13.68	22.29	1.63	13.97	21.79	1.56	14.25	21.29	1.49	14.54	20.62	1.42	14.82	19.95	1.35	15.10	19.28	1.28	15.20	18.61	1.22	15.17	17.94	1.18
-11°C	13.71	21.90	1.60	13.99	21.46	1.53	14.28	21.00	1.47	14.56	20.37	1.40	14.85	19.74	1.33	15.13	19.10	1.26	15.23	18.45	1.21	15.20	17.80	1.17
-12°C	13.73	21.49	1.57	14.02	21.10	1.51	14.30	20.69	1.45	14.59	20.10	1.38	14.88	19.50	1.31	15.16	18.89	1.25	15.26	18.26	1.20	15.23	17.64	1.16
-13°C	13.76	21.07	1.53	14.04	20.73	1.48	14.33	20.36	1.42	14.62	19.81	1.35	14.91	19.24	1.29	15.20	18.65	1.23	15.29	18.06	1.18	15.27	17.45	1.14
-14°C	13.78	20.63	1.50	14.07	20.34	1.45	14.36	20.00	1.39	14.65	19.49	1.33	14.94	18.95	1.27	15.23	18.40	1.21	15.32	17.83	1.16	15.30	17.25	1.13
-15°C	13.80	20.17	1.46	14.09	19.92	1.41	14.38	19.63	1.36	14.68	19.15	1.30	14.97	18.65	1.25	15.26	18.12	1.19	15.36	17.57	1.14	15.33	17.02	1.11
-16°C	13.76	19.71	1.43	14.04	19.50	1.39	14.33	19.23	1.34	14.62	18.79	1.29	14.91	18.32	1.23	15.19	17.82	1.17	15.29	17.30	1.13	15.27	16.77	1.10
-17°C	13.71	19.23	1.40	13.99	19.05	1.36	14.28	18.82	1.32	14.56	18.41	1.26	14.85	17.97	1.21	15.13	17.50	1.16	15.23	17.01	1.12	15.20	16.51	1.09
-18°C	13.66	18.73	1.37	13.94	18.59	1.33	14.22	18.39	1.29	14.51	18.02	1.24	14.79	17.60	1.19	15.07	17.16	1.14	15.17	16.70	1.10	15.14	16.22	1.07
-19°C	13.61	18.23	1.34	13.89	18.12	1.30	14.17	17.95	1.27	14.45	17.60	1.22	14.73	17.22	1.17	15.01	16.81	1.12	15.11	16.37	1.08	15.08	15.92	1.06
-20°C	13.57	17.72	1.31	13.84	17.63	1.27	14.12	17.48	1.24	14.40	17.17	1.19	14.67	16.82	1.15	14.95	16.43	1.10	15.05	16.03	1.07	15.02	15.60	1.04
-21°C	13.52	17.20	1.27	13.80	17.13	1.24	14.07	17.01	1.21	14.34	16.72	1.17	14.62	16.40	1.12	14.89	16.04	1.08	14.98	15.67	1.05	9.00	9.00	1.00
-22°C	13.48	16.67	1.24	13.75	16.62	1.21	14.02	16.52	1.18	14.29	16.26	1.14	14.56	15.97	1.10	14.83	15.64	1.05	14.92	15.29	1.02	9.00	9.00	1.00
-23°C	13.43	16.13	1.20	13.70	16.10	1.18	13.97	16.02	1.15	14.24	15.79	1.11	14.51	15.52	1.07	14.77	15.22	1.03	9.00	9.00	1.00	9.00	9.00	1.00
-24°C	13.39	15.59	1.16	13.65	15.57	1.14	13.92	15.50	1.11	14.18	15.30	1.08	14.45	15.06	1.04	14.72	14.78	1.00	9.00	9.00	1.00	9.00	9.00	1.00
-25°C	13.34	15.03	1.13	13.61	15.03	1.10	13.87	14.98	1.08	14.13	14.80	1.05	14.40	14.58	1.01	14.66	14.33	0.98	9.00	9.00	1.00	9.00	9.00	1.00

HC : Heating capacity (kW)
IP : Input power (kW)
COP : Coefficient of performance

2.4 Nominal performances tables in Cooling mode

Test conditions comply with EN 14-511.

2.4.1 alféa excellia A.I. single phase models

alféa excellia A.I. 11 /alféa excellia duo A.I. 11

Outdoor temperature	Starting temperature 7°C			9°C			12°C			18°C			20°C			21°C			22°C		
	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER
43°C	3,34	6,95	2,08	3,35	7,45	2,23	3,36	8,23	2,45	3,38	9,71	2,87	3,30	9,99	3,03	3,26	10,13	3,11	3,22	10,27	3,19
42°C	3,33	7,22	2,17	3,34	7,73	2,31	3,35	8,56	2,56	3,22	9,80	3,04	3,15	10,04	3,19	3,12	10,15	3,26	3,08	10,27	3,33
41°C	3,33	7,49	2,25	3,34	8,02	2,40	3,34	8,90	2,66	3,07	9,80	3,19	3,01	10,04	3,34	2,97	10,15	3,42	2,94	10,27	3,49
40°C	3,32	7,75	2,33	3,33	8,29	2,49	3,27	8,99	2,75	2,93	9,80	3,34	2,87	10,04	3,50	2,83	10,15	3,58	2,80	10,27	3,67
39°C	3,32	8,02	2,42	3,33	8,57	2,58	3,18	9,09	2,86	2,81	9,80	3,49	2,74	10,04	3,67	2,70	10,15	3,76	2,66	10,27	3,86
38°C	3,31	8,29	2,50	3,26	8,67	2,66	3,08	9,09	2,95	2,68	9,80	3,66	2,60	10,04	3,86	2,56	10,15	3,97	2,52	10,27	4,08
37°C	3,33	8,50	2,55	3,19	8,73	2,74	2,97	9,09	3,06	2,58	9,80	3,80	2,51	10,04	4,01	2,47	10,15	4,11	2,43	10,27	4,23
36°C	3,22	8,50	2,64	3,07	8,73	2,84	2,85	9,09	3,19	2,48	9,80	3,95	2,41	10,04	4,16	2,38	10,15	4,27	2,34	10,27	4,39
35°C	3,11	8,50	2,73	2,96	8,74	2,95	2,74	9,09	3,32	2,38	9,80	4,12	2,32	10,04	4,34	2,28	10,15	4,45	2,25	10,27	4,57
34°C	3,00	8,50	2,83	2,86	8,73	3,05	2,64	9,09	3,44	2,29	9,80	4,28	2,23	10,04	4,51	2,19	10,15	4,63	2,16	10,27	4,75
33°C	2,90	8,50	2,93	2,76	8,73	3,16	2,55	9,09	3,56	2,19	9,80	4,47	2,14	10,04	4,70	2,11	10,15	4,82	2,08	10,27	4,94
32°C	2,79	8,50	3,05	2,66	8,73	3,29	2,46	9,09	3,70	2,10	9,80	4,67	2,05	10,04	4,91	2,02	10,15	5,03	1,99	10,27	5,16
31°C	2,68	8,50	3,17	2,55	8,73	3,42	2,36	9,09	3,85	2,01	9,80	4,88	1,96	10,04	5,12	1,94	10,15	5,25	1,91	10,27	5,38
30°C	2,57	8,50	3,31	2,45	8,73	3,56	2,26	9,09	4,02	1,91	9,80	5,13	1,87	10,04	5,38	1,84	10,15	5,51	1,82	10,27	5,64
29°C	2,47	8,50	3,44	2,35	8,73	3,72	2,17	9,09	4,19	1,82	9,80	5,38	1,78	10,04	5,65	1,75	10,15	5,79	1,73	10,27	5,94
28°C	2,36	8,50	3,60	2,25	8,73	3,89	2,08	9,09	4,38	1,72	9,80	5,70	1,69	10,04	5,96	1,67	10,15	6,09	1,65	10,27	6,22
27°C	2,25	8,50	3,78	2,14	8,74	4,08	1,98	9,09	4,58	1,63	9,80	6,01	1,60	10,04	6,29	1,58	10,15	6,44	1,56	10,27	6,59
26°C	2,14	8,50	3,97	2,04	8,73	4,28	1,89	9,09	4,81	1,54	9,80	6,36	1,51	10,04	6,67	1,49	10,15	6,83	1,47	10,27	6,99
25°C	2,04	8,50	4,17	1,94	8,73	4,50	1,80	9,09	5,06	1,44	9,80	6,81	1,42	10,04	7,09	1,40	10,15	7,24	1,39	10,27	7,39
24°C	2,47	8,50	3,44	2,42	8,73	3,61	2,56	9,09	3,55	2,62	9,80	3,74	2,50	10,04	4,01	2,44	10,15	4,16	2,38	10,27	4,32
23°C	2,37	8,50	3,59	2,33	8,73	3,75	2,47	9,09	3,68	2,51	9,80	3,90	2,40	10,04	4,18	2,35	10,15	4,33	2,29	10,27	4,48
22°C	2,27	8,50	3,74	2,24	8,74	3,91	2,37	9,09	3,83	2,40	9,80	4,08	2,30	10,04	4,36	2,25	10,15	4,51	2,20	10,27	4,67
21°C	2,17	8,50	3,92	2,15	8,73	4,06	2,28	9,09	3,99	2,29	9,80	4,28	2,20	10,04	4,56	2,16	10,15	4,71	2,11	10,27	4,87
20°C	2,07	8,50	4,11	2,06	8,74	4,25	2,18	9,09	4,16	2,18	9,80	4,50	2,10	10,04	4,78	2,06	10,15	4,93	2,02	10,27	5,09

alféa excellia A.I. 14 /alféa excellia duo A.I. 14

Outdoor temperature	Starting temperature 7°C			9°C			12°C			18°C			20°C			21°C			22°C		
	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER
43°C	3,37	6,95	2,06	3,38	7,45	2,21	3,39	8,23	2,42	3,42	9,71	2,84	3,43	10,21	2,98	3,43	10,46	3,05	3,43	10,71	3,12
42°C	3,36	7,22	2,15	3,37	7,73	2,29	3,39	8,53	2,51	3,43	10,07	2,94	3,43	10,59	3,09	3,43	10,84	3,16	3,43	11,10	3,24
41°C	3,35	7,49	2,24	3,36	8,02	2,39	3,39	8,84	2,61	3,43	10,43	3,04	3,44	10,97	3,19	3,44	11,23	3,27	3,44	11,50	3,34
40°C	3,35	7,75	2,31	3,36	8,30	2,47	3,39	9,14	2,70	3,44	10,79	3,14	3,44	11,34	3,30	3,44	11,62	3,38	3,44	11,89	3,46
39°C	3,34	8,02	2,40	3,35	8,59	2,56	3,39	9,45	2,79	3,44	11,15	3,24	3,45	11,72	3,40	3,45	12,01	3,48	3,45	12,29	3,56
38°C	3,33	8,29	2,49	3,35	8,88	2,65	3,39	9,75	2,88	3,45	11,51	3,34	3,45	12,10	3,51	3,45	12,39	3,59	3,45	12,68	3,68
37°C	3,57	9,00	2,52	3,60	9,63	2,68	3,65	10,59	2,90	3,63	12,50	3,44	3,69	13,14	3,56	3,71	13,45	3,62	3,74	13,77	3,68
36°C	3,46	9,00	2,60	3,48	9,63	2,77	3,52	10,59	3,01	3,51	12,50	3,56	3,56	13,14	3,69	3,58	13,45	3,76	3,60	13,77	3,83
35°C	3,34	9,00	2,69	3,36	9,63	2,87	3,40	10,59	3,12	3,38	12,50	3,70	3,42	13,14	3,84	3,44	13,45	3,91	3,46	13,77	3,98
34°C	3,23	9,00	2,79	3,24	9,63	2,97	3,27	10,59	3,24	3,25	12,50	3,85	3,29	13,14	4,00	3,30	13,45	4,07	3,32	13,77	4,15
33°C	3,11	9,00	2,89	3,12	9,63	3,08	3,15	10,59	3,36	3,13	12,50	3,99	3,16	13,14	4,16	3,18	13,45	4,24	3,19	13,77	4,32
32°C	3,00	9,00	3,00	3,01	9,63	3,20	3,02	10,59	3,50	3,00	12,50	4,17	3,03	13,14	4,34	3,04	13,45	4,43	3,05	13,77	4,51
31°C	2,88	9,00	3,13	2,89	9,63	3,34	2,90	10,59	3,66	2,87	12,50	4,36	2,89	13,14	4,54	2,90	13,45	4,64	2,91	13,77	4,73
30°C	2,77	9,00	3,25	2,77	9,63	3,48	2,77	10,59	3,82	2,75	12,50	4,55	2,76	13,14	4,76	2,77	13,45	4,87	2,77	13,77	4,97
29°C	2,65	9,00	3,40	2,65	9,63	3,64	2,65	10,59	4,00	2,62	12,50	4,77	2,63	13,14	4,99	2,64	13,45	5,11	2,64	13,77	5,22
28°C	2,54	9,00	3,54	2,53	9,63	3,80	2,52	10,59	4,20	2,49	12,50	5,02	2,50	13,14	5,26	2,50	13,45	5,39	2,50	13,77	5,51
27°C	2,42	9,00	3,72	2,41	9,63	3,99	2,40	10,59	4,42	2,37	12,50	5,29	2,36	13,14	5,56	2,36	13,45	5,70	2,36	13,77	5,83
26°C	2,31	9,00	3,90	2,30	9,63	4,19	2,27	10,59	4,67	2,24	12,50	5,58	2,23	13,14	5,89	2,23	13,45	6,05	2,22	13,77	6,20
25°C	2,19	9,00	4,11	2,18	9,63	4,43	2,15	10,59	4,93	2,11	12,50	5,92	2,10	13,14	6,25	2,10	13,45	6,42	2,09	13,77	6,59
24°C	2,71	9,00	3,32	2,76	9,63	3,49	2,86	10,59	3,70	3,12	12,50	4,01	3,18	13,14	4,14	3,20	13,45	4,20	3,23	13,77	4,26
23°C	2,60	9,00	3,46	2,66	9,63	3,62	2,76	10,59	3,83	2,99	12,50	4,18	3,05	13,14	4,31	3,08	13,45	4,37	3,11	13,77	4,43
22°C	2,49	9,00	3,61	2,56	9,63	3,77	2,66	10,59	3,99	2,86	12,50	4,37	2,93	13,14	4,49	2,96	13,45	4,55	2,99	13,77	4,61
21°C	2,38	9,00	3,78	2,45	9,63	3,93	2,56	10,59	4,14	2,73	12,50	4,58	2,80	13,14	4,69	2,84	13,45	4,75	2,87	13,77	4,80
20°C	2,27	9,00	3,96	2,35	9,63	4,10	2,45	10,59	4,32	2,60	12,50	4,81	2,68	13,14	4,91	2,71	13,45	4,96	2,75	13,77	5,01

CC : Cooling capacity (kW)
IP : Input power (kW)
EER : Energy Efficiency Rating

2.4.2 alféa excellia A.I. 3-phases models

alféa excellia A.I. tri 11 / alféa excellia duo A.I. tri 11

Outdoor temperature	Starting temperature																				
	7°C			9°C			12°C			18°C			20°C			21°C			22°C		
	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER
43°C	4,23	7,89	1,86	4,26	8,45	1,98	4,10	9,05	2,21	3,59	9,80	2,73	3,42	10,04	2,94	3,33	10,15	3,05	3,25	10,27	3,16
42°C	4,19	8,09	1,93	4,16	8,54	2,06	3,97	9,06	2,28	3,46	9,80	2,83	3,30	10,04	3,05	3,21	10,15	3,16	3,13	10,27	3,28
41°C	4,14	8,30	2,00	4,04	8,64	2,14	3,82	9,08	2,37	3,33	9,80	2,94	3,17	10,04	3,17	3,09	10,15	3,29	3,01	10,27	3,41
40°C	4,09	8,50	2,08	3,93	8,73	2,22	3,69	9,09	2,47	3,20	9,80	3,06	3,04	10,04	3,30	2,96	10,15	3,43	2,88	10,27	3,56
39°C	3,95	8,50	2,15	3,80	8,73	2,30	3,55	9,09	2,56	3,08	9,80	3,18	2,92	10,04	3,44	2,84	10,15	3,57	2,76	10,27	3,72
38°C	3,82	8,50	2,23	3,66	8,73	2,39	3,42	9,09	2,66	2,95	9,80	3,32	2,79	10,04	3,60	2,71	10,15	3,75	2,63	10,27	3,90
37°C	3,68	8,50	2,31	3,52	8,73	2,48	3,28	9,09	2,77	2,82	9,80	3,48	2,66	10,04	3,77	2,58	10,15	3,94	2,50	10,27	4,11
36°C	3,54	8,50	2,40	3,39	8,73	2,58	3,15	9,09	2,89	2,69	9,80	3,64	2,54	10,04	3,96	2,46	10,15	4,13	2,38	10,27	4,32
35°C	3,41	8,50	2,50	3,25	8,73	2,69	3,01	9,09	3,02	2,57	9,80	3,82	2,41	10,04	4,17	2,33	10,15	4,36	2,25	10,27	4,56
34°C	3,30	8,50	2,58	3,15	8,73	2,78	2,91	9,09	3,12	2,47	9,80	3,97	2,32	10,04	4,33	2,24	10,15	4,54	2,16	10,27	4,75
33°C	3,19	8,50	2,66	3,04	8,73	2,87	2,82	9,09	3,23	2,38	9,80	4,12	2,23	10,04	4,51	2,15	10,15	4,73	2,07	10,27	4,96
32°C	3,09	8,50	2,75	2,94	8,73	2,97	2,72	9,09	3,35	2,28	9,80	4,30	2,14	10,04	4,70	2,06	10,15	4,92	1,99	10,27	5,16
31°C	2,98	8,50	2,85	2,84	8,73	3,08	2,62	9,09	3,47	2,19	9,80	4,47	2,05	10,04	4,91	1,97	10,15	5,15	1,90	10,27	5,41
30°C	2,88	8,50	2,95	2,74	8,73	3,19	2,52	9,09	3,60	2,10	9,80	4,67	1,96	10,04	5,13	1,88	10,15	5,39	1,81	10,27	5,67
29°C	2,77	8,50	3,07	2,63	8,73	3,32	2,42	9,09	3,76	2,00	9,80	4,90	1,86	10,04	5,40	1,79	10,15	5,67	1,72	10,27	5,97
28°C	2,67	8,50	3,18	2,53	8,73	3,45	2,32	9,09	3,92	1,91	9,80	5,13	1,77	10,04	5,67	1,70	10,15	5,97	1,63	10,27	6,30
27°C	2,56	8,50	3,32	2,43	8,73	3,60	2,22	9,09	4,09	1,82	9,80	5,40	1,68	10,04	5,97	1,61	10,15	6,30	1,55	10,27	6,65
26°C	2,46	8,50	3,46	2,33	8,73	3,75	2,13	9,09	4,27	1,72	9,80	5,70	1,59	10,04	6,31	1,53	10,15	6,66	1,46	10,27	7,03
25°C	2,35	8,50	3,62	2,22	8,73	3,93	2,03	9,09	4,49	1,63	9,80	6,01	1,50	10,04	6,69	1,44	10,15	7,07	1,37	10,27	7,50
24°C	2,72	8,50	3,13	2,57	8,73	3,40	2,28	9,09	3,99	1,95	9,80	5,03	1,95	10,04	5,16	1,94	10,15	5,23	1,94	10,27	5,29
23°C	2,62	8,50	3,24	2,47	8,73	3,54	2,21	9,09	4,11	1,94	9,80	5,06	1,94	10,04	5,19	1,93	10,15	5,25	1,93	10,27	5,32
22°C	2,52	8,50	3,37	2,37	8,73	3,68	2,15	9,09	4,23	1,93	9,80	5,08	1,93	10,04	5,21	1,92	10,15	5,28	1,92	10,27	5,35
21°C	2,41	8,50	3,53	2,28	8,73	3,84	2,08	9,09	4,36	1,92	9,80	5,10	1,92	10,04	5,24	1,91	10,15	5,31	1,91	10,27	5,38
20°C	2,31	8,50	3,69	2,18	8,73	4,00	2,02	9,09	4,49	1,91	9,80	5,13	1,91	10,04	5,27	1,90	10,15	5,33	1,90	10,27	5,40

alféa excellia A.I. tri 14 / alféa excellia duo A.I. tri 14

Outdoor temperature	Starting temperature																				
	7°C			9°C			12°C			18°C			20°C			21°C			22°C		
	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER
43°C	4,25	7,90	1,86	4,27	8,46	1,98	4,29	9,27	2,16	4,33	11,09	2,56	4,35	11,65	2,68	4,36	11,93	2,74	4,37	12,21	2,79
42°C	4,24	8,14	1,92	4,26	8,73	2,05	4,28	9,58	2,24	4,32	11,42	2,64	4,34	12,01	2,77	4,34	12,30	2,83	4,35	12,59	2,89
41°C	4,23	8,38	1,98	4,25	8,99	2,11	4,27	9,88	2,32	4,30	11,76	2,73	4,32	12,37	2,87	4,32	12,67	2,93	4,33	12,97	3,00
40°C	4,22	8,62	2,04	4,24	9,25	2,18	4,25	10,20	2,40	4,28	12,09	2,82	4,30	12,72	2,96	4,30	13,04	3,03	4,31	13,35	3,10
39°C	4,29	9,00	2,10	4,32	9,63	2,23	4,35	10,59	2,44	4,31	12,50	2,90	4,29	13,14	3,07	4,27	13,45	3,15	4,26	13,77	3,23
38°C	4,13	9,00	2,18	4,15	9,63	2,32	4,15	10,59	2,55	4,14	12,50	3,02	4,12	13,14	3,19	4,12	13,45	3,27	4,11	13,77	3,35
37°C	3,98	9,00	2,26	3,97	9,63	2,43	3,95	10,59	2,68	3,96	12,50	3,16	3,96	13,14	3,32	3,96	13,45	3,40	3,96	13,77	3,48
36°C	3,82	9,00	2,36	3,79	9,63	2,54	3,76	10,59	2,82	3,79	12,50	3,30	3,80	13,14	3,46	3,81	13,45	3,54	3,81	13,77	3,61
35°C	3,66	9,00	2,46	3,60	9,63	2,67	3,56	10,59	2,98	3,61	12,50	3,46	3,64	13,14	3,61	3,65	13,45	3,68	3,67	13,77	3,76
34°C	3,54	9,00	2,54	3,49	9,63	2,76	3,45	10,59	3,07	3,49	12,50	3,58	3,51	13,14	3,75	3,51	13,45	3,83	3,52	13,77	3,91
33°C	3,42	9,00	2,63	3,37	9,63	2,86	3,34	10,59	3,17	3,37	12,50	3,71	3,38	13,14	3,89	3,38	13,45	3,98	3,38	13,77	4,07
32°C	3,30	9,00	2,73	3,26	9,63	2,96	3,23	10,59	3,28	3,25	12,50	3,85	3,25	13,14	4,05	3,24	13,45	4,15	3,24	13,77	4,25
31°C	3,18	9,00	2,83	3,15	9,63	3,06	3,12	10,59	3,40	3,13	12,50	3,99	3,12	13,14	4,22	3,11	13,45	4,33	3,10	13,77	4,44
30°C	3,06	9,00	2,94	3,03	9,63	3,18	3,00	10,59	3,53	3,01	12,50	4,15	2,99	13,14	4,40	2,97	13,45	4,53	2,96	13,77	4,65
29°C	2,94	9,00	3,06	2,91	9,63	3,31	2,89	10,59	3,66	2,89	12,50	4,33	2,86	13,14	4,60	2,84	13,45	4,74	2,82	13,77	4,88
28°C	2,82	9,00	3,19	2,80	9,63	3,44	2,78	10,59	3,80	2,77	12,50	4,51	2,73	13,14	4,82	2,70	13,45	4,98	2,68	13,77	5,14
27°C	2,70	9,00	3,34	2,68	9,63	3,59	2,67	10,59	3,97	2,65	12,50	4,72	2,59	13,14	5,06	2,57	13,45	5,24	2,54	13,77	5,42
26°C	2,57	9,00	3,50	2,57	9,63	3,75	2,56	10,59	4,13	2,53	12,50	4,94	2,47	13,14	5,33	2,43	13,45	5,53	2,40	13,77	5,74
25°C	2,45	9,00	3,67	2,46	9,63	3,92	2,45	10,59	4,33	2,41	12,50	5,19	2,34	13,14	5,63	2,30	13,45	5,86	2,26	13,77	6,09
24°C	2,98	9,00	3,02	3,07	9,63	3,13	3,23	10,59	3,28	3,29	12,50	3,80	3,32	13,14	3,96	3,33	13,45	4,04	3,34	13,77	4,12
23°C	2,87	9,00	3,13	2,97	9,63	3,24	3,13	10,59	3,39	3,18	12,50	3,93	3,21	13,14	4,10	3,22	13,45	4,18	3,23	13,77	4,26
22°C	2,76	9,00	3,26	2,87	9,63	3,36	3,02	10,59	3,51	3,08	12,50	4,06	3,10	13,14	4,24	3,11	13,45	4,33	3,12	13,77	4,41
21°C	2,65	9,00	3,40	2,76	9,63	3,49	2,91	10,59	3,64	2,97	12,50	4,21	2,99	13,14	4,39	3,00	13,45	4,48	3,01	13,77	4,57
20°C	2,54	9,00	3,54	2,66	9,63	3,63	2,80	10,59	3,78	2,87	12,50	4,36	2,89	13,14	4,55	2,89	13,45	4,65	2,90	13,77	4,75

CC : Cooling capacity (kW)
IP : Input power (kW)
EER : Energy Efficiency Rating

alféa excellia A.I. tri 16 / alféa excellia duo A.I. tri 16

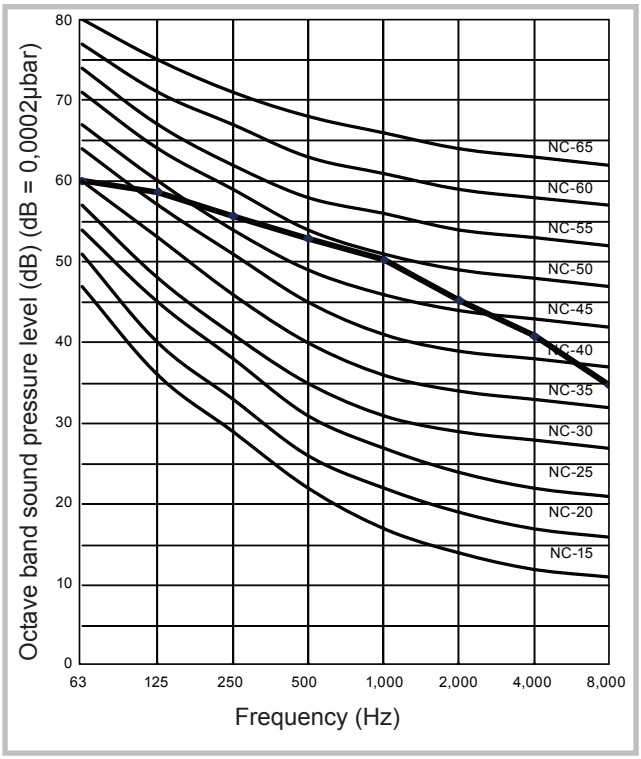
		Starting temperature																				
		7°C			9°C			12°C			18°C			20°C			21°C			22°C		
		IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER	IP	CC	EER
Outdoor temperature	43°C	4,26	7,91	1,86	4,28	8,47	1,98	4,30	9,28	2,16	4,34	11,10	2,56	4,36	11,66	2,68	4,37	11,94	2,74	4,37	12,22	2,79
	42°C	4,25	8,15	1,92	4,26	8,74	2,05	4,28	9,59	2,24	4,33	11,43	2,64	4,34	12,02	2,77	4,35	12,31	2,83	4,35	12,60	2,90
	41°C	4,24	8,39	1,98	4,25	9,00	2,12	4,27	9,89	2,32	4,31	11,77	2,73	4,32	12,38	2,86	4,33	12,68	2,93	4,33	12,98	3,00
	40°C	4,23	8,63	2,04	4,24	9,26	2,18	4,26	10,21	2,40	4,29	12,10	2,82	4,30	12,73	2,96	4,31	13,05	3,03	4,31	13,36	3,10
	39°C	4,60	9,50	2,07	4,62	10,23	2,21	4,65	11,32	2,43	4,72	13,50	2,86	4,68	14,23	3,04	4,65	14,59	3,14	4,63	14,95	3,23
	38°C	4,45	9,50	2,13	4,47	10,23	2,29	4,51	11,32	2,51	4,58	13,50	2,95	4,53	14,23	3,14	4,51	14,59	3,23	4,49	14,95	3,33
	37°C	4,30	9,50	2,21	4,33	10,23	2,36	4,37	11,32	2,59	4,43	13,50	3,05	4,39	14,23	3,24	4,37	14,59	3,34	4,35	14,95	3,44
	36°C	4,14	9,50	2,29	4,18	10,23	2,45	4,22	11,32	2,68	4,28	13,50	3,15	4,24	14,23	3,35	4,22	14,59	3,46	4,20	14,95	3,56
	35°C	3,99	9,50	2,38	4,03	10,23	2,54	4,08	11,32	2,78	4,14	13,50	3,26	4,10	14,23	3,47	4,08	14,59	3,58	4,06	14,95	3,68
	34°C	3,85	9,50	2,47	3,89	10,23	2,63	3,93	11,32	2,88	3,99	13,50	3,38	3,95	14,23	3,60	3,93	14,59	3,71	3,91	14,95	3,82
	33°C	3,70	9,50	2,57	3,74	10,23	2,73	3,78	11,32	2,99	3,84	13,50	3,52	3,80	14,23	3,74	3,78	14,59	3,86	3,76	14,95	3,98
	32°C	3,56	9,50	2,67	3,59	10,23	2,85	3,63	11,32	3,12	3,69	13,50	3,66	3,66	14,23	3,89	3,64	14,59	4,01	3,62	14,95	4,13
	31°C	3,41	9,50	2,79	3,44	10,23	2,97	3,48	11,32	3,25	3,55	13,50	3,80	3,51	14,23	4,05	3,49	14,59	4,18	3,47	14,95	4,31
	30°C	3,26	9,50	2,91	3,29	10,23	3,11	3,33	11,32	3,40	3,40	13,50	3,97	3,36	14,23	4,23	3,34	14,59	4,37	3,32	14,95	4,50
	29°C	3,12	9,50	3,04	3,15	10,23	3,25	3,19	11,32	3,55	3,25	13,50	4,15	3,21	14,23	4,43	3,19	14,59	4,57	3,17	14,95	4,72
	28°C	2,97	9,50	3,20	3,00	10,23	3,41	3,04	11,32	3,73	3,10	13,50	4,35	3,06	14,23	4,65	3,04	14,59	4,80	3,02	14,95	4,95
	27°C	2,83	9,50	3,36	2,85	10,23	3,59	2,89	11,32	3,92	2,96	13,50	4,57	2,92	14,23	4,88	2,90	14,59	5,04	2,88	14,95	5,20
	26°C	2,68	9,50	3,54	2,71	10,23	3,78	2,74	11,32	4,13	2,81	13,50	4,80	2,77	14,23	5,14	2,75	14,59	5,30	2,73	14,95	5,48
	25°C	2,54	9,50	3,74	2,56	10,23	3,99	2,59	11,32	4,37	2,66	13,50	5,08	2,62	14,23	5,43	2,60	14,59	5,61	2,58	14,95	5,79
	24°C	3,24	9,50	2,93	3,41	10,23	3,00	3,56	11,10	3,12	3,63	13,16	3,63	3,64	13,89	3,82	3,65	14,26	3,91	3,65	14,62	4,01
	23°C	3,13	9,50	3,04	3,30	10,23	3,10	3,46	11,15	3,22	3,53	13,25	3,75	3,53	13,97	3,95	3,54	14,34	4,05	3,54	14,70	4,15
	22°C	3,01	9,50	3,16	3,18	10,23	3,21	3,36	11,32	3,36	3,42	13,33	3,90	3,43	14,06	4,10	3,43	14,42	4,21	3,43	14,78	4,31
	21°C	2,90	9,50	3,28	3,07	10,23	3,33	3,27	11,32	3,46	3,32	13,50	4,07	3,32	14,19	4,27	3,32	14,53	4,38	3,32	14,87	4,48
	20°C	2,78	9,50	3,42	2,96	10,23	3,45	3,18	11,32	3,56	3,22	13,50	4,20	3,21	14,23	4,43	3,21	14,59	4,55	3,21	14,95	4,66

CC : Cooling capacity (kW)
IP : Input power (kW)
EER : Energy Efficiency Rating

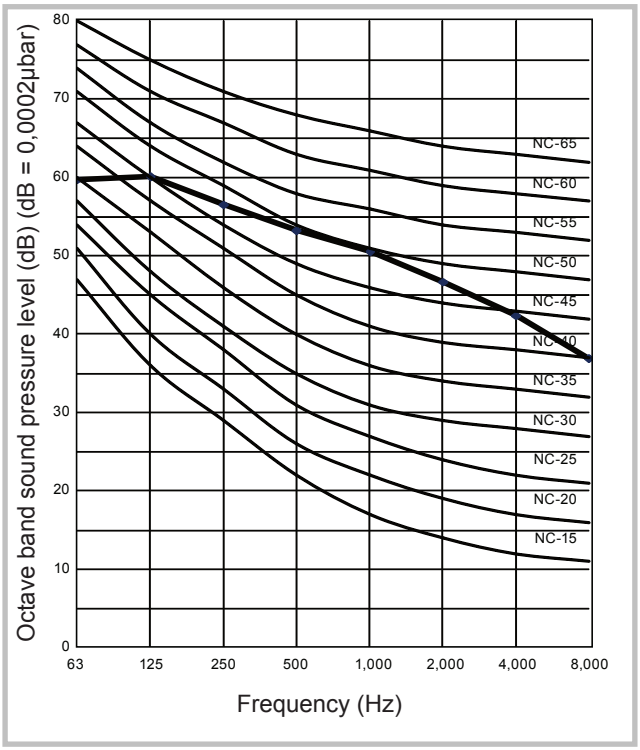
2.5 Sound power of the outdoor unit

2.5.1 Sound power curves of single phase models in heating mode

alféa excellia A.I. 11 / alféa excellia duo A.I. 11

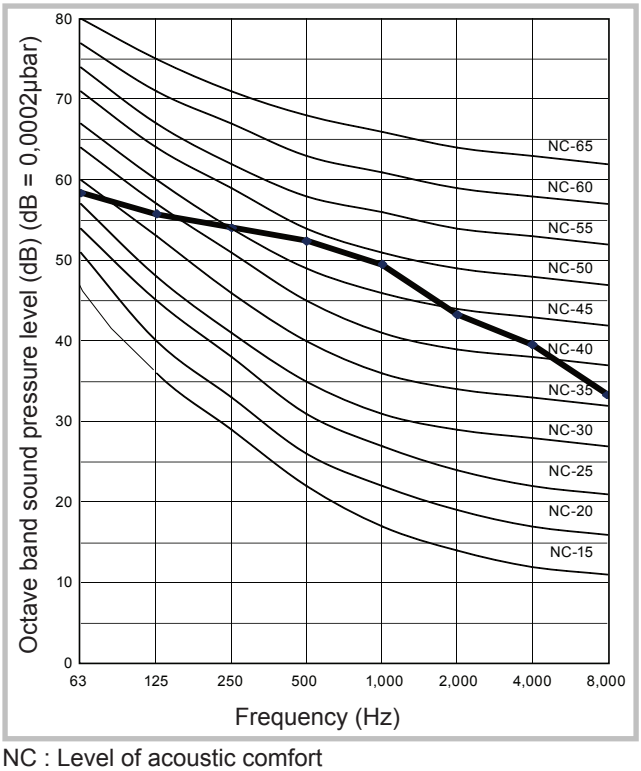


alféa excellia A.I. 14 / alféa excellia duo A.I. 14

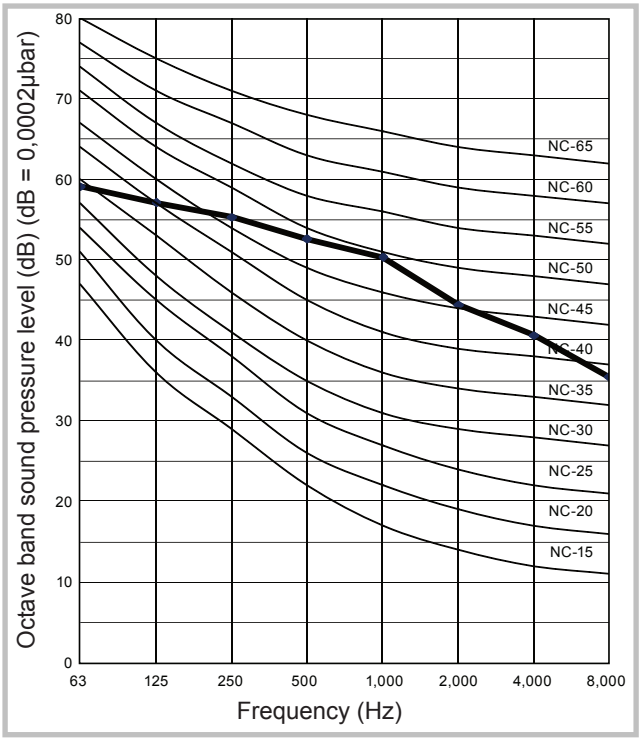


2.5.2 Sound power curves of 3-phase models in heating mode

alféa excellia tri A.I. 11 / alféa excellia duo A.I. tri 11

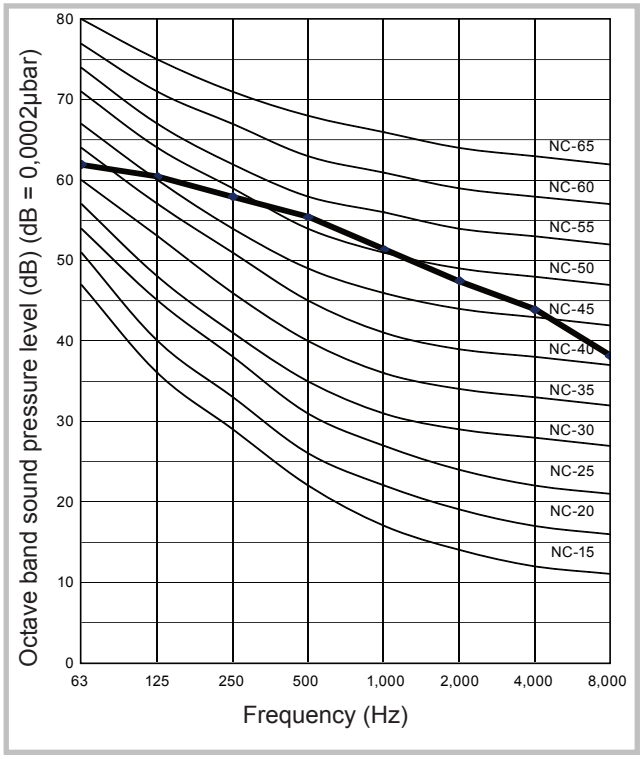


alféa excellia A.I. tri 14 / alféa excellia duo A.I. tri 14



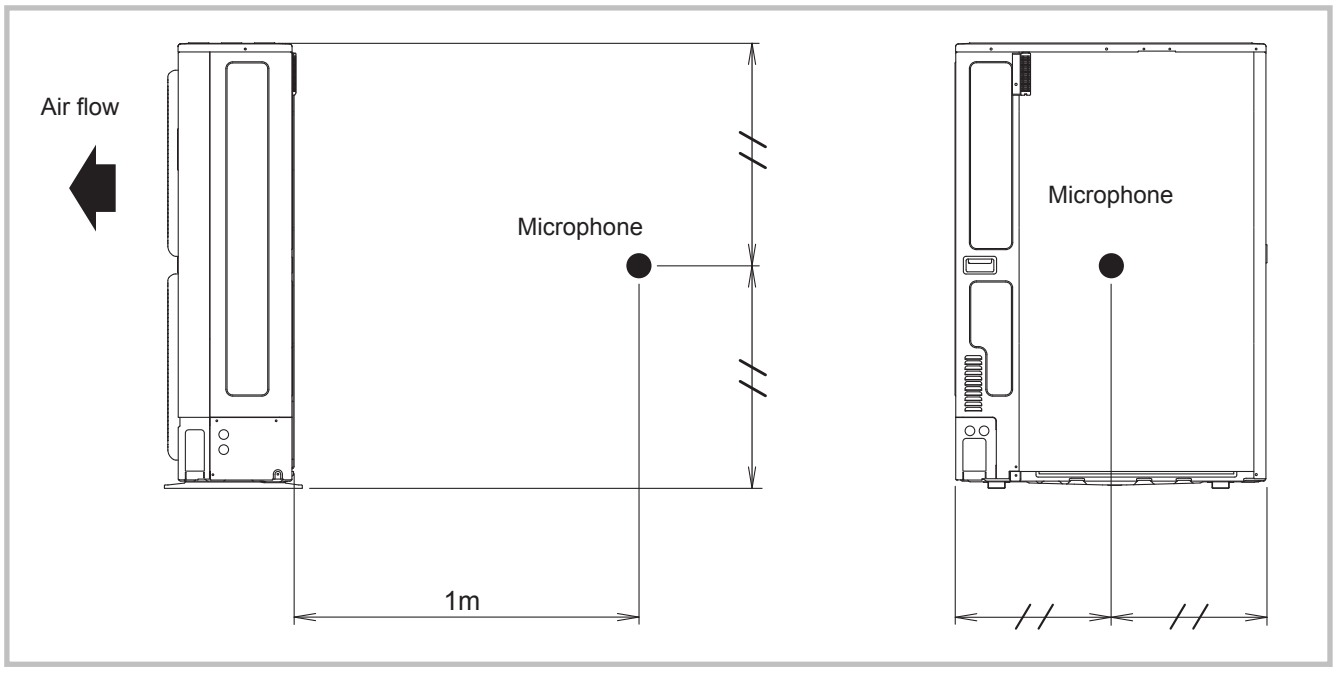
NC : Level of acoustic comfort

alféa excellia A.I. tri 16 / alféa excellia duo A.I. tri 16

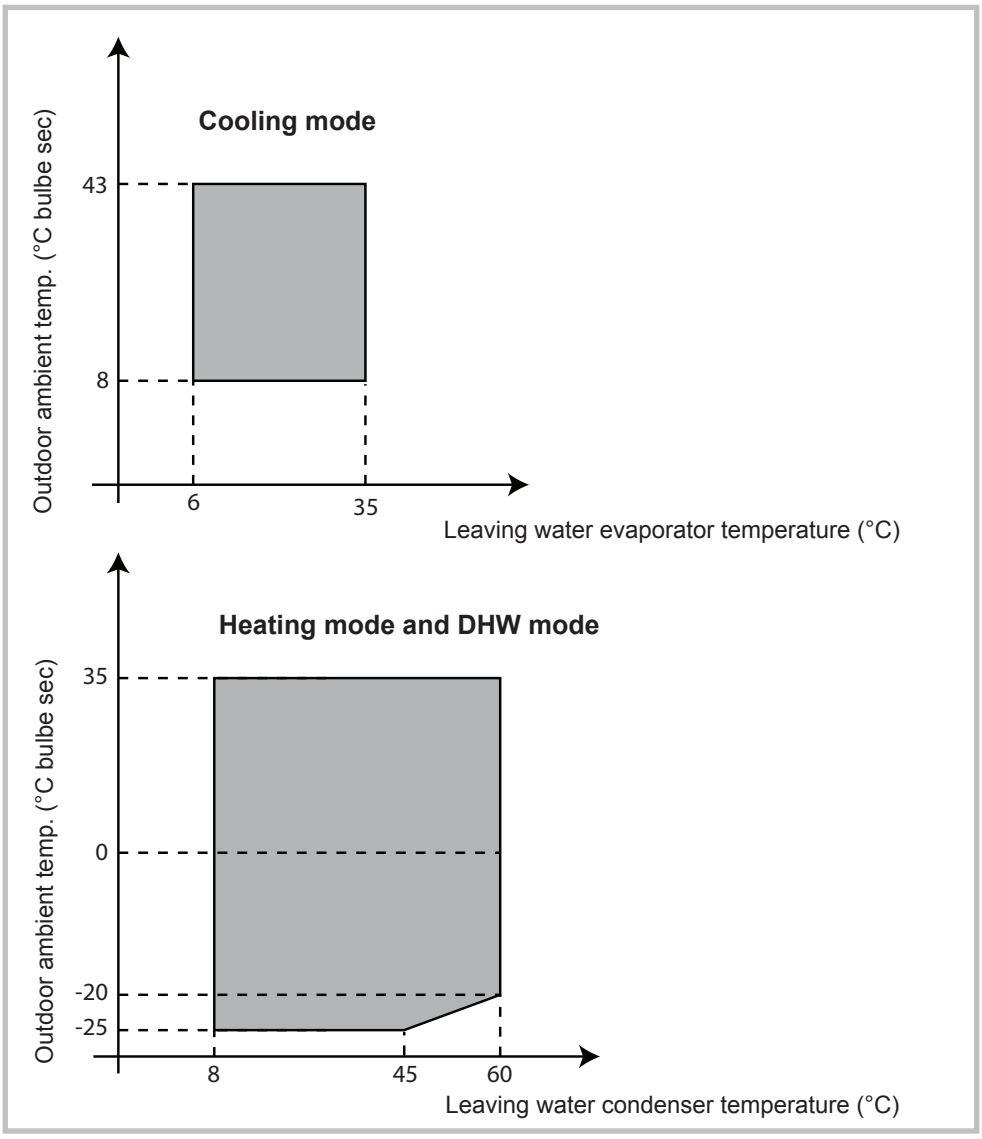


NC : Level of acoustic comfort

2.5.3 Sound level check point



2.6 Recommended operation range



2.7 Safety devices

2.7.1 Outdoor unit

		Single phase		3-phase		
		alféa excellia A.I. 11 alféa excellia duo A.I. 11	alféa excellia A.I. 14 alféa excellia duo A.I. 14	alféa excellia A.I. tri 11 alféa excellia duo A.I. tri 11	alféa excellia A.I. tri 14 alféa excellia duo A.I. tri 14	alféa excellia A.I. tri 16 alféa excellia duo A.I. tri 16
Calibre curve C breaker		32 A		20 A		
Circuit protection	Current fuse (Main PCB)	5 A 250 V				
		3,15 A 250 V				
		10 A 250 V				
Fan motor protection	Thermal protecter	OFF : 150 +/- 15°C ON : 120 +/- 15°C		OFF : 140 +/- 20°C ON : 110 +/- 20°C		
Compressor protection	Thermal protection program (Compressor temp.)	OFF : 112°C ON : 80°C				
	Thermal protection program (Discharge temp.)	OFF : 115°C ON : after 7 minutes				
High pressure protection	Thermal protection program (Heat exchanger temp.)	OFF : 68°C ON : 63°C				
	Pressure sensor	OFF : 4,2 MPa ON : 3,0 MPa				
Low pressure protection	Pressure sensor	OFF : 0,12 MPa ON : 0,15 MPa				

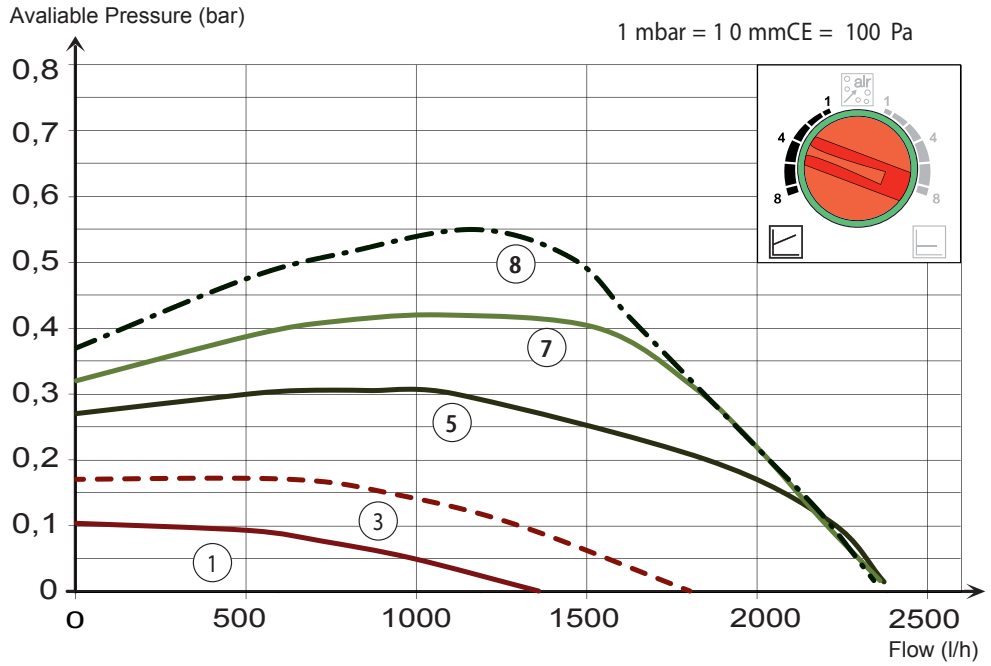
2.7.2 Hydraulic unit

		Single phase		3-phase		
		alféa excellia A.I. 11 alféa excellia duo A.I. 11	alféa excellia A.I. 14 alféa excellia duo A.I. 14	alféa excellia A.I. tri 11 alféa excellia duo A.I. tri 11	alféa excellia A.I. tri 14 alféa excellia duo A.I. tri 14	alféa excellia A.I. tri 16 alféa excellia duo A.I. tri 16
Circuit protection	Current fuse (Main PCB)	20 A				
High pressure protection	Safety valve	3 bar				

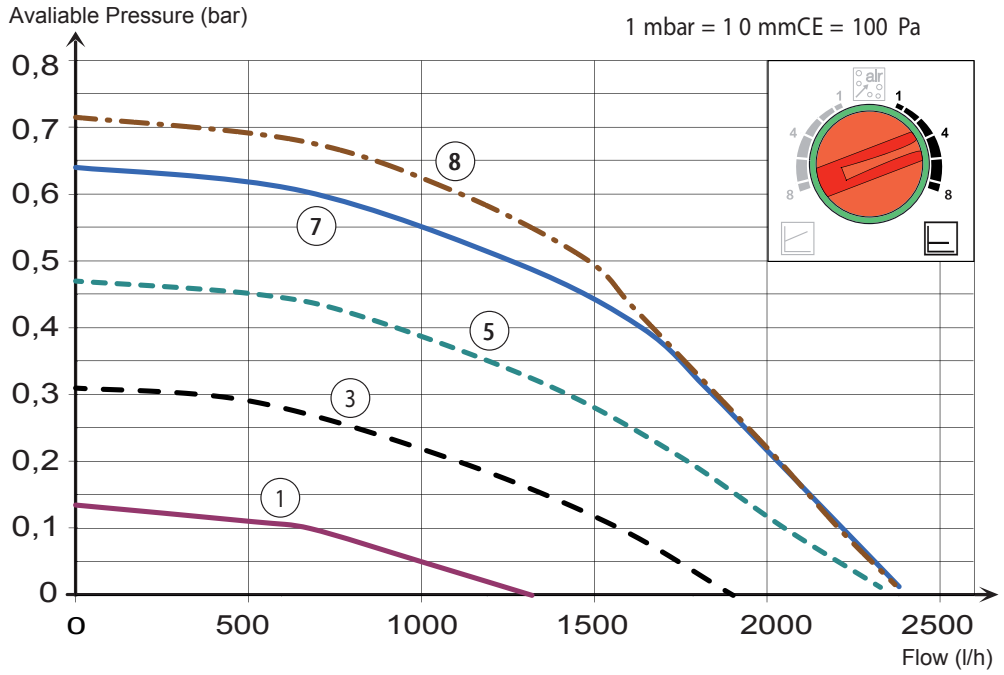
3. Hydraulic circuit

3.1 Availables pressure

Variable pressure



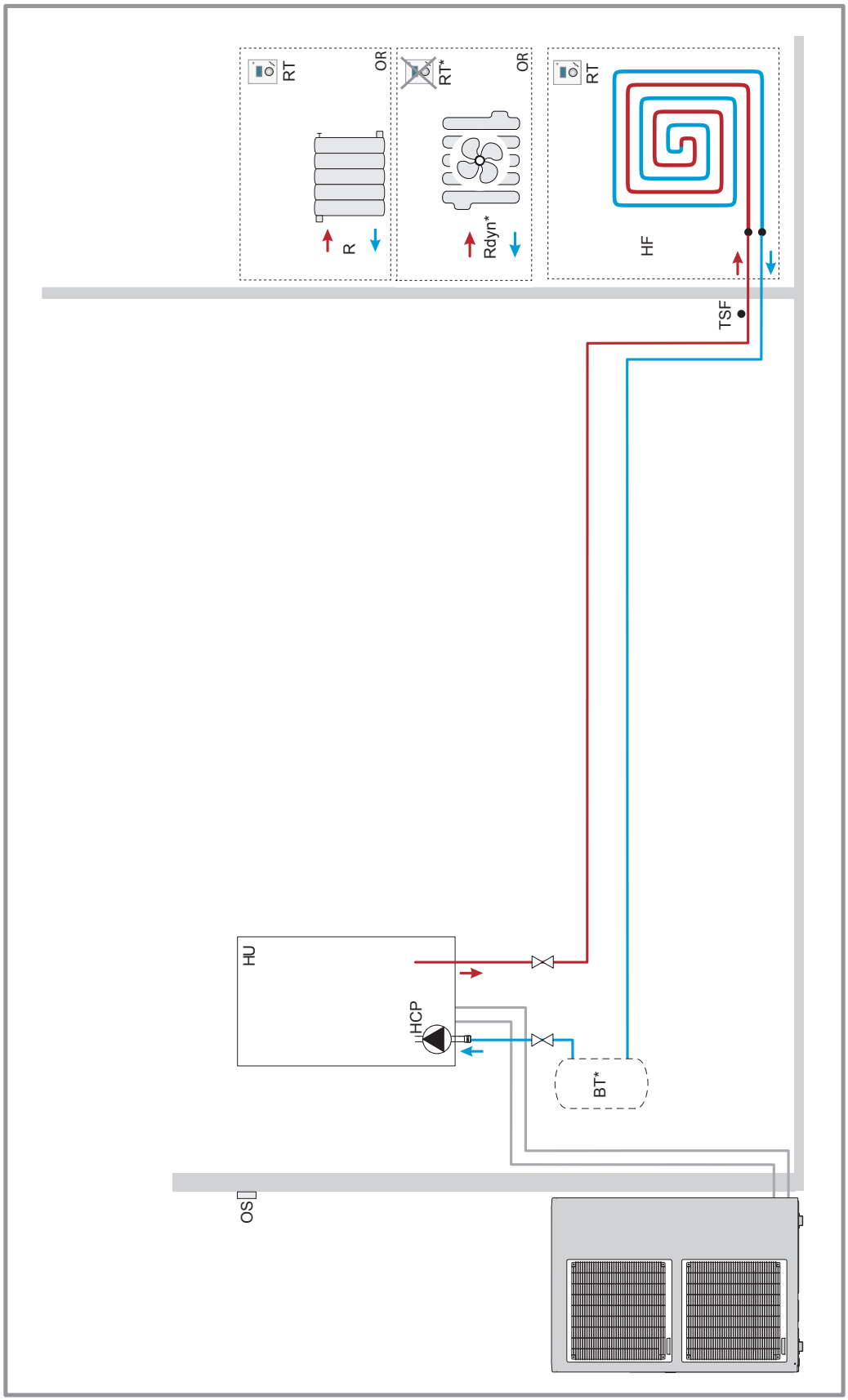
Constant pressure



3.2 Overall hydraulic layout

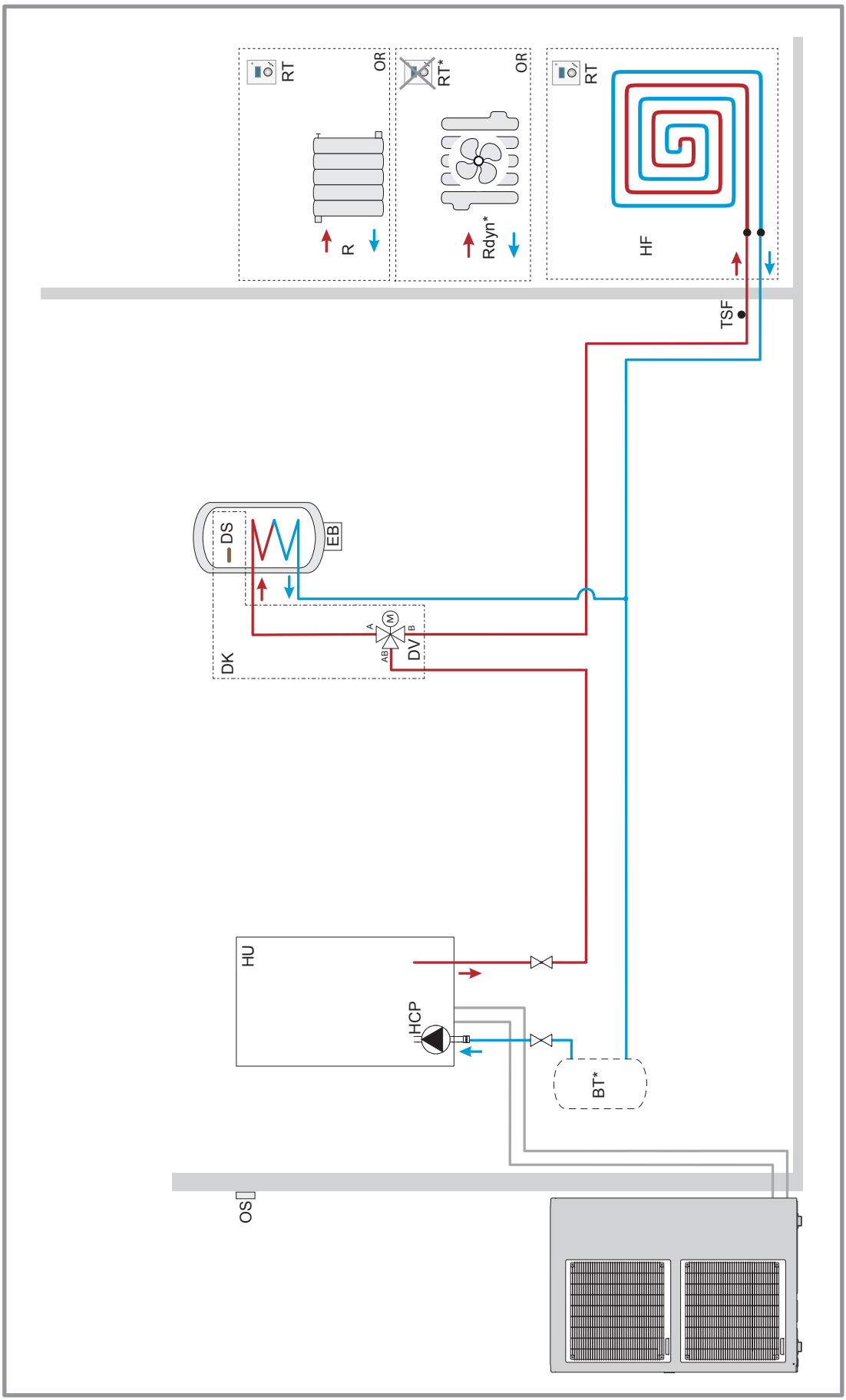
3.2.1 alféa excellia A.I. models

- Configuration 1 : 1 heating circuit



Caption :
BT - Buffer tank (obligatory with Rdyn, if HP>11kW)
HCP - Heating circulation pump
HU - Hydraulic unit
HF - Heating-cooling floor
R - Radiators (or fan coils)
Rdyn* - Dynamic radiators
RT - Room thermostat or room control unit (option/except with Rdyn)
OS - Outdoor sensor

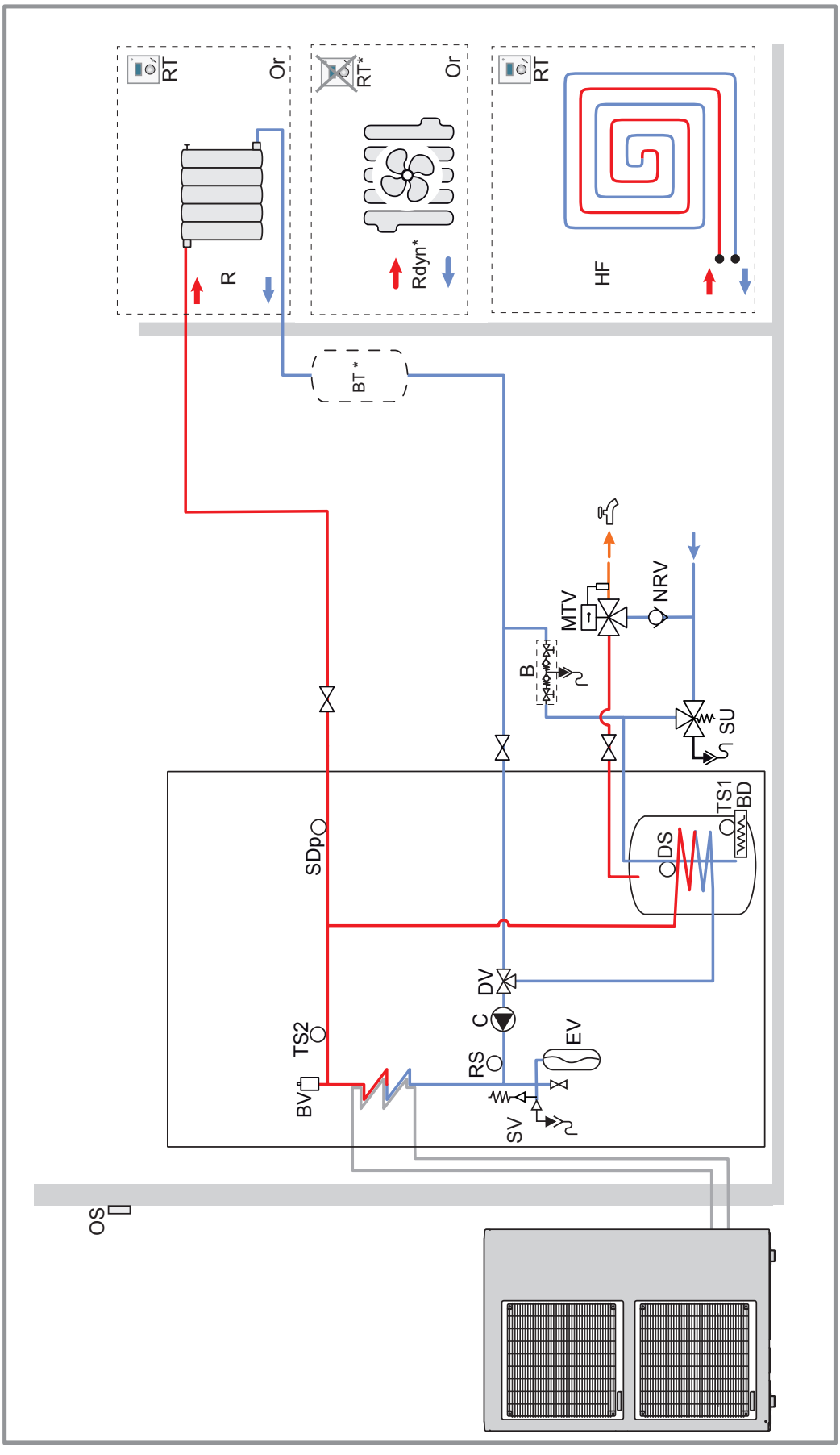
- Configuration 1 : 1 heating circuit and DHW tank



Caption :
EB - Electrical back-up
BT -Buffer tank (obligatory with Rdyn, if HP>11kW)
HCP - Heating circulation pump
DK - DHW kit
HU - Hydraulic unit
HF - Heating-cooling floor
R - Radiators (or fan coils)
Rdyn* - Dynamic radiators
RT* - Room thermostat or room control unit (option/except with Rdyn)
DS - DHW sensor
OS - Outdoor sensor
DV - Distribution valve

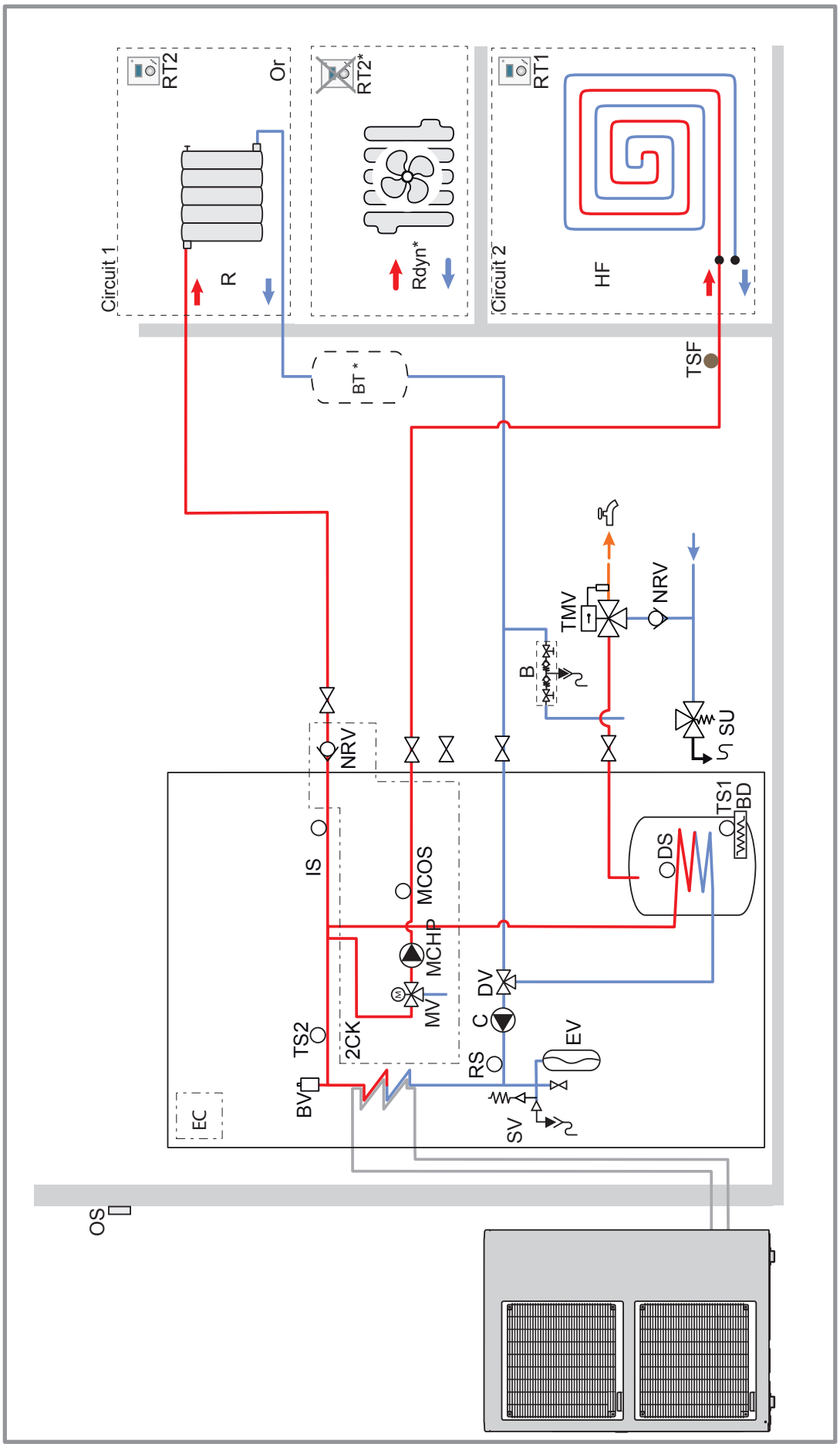
3.2.2 alféa excellia duo A.I. models

- Configuration 1 : 1 heating circuit



Caption :
BD - Back-up DHW
NRV- Non-return valve
C - Circulateur heat pump
B - Breaker
SU - Safety unit
MTV - Thermostatic mixer valve
HF - Heating-cooling floor
BV - Bleeder valve
R - Radiators (or fan coils)
RT* - Room thermostat (option / without Rdyn)
TS1 - Temperature safety of domestic electrical back-up
TS2 - Temperature safety (option Heating back-up option)
BT* - Buffer tank (required with Rdyn) **Necessary if the volume of the installation is smaller than the volume recommended.**
IS - HP Initial sensor
OS - Outdoor sensor
RS - Return sensor
DS - DHW sensor
SV - Safety valve
EV - Expansion vessel
Rdyn* - Dynamic radiators

- Configuration 2 : 2 heating circuits



Caption :

BD - Back-up DHW
EC - Extension card, 2 circuits
NRV - Non-return valve
C - Circulateur heat pump
MCHP -Mixed-circuit heat pump
D - Breaker
SU - Safety unit
2CK - 2nd circuit kit
TMV - Thermostatic mixer valve
HF - Heating-cooling floor
BV - Bleeder valve
R - Radiators (or fan coils) **Rdyn*** - Dynamic radiators
RT1 - Room thermostat circuit 1 (option)
RT2 - Room thermostat circuit 2 (option)
TS1 - Temperature safety of domestic electrical back-up
TS2 - Temperature safety (option Heating back-up option)
BT* - Buffer tank (required with Rdyn) **Necessary if the volume of the installation is smaller than the volume recommended.**
IS - HP Initial sensor
MCOS - Mixed circuit output sensor
OS - Outdoor sensor
TSF - Heated floor thermal safety fuse
RS - Return sensor
DS - DHW sensor
SV - Safety valve
DV - Distribution valve
EV - Expansion vessel
MV - Mixer valve

4. Options

Function	Name	Reference	alféa excellia	alféa excellia duo
Ambient sensor	Wireless room sensor A59	074 208	•	•
	Wireless room sensor A75	074 213	•	•
	Wireless room sensor A78	074 214	•	•
Measure of consumptions	Pack Heat pump(1)	602 231	•	•
DHW	Mileo 200	090 881	•	
	Mileo 300	090 882	•	
	Mileo + 200	090 885	•	
	Mileo + 300	090 886	•	
	DHW kit	073 991	•	
	Expansion Duo kit	075 118		•
Buffer tank	BT 25	700 436	•	•
	BT 50	700 437	•	•
Connection	Hydraulic kit Duo high exit (1 Zone)	075 526		•
	Hydraulic kit Duo high exit (2 Zones)	075 522		•
2 Zones	Split 2 Zones kit (regul exterior kit included)	570 630	•	
	Split Duo 2 Zones kit (regul exterior kit included)	570 629		•
Boiler connection	Boiler connection kit	073 989	•	
	Bottle decoupling	073 957	•	•
	Boiler connection kit	073 990		•
Cooling	Cooling kit	075 312	•	•
Other	High flow rate circulating pump kit(2)	074 077	•	•
Accessoiries for outdoor unit	Anti-vibration blocks (x4)	523 574	•	•
	White PVC floor support (x2)	809 532	•	•
	Cap for floor support (x4)	809 540	•	•
	Black rubber floor support (x2)	809 536	•	•
	Wall bracket (3) 600 mm (with bar)	875 033	•	•
	Heater for drain pan	809 644	•	•
Refrigerant pipes(4)	KM1 5M 5/8"-3/8"	809 565	•	•
	KM1 7M 5/8"-3/8"	809 567	•	•
	KM1 10M 5/8"-3/8"	809 570	•	•
	KM1 25M 5/8"-3/8" (20 m max.)	809 575	•	•
Protection pipes for refrigerant pipes	GO 80x60 (8 x 2 m)	809 709	•	•
	GO 80x60 (2 x 2 m)	809 716	•	•
	CGO 80x60 (x5)	809 723	•	•
	PMC 80x60 (x5)	809 729	•	•

• Option compatible

(1) Only with models single phase.
(2) High flow rate circulating pump kit incompatible with 2 zones kit.
(3) It's the installer to ensure that the wall bracket will not be installed in conditions likely to transmit vibrations (ground position is being preferred).
(4) For better protection of isolant against UV, Atlantic recommend install protection pipes with the refrigerant pipes.

This appliance also complies with :

-Low Voltage Directive 2014/35/EU in accordance with NF EN 60335-1, NF EN 60335-2-40, NF EN 60529 and NF EN 60529/A2 (IP) standards,

- Electromechanical Compatibility Directive 2014/30/EU,
- Machines Directive 2006/42/EC,
- Pressure Equipment Directive 2014/68/EU in accordance with NF EN 378-2 standard,
- Ecodesign Directive 2009/125/EC,
- Energy Labelling Directive 2010/30/EC.

This appliance also complies with :

- Decree No. 92-1271 (and its modifications) relating to certain refrigeration fluids used in refrigeration and air conditioning equipment.
- Regulation 842/2006 of the European Parliament on certain fluorinated greenhouse gases.
- Standards relating to the product and testing methods used: Air-conditioners, liquid chiller units and heat pumps with a compressor driven by an electric motor for heating and refrigeration EN 14511-1, EN 14511-2,EN 14511-3, EN 14511-4.
- EN 12102 standard: Air-conditioners, heat pumps and dehumidifiers with compressor driven by electric motor. Measurement of airborne noise. Determination of the level of sound power.

This appliance is marked with this symbol. It means that all electrical and electronic products must be strictly separated from household waste.

A specific recovery system for this type of product is in place in the countries of the European Union (*), Norway, Iceland and Liechtenstein.

Do not attempt to dismantle this product yourself. This can have adverse effects on your health and on the environment.

Refrigerant liquid, oil and other parts must be reprocessed by a qualified installer in accordance with applicable local and national laws.

In terms of recycling, this appliance must be processed by a specialised service and must not, under any circumstances, be thrown out with household waste, bulky waste or at a tip.

Please contact your heating engineer or After Sales service for further information.

* Depending on the national regulations of each member state.

Contact SIC SATC : BP64
59660 MERVILLE
www.atlantic.fr