

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

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

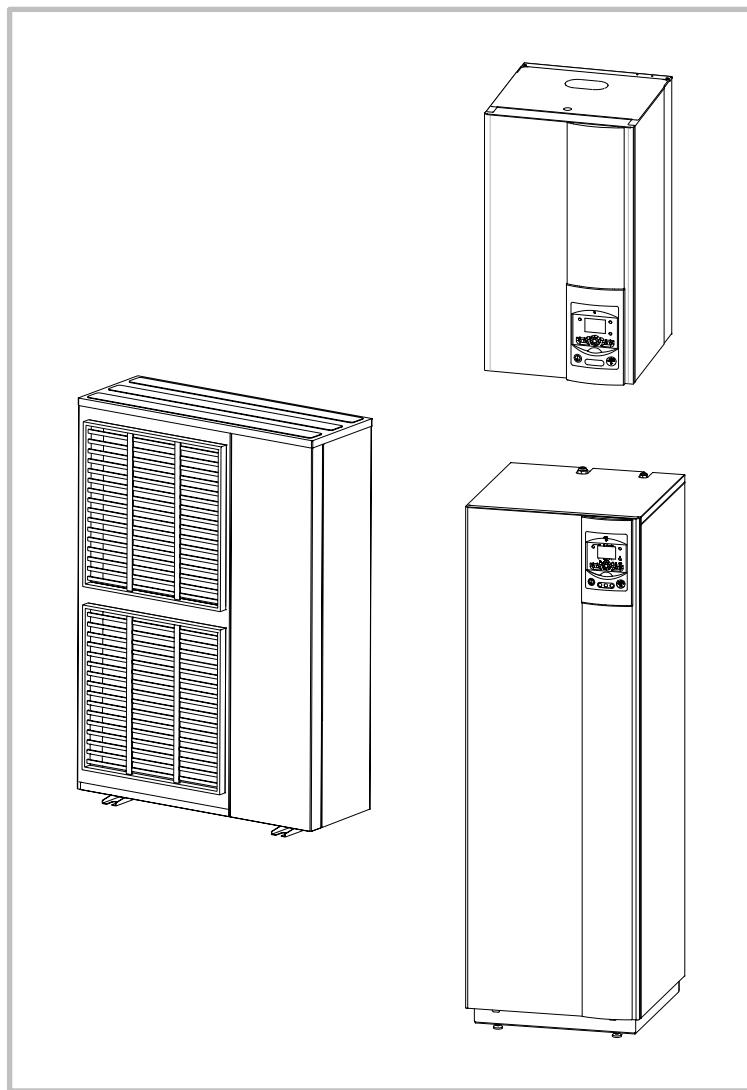
alféa excellia A.I. 11 et alféa excellia duo A.I. 11

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

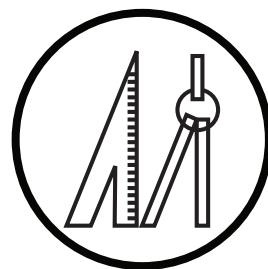
alféa excellia A.I. tri 14 et alféa excellia duo A.I. tri 14

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 and 1879.

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1. General Description

For more information, please refer to the instructions sheets 1876 (alféa excellia A.I.) and 1779 (alféa excellia duo A.I.).

- Table of dimensions and weight**

	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
Référence 1 service	526300 / 526350	526301 / 526351	526302 / 526352	526303 / 526353	526304 / 526354
Référence 2 services	526321 / 526355	526322 / 526356	526323 / 526357	526324 / 526358	526325 / 526359
Outdoor unit	WOYG112LHT	WOYG140LCTA	WOYK112 LCTA	WOYK140LCTA	WOYK160LCTA
Reference	700197	700175	700176	700177	700178
Dimensions (H x W x D) (mm)	1290 x 970 x 400	1290 x 970 x 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

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
Weight vacuum / water (kg)	46 / 62	46 / 62

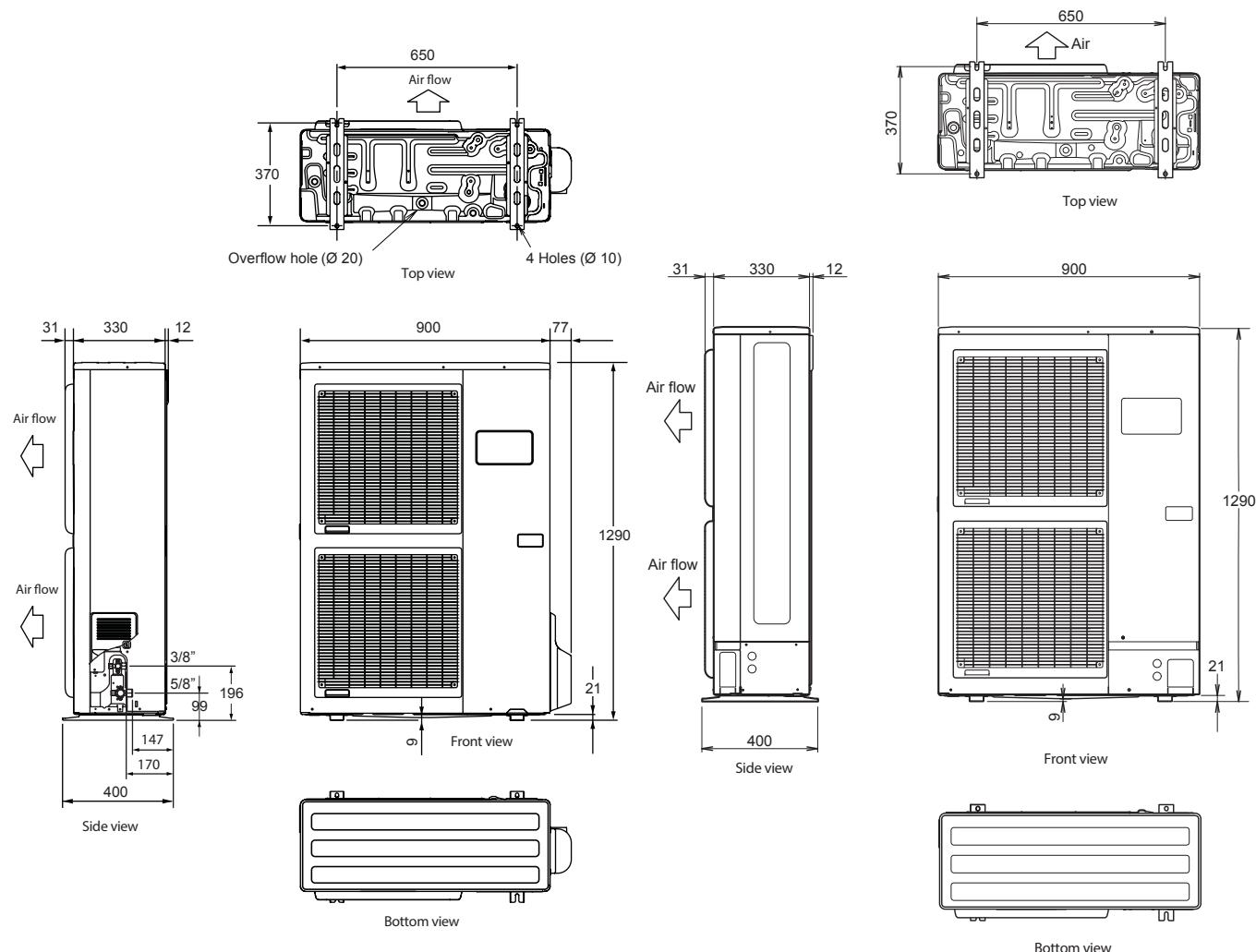
Hydraulic unit	alféa excellia duo A.I.	alféa excellia duo A.I.
Reference	024216	024217
Dimensions (H x W x D) (mm)	1851 x 648 x 684	1851 x 648 x 684
Weight vacuum / water (kg)	155 / 373	155 / 373

- Dimensional drawing**

Outdoor unit :

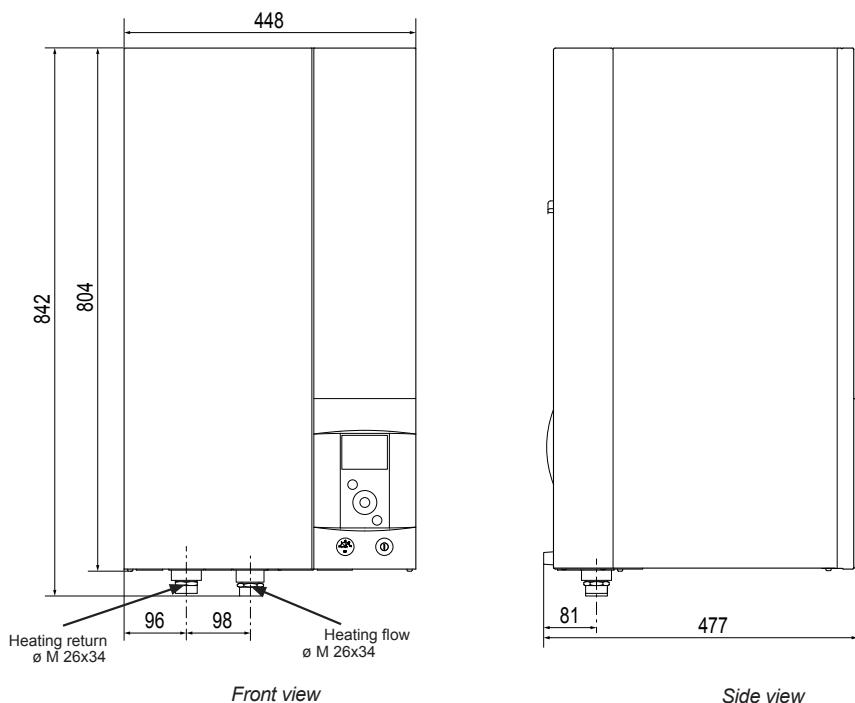
- alféa excellia A.I. 11/14 and alféa excellia duo A.I. 11/14

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

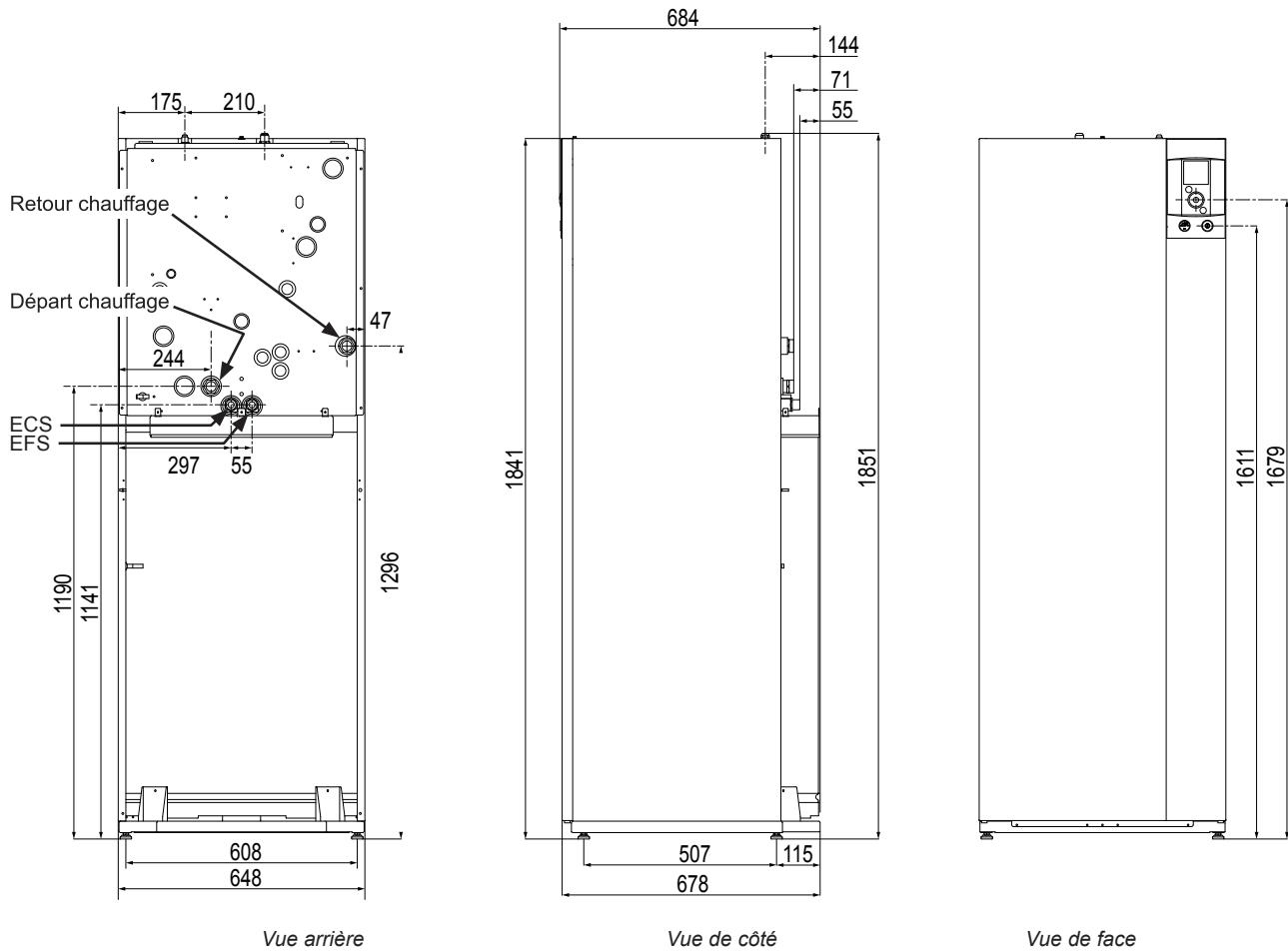


Hydraulic unit :

- alféa excellia A.I. models



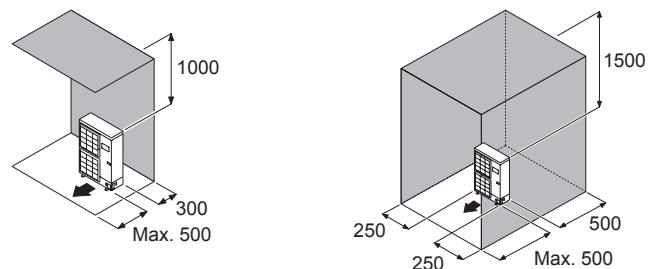
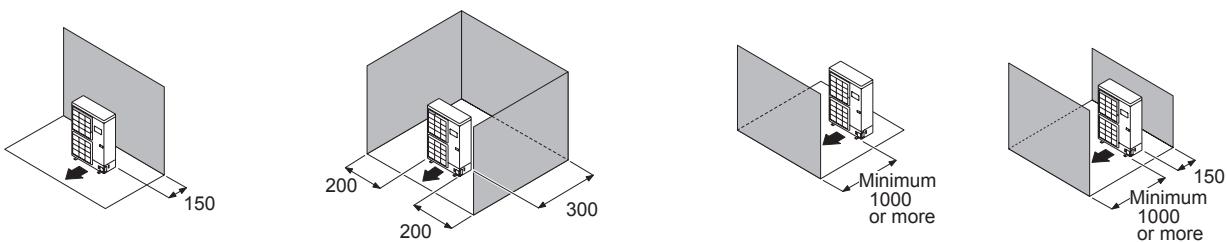
- alféa excellia duo A.I. models

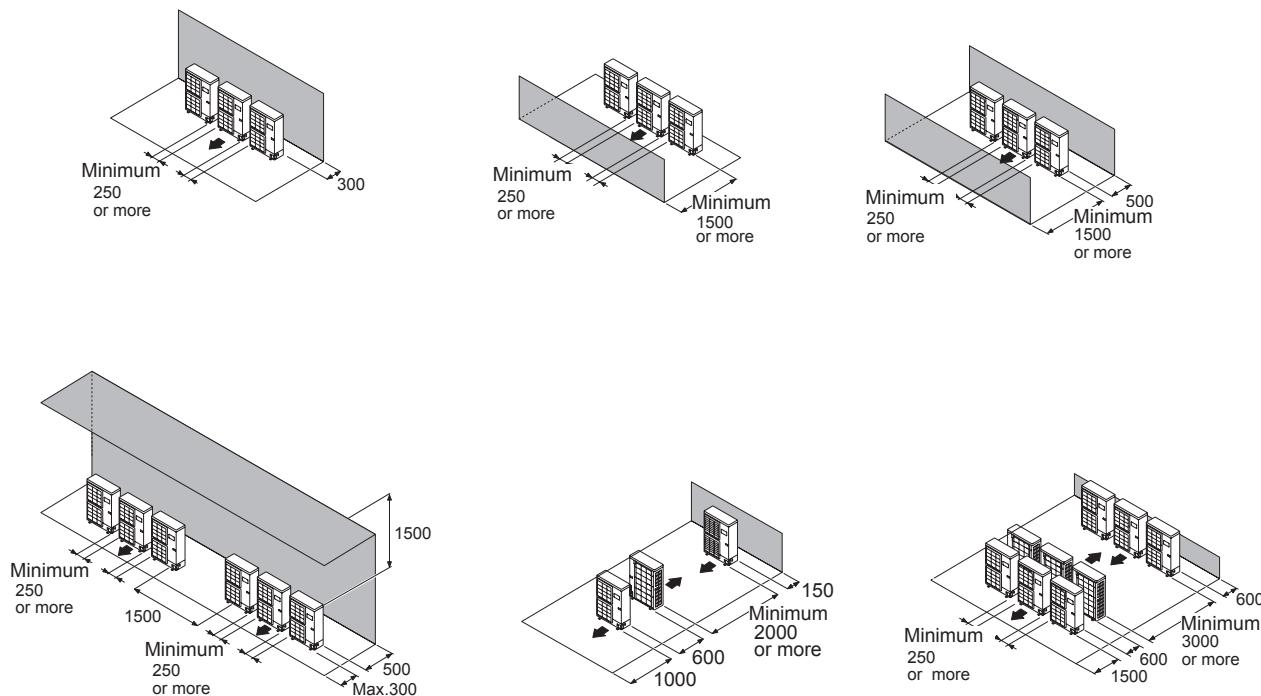


• **Installation place**

Outdoor unit :

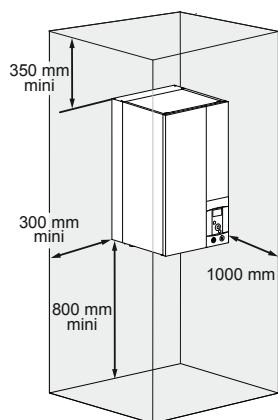
The outdoor unit must only be installed outside (outside). If a shelter is required, it must have broad openings on all 4 sides and following the installation conditions below.



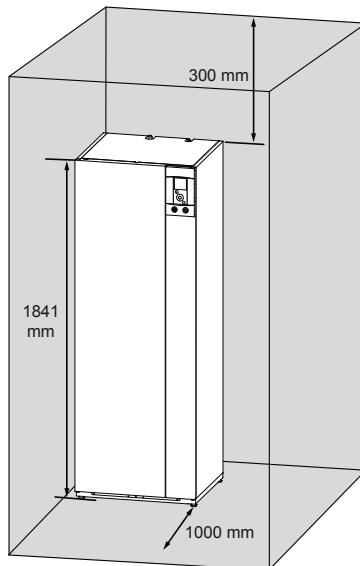


Hydraulic unit :

- alféa excellia A.I. models



- alféa excellia duo A.I. models



According to EN 378-1 (requirement of safety and environmental for heat pump), the heat pump must be installed in a room with minimal volume is : machine load in kg / 0,44. Otherwise, it must be ensured that :

- Either the room is mechanically ventilated,*
- Either the door is left open when the installer comes on the heat pump.*

• 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. tri 16
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 / outdoor) (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 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
			4,12	3,70	3,82	3,46	3,26
	EER						
+15°C/+35°C Refreshing floor	Cooling capacity (kW)	Nom.	9,44	11,55	9,45	11,55	12,410
			2,55	3,40	2,79	3,56	4,12
			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
			2,74	3,40	3,01	3,56	4,08
			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
			3,11	3,34	3,41	3,66	3,99
			2,73	2,69	2,50	2,46	2,38

Test conditions comply with EN 14-511.

2.2 Nominal performances tables (Heating mode)

Test conditions comply with EN 14-511.
(defrosting included)

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

2.2.1 alféa excellia A.I. single phase models

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

		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	1.46	11.50	7.88	1.58	11.15	7.06	1.70	10.80	6.35	1.85	10.10	5.46	1.96	9.05	4.62	2.08	8.49	4.08	2.20	7.59	3.45	2.36	7.05	2.99
	34°C	1.48	11.50	7.77	1.60	11.15	6.97	1.72	10.80	6.28	1.87	10.10	5.40	1.98	9.05	4.57	2.10	8.49	4.04	2.22	7.59	3.42	2.38	7.05	2.96
	33°C	1.48	11.50	7.77	1.61	11.15	6.93	1.74	10.80	6.21	1.89	10.10	5.34	2.00	9.05	4.53	2.12	8.49	4.00	2.25	7.59	3.37	2.40	7.05	2.94
	32°C	1.50	11.50	7.67	1.63	11.15	6.84	1.76	10.80	6.14	1.91	10.10	5.29	2.02	9.05	4.48	2.15	8.49	3.95	2.27	7.59	3.34	2.42	7.05	2.91
	31°C	1.52	11.50	7.57	1.65	11.15	6.76	1.78	10.80	6.07	1.93	10.10	5.23	2.04	9.05	4.44	2.17	8.49	3.91	2.30	7.59	3.30	2.43	7.05	2.90
	30°C	1.54	11.50	7.47	1.67	11.15	6.68	1.80	10.80	6.00	1.95	10.10	5.18	2.06	9.05	4.39	2.19	8.49	3.88	2.32	7.59	3.27	2.45	7.05	2.88
	29°C	1.54	11.50	7.47	1.68	11.15	6.64	1.82	10.80	5.93	1.97	10.10	5.13	2.08	9.05	4.35	2.21	8.49	3.84	2.34	7.59	3.24	2.47	7.05	2.85
	28°C	1.56	11.50	7.37	1.70	11.15	6.56	1.84	10.80	5.87	1.99	10.10	5.08	2.10	9.05	4.31	2.23	8.49	3.81	2.37	7.59	3.20	2.49	7.05	2.83
	27°C	1.58	11.50	7.28	1.72	11.15	6.48	1.86	10.80	5.81	2.01	10.10	5.02	2.13	9.05	4.25	2.26	8.49	3.76	2.39	7.59	3.18	2.51	7.05	2.81
	26°C	1.60	11.50	7.19	1.74	11.15	6.41	1.88	10.80	5.74	2.03	10.10	4.98	2.15	9.05	4.21	2.28	8.49	3.72	2.42	7.59	3.14	2.53	7.05	2.79
Outdoor temperature	25°C	1.60	11.50	7.19	1.75	11.15	6.37	1.90	10.80	5.68	2.05	10.10	4.93	2.17	9.05	4.17	2.30	8.49	3.69	2.44	7.59	3.11	2.55	7.05	2.76
	24°C	1.62	11.50	7.10	1.77	11.15	6.30	1.92	10.80	5.63	2.07	10.10	4.88	2.19	9.05	4.13	2.32	8.49	3.66	2.46	7.59	3.09	2.57	7.05	2.74
	23°C	1.64	11.50	7.01	1.79	11.15	6.23	1.94	10.80	5.57	2.09	10.10	4.83	2.21	9.05	4.10	2.34	8.49	3.63	2.49	7.59	3.05	2.58	7.05	2.73
	22°C	1.66	11.50	6.93	1.81	11.15	6.16	1.96	10.80	5.51	2.11	10.10	4.79	2.23	9.05	4.06	2.37	8.49	3.58	2.51	7.59	3.02	2.60	7.05	2.71
	21°C	1.66	11.50	6.93	1.82	11.15	6.13	1.98	10.80	5.45	2.13	10.10	4.74	2.25	9.05	4.02	2.39	8.49	3.55	2.54	7.59	2.99	2.62	7.05	2.69
	20°C	1.68	11.50	6.85	1.84	11.15	6.06	2.00	10.80	5.40	2.15	10.10	4.70	2.27	9.05	3.99	2.41	8.49	3.52	2.56	7.59	2.96	2.64	7.05	2.67
	19°C	1.72	11.50	6.69	1.88	11.15	5.93	2.04	10.80	5.29	2.19	10.10	4.61	2.31	9.05	3.92	2.45	8.49	3.47	2.60	7.59	2.92	2.69	7.05	2.62
	18°C	1.74	11.50	6.61	1.91	11.15	5.84	2.08	10.80	5.19	2.23	10.10	4.53	2.35	9.05	3.85	2.49	8.49	3.41	2.64	7.59	2.88	2.74	7.05	2.57
	17°C	1.78	11.50	6.46	1.95	11.15	5.72	2.12	10.80	5.09	2.27	10.10	4.45	2.39	9.05	3.79	2.53	8.49	3.36	2.68	7.59	2.83	2.79	7.05	2.53
	16°C	1.80	11.50	6.39	1.98	11.15	5.63	2.16	10.80	5.00	2.31	10.10	4.37	2.43	9.05	3.72	2.57	8.49	3.30	2.72	7.59	2.79	2.84	7.05	2.48
Outdoor temperature	15°C	1.84	11.50	6.25	2.02	11.15	5.52	2.20	10.80	4.91	2.36	10.10	4.28	2.47	9.05	3.66	2.61	8.49	3.25	2.76	7.59	2.75	2.89	7.05	2.44
	14°C	1.88	11.50	6.12	2.06	11.15	5.41	2.24	10.80	4.82	2.40	10.10	4.21	2.50	9.05	3.62	2.64	8.49	3.22	2.80	7.59	2.71	2.94	7.05	2.40
	13°C	1.90	11.50	6.05	2.09	11.15	5.33	2.28	10.80	4.74	2.44	10.10	4.14	2.54	9.05	3.56	2.68	8.49	3.17	2.84	7.59	2.67	2.99	7.05	2.36
	12°C	1.94	11.50	5.93	2.13	11.15	5.23	2.32	10.80	4.66	2.48	10.10	4.07	2.58	9.05	3.51	2.72	8.49	3.12	2.88	7.59	2.64	3.04	7.05	2.32
	11°C	1.96	11.50	5.87	2.16	11.15	5.16	2.36	10.80	4.58	2.52	10.10	4.01	2.62	9.05	3.45	2.76	8.49	3.08	2.92	7.59	2.60	3.09	7.05	2.28
	10°C	2.00	11.50	5.75	2.20	11.15	5.07	2.40	10.80	4.50	2.56	10.10	3.95	2.66	9.05	3.40	2.80	8.49	3.03	2.96	7.59	2.56	3.14	7.05	2.25
	9°C	2.05	11.50	5.61	2.25	11.15	4.96	2.45	10.80	4.41	2.61	10.10	3.87	2.72	9.05	3.33	2.85	8.49	2.98	3.02	7.59	2.51	3.22	7.05	2.19
	8°C	2.08	11.50	5.53	2.29	11.15	4.87	2.50	10.80	4.32	2.65	10.10	3.81	2.78	9.05	3.26	2.89	8.49	2.94	3.07	7.59	2.47	3.31	7.05	2.13
	7°C	2.14	11.50	5.37	2.34	11.15	4.76	2.54	10.80	4.25	2.70	10.10	3.74	2.82	9.05	3.21	2.94	8.49	2.89	3.07	7.59	2.47	3.39	7.05	2.08
	6°C	2.33	11.51	4.93	2.53	11.15	4.41	2.72	10.79	3.97	2.83	10.10	3.57	2.99	9.04	3.02	3.05	8.49	2.78	3.22	7.58	2.36	3.47	7.05	2.03
Outdoor temperature	5°C	2.48	11.54	4.65	2.67	11.15	4.18	2.85	10.76	3.77	2.95	10.10	3.42	3.13	9.05	2.89	3.16	8.49	2.69	3.33	7.58	2.28	3.56	7.05	1.98
	4°C	2.83	11.58	4.41	2.81	11.15	3.97	2.99	10.72	3.59	3.15	10.10	3.21	3.26	9.06	2.78	3.31	8.48	2.56	3.44	7.58	2.20	3.59	7.02	1.96
	3°C	2.77	11.61	4.19	2.95	11.15	3.78	3.12	10.69	3.43	3.35	10.10	3.01	3.39	9.07	2.67	3.45	8.46	2.45	3.56	7.58	2.13	3.62	6.98	1.93
	2°C	2.92	11.64	3.99	3.09	11.15	3.61	3.26	10.66	3.27	3.35	10.10	2.85	3.52	9.08	2.58	3.60	8.45	2.35	3.67	7.58	2.06	3.71	6.95	1.87
	1°C	3.07	11.68	3.81	3.23	11.15	3.45	3.39	10.62	3.13	3.66	10.10	2.76	3.66	9.09	2.49	3.71	8.44	2.27	3.78	7.58	2.00	3.80	6.92	1.82
	0°C	3.21	11.71	3.65	3.37	11.15	3.31	3.52	10.59	3.01	3.77	10.10	2.68	3.79	9.10	2.40	3.81	8.44	2.22	3.90	7.58	1.94	3.89	6.89	1.77
	-1°C	3.36	11.74	3.50	3.51	11.15	3.18	3.66	10.56	2.89	3.88	10.10	2.60	3.92	9.11	2.32	3.92	8.43	2.15	4.01	7.58	1.89	3.99	6.86	1.72
	-2°C	3.50	11.78	3.36	3.65	11.15	3.06	3.79	10.52	2.77	3.99	10.10	2.53	4.06	9.13	2.25	4.02	8.43	2.10	4.12	7.58	1.84	4.08	6.83	1.67
	-3°C	3.65	11.81	3.23	3.79	11.15	2.94	3.93	10.49	2.67	4.10	10.10	2.46	4.19	9.14	2.18	4.12	8.42	2.04	4.24	7.58	1.79	4.17	6.80	1.63
	-4°C	3.80	11.84	3.12	3.93	11.15	2.84	4.06	10.46	2.57	4.19	10.10	2.41	4.32	9.15	2.12	4.25	8.41	1.98	4.35	7.58	1.74	4.33	6.78	1.57
Outdoor temperature	-5°C	3.94	11.88	3.01																					

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

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	1.75	14.40	8.23	1.89	13.95	7.38	2.03	13.50	6.65	2.23	12.52	5.61	2.45	11.54	4.71	2.59	10.61	4.10	2.75	9.67	3.52	2.96	8.81	2.98	
34°C	1.78	14.40	8.09	1.92	13.95	7.27	2.06	13.50	6.55	2.26	12.52	5.54	2.48	11.54	4.65	2.63	10.61	4.03	2.78	9.67	3.48	2.99	8.81	2.95	
33°C	1.80	14.40	8.00	1.95	13.95	7.15	2.10	13.50	6.43	2.30	12.52	5.44	2.51	11.54	4.60	2.66	10.61	3.99	2.82	9.67	3.43	3.01	8.81	2.93	
32°C	1.83	14.40	7.87	1.98	13.95	7.05	2.13	13.50	6.34	2.33	12.52	5.37	2.54	11.54	4.54	2.70	10.61	3.93	2.85	9.67	3.39	3.04	8.81	2.90	
31°C	1.85	14.40	7.78	2.01	13.95	6.94	2.17	13.50	6.22	2.37	12.52	5.28	2.57	11.54	4.49	2.73	10.61	3.89	2.88	9.67	3.36	3.06	8.81	2.88	
30°C	1.88	14.40	7.66	2.04	13.95	6.84	2.20	13.50	6.14	2.40	12.52	5.22	2.60	11.54	4.44	2.77	10.61	3.83	2.92	9.67	3.31	3.09	8.81	2.85	
29°C	1.91	14.40	7.54	2.07	13.95	6.74	2.23	13.50	6.05	2.43	12.52	5.15	2.63	11.54	4.39	2.81	10.61	3.78	2.95	9.67	3.28	3.11	8.81	2.83	
28°C	1.93	14.40	7.46	2.10	13.95	6.64	2.27	13.50	5.95	2.47	12.52	5.07	2.66	11.54	4.34	2.84	10.61	3.74	2.98	9.67	3.24	3.14	8.81	2.81	
27°C	1.98	14.40	7.27	2.14	13.95	6.52	2.30	13.50	5.87	2.50	12.52	5.01	2.68	11.54	4.31	2.88	10.61	3.68	3.02	9.67	3.20	3.16	8.81	2.79	
26°C	2.00	14.40	7.20	2.17	13.95	6.43	2.34	13.50	5.77	2.54	12.52	4.93	2.71	11.54	4.26	2.91	10.61	3.65	3.05	9.67	3.17	3.19	8.81	2.76	
25°C	2.03	14.40	7.09	2.20	13.95	6.34	2.37	13.50	5.70	2.57	12.52	4.87	2.74	11.54	4.21	2.95	10.61	3.60	3.08	9.67	3.14	3.21	8.81	2.74	
24°C	2.06	14.40	6.99	2.23	13.95	6.26	2.40	13.50	5.63	2.60	12.52	4.82	2.77	11.54	4.17	2.99	10.61	3.55	3.12	9.67	3.10	3.24	8.81	2.72	
23°C	2.08	14.40	6.92	2.26	13.95	6.17	2.44	13.50	5.53	2.64	12.52	4.74	2.80	11.54	4.12	3.02	10.61	3.51	3.15	9.67	3.07	3.26	8.81	2.70	
22°C	2.11	14.40	6.82	2.29	13.95	6.09	2.47	13.50	5.47	2.67	12.52	4.69	2.83	11.54	4.08	3.06	10.61	3.47	3.18	9.67	3.04	3.29	8.81	2.68	
21°C	2.13	14.40	6.76	2.32	13.95	6.01	2.51	13.50	5.38	2.71	12.52	4.62	2.86	11.54	4.03	3.09	10.61	3.43	3.22	9.67	3.00	3.31	8.81	2.66	
20°C	2.16	14.40	6.67	2.35	13.95	5.94	2.54	13.50	5.31	2.74	12.52	4.57	2.89	11.54	3.99	3.13	10.61	3.39	3.25	9.67	2.98	3.34	8.81	2.64	
19°C	2.21	14.40	6.52	2.40	13.95	5.81	2.59	13.50	5.21	2.80	12.52	4.47	2.95	11.54	3.91	3.19	10.61	3.33	3.31	9.67	2.92	3.41	8.81	2.58	
18°C	2.23	14.40	6.46	2.44	13.95	5.72	2.65	13.50	5.09	2.86	12.52	4.38	3.01	11.54	3.83	3.25	10.61	3.26	3.37	9.67	2.87	3.47	8.81	2.54	
17°C	2.28	14.40	6.32	2.49	13.95	5.60	2.70	13.50	5.00	2.92	12.52	4.29	3.07	11.54	3.76	3.30	10.61	3.22	3.44	9.67	2.81	3.54	8.81	2.49	
16°C	2.33	14.40	6.18	2.54	13.95	5.49	2.75	13.50	4.91	2.98	12.52	4.20	3.13	11.54	3.69	3.36	10.61	3.16	3.50	9.67	2.76	3.60	8.81	2.45	
15°C	2.37	14.40	6.08	2.59	13.95	5.39	2.81	13.50	4.80	3.04	12.52	4.12	3.19	11.54	3.62	3.42	10.61	3.10	3.56	9.67	2.72	3.67	8.81	2.40	
14°C	2.40	14.40	6.00	2.63	13.95	5.30	2.86	13.50	4.72	3.10	12.52	4.04	3.24	11.54	3.56	3.48	10.61	3.05	3.62	9.67	2.67	3.74	8.81	2.36	
13°C	2.45	14.40	5.88	2.68	13.95	5.21	2.91	13.50	4.64	3.16	12.52	3.96	3.30	11.54	3.50	3.54	10.61	3.00	3.68	9.67	2.63	3.80	8.81	2.32	
12°C	2.50	14.40	5.76	2.73	13.95	5.11	2.96	13.50	4.56	3.22	12.52	3.89	3.36	11.54	3.43	3.59	10.61	2.96	3.75	9.67	2.58	3.87	8.81	2.28	
11°C	2.52	14.40	5.71	2.77	13.95	5.04	3.02	13.50	4.47	3.28	12.52	3.82	3.42	11.54	3.37	3.65	10.61	2.91	3.81	9.67	2.54	3.93	8.81	2.24	
10°C	2.57	14.40	5.60	2.82	13.95	4.95	3.07	13.50	4.40	3.34	12.52	3.75	3.48	11.54	3.32	3.71	10.61	2.86	3.87	9.67	2.50	4.00	8.81	2.20	
9°C	2.64	14.40	5.45	2.88	13.95	4.84	3.12	13.50	4.33	3.37	12.52	3.72	3.56	11.54	3.24	3.76	10.61	2.82	3.92	9.67	2.47	4.10	8.81	2.15	
8°C	2.72	14.40	5.29	2.95	13.95	4.73	3.18	13.50	4.25	3.40	12.52	3.68	3.64	11.54	3.17	3.82	10.61	2.78	3.98	9.67	2.43	4.21	8.81	2.09	
7°C	2.79	14.40	5.16	3.01	13.95	4.63	3.23	13.50	4.18	3.43	12.52	3.65	3.69	11.52	3.07	3.87	10.61	2.74	3.95	9.48	2.40	4.31	8.81	2.04	
6°C	3.01	14.46	4.81	3.21	13.88	4.32	3.42	13.30	3.89	3.92	12.52	3.19	3.91	11.33	2.89	3.97	10.61	2.67	4.06	9.45	2.33	4.41	8.81	2.00	
5°C	3.17	14.50	4.58	3.37	13.83	4.11	3.56	13.16	3.69	4.11	12.52	2.84	4.08	11.34	2.78	4.07	10.61	2.61	4.15	9.43	2.27	4.37	8.81	2.02	
4°C	3.33	14.54	4.36	3.52	13.78	3.91	3.71	13.01	3.51	4.40	12.27	2.79	4.25	11.35	2.67	4.27	10.55	2.47	4.23	9.41	2.22	4.55	8.78	1.93	
3°C	3.49	14.59	4.17	3.67	13.73	3.74	3.85	12.86	3.34	4.39	12.03	2.74	4.42	11.36	2.57	4.47	10.49	2.35	4.32	9.39	2.17	4.72	8.75	1.85	
2°C	3.66	14.63	4.00	3.83	13.67	3.57	3.99	12.72	3.18	4.38	11.78	2.69	4.59	11.37	2.48	4.67	10.43	2.23	4.40	9.37	2.13	4.83	8.71	1.80	
1°C	3.82	14.67	3.84	3.98	13.62	3.42	4.14	12.57	3.04	4.50	11.77	2.62	4.75	11.38	2.39	4.79	10.42	2.18	4.49	9.35	2.08	4.94	8.67	1.76	
0°C	3.98	14.71	3.69	4.13	13.57	3.28	4.28	12.43	2.90	4.61	11.77	2.55	4.92	11.39	2.32	4.91	10.41	2.12	4.58	9.33	2.04	5.06	8.63	1.71	
-1°C	4.15	14.76	3.56	4.28	13.52	3.16	4.42	12.28	2.78	4.73	11.76	2.49	5.09	11.41	2.24	5.04	10.41	2.07	4.66	9.31	2.00	5.17	8.59	1.66	
-2°C	4.31	14.80	3.44	4.44	13.47	3.03	4.57	12.13	2.66	4.85	11.76	2.42	5.26	11.42	2.17	5.16	10.40	2.02	4.75	9.29	1.96	5.29	8.55	1.62	
-3°C	4.47	14.84	3.32	4.59	13.42	2.92	4.71	11.99	2.54	4.96	11.75	2.37	5.43	11.43	2.11	5.28	10.39	1.97	4.83	9.27	1.92	5.40	8.51	1.58	
-4°C	4.63	14.89	3.21	4.74	13.36	2.82	4.85	11.84	2.44	5.11	11.75	2.30	5.59	11.44	2.04	5.41	10.38	1.92	4.92	9.25	1.88	5.56	8.49	1.53	
-5°C	4.80	14.93	3.11	4.90	13.31	2.72	5.00	11.69	2.34	5.25	11.74	2.24	5.76	11.45	1.99	5.53	10.37	1.88	5.00	9.23	1.84	5.72	8.47	1.48	
-6°C	4.96	14.97	3.02	5.05	13.26	2.63	5.14	11.55	2.25	5.40	11.74	2.17	5.93	11.46	1.93	5.66	10.36	1.83	5.09	9.21	1.81	5.88	8.44	1.44	
-7°C	4.95	14.96	3.02	5.04	13.25	2.63	5.13	11.54	2.25	5.54	11.														

2.2.2 alféa excellia A.I. 3-phases models

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

		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	1.45	11.50	7.93	1.57	11.15	7.10	1.69	10.80	6.39	1.89	10.45	5.53	2.11	10.10	4.79	2.36	9.79	4.15	2.64	9.48	3.59	2.98	9.25	3.10
	34°C	1.47	11.50	7.82	1.59	11.15	7.01	1.71	10.80	6.32	1.91	10.45	5.47	2.13	10.10	4.74	2.39	9.79	4.10	2.67	9.48	3.55	3.01	9.25	3.07
	33°C	1.47	11.50	7.82	1.60	11.15	6.97	1.73	10.80	6.24	1.93	10.45	5.41	2.16	10.10	4.68	2.41	9.79	4.06	2.70	9.48	3.51	3.04	9.25	3.04
	32°C	1.49	11.50	7.72	1.62	11.15	6.88	1.75	10.80	6.17	1.95	10.45	5.36	2.18	10.10	4.63	2.44	9.79	4.01	2.73	9.48	3.47	3.08	9.25	3.00
	31°C	1.51	11.50	7.62	1.64	11.15	6.80	1.77	10.80	6.10	1.98	10.45	5.28	2.21	10.10	4.57	2.46	9.79	3.98	2.76	9.48	3.43	3.11	9.25	2.97
	30°C	1.51	11.50	7.62	1.65	11.15	6.76	1.79	10.80	6.03	2.00	10.45	5.23	2.23	10.10	4.53	2.49	9.79	3.93	2.79	9.48	3.40	3.14	9.25	2.95
	29°C	1.53	11.50	7.52	1.67	11.15	6.68	1.81	10.80	5.97	2.02	10.45	5.17	2.25	10.10	4.49	2.51	9.79	3.90	2.82	9.48	3.36	3.17	9.25	2.92
	28°C	1.55	11.50	7.42	1.69	11.15	6.60	1.83	10.80	5.90	2.04	10.45	5.12	2.28	10.10	4.43	2.54	9.79	3.85	2.85	9.48	3.33	3.20	9.25	2.89
	27°C	1.56	11.50	7.37	1.70	11.15	6.56	1.84	10.80	5.87	2.06	10.45	5.07	2.30	10.10	4.39	2.56	9.79	3.82	2.87	9.48	3.30	3.24	9.25	2.85
	26°C	1.58	11.50	7.28	1.72	11.15	6.48	1.86	10.80	5.81	2.08	10.45	5.02	2.33	10.10	4.33	2.59	9.79	3.78	2.90	9.48	3.27	3.27	9.25	2.83
Outdoor temperature	25°C	1.60	11.50	7.19	1.74	11.15	6.41	1.88	10.80	5.74	2.10	10.45	4.98	2.35	10.10	4.30	2.61	9.79	3.75	2.93	9.48	3.24	3.30	9.25	2.80
	24°C	1.60	11.50	7.19	1.75	11.15	6.37	1.90	10.80	5.68	2.12	10.45	4.93	2.37	10.10	4.26	2.64	9.79	3.71	2.96	9.48	3.20	3.33	9.25	2.78
	23°C	1.62	11.50	7.10	1.77	11.15	6.30	1.92	10.80	5.63	2.15	10.45	4.86	2.40	10.10	4.21	2.66	9.79	3.68	2.99	9.48	3.17	3.36	9.25	2.75
	22°C	1.64	11.50	7.01	1.79	11.15	6.23	1.94	10.80	5.57	2.17	10.45	4.82	2.42	10.10	4.17	2.69	9.79	3.64	3.02	9.48	3.14	3.40	9.25	2.72
	21°C	1.64	11.50	7.01	1.80	11.15	6.19	1.96	10.80	5.51	2.19	10.45	4.77	2.45	10.10	4.12	2.71	9.79	3.61	3.05	9.48	3.11	3.43	9.25	2.70
	20°C	1.66	11.50	6.93	1.82	11.15	6.13	1.98	10.80	5.45	2.21	10.45	4.73	2.47	10.10	4.09	2.74	9.79	3.57	3.08	9.48	3.08	3.46	9.25	2.67
	19°C	1.70	11.50	6.76	1.86	11.15	5.99	2.02	10.80	5.35	2.25	10.45	4.64	2.51	10.10	4.02	2.78	9.79	3.52	3.12	9.48	3.04	3.49	9.25	2.65
	18°C	1.74	11.50	6.61	1.90	11.15	5.87	2.06	10.80	5.24	2.29	10.45	4.56	2.55	10.10	3.96	2.82	9.79	3.47	3.15	9.48	3.01	3.52	9.25	2.63
	17°C	1.76	11.50	6.53	1.93	11.15	5.78	2.10	10.80	5.14	2.34	10.45	4.47	2.60	10.10	3.88	2.86	9.79	3.42	3.19	9.48	2.97	3.54	9.25	2.61
	16°C	1.80	11.50	6.39	1.97	11.15	5.66	2.14	10.80	5.05	2.38	10.45	4.39	2.64	10.10	3.83	2.90	9.79	3.38	3.22	9.48	2.94	3.57	9.25	2.59
Outdoor temperature	15°C	1.84	11.50	6.25	2.01	11.15	5.55	2.18	10.80	4.95	2.42	10.45	4.32	2.68	10.10	3.77	2.94	9.79	3.33	3.26	9.48	2.91	3.60	9.25	2.57
	14°C	1.86	11.50	6.18	2.04	11.15	5.47	2.22	10.80	4.86	2.46	10.45	4.25	2.71	10.10	3.73	2.98	9.79	3.29	3.30	9.48	2.87	3.64	9.25	2.54
	13°C	1.90	11.50	6.05	2.08	11.15	5.36	2.26	10.80	4.78	2.50	10.45	4.18	2.75	10.10	3.67	3.02	9.79	3.24	3.34	9.48	2.84	3.68	9.25	2.51
	12°C	1.92	11.50	5.99	2.11	11.15	5.28	2.30	10.80	4.70	2.54	10.45	4.11	2.78	10.10	3.63	3.06	9.79	3.20	3.38	9.48	2.80	3.71	9.25	2.49
	11°C	1.96	11.50	5.87	2.15	11.15	5.19	2.34	10.80	4.62	2.58	10.45	4.05	2.82	10.10	3.58	3.10	9.79	3.16	3.42	9.48	2.77	3.75	9.25	2.47
	10°C	1.98	11.50	5.81	2.18	11.15	5.11	2.38	10.80	4.54	2.62	10.45	3.99	2.85	10.10	3.54	3.14	9.79	3.12	3.46	9.48	2.74	3.79	9.25	2.44
	9°C	2.02	11.50	5.69	2.22	11.15	5.02	2.42	10.80	4.46	2.66	10.45	3.93	2.90	10.10	3.48	3.19	9.79	3.07	3.51	9.48	2.70	3.81	9.25	2.43
	8°C	2.07	11.50	5.56	2.27	11.15	4.91	2.47	10.80	4.37	2.71	10.45	3.86	2.96	10.10	3.41	3.25	9.79	3.01	3.55	9.48	2.67	3.82	9.25	2.42
	7°C	2.11	11.50	5.45	2.31	11.15	4.83	2.51	10.80	4.30	2.75	10.45	3.80	2.99	9.90	3.32	3.30	9.79	2.97	3.52	9.48	2.64	3.84	9.25	2.41
	6°C	2.31	11.54	5.00	2.50	11.15	4.47	2.69	10.76	4.00	2.88	10.45	3.63	3.15	9.91	3.15	3.43	9.79	2.85	3.68	9.29	2.52	3.85	9.25	2.40
Outdoor temperature	5°C	2.46	11.57	4.71	2.64	11.15	4.23	2.82	10.73	3.80	3.00	10.45	3.48	3.27	9.92	3.03	3.55	9.79	2.76	3.80	9.29	2.45	3.86	9.25	2.40
	4°C	2.60	11.61	4.46	2.78	11.15	4.01	2.95	10.70	3.62	3.18	10.45	3.29	3.40	9.93	2.92	3.68	9.79	2.66	3.92	9.29	2.37	3.97	9.25	2.33
	3°C	2.75	11.64	4.23	2.92	11.15	3.82	3.09	10.67	3.45	3.36	10.45	3.11	3.52	9.93	2.82	3.82	9.79	2.56	4.04	9.29	2.30	4.09	9.25	2.26
	2°C	2.90	11.67	4.02	3.06	11.15	3.64	3.22	10.64	3.30	3.54	10.45	2.95	3.65	9.94	2.73	3.95	9.79	2.48	4.15	9.29	2.24	4.20	9.25	2.20
	1°C	3.05	11.70	3.84	3.20	11.15	3.48	3.35	10.61	3.16	3.66	10.45	2.86	3.77	9.95	2.64	4.08	9.79	2.40	4.27	9.29	2.17	4.34	9.25	2.13
	0°C	3.20	11.73	3.67	3.34	11.16	3.34	3.49	10.58	3.03	3.78	10.45	2.76	3.90	9.95	2.56	3.55	9.79	2.33	4.39	9.29	2.12	4.48	9.25	2.06
	-1°C	3.35	11.77	3.52	3.48	11.16	3.20	3.62	10.55	2.91	3.89	10.45	2.69	4.02	9.96	2.48	3.43	9.79	2.26	4.51	9.29	2.06	4.62	9.25	2.00
	-2°C	3.50	11.80	3.38	3.63	11.16	3.08	3.76	10.51	2.80	4.01	10.45	2.61	4.14	9.97	2.41	4.46	9.79	2.20	4.63	9.29	2.01	4.76	9.25	1.94
	-3°C	3.64	11.83	3.25	3.77	11.16	2.96	3.89	10.48	2.70	4.13	10.45	2.53	4.27	9.97	2.34	4.59	9.79	2.13	4.74	9.29	1.96	4.90	9.25	1.89
	-4°C	3.79	11.86	3.13	3.91	11.16	2.86	4.02	10.45	2.60	4.23	10.44	2.47	4.39	9.98	2.27	4.70	9.79	2.08	4.86	9.28	1.91	4.99	9.06	1.82
Outdoor temperature	-5°C	3.94	11.89	3.02	4.05	11.16	2.76	4.16	10.42	2.51	4.33	10.43	2.41	4.52	9.99	2.21	4.81	9.79							

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

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	1.71	14.60	8.54	1.84	13.95	7.58	1.97	13.30	6.75	2.20	13.05	5.93	2.50	12.60	5.04	2.75	12.20	4.44	3.00	11.80	3.93	3.49	11.50	3.30	
34°C	1.73	14.60	8.44	1.87	13.95	7.46	2.01	13.30	6.62	2.24	13.05	5.83	2.54	12.60	4.96	2.80	12.20	4.36	3.06	11.80	3.86	3.54	11.50	3.25	
33°C	1.78	14.60	8.20	1.91	13.95	7.30	2.04	13.30	6.52	2.28	13.05	5.72	2.58	12.60	4.88	2.85	12.20	4.28	3.11	11.80	3.79	3.58	11.50	3.21	
32°C	1.80	14.60	8.11	1.94	13.95	7.19	2.08	13.30	6.39	2.32	13.05	5.63	2.62	12.60	4.81	2.90	12.20	4.21	3.17	11.80	3.72	3.63	11.50	3.17	
31°C	1.82	14.60	8.02	1.97	13.95	7.08	2.12	13.30	6.27	2.36	13.05	5.53	2.66	12.60	4.74	2.95	12.20	4.14	3.23	11.80	3.65	3.68	11.50	3.13	
30°C	1.84	14.60	7.93	2.00	13.95	6.98	2.16	13.30	6.16	2.40	13.05	5.44	2.70	12.60	4.67	3.00	12.20	4.07	3.28	11.80	3.60	3.72	11.50	3.09	
29°C	1.89	14.60	7.72	2.04	13.95	6.84	2.19	13.30	6.07	2.44	13.05	5.35	2.74	12.60	4.60	3.05	12.20	4.00	3.34	11.80	3.53	3.77	11.50	3.05	
28°C	1.91	14.60	7.64	2.07	13.95	6.74	2.23	13.30	5.96	2.48	13.05	5.26	2.78	12.60	4.53	3.10	12.20	3.94	3.40	11.80	3.47	3.82	11.50	3.01	
27°C	1.93	14.60	7.56	2.10	13.95	6.64	2.27	13.30	5.86	2.52	13.05	5.18	2.83	12.60	4.45	3.15	12.20	3.87	3.45	11.80	3.42	3.86	11.50	2.98	
26°C	1.95	14.60	7.49	2.13	13.95	6.55	2.31	13.30	5.76	2.56	13.05	5.10	2.87	12.60	4.39	3.20	12.20	3.81	3.51	11.80	3.36	3.91	11.50	2.94	
25°C	2.00	14.60	7.30	2.17	13.95	6.43	2.34	13.30	5.68	2.60	13.05	5.02	2.91	12.60	4.33	3.25	12.20	3.75	3.57	11.80	3.31	3.96	11.50	2.90	
24°C	2.02	14.60	7.23	2.20	13.95	6.34	2.38	13.30	5.59	2.64	13.05	4.94	2.95	12.60	4.27	3.30	12.20	3.70	3.62	11.80	3.26	4.00	11.50	2.88	
23°C	2.04	14.60	7.16	2.23	13.95	6.26	2.42	13.30	5.50	2.68	13.05	4.87	2.99	12.60	4.21	3.35	12.20	3.64	3.68	11.80	3.21	4.05	11.50	2.84	
22°C	2.06	14.60	7.09	2.26	13.95	6.17	2.46	13.30	5.41	2.72	13.05	4.80	3.03	12.60	4.16	3.40	12.20	3.59	3.74	11.80	3.16	4.10	11.50	2.80	
21°C	2.11	14.60	6.92	2.30	13.95	6.07	2.49	13.30	5.34	2.76	13.05	4.73	3.07	12.60	4.10	3.45	12.20	3.54	3.79	11.80	3.11	4.14	11.50	2.78	
20°C	2.13	14.60	6.85	2.33	13.95	5.99	2.53	13.30	5.26	2.80	13.05	4.66	3.11	12.60	4.05	3.50	12.20	3.49	3.85	11.80	3.06	4.19	11.50	2.74	
19°C	2.18	14.60	6.70	2.38	13.95	5.86	2.58	13.30	5.16	2.86	13.05	4.56	3.17	12.60	3.97	3.55	12.20	3.44	3.92	11.80	3.01	4.25	11.50	2.71	
18°C	2.23	14.60	6.55	2.43	13.95	5.74	2.63	13.30	5.06	2.92	13.05	4.47	3.23	12.60	3.90	3.61	12.20	3.38	3.99	11.80	2.96	4.31	11.50	2.67	
17°C	2.25	14.60	6.49	2.47	13.95	5.65	2.69	13.30	4.94	2.97	13.05	4.39	3.28	12.60	3.84	3.66	12.20	3.33	4.06	11.80	2.91	4.37	11.50	2.63	
16°C	2.30	14.60	6.35	2.52	13.95	5.54	2.74	13.30	4.85	3.03	13.05	4.31	3.34	12.60	3.77	3.22	12.20	3.28	4.13	11.80	2.86	4.43	11.50	2.60	
15°C	2.35	14.60	6.21	2.57	13.95	5.43	2.79	13.30	4.77	3.09	13.05	4.22	3.40	12.60	3.71	3.77	12.20	3.24	4.20	11.80	2.81	4.49	11.50	2.56	
14°C	2.40	14.60	6.08	2.62	13.95	5.32	2.84	13.30	4.68	3.15	13.05	4.14	3.46	12.60	3.64	3.84	12.20	3.18	4.27	11.80	2.76	4.57	11.50	2.52	
13°C	2.43	14.60	6.01	2.66	13.95	5.24	2.89	13.30	4.60	3.21	13.05	4.07	3.51	12.60	3.59	3.91	12.20	3.12	4.34	11.80	2.72	4.65	11.50	2.47	
12°C	2.47	14.60	5.91	2.71	13.95	5.15	2.95	13.30	4.51	3.26	13.05	4.00	3.57	12.60	3.53	3.98	12.20	3.07	4.41	11.80	2.68	4.73	11.50	2.43	
11°C	2.50	14.60	5.84	2.75	13.95	5.07	3.00	13.30	4.43	3.32	13.05	3.93	3.62	12.60	3.48	4.05	12.20	3.01	4.48	11.80	2.63	4.81	11.50	2.39	
10°C	2.55	14.60	5.73	2.80	13.95	4.98	3.05	13.30	4.36	3.38	13.05	3.86	3.68	12.60	3.42	4.12	12.20	2.96	4.48	11.80	2.63	4.89	11.50	2.35	
9°C	2.62	14.70	5.61	2.86	13.95	4.88	3.10	13.20	4.26	3.41	13.05	3.83	3.72	12.60	3.39	4.14	12.20	2.95	4.48	11.80	2.63	4.91	11.50	2.34	
8°C	2.69	14.80	5.50	2.92	13.95	4.78	3.15	13.10	4.16	3.45	13.05	3.78	3.77	12.60	3.34	4.16	12.20	2.93	4.48	11.80	2.63	4.92	11.50	2.34	
7°C	2.85	14.90	5.23	2.98	13.95	4.68	3.11	13.00	4.18	3.48	13.05	3.75	3.81	12.34	3.24	4.18	12.20	2.92	4.49	10.81	2.41	4.94	11.50	2.33	
6°C	3.05	14.79	4.84	3.18	13.88	4.36	3.31	12.97	3.92	3.99	13.05	3.27	3.94	12.18	3.09	4.29	12.20	2.84	4.61	10.73	2.33	4.98	11.50	2.31	
5°C	3.21	14.71	4.59	3.34	13.83	4.15	3.46	12.95	3.74	4.49	13.05	2.91	4.04	12.06	2.98	4.40	12.20	2.77	4.69	10.67	2.27	5.01	11.50	2.30	
4°C	3.36	14.63	4.35	3.49	13.78	3.95	3.62	12.92	3.57	4.52	12.95	2.87	4.14	11.94	2.88	4.65	12.20	2.62	4.78	10.61	2.22	5.22	11.50	2.20	
3°C	3.52	14.55	4.14	3.64	13.73	3.77	3.77	12.90	3.42	4.55	12.85	2.82	4.24	11.82	2.79	4.90	12.20	2.49	4.87	10.56	2.17	5.42	11.50	2.12	
2°C	3.67	14.47	3.94	3.80	13.67	3.60	3.92	12.88	3.28	4.58	12.75	2.78	4.35	11.70	2.69	5.15	12.20	2.37	4.95	10.50	2.12	5.63	11.50	2.04	
1°C	3.82	14.39	3.76	3.95	13.62	3.45	4.07	12.86	3.16	4.69	12.75	2.72	4.45	11.58	2.61	5.28	12.18	2.31	5.04	10.44	2.07	5.72	11.37	1.99	
0°C	3.98	14.31	3.60	4.10	13.57	3.31	4.23	12.83	3.04	4.80	12.75	2.66	4.55	11.47	2.52	5.40	12.16	2.25	5.13	10.38	2.02	5.82	11.24	1.93	
-1°C	4.13	14.22	3.44	4.25	13.52	3.18	4.38	12.81	2.93	4.90	12.75	2.60	4.65	11.35	2.44	5.53	12.14	2.20	5.21	10.32	1.98	5.91	11.11	1.88	
-2°C	4.28	14.14	3.30	4.41	13.47	3.06	4.53	12.79	2.82	5.01	12.75	2.54	4.75	11.23	2.36	5.65	12.12	2.15	5.30	10.26	1.94	6.01	10.98	1.83	
-3°C	4.44	14.06	3.17	4.56	13.42	2.94	4.68	12.77	2.73	5.12	12.75	2.49	4.85	11.11	2.29	5.78	12.10	2.09	5.39	10.21	1.89	6.10	10.85	1.78	
-4°C	4.59	13.98	3.04	4.71	13.36	2.83	4.84	12.74	2.64	5.25	12.75	2.43	4.95	10.99	2.22	5.84	11.96	2.05	5.48	10.15	1.85	6.17	10.66	1.73	
-5°C	4.75	13.90	2.93	4.87	13.31	2.74	4.99	12.72	2.55	5.37	12.75	2.37	5.05	10.87	2.15	5.90	11.83	2.01	5.56	10.09	1.81	6.25	10.48	1.68	
-6°C	4.90	13.82	2.82	5.02	13.26	2.64	5.14	12.70	2.47	5.50	12.75	2.32	5.15	10.75	2.09	5.95	11.69	1.96	5.65	10.03	1.78	6.32	10.29	1.63	
-7°C	4.89	1																							

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

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	1.97	17.35	8.81	2.04	16.26	7.97	2.11	15.17	7.19	2.24	14.09	6.29	2.38	13.00	5.46	2.73	12.98	4.75	3.20	12.96	4.05	3.61	12.49	3.46
34°C	2.02	17.35	8.59	2.09	16.26	7.78	2.16	15.17	7.02	2.30	14.09	6.13	2.44	13.00	5.33	2.80	12.98	4.64	3.27	12.96	3.96	3.67	12.49	3.40
33°C	2.06	17.35	8.42	2.14	16.26	7.60	2.22	15.17	6.83	2.35	14.09	6.00	2.50	13.00	5.20	2.87	12.98	4.52	3.34	12.96	3.88	3.73	12.49	3.35
32°C	2.11	17.35	8.22	2.19	16.26	7.42	2.27	15.17	6.68	2.41	14.09	5.85	2.56	13.00	5.08	2.94	12.98	4.41	3.41	12.96	3.80	3.79	12.49	3.30
31°C	2.14	17.35	8.11	2.23	16.26	7.29	2.32	15.17	6.54	2.47	14.09	5.70	2.62	13.00	4.96	3.01	12.98	4.31	3.49	12.96	3.71	3.85	12.49	3.24
30°C	2.18	17.35	7.96	2.28	16.26	7.13	2.38	15.17	6.37	2.52	14.09	5.59	2.68	13.00	4.85	3.08	12.98	4.21	3.56	12.96	3.64	3.91	12.49	3.19
29°C	2.23	17.35	7.78	2.33	16.26	6.98	2.43	15.17	6.24	2.58	14.09	5.46	2.74	13.00	4.74	3.15	12.98	4.12	3.63	12.96	3.57	3.97	12.49	3.15
28°C	2.28	17.35	7.61	2.38	16.26	6.83	2.48	15.17	6.12	2.64	14.09	5.34	2.80	13.00	4.64	3.22	12.98	4.03	3.70	12.96	3.50	4.03	12.49	3.10
27°C	2.32	17.35	7.48	2.43	16.26	6.69	2.54	15.17	5.97	2.69	14.09	5.24	2.87	13.00	4.53	3.28	12.98	3.96	3.77	12.96	3.44	4.10	12.49	3.05
26°C	2.37	17.35	7.32	2.48	16.26	6.56	2.59	15.17	5.86	2.75	14.09	5.12	2.93	13.00	4.44	3.35	12.98	3.87	3.84	12.96	3.38	4.16	12.49	3.00
25°C	2.42	17.35	7.17	2.53	16.26	6.43	2.64	15.17	5.75	2.81	14.09	5.01	2.99	13.00	4.35	3.42	12.98	3.80	3.91	12.96	3.31	4.22	12.49	2.96
24°C	2.46	17.35	7.05	2.58	16.26	6.30	2.70	15.17	5.62	2.86	14.09	4.93	3.05	13.00	4.26	3.49	12.98	3.72	3.98	12.96	3.26	4.28	12.49	2.92
23°C	2.49	17.35	6.97	2.62	16.26	6.21	2.75	15.17	5.52	2.92	14.09	4.83	3.11	13.00	4.18	3.56	12.98	3.65	4.06	12.96	3.19	4.34	12.49	2.88
22°C	2.54	17.35	6.83	2.67	16.26	6.09	2.80	15.17	5.42	2.98	14.09	4.73	3.17	13.00	4.10	3.63	12.98	3.58	4.13	12.96	3.14	4.40	12.49	2.84
21°C	2.58	17.35	6.72	2.72	16.26	5.98	2.86	15.17	5.30	3.03	14.09	4.65	3.23	13.00	4.02	3.70	12.98	3.51	4.20	12.96	3.09	4.46	12.49	2.80
20°C	2.63	17.35	6.60	2.77	16.26	5.87	2.91	15.17	5.21	3.09	14.09	4.56	3.29	13.00	3.95	3.77	12.98	3.44	4.27	12.96	3.04	4.52	12.49	2.76
19°C	2.71	17.35	6.40	2.84	16.26	5.73	2.97	15.17	5.11	3.14	14.09	4.49	3.34	13.00	3.89	3.82	12.98	3.40	4.33	12.96	2.99	4.58	12.49	2.73
18°C	2.77	17.35	6.26	2.90	16.26	5.61	3.03	15.17	5.01	3.20	14.09	4.40	3.39	13.00	3.83	3.88	12.98	3.35	4.39	12.96	2.95	4.65	12.49	2.69
17°C	2.84	17.35	6.11	2.97	16.26	5.47	3.10	15.17	4.89	3.25	14.09	4.34	3.43	13.00	3.79	3.93	12.98	3.30	4.45	12.96	2.91	4.71	12.49	2.65
16°C	2.90	17.35	5.98	3.03	16.26	5.37	3.16	15.17	4.80	3.31	14.09	4.26	3.48	13.00	3.74	3.99	12.98	3.25	4.51	12.96	2.87	4.78	12.49	2.61
15°C	2.98	17.35	5.82	3.10	16.26	5.25	3.22	15.17	4.71	3.36	14.09	4.19	3.53	13.00	3.68	4.04	12.98	3.21	4.57	12.96	2.84	4.84	12.49	2.58
14°C	3.06	17.35	5.67	3.17	16.26	5.13	3.28	15.17	4.63	3.41	14.09	4.13	3.59	13.00	3.62	4.10	12.98	3.17	4.64	12.96	2.79	4.91	12.49	2.54
13°C	3.16	17.35	5.49	3.25	16.26	5.00	3.34	15.17	4.54	3.47	14.09	4.06	3.64	13.00	3.57	4.16	12.98	3.12	4.70	12.96	2.76	4.98	12.49	2.51
12°C	3.24	17.35	5.35	3.32	16.26	4.90	3.40	15.17	4.46	3.52	14.09	4.00	3.70	13.00	3.51	4.22	12.98	3.08	4.77	12.96	2.72	5.05	12.49	2.47
11°C	3.34	17.35	5.19	3.40	16.26	4.78	3.46	15.17	4.38	3.58	14.09	3.94	3.75	13.00	3.47	4.28	12.98	3.03	4.83	12.96	2.68	5.12	12.49	2.44
10°C	3.42	17.35	5.07	3.47	16.26	4.69	3.52	15.17	4.31	3.63	14.09	3.88	3.81	13.00	3.41	4.34	12.98	2.99	4.90	12.96	2.64	5.19	12.49	2.41
9°C	3.48	17.35	4.99	3.53	16.26	4.61	3.58	15.17	4.24	3.70	14.09	3.81	3.87	13.00	3.36	4.41	12.98	2.94	4.98	12.95	2.60	5.27	12.49	2.37
8°C	3.52	17.35	4.93	3.58	16.26	4.54	3.64	15.17	4.17	3.76	14.09	3.75	3.94	13.00	3.30	4.49	12.98	2.89	5.00	12.83	2.57	5.35	12.49	2.33
7°C	3.58	17.35	4.85	3.64	16.26	4.47	3.70	15.17	4.10	3.83	14.09	3.68	3.97	12.75	3.21	4.56	12.98	2.85	5.04	12.71	2.52	5.43	12.49	2.30
6°C	3.91	17.07	4.36	4.02	16.01	3.98	4.13	14.95	3.62	4.36	14.00	3.21	4.46	12.77	2.86	5.03	12.98	2.58	5.22	12.64	2.42	5.51	12.49	2.27
5°C	4.24	16.86	3.98	4.40	15.82	3.60	4.56	14.79	3.24	4.88	13.92	2.85	4.92	12.78	2.60	5.49	12.98	2.36	5.52	12.58	2.28	5.58	12.49	2.24
4°C	4.25	16.64	3.92	4.37	15.63	3.58	4.49	14.62	3.26	4.91	13.71	2.79	5.12	12.80	2.50	5.59	12.98	2.32	5.74	12.53	2.18	5.86	12.49	2.13
3°C	4.25	16.43	3.87	4.33	15.45	3.57	4.41	14.46	3.28	4.95	13.51	2.73	5.31	12.82	2.41	5.70	12.98	2.28	5.95	12.48	2.10	6.15	12.49	2.03
2°C	4.26	16.22	3.81	4.30	15.26	3.55	4.34	14.30	3.29	4.98	13.30	2.67	5.51	12.83	2.33	5.80	12.98	2.24	6.17	12.43	2.01	6.43	12.49	1.94
1°C	4.32	16.01	3.71	4.40	15.07	3.43	4.48	14.13	3.15	5.09	13.29	2.61	5.61	12.85	2.29	5.91	12.94	2.19	6.29	12.37	1.97	6.51	12.30	1.89
0°C	4.36	15.80	3.62	4.49	14.88	3.32	4.62	13.97	3.02	5.19	13.28	2.56	5.71	12.86	2.25	6.01	12.91	2.15	6.40	12.32	1.93	6.59	12.10	1.84
-1°C	4.42	15.59	3.53	4.59	14.70	3.20	4.76	13.81	2.90	5.30	13.27	2.50	5.82	12.88	2.21	6.12	12.87	2.10	6.52	12.27	1.88	6.68	11.91	1.78
-2°C	4.46	15.38	3.45	4.68	14.51	3.10	4.90	13.64	2.78	5.40	13.26	2.46	5.92	12.90	2.18	6.22	12.84	2.06	6.63	12.22	1.84	6.76	11.71	1.73
-3°C	4.52	15.17	3.36	4.78	14.32	3.00	5.04	13.48	2.67	5.51	13.25	2.40	6.02	12.91	2.15	6.33	12.80	2.02	6.75	12.16	1.80	6.84	11.52	1.68
-4°C	4.65	14.95	3.22	4.89	14.13	2.89	5.13	13.32	2.60	5.62	13.25	2.36	6.11	12.93	2.12	6.38	12.71	1.99	6.78	12.11	1.79	6.88	11.37	1.65
-5°C	4.78	14.74	3.08	5.00	13.95	2.79	5.22	13.15	2.52	5.73	13.25	2.31	6.20	12.95	2.09	6.44	12.63	1.96	6.82	12.06	1.77	6.91	11.21	1.62
-6°C	4.91	14.53	2.96	5.11	13.76	2.69	5.31	12.99	2.45	5.83	13.25	2.27	6.28	12.96	2.06	6.49	12.54	1.93	6.85	12.01	1.75	6.95	11.06	1.59
-7°C	5.04	14.52																						

2.3 Performances tables (Heating mode)

Test conditions comply with EN 14-511 (defrosting included).

HC : Heating capacity (kW)

IP : Input power (kW)

COP : Coefficient of performance

2.3.1 alféa excellia A.I. single phase models

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

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	2.94	22.76	7.74	4.09	21.68	5.30	4.27	20.11	4.71	4.41	19.43	4.40	4.54	18.98	4.18	4.66	18.52	3.98	4.77	18.07	3.79	4.89	17.61	3.60	
34°C	2.93	22.65	7.73	4.07	21.57	5.29	4.25	20.01	4.71	4.40	19.33	4.40	4.52	18.88	4.18	4.64	18.42	3.97	4.75	17.97	3.78	4.87	17.52	3.60	
33°C	2.92	22.54	7.72	4.06	21.46	5.29	4.24	19.91	4.70	4.38	19.23	4.39	4.50	18.78	4.17	4.62	18.33	3.97	4.73	17.87	3.78	4.85	17.42	3.59	
32°C	2.91	22.42	7.71	4.04	21.35	5.28	4.22	19.81	4.70	4.36	19.14	4.39	4.49	18.68	4.17	4.60	18.23	3.96	4.71	17.77	3.77	4.83	17.32	3.59	
31°C	2.90	22.31	7.70	4.03	21.25	5.28	4.20	19.71	4.69	4.34	19.04	4.38	4.47	18.59	4.16	4.58	18.13	3.96	4.70	17.68	3.76	4.81	17.22	3.58	
30°C	2.88	22.20	7.70	4.01	21.14	5.27	4.18	19.61	4.69	4.33	18.94	4.38	4.45	18.49	4.16	4.56	18.04	3.95	4.68	17.58	3.76	4.79	17.13	3.58	
29°C	2.87	22.09	7.69	3.99	21.04	5.27	4.17	19.51	4.68	4.31	18.85	4.37	4.43	18.39	4.15	4.54	17.94	3.95	4.66	17.49	3.75	4.77	17.03	3.57	
28°C	2.86	21.98	7.68	3.98	20.93	5.26	4.15	19.42	4.68	4.29	18.75	4.37	4.41	18.30	4.15	4.53	17.84	3.94	4.64	17.39	3.75	4.75	16.94	3.56	
27°C	2.85	21.87	7.67	3.96	20.83	5.26	4.14	19.32	4.67	4.28	18.66	4.36	4.40	18.20	4.14	4.51	17.75	3.94	4.62	17.29	3.74	4.73	16.84	3.56	
26°C	2.84	21.76	7.67	3.95	20.72	5.25	4.12	19.22	4.67	4.26	18.56	4.36	4.38	18.11	4.14	4.49	17.65	3.93	4.60	17.20	3.74	4.71	16.75	3.55	
25°C	2.83	21.65	7.66	3.93	20.62	5.25	4.10	19.13	4.66	4.24	18.47	4.35	4.36	18.01	4.13	4.47	17.56	3.93	4.58	17.11	3.73	4.70	16.65	3.55	
24°C	2.82	21.55	7.65	3.91	20.52	5.24	4.09	19.03	4.66	4.23	18.37	4.35	4.34	17.92	4.13	4.46	17.47	3.92	4.57	17.01	3.73	4.68	16.56	3.54	
23°C	2.80	21.44	7.64	3.90	20.42	5.24	4.07	18.94	4.65	4.21	18.28	4.34	4.33	17.83	4.12	4.44	17.37	3.92	4.55	16.92	3.72	4.66	16.47	3.53	
22°C	2.79	21.33	7.64	3.88	20.31	5.23	4.05	18.84	4.65	4.19	18.19	4.34	4.31	17.73	4.11	4.42	17.28	3.91	4.53	16.83	3.71	4.64	16.37	3.53	
21°C	2.78	21.23	7.63	3.87	20.21	5.23	4.04	18.75	4.64	4.17	18.10	4.33	4.29	17.64	4.11	4.40	17.19	3.90	4.51	16.73	3.71	4.62	16.28	3.52	
20°C	2.77	21.12	7.62	3.85	20.11	5.22	4.02	18.66	4.64	4.16	18.00	4.33	4.28	17.55	4.10	4.38	17.10	3.90	4.49	16.64	3.70	4.60	16.19	3.52	
19°C	2.81	21.02	7.48	3.89	20.01	5.15	4.05	18.57	4.58	4.18	17.91	4.28	4.30	17.46	4.06	4.41	17.00	3.86	4.52	16.55	3.67	4.62	16.10	3.48	
18°C	2.85	20.91	7.34	3.92	19.91	5.08	4.09	18.47	4.52	4.21	17.82	4.23	4.32	17.37	4.02	4.43	16.91	3.82	4.54	16.46	3.63	4.65	16.01	3.44	
17°C	2.89	20.81	7.21	3.95	19.81	5.01	4.12	18.38	4.46	4.24	17.73	4.19	4.34	17.28	3.98	4.45	16.82	3.78	4.56	16.37	3.59	4.67	15.92	3.41	
16°C	2.92	20.70	7.08	3.99	19.72	4.94	4.16	18.29	4.40	4.26	17.64	4.14	4.36	17.19	3.94	4.47	16.73	3.74	4.58	16.28	3.55	4.69	15.83	3.37	
15°C	2.96	20.60	6.96	4.02	19.62	4.88	4.19	18.20	4.34	4.29	17.55	4.09	4.38	17.10	3.90	4.49	16.64	3.70	4.60	16.19	3.52	4.71	15.74	3.34	
14°C	3.00	20.50	6.83	4.05	19.52	4.81	4.22	18.11	4.29	4.31	17.46	4.05	4.41	17.01	3.86	4.52	16.55	3.67	4.62	16.10	3.48	4.73	15.65	3.31	
13°C	3.04	20.40	6.71	4.09	19.42	4.75	4.26	18.02	4.23	4.34	17.37	4.00	4.43	16.92	3.82	4.54	16.47	3.63	4.65	16.01	3.45	4.76	15.56	3.27	
12°C	3.08	20.29	6.60	4.12	19.33	4.69	4.29	17.93	4.18	4.36	17.29	3.96	4.45	16.83	3.78	4.56	16.38	3.59	4.67	15.92	3.41	4.78	15.47	3.24	
11°C	3.29	19.90	6.05	4.25	19.03	4.47	4.54	17.86	3.94	4.60	17.22	3.74	4.68	16.76	3.58	4.79	16.31	3.40	4.90	15.85	3.24	5.01	15.40	3.07	
10°C	3.47	19.47	5.61	4.35	18.70	4.30	4.75	17.76	3.74	4.81	17.12	3.56	4.88	16.66	3.41	4.99	16.21	3.25	5.10	15.75	3.09	5.21	15.30	2.94	
9°C	3.68	19.07	5.18	4.48	18.41	4.10	4.99	17.69	3.54	5.04	17.05	3.38	5.12	16.59	3.24	5.22	16.14	3.09	5.33	15.68	2.94	5.44	15.23	2.80	
8°C	3.86	18.64	4.82	4.59	18.08	3.94	5.21	17.59	3.38	5.25	16.95	3.23	5.32	16.49	3.10	5.43	16.04	2.96	5.54	15.59	2.82	5.65	15.13	2.68	
7°C	4.17	18.33	4.40	4.81	17.88	3.72	5.45	17.42	3.20	5.53	16.97	3.07	5.62	16.51	2.94	5.74	16.06	2.80	5.86	15.61	2.66	5.94	15.15	2.55	
6°C	5.70	18.35	3.22	6.23	17.84	2.86	6.71	17.32	2.58	6.82	16.81	2.46	6.94	16.29	2.35	7.08	15.78	2.23	7.22	15.26	2.11	7.26	14.75	2.03	
5°C	6.95	18.34	2.64	7.40	17.77	2.40	7.74	17.21	2.22	7.88	16.64	2.11	8.02	16.07	2.00	8.17	15.50	1.90	8.33	14.94	1.79	8.34	14.37	1.72	
4°C	7.98	18.34	2.30	8.36	17.73	2.12	8.61	17.12	1.99	8.76	16.51	1.88	8.92	15.90	1.78	9.09	15.30	1.68	9.25	14.69	1.59	9.24	14.08	1.52	
3°C	8.77	18.37	2.09	9.11	17.72	1.94	9.31	17.08	1.84	9.47	16.44	1.74	9.64	15.80	1.64	9.81	15.15	1.54	9.98	14.51	1.45	9.96	13.87	1.39	
2°C	9.69	18.37	1.90	10.03	17.69	1.76	10.20	17.00	1.67	10.37	16.31	1.57	10.54	15.63	1.48	10.71	14.94	1.39	10.89	14.26	1.31	10.85	13.57	1.25	
1°C	9.69	18.33	1.89	10.02	17.64	1.76	10.20	16.95	1.66	10.37	16.26	1.57	10.54	15.57	1.48	10.71	14.88	1.39	10.88	14.19	1.30	10.85	13.50	1.24	
0°C	9.70	18.28	1.89	10.02	17.59	1.76	10.19	16.90	1.66	10.36	16.20	1.56	10.52	15.51	1.47	10.69	14.82	1.39	10.87	14.13	1.30	10.85	13.43	1.24	
-1°C	9.70	18.24	1.88	10.01	17.54	1.75	10.17	16.85	1.66	10.34	16.15	1.56	10.50	15.45	1.47	10.67	14.76	1.38	10.85	14.06	1.30	10.85	13.36	1.23	
-2°C	9.70	18.19	1.88	9.99	17.49	1.75	10.15	16.79	1.65	10.31	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	9.71	18.15	1.87	9.97	17.45	1.75	10.13	16.74	1.65	10.28	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	9.72	18.11	1.86	9.95	17.40	1.75	10.09	16.69	1.65	10.24	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	9.73	18.06	1.86	9.92	17.35	1.75	10.06	16.64	1.65	10.19	15.93	1.56	10.32	15.22	1.47	10.45	14.51								

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

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	3.22	23.02	7.16	4.19	23.87	5.70	4.40	22.03	5.01	4.56	21.14	4.63	4.70	20.49	4.36	4.83	19.84	4.11	4.96	19.19	3.87	5.09	18.54	3.65
34°C	3.20	22.91	7.15	4.18	23.76	5.69	4.38	21.92	5.00	4.54	21.03	4.63	4.68	20.38	4.35	4.81	19.73	4.10	4.94	19.08	3.86	5.07	18.43	3.64
33°C	3.19	22.80	7.15	4.16	23.64	5.68	4.36	21.81	5.00	4.52	20.92	4.62	4.66	20.28	4.35	4.79	19.63	4.10	4.92	18.98	3.86	5.05	18.33	3.63
32°C	3.18	22.68	7.14	4.14	23.52	5.68	4.34	21.70	4.99	4.51	20.82	4.62	4.64	20.17	4.34	4.77	19.52	4.09	4.90	18.87	3.85	5.03	18.22	3.63
31°C	3.16	22.57	7.13	4.13	23.40	5.67	4.33	21.59	4.99	4.49	20.71	4.61	4.63	20.06	4.34	4.75	19.41	4.08	4.88	18.76	3.85	5.01	18.11	3.62
30°C	3.15	22.46	7.13	4.11	23.29	5.67	4.31	21.49	4.98	4.47	20.61	4.61	4.61	19.96	4.33	4.73	19.31	4.08	4.86	18.66	3.84	4.99	18.01	3.61
29°C	3.14	22.35	7.12	4.09	23.17	5.66	4.29	21.38	4.98	4.45	20.50	4.60	4.59	19.85	4.33	4.71	19.20	4.07	4.84	18.55	3.83	4.97	17.90	3.61
28°C	3.13	22.23	7.11	4.08	23.06	5.66	4.28	21.27	4.98	4.44	20.40	4.60	4.57	19.75	4.32	4.70	19.10	4.07	4.82	18.45	3.83	4.95	17.80	3.60
27°C	3.11	22.12	7.10	4.06	22.94	5.65	4.26	21.17	4.97	4.42	20.29	4.59	4.55	19.64	4.31	4.68	18.99	4.06	4.80	18.34	3.82	4.93	17.69	3.59
26°C	3.10	22.01	7.10	4.04	22.83	5.64	4.24	21.06	4.97	4.40	20.19	4.59	4.53	19.54	4.31	4.66	18.89	4.06	4.78	18.24	3.81	4.91	17.59	3.59
25°C	3.09	21.90	7.09	4.03	22.71	5.64	4.22	20.96	4.96	4.38	20.09	4.58	4.52	19.44	4.30	4.64	18.79	4.05	4.76	18.14	3.81	4.89	17.49	3.58
24°C	3.08	21.80	7.08	4.01	22.60	5.63	4.21	20.85	4.96	4.37	19.98	4.58	4.50	19.33	4.30	4.62	18.68	4.04	4.74	18.04	3.80	4.87	17.39	3.57
23°C	3.06	21.69	7.08	4.00	22.49	5.63	4.19	20.75	4.95	4.35	19.88	4.57	4.48	19.23	4.29	4.60	18.58	4.04	4.73	17.93	3.79	4.85	17.28	3.56
22°C	3.05	21.58	7.07	3.98	22.38	5.62	4.17	20.65	4.95	4.33	19.78	4.57	4.46	19.13	4.29	4.58	18.48	4.03	4.71	17.83	3.79	4.83	17.18	3.56
21°C	3.04	21.47	7.06	3.96	22.26	5.62	4.16	20.54	4.94	4.31	19.68	4.56	4.44	19.03	4.28	4.57	18.38	4.03	4.69	17.73	3.78	4.81	17.08	3.55
20°C	3.03	21.36	7.05	3.95	22.15	5.61	4.14	20.44	4.94	4.30	19.58	4.56	4.43	18.93	4.28	4.55	18.28	4.02	4.67	17.63	3.78	4.79	16.98	3.54
19°C	3.07	21.26	6.93	3.99	22.04	5.53	4.18	20.34	4.87	4.33	19.48	4.50	4.45	18.83	4.23	4.57	18.18	3.98	4.69	17.53	3.73	4.81	16.88	3.51
18°C	3.11	21.15	6.81	4.03	21.93	5.45	4.22	20.24	4.80	4.35	19.38	4.45	4.48	18.73	4.18	4.60	18.08	3.93	4.72	17.43	3.69	4.84	16.78	3.47
17°C	3.15	21.05	6.69	4.06	21.82	5.37	4.26	20.14	4.73	4.38	19.28	4.40	4.50	18.63	4.14	4.62	17.98	3.89	4.74	17.33	3.65	4.86	16.68	3.43
16°C	3.19	20.94	6.57	4.10	21.72	5.29	4.30	20.04	4.66	4.41	19.18	4.35	4.52	18.53	4.10	4.65	17.88	3.85	4.77	17.23	3.62	4.89	16.58	3.39
15°C	3.23	20.84	6.46	4.14	21.61	5.22	4.33	19.94	4.60	4.44	19.08	4.30	4.55	18.43	4.05	4.67	17.78	3.81	4.79	17.14	3.58	4.91	16.49	3.36
14°C	3.27	20.74	6.35	4.18	21.50	5.14	4.37	19.84	4.54	4.47	18.99	4.25	4.57	18.34	4.01	4.69	17.69	3.77	4.81	17.04	3.54	4.94	16.39	3.32
13°C	3.31	20.63	6.24	4.22	21.39	5.07	4.41	19.74	4.47	4.50	18.89	4.20	4.60	18.24	3.97	4.72	17.59	3.73	4.84	16.94	3.50	4.96	16.29	3.28
12°C	3.35	20.53	6.13	4.26	21.29	5.00	4.45	19.64	4.41	4.53	18.79	4.15	4.62	18.14	3.93	4.74	17.49	3.69	4.86	16.84	3.46	4.98	16.19	3.25
11°C	3.57	20.45	5.74	4.41	20.93	4.74	4.70	19.52	4.15	4.77	18.67	3.92	4.86	18.02	3.71	4.98	17.37	3.49	5.10	16.72	3.28	5.22	16.08	3.08
10°C	3.75	20.35	5.42	4.54	20.54	4.53	4.92	19.37	3.94	4.98	18.52	3.72	5.06	17.87	3.53	5.18	17.23	3.32	5.30	16.58	3.13	5.42	15.93	2.94
9°C	3.97	20.27	5.10	4.69	20.18	4.30	5.17	19.25	3.73	5.22	18.40	3.53	5.29	17.76	3.35	5.41	17.11	3.16	5.54	16.46	2.97	5.66	15.81	2.79
8°C	4.16	20.16	4.84	4.81	19.79	4.11	5.38	19.10	3.55	5.42	18.26	3.37	5.50	17.61	3.20	5.62	16.96	3.02	5.74	16.31	2.84	5.86	15.66	2.67
7°C	4.47	20.17	4.51	5.06	19.52	3.86	5.64	18.88	3.34	5.71	18.23	3.19	5.80	17.58	3.03	5.93	16.93	2.85	6.06	16.28	2.68	6.18	15.63	2.53
6°C	5.99	19.65	3.28	6.45	19.03	2.95	6.90	18.41	2.67	7.00	17.79	2.54	7.13	17.17	2.41	7.28	16.55	2.27	7.43	15.94	2.15	7.52	15.32	2.04
5°C	7.23	19.16	2.65	7.59	18.57	2.45	7.92	17.98	2.27	8.06	17.39	2.16	8.21	16.79	2.04	8.38	16.20	1.93	8.54	15.61	1.83	8.62	15.02	1.74
4°C	8.24	18.78	2.28	8.54	18.21	2.13	8.78	17.64	2.01	8.95	17.07	1.91	9.12	16.50	1.81	9.29	15.93	1.71	9.47	15.36	1.62	9.54	14.79	1.55
3°C	9.03	18.51	2.05	9.28	17.95	1.93	9.48	17.40	1.84	9.66	16.85	1.74	9.84	16.29	1.66	10.02	15.74	1.57	10.20	15.19	1.49	10.27	14.63	1.43
2°C	9.95	18.13	1.82	10.19	17.59	1.73	10.37	17.06	1.64	10.56	16.53	1.57	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	9.95	18.17	1.82	10.19	17.64	1.73	10.38	17.12	1.65	10.56	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	9.97	18.21	1.83	10.20	17.69	1.73	10.38	17.18	1.65	10.57	16.67	1.58	10.75	16.16	1.50	10.93	15.65	1.43	11.11	15.14	1.36	11.17	14.62	1.31
-1°C	9.99	18.25	1.83	10.22	17.74	1.74	10.40	17.24	1.66	10.58	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	10.01	18.29	1.83	10.24	17.79	1.74	10.42	17.30	1.66	10.60	16.81	1.59	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	10.05	18.32	1.82	10.27	17.84	1.74	10.45	17.36	1.66	10.63	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	10.09	18.36	1.82	10.30	17.89	1.74	10.48	17.42	1.66	10.67	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	10.14	18.40	1.82	10.34	17.94	1.74	10.52	17.48	1.66	10.70	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	10.19	18.44	1.81	10.39	17.99	1.73	10.57	17.54	1.66	10.75	17.09	1.59	10.93	16.64	1.52	11.11	16.19	1.46	11.21	15.7				

2.3.2 alféa excellia A.I. 3-phases models

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

Outdoor temperature	Starting temperature																								
	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	3.16	22.79	7.22	4.02	21.27	5.30	4.14	19.60	4.73	4.25	18.55	4.36	4.36	17.66	4.05	4.47	16.77	3.75	4.58	15.88	3.47	4.68	14.99	3.20	
34°C	3.14	22.67	7.21	4.00	21.17	5.29	4.12	19.50	4.73	4.24	18.45	4.35	4.35	17.56	4.04	4.45	16.67	3.75	4.56	15.78	3.46	4.66	14.90	3.19	
33°C	3.13	22.56	7.20	3.98	21.06	5.29	4.11	19.40	4.72	4.22	18.36	4.35	4.33	17.47	4.04	4.43	16.58	3.74	4.54	15.69	3.46	4.64	14.80	3.19	
32°C	3.12	22.45	7.20	3.97	20.96	5.28	4.09	19.30	4.72	4.20	18.26	4.34	4.31	17.37	4.03	4.42	16.48	3.73	4.52	15.59	3.45	4.63	14.71	3.18	
31°C	3.11	22.34	7.19	3.98	20.85	5.28	4.07	19.21	4.71	4.19	18.17	4.34	4.29	17.28	4.02	4.40	16.39	3.73	4.50	15.50	3.44	4.61	14.61	3.17	
30°C	3.09	22.23	7.18	3.94	20.75	5.27	4.06	19.11	4.71	4.17	18.07	4.33	4.28	17.18	4.02	4.38	16.30	3.72	4.48	15.41	3.44	4.59	14.52	3.16	
29°C	3.08	22.11	7.18	3.92	20.65	5.26	4.04	19.02	4.70	4.15	17.98	4.33	4.26	17.09	4.01	4.36	16.20	3.71	4.47	15.31	3.43	4.57	14.42	3.16	
28°C	3.07	22.00	7.17	3.91	20.54	5.26	4.03	18.92	4.70	4.14	17.89	4.32	4.24	17.00	4.01	4.35	16.11	3.71	4.45	15.22	3.42	4.55	14.33	3.15	
27°C	3.06	21.90	7.16	3.89	20.44	5.25	4.01	18.83	4.70	4.12	17.79	4.32	4.23	16.91	4.00	4.33	16.02	3.70	4.43	15.13	3.41	4.53	14.24	3.14	
26°C	3.05	21.79	7.15	3.88	20.34	5.25	3.99	18.74	4.69	4.10	17.70	4.31	4.21	16.81	3.99	4.31	15.92	3.69	4.41	15.04	3.41	4.52	14.15	3.13	
25°C	3.03	21.68	7.15	3.86	20.24	5.24	3.98	18.64	4.69	4.09	17.61	4.31	4.19	16.72	3.99	4.29	15.83	3.69	4.40	14.94	3.40	4.50	14.05	3.12	
24°C	3.02	21.57	7.14	3.84	20.14	5.24	3.96	18.55	4.68	4.07	17.52	4.30	4.18	16.63	3.98	4.28	15.74	3.68	4.38	14.85	3.39	4.48	13.96	3.12	
23°C	3.01	21.46	7.13	3.83	20.04	5.23	3.95	18.46	4.68	4.06	17.43	4.30	4.16	16.54	3.98	4.26	15.65	3.67	4.36	14.76	3.38	4.46	13.87	3.11	
22°C	3.00	21.36	7.13	3.81	19.94	5.23	3.93	18.37	4.67	4.04	17.34	4.29	4.14	16.45	3.97	4.24	15.56	3.67	4.34	14.67	3.38	4.44	13.78	3.10	
21°C	2.99	21.25	7.12	3.80	19.84	5.22	3.92	18.27	4.67	4.02	17.25	4.29	4.13	16.36	3.97	4.23	15.47	3.66	4.33	14.58	3.37	4.43	13.69	3.09	
20°C	2.97	21.14	7.11	3.78	19.74	5.22	3.90	18.18	4.66	4.01	17.16	4.28	4.11	16.27	3.96	4.21	15.38	3.65	4.31	14.49	3.36	4.41	13.60	3.08	
19°C	3.01	21.04	6.99	3.81	19.64	5.16	3.92	18.09	4.61	4.03	17.07	4.24	4.13	16.18	3.92	4.23	15.29	3.62	4.33	14.40	3.33	4.43	13.51	3.05	
18°C	3.05	20.93	6.87	3.83	19.55	5.10	3.95	18.00	4.56	4.05	16.98	4.19	4.15	16.09	3.88	4.25	15.20	3.58	4.35	14.31	3.29	4.45	13.43	3.02	
17°C	3.08	20.83	6.76	3.85	19.45	5.05	3.97	17.91	4.51	4.07	16.89	4.15	4.17	16.01	3.84	4.27	15.12	3.54	4.37	14.23	3.26	4.47	13.34	2.98	
16°C	3.12	20.73	6.65	3.88	19.35	4.99	3.99	17.82	4.46	4.09	16.81	4.11	4.19	15.92	3.80	4.29	15.03	3.50	4.39	14.14	3.22	4.49	13.25	2.95	
15°C	3.15	20.62	6.54	3.90	19.26	4.94	4.02	17.74	4.42	4.11	16.72	4.07	4.21	15.83	3.76	4.31	14.94	3.47	4.41	14.05	3.19	4.51	13.16	2.92	
14°C	3.19	20.52	6.43	3.92	19.16	4.88	4.04	17.65	4.37	4.13	16.63	4.02	4.23	15.74	3.72	4.33	14.85	3.43	4.43	13.97	3.15	4.53	13.08	2.89	
13°C	3.23	20.42	6.33	3.95	19.06	4.83	4.06	17.56	4.32	4.16	16.55	3.98	4.25	15.66	3.68	4.35	14.77	3.40	4.45	13.88	3.12	4.55	12.99	2.86	
12°C	3.26	20.32	6.23	3.97	18.97	4.78	4.09	17.47	4.28	4.18	16.46	3.94	4.27	15.57	3.65	4.37	14.68	3.36	4.47	13.79	3.09	4.57	12.90	2.82	
11°C	3.60	20.09	5.59	4.24	18.84	4.44	4.42	17.49	3.95	4.51	16.48	3.65	4.60	15.59	3.39	4.70	14.70	3.12	4.80	13.81	2.87	4.90	12.92	2.63	
10°C	3.89	19.83	5.10	4.47	18.66	4.18	4.72	17.46	3.70	4.80	16.45	3.42	4.89	15.56	3.18	4.99	14.67	2.94	5.09	13.78	2.70	5.19	12.89	2.48	
9°C	4.22	19.61	4.64	4.74	18.53	3.91	5.06	17.47	3.46	5.14	16.46	3.20	5.23	15.57	2.98	5.33	14.68	2.76	5.43	13.79	2.54	5.53	12.91	2.33	
8°C	4.51	19.34	4.29	4.97	18.36	3.70	5.35	17.44	3.26	5.43	16.43	3.03	5.52	15.54	2.82	5.62	14.65	2.61	5.72	13.77	2.41	5.82	12.88	2.21	
7°C	4.98	19.25	3.87	5.37	18.36	3.42	5.77	17.47	3.03	5.83	16.58	2.84	5.94	15.69	2.64	6.07	14.81	2.44	6.19	13.92	2.25	6.31	13.03	2.06	
6°C	6.99	19.58	2.80	7.26	18.83	2.59	7.60	18.08	2.38	7.72	17.33	2.24	7.88	16.58	2.10	8.04	15.83	1.97	8.21	15.09	1.84	8.37	14.34	1.71	
5°C	8.63	19.80	2.29	8.81	19.17	2.18	9.10	18.54	2.04	9.28	17.91	1.93	9.47	17.28	1.83	9.66	16.65	1.72	9.85	16.02	1.63	10.05	15.39	1.53	
4°C	9.99	20.00	2.00	10.11	19.47	1.93	10.37	18.94	1.83	10.58	18.41	1.74	10.79	17.87	1.66	11.01	17.34	1.58	11.22	16.81	1.50	11.45	16.28	1.42	
3°C	11.08	20.19	1.82	11.16	19.73	1.77	11.40	19.28	1.69	11.63	18.82	1.62	11.86	18.37	1.55	12.09	17.91	1.48	12.32	17.46	1.42	12.55	17.00	1.35	
2°C	12.43	20.39	1.64	12.50	20.03	1.60	12.73	19.68	1.55	12.97	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	12.43	20.39	1.64	12.50	20.00	1.60	12.73	19.61	1.54	12.97	19.22	1.48	13.20	18.83	1.43	13.43	18.44	1.37	13.67	18.05	1.32	13.91	17.66	1.27	
0°C	12.44	20.40	1.64	12.51	19.97	1.60	12.74	19.55	1.53	12.97	19.12	1.48	13.19	18.70	1.42	13.42	18.28	1.36	13.67	17.85	1.31	13.92	17.43	1.25	
-1°C	12.45	20.40	1.64	12.52	19.94	1.59	12.74	19.49	1.53	12.96	19.03	1.47	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	12.46	20.40	1.64	12.54	19.91	1.59	12.75	19.42	1.52	12.96	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	12.48	20.40	1.63	12.56	19.88	1.58	12.76	19.36	1.52	12.96	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	12.50	20.41	1.63	12.63	19.82	1.57	12.79	19.23	1.50	12.96	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	
-5°C	12.53	20.41	1.63	12.63	19.82	1.57	12.79	19.23	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	
-6°C	12.56	20.41	1.63	12.66	19.79	1.56	12.81	19.17	1.50	12.95	18.54</														

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

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	2.85	25.32	8.88	4.24	24.20	5.71	4.37	22.28	5.09	4.54	21.13	4.66	4.72	20.17	4.27	4.91	19.21	3.91	5.10	18.25	3.58	5.29	17.29	3.27
34°C	2.84	25.19	8.87	4.23	24.08	5.70	4.36	22.17	5.09	4.52	21.02	4.65	4.70	20.06	4.27	4.89	19.10	3.91	5.08	18.14	3.57	5.27	17.18	3.26
33°C	2.83	25.07	8.87	4.21	23.96	5.69	4.34	22.06	5.08	4.50	20.91	4.64	4.68	19.95	4.26	4.87	18.99	3.90	5.06	18.03	3.57	5.25	17.08	3.26
32°C	2.82	24.94	8.86	4.19	23.84	5.69	4.32	21.95	5.08	4.48	20.80	4.64	4.66	19.84	4.26	4.85	18.89	3.89	5.04	17.93	3.56	5.22	16.97	3.25
31°C	2.81	24.82	8.85	4.17	23.72	5.68	4.31	21.84	5.07	4.47	20.70	4.63	4.64	19.74	4.25	4.83	18.78	3.89	5.02	17.82	3.55	5.20	16.86	3.24
30°C	2.79	24.70	8.84	4.16	23.61	5.68	4.29	21.73	5.07	4.45	20.59	4.63	4.63	19.63	4.24	4.81	18.67	3.88	5.00	17.71	3.54	5.18	16.75	3.23
29°C	2.78	24.57	8.83	4.14	23.49	5.67	4.27	21.62	5.06	4.43	20.48	4.62	4.61	19.52	4.24	4.79	18.56	3.87	4.98	17.61	3.54	5.16	16.65	3.22
28°C	2.77	24.45	8.82	4.13	23.37	5.67	4.25	21.51	5.06	4.41	20.38	4.62	4.59	19.42	4.23	4.77	18.46	3.87	4.96	17.50	3.53	5.14	16.54	3.22
27°C	2.76	24.33	8.81	4.11	23.26	5.66	4.24	21.41	5.05	4.40	20.27	4.61	4.57	19.31	4.22	4.75	18.35	3.86	4.94	17.40	3.52	5.12	16.44	3.21
26°C	2.75	24.21	8.80	4.09	23.14	5.65	4.22	21.30	5.05	4.38	20.17	4.61	4.55	19.21	4.22	4.74	18.25	3.85	4.92	17.29	3.52	5.10	16.33	3.20
25°C	2.74	24.09	8.79	4.08	23.02	5.65	4.20	21.20	5.04	4.36	20.06	4.60	4.53	19.10	4.21	4.72	18.15	3.85	4.90	17.19	3.51	5.08	16.23	3.19
24°C	2.73	23.97	8.79	4.06	22.91	5.64	4.19	21.09	5.04	4.34	19.96	4.60	4.52	19.00	4.21	4.70	18.04	3.84	4.88	17.08	3.50	5.06	16.12	3.19
23°C	2.72	23.85	8.78	4.04	22.80	5.64	4.17	20.98	5.03	4.33	19.86	4.59	4.50	18.90	4.20	4.68	17.94	3.83	4.86	16.98	3.49	5.04	16.02	3.18
22°C	2.71	23.73	8.77	4.03	22.68	5.63	4.15	20.88	5.03	4.31	19.75	4.58	4.48	18.79	4.19	4.66	17.84	3.83	4.84	16.88	3.49	5.02	15.92	3.17
21°C	2.70	23.61	8.76	4.01	22.57	5.63	4.14	20.78	5.02	4.29	19.65	4.58	4.46	18.69	4.19	4.64	17.73	3.82	4.82	16.78	3.48	5.00	15.82	3.16
20°C	2.68	23.49	8.75	4.00	22.46	5.62	4.12	20.67	5.02	4.27	19.55	4.57	4.45	18.59	4.18	4.62	17.63	3.81	4.80	16.67	3.47	4.98	15.72	3.16
19°C	2.77	23.38	8.44	4.02	22.35	5.56	4.15	20.57	4.96	4.31	19.45	4.52	4.48	18.49	4.13	4.66	17.53	3.76	4.84	16.57	3.43	5.02	15.61	3.11
18°C	2.85	23.26	8.16	4.05	22.23	5.50	4.17	20.47	4.91	4.34	19.35	4.46	4.52	18.39	4.07	4.69	17.43	3.71	4.87	16.47	3.38	5.05	15.51	3.07
17°C	2.94	23.15	7.88	4.07	22.12	5.44	4.20	20.37	4.85	4.37	19.25	4.40	4.55	18.29	4.02	4.73	17.33	3.66	4.91	16.37	3.34	5.09	15.41	3.03
16°C	3.02	23.03	7.63	4.10	22.01	5.38	4.22	20.26	4.80	4.40	19.15	4.35	4.59	18.19	3.96	4.77	17.23	3.62	4.94	16.27	3.29	5.12	15.31	2.99
15°C	3.10	22.92	7.38	4.12	21.90	5.32	4.25	20.16	4.75	4.43	19.05	4.30	4.62	18.09	3.91	4.80	17.13	3.57	4.98	16.17	3.25	5.16	15.21	2.95
14°C	3.19	22.80	7.16	4.15	21.80	5.26	4.27	20.06	4.70	4.47	18.95	4.24	4.66	17.99	3.86	4.84	17.03	3.52	5.02	16.07	3.20	5.19	15.12	2.91
13°C	3.27	22.69	6.94	4.17	21.69	5.20	4.30	19.96	4.65	4.50	18.85	4.19	4.69	17.89	3.81	4.87	16.94	3.48	5.05	15.98	3.16	5.23	15.02	2.87
12°C	3.35	22.58	6.73	4.20	21.58	5.14	4.32	19.86	4.60	4.53	18.75	4.14	4.73	17.80	3.76	4.91	16.84	3.43	5.09	15.88	3.12	5.27	14.92	2.83
11°C	3.76	22.36	5.94	4.49	21.37	4.75	4.66	19.84	4.26	4.88	18.73	3.84	5.08	17.77	3.50	5.26	16.81	3.20	5.44	15.85	2.92	5.62	14.89	2.65
10°C	4.13	22.10	5.36	4.75	21.12	4.45	4.96	19.76	3.99	5.18	18.65	3.60	5.39	17.70	3.28	5.56	16.74	3.01	5.74	15.78	2.75	5.92	14.82	2.50
9°C	4.53	21.88	4.82	5.05	20.91	4.14	5.30	19.74	3.73	5.53	18.63	3.37	5.74	17.67	3.08	5.92	16.71	2.82	6.09	15.75	2.58	6.27	14.79	2.36
8°C	4.90	21.62	4.41	5.30	20.65	3.89	5.59	19.66	3.52	5.83	18.55	3.18	6.04	17.59	2.91	6.22	16.64	2.67	6.40	15.68	2.45	6.58	14.72	2.24
7°C	5.44	21.54	3.96	5.74	20.58	3.59	6.03	19.62	3.25	6.25	18.66	2.98	6.48	17.70	2.73	6.68	16.74	2.50	6.89	15.78	2.29	7.05	14.83	2.10
6°C	7.43	21.64	2.91	7.63	20.79	2.73	7.93	19.94	2.51	8.18	19.09	2.33	8.44	18.24	2.16	8.69	17.38	2.00	8.93	16.53	1.85	9.06	15.68	1.73
5°C	9.06	21.67	2.39	9.17	20.91	2.28	9.48	20.15	2.13	9.76	19.39	1.99	10.05	18.63	1.85	10.32	17.87	1.73	10.60	17.11	1.61	10.71	16.35	1.53
4°C	10.41	21.73	2.09	10.47	21.04	2.01	10.79	20.35	1.89	11.09	19.67	1.77	11.39	18.98	1.67	11.69	18.30	1.57	11.98	17.61	1.47	12.08	16.92	1.40
3°C	11.49	21.80	1.90	11.52	21.17	1.84	11.84	20.54	1.74	12.15	19.91	1.64	12.46	19.28	1.55	12.77	18.66	1.46	13.09	18.03	1.38	13.17	17.40	1.32
2°C	12.84	21.85	1.70	12.86	21.29	1.66	13.18	20.74	1.57	13.49	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	12.85	21.80	1.70	12.87	21.26	1.65	13.18	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	12.87	21.76	1.69	12.90	21.22	1.65	13.20	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	14.53	17.97	1.24
-1°C	12.91	21.72	1.68	12.94	21.18	1.64	13.23	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	12.96	21.67	1.67	13.00	21.14	1.63	13.27	20.61	1.55	13.55	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	13.02	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	14.56	17.97	1.23
-4°C	13.10	21.58	1.65	13.16	21.07	1.60	13.39	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	13.19	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	13.30	21.49	1.62	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							

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

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	3.32	26.84	8.07	4.00	24.85	6.21	4.25	22.74	5.35	4.53	21.48	4.74	4.82	20.42	4.23	5.12	19.36	3.78	5.42	18.30	3.38	5.72	17.25	3.02
34°C	3.31	26.70	8.07	3.98	24.72	6.20	4.24	22.63	5.34	4.51	21.36	4.73	4.80	20.31	4.23	5.10	19.25	3.77	5.40	18.19	3.37	5.69	17.14	3.01
33°C	3.30	26.57	8.06	3.97	24.60	6.20	4.22	22.52	5.33	4.50	21.25	4.73	4.79	20.20	4.22	5.08	19.14	3.77	5.38	18.08	3.36	5.67	17.03	3.00
32°C	3.28	26.44	8.05	3.95	24.48	6.19	4.20	22.40	5.33	4.48	21.14	4.72	4.77	20.09	4.21	5.06	19.03	3.76	5.35	17.97	3.36	5.65	16.92	2.99
31°C	3.27	26.31	8.04	3.94	24.36	6.19	4.19	22.29	5.32	4.46	21.03	4.72	4.75	19.98	4.21	5.04	18.92	3.75	5.33	17.86	3.35	5.63	16.81	2.99
30°C	3.26	26.17	8.03	3.92	24.23	6.18	4.17	22.18	5.32	4.44	20.93	4.71	4.73	19.87	4.20	5.02	18.81	3.75	5.31	17.75	3.34	5.60	16.70	2.98
29°C	3.24	26.04	8.03	3.91	24.11	6.17	4.15	22.07	5.31	4.42	20.82	4.71	4.71	19.76	4.20	5.00	18.70	3.74	5.29	17.65	3.34	5.58	16.59	2.97
28°C	3.23	25.91	8.02	3.89	23.99	6.17	4.14	21.96	5.31	4.41	20.71	4.70	4.69	19.65	4.19	4.98	18.60	3.73	5.27	17.54	3.33	5.56	16.48	2.96
27°C	3.22	25.79	8.01	3.88	23.87	6.16	4.12	21.85	5.30	4.39	20.60	4.69	4.67	19.55	4.18	4.96	18.49	3.73	5.25	17.43	3.32	5.54	16.37	2.96
26°C	3.21	25.66	8.00	3.86	23.76	6.15	4.10	21.74	5.30	4.37	20.50	4.69	4.65	19.44	4.18	4.94	18.38	3.72	5.23	17.32	3.31	5.51	16.27	2.95
25°C	3.19	25.53	7.99	3.84	23.64	6.15	4.09	21.64	5.29	4.35	20.39	4.68	4.63	19.33	4.17	4.92	18.28	3.71	5.21	17.22	3.31	5.49	16.16	2.94
24°C	3.18	25.40	7.99	3.83	23.52	6.14	4.07	21.53	5.29	4.34	20.28	4.68	4.62	19.23	4.17	4.90	18.17	3.71	5.19	17.11	3.30	5.47	16.06	2.93
23°C	3.17	25.28	7.98	3.81	23.40	6.14	4.06	21.42	5.28	4.32	20.18	4.67	4.60	19.12	4.16	4.88	18.06	3.70	5.17	17.01	3.29	5.45	15.95	2.93
22°C	3.16	25.15	7.97	3.80	23.29	6.13	4.04	21.31	5.28	4.30	20.07	4.67	4.58	19.02	4.15	4.86	17.96	3.69	5.14	16.90	3.29	5.43	15.85	2.92
21°C	3.14	25.03	7.96	3.78	23.17	6.12	4.02	21.21	5.27	4.29	19.97	4.66	4.56	18.91	4.15	4.84	17.86	3.69	5.12	16.80	3.28	5.41	15.74	2.91
20°C	3.13	24.90	7.95	3.77	23.06	6.12	4.01	21.10	5.27	4.27	19.87	4.65	4.54	18.81	4.14	4.82	17.75	3.68	5.10	16.70	3.27	5.38	15.64	2.90
19°C	3.18	24.78	7.79	3.82	22.94	6.01	4.06	21.00	5.18	4.32	19.76	4.57	4.60	18.71	4.07	4.88	17.65	3.62	5.16	16.59	3.22	5.44	15.54	2.86
18°C	3.23	24.65	7.63	3.86	22.83	5.91	4.10	20.89	5.09	4.37	19.66	4.49	4.66	18.60	4.00	4.94	17.55	3.56	5.22	16.49	3.16	5.50	15.43	2.81
17°C	3.28	24.53	7.48	3.91	22.71	5.81	4.15	20.79	5.01	4.43	19.56	4.42	4.71	18.50	3.93	4.99	17.45	3.49	5.27	16.39	3.11	5.55	15.33	2.76
16°C	3.33	24.41	7.33	3.96	22.60	5.71	4.20	20.69	4.93	4.48	19.46	4.34	4.77	18.40	3.86	5.05	17.34	3.44	5.33	16.29	3.06	5.61	15.23	2.72
15°C	3.38	24.29	7.19	4.01	22.49	5.61	4.25	20.58	4.85	4.53	19.36	4.27	4.82	18.30	3.79	5.10	17.24	3.38	5.38	16.19	3.01	5.66	15.13	2.67
14°C	3.43	24.17	7.05	4.06	22.38	5.52	4.29	20.48	4.77	4.59	19.26	4.20	4.88	18.20	3.73	5.16	17.14	3.32	5.44	16.09	2.96	5.72	15.03	2.63
13°C	3.48	24.05	6.91	4.10	22.26	5.43	4.34	20.38	4.69	4.64	19.16	4.13	4.94	18.10	3.67	5.22	17.04	3.27	5.50	15.99	2.91	5.78	14.93	2.58
12°C	3.53	23.93	6.78	4.15	22.15	5.34	4.39	20.28	4.62	4.69	19.06	4.06	4.99	18.00	3.61	5.27	16.94	3.21	5.55	15.89	2.86	5.83	14.83	2.54
11°C	3.88	23.53	6.07	4.46	21.90	4.91	4.75	20.22	4.25	5.06	19.00	3.75	5.36	17.94	3.35	5.64	16.88	2.99	5.92	15.83	2.67	6.20	14.77	2.38
10°C	4.18	23.08	5.52	4.73	21.59	4.56	5.07	20.11	3.97	5.39	18.89	3.51	5.69	17.83	3.13	5.97	16.78	2.81	6.25	15.72	2.52	6.53	14.66	2.25
9°C	4.53	22.68	5.01	5.05	21.34	4.23	5.43	20.05	3.69	5.75	18.83	3.27	6.06	17.77	2.93	6.34	16.72	2.64	6.62	15.66	2.37	6.90	14.60	2.12
8°C	4.83	22.24	4.60	5.31	21.04	3.96	5.75	19.95	3.47	6.08	18.73	3.08	6.39	17.67	2.77	6.67	16.61	2.49	6.95	15.55	2.24	7.23	14.50	2.01
7°C	5.32	21.97	4.13	5.76	20.91	3.63	6.21	19.86	3.20	6.56	18.80	2.86	6.88	17.74	2.58	7.16	16.68	2.33	7.45	15.63	2.10	7.69	14.57	1.90
6°C	7.47	22.19	2.97	7.86	21.28	2.71	8.26	20.38	2.47	8.61	19.48	2.26	8.93	18.58	2.08	9.23	17.68	1.92	9.53	16.78	1.76	9.69	15.88	1.64
5°C	9.22	23.31	2.42	9.57	21.54	2.25	9.94	20.77	2.09	10.28	20.00	1.95	10.60	19.24	1.81	10.92	18.47	1.69	11.23	17.70	1.58	11.32	16.93	1.50
4°C	10.66	22.44	2.10	10.98	21.78	1.98	11.33	21.12	1.86	11.67	20.46	1.75	11.99	19.80	1.65	12.32	19.13	1.55	12.64	18.47	1.46	12.68	17.81	1.40
3°C	11.80	22.57	1.91	12.10	21.99	1.82	12.44	21.41	1.72	12.77	20.84	1.63	13.10	20.26	1.55	13.42	19.68	1.47	13.75	19.11	1.39	13.77	18.53	1.35
2°C	13.17	22.70	1.72	13.47	22.23	1.65	13.80	21.76	1.58	14.13	21.29	1.51	14.45	20.82	1.44	14.78	20.35	1.38	15.11	19.88	1.32	15.12	19.41	1.28
1°C	13.17	22.69	1.72	13.47	22.22	1.65	13.80	21.75	1.58	14.13	21.28	1.51	14.46	20.80	1.44	14.79	20.33	1.37	15.11	19.86	1.31	15.12	19.39	1.28
0°C	13.18	22.69	1.72	13.49	22.22	1.65	13.81	21.74	1.57	14.14	21.26	1.50	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	13.21	22.69	1.72	13.51	22.21	1.64	13.84	21.73	1.57	14.16	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	13.24	22.69	1.71	13.54	22.21	1.64	13.87	21.72	1.57	14.19	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	13.28	22.69	1.71	13.58	22.20	1.63	13.91	21.71	1.56	14.23	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	13.32	22.69	1.70	13.63	22.20	1.63	13.96	21.71	1.56	14.28	21.21	1.49	14.60	20.70	1.42	14.93	20.23	1.36	15.16	19.74	1.30	15.15	19.25	1.27
-5°C	13.38	22.69	1.70	13.69	22.19	1.62	14.01	21.70	1.55	14.34	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	13.45	22.69	1.69	13.76	22.19	1.61	14.08	21.69	1.54	14.40	21.19	1.47	14.72	20.69	1.41	15.04	20.19							

2.4 Nominal performances tables (Cooling mode)

Test conditions comply with EN 14-511.

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

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,								

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	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	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																					

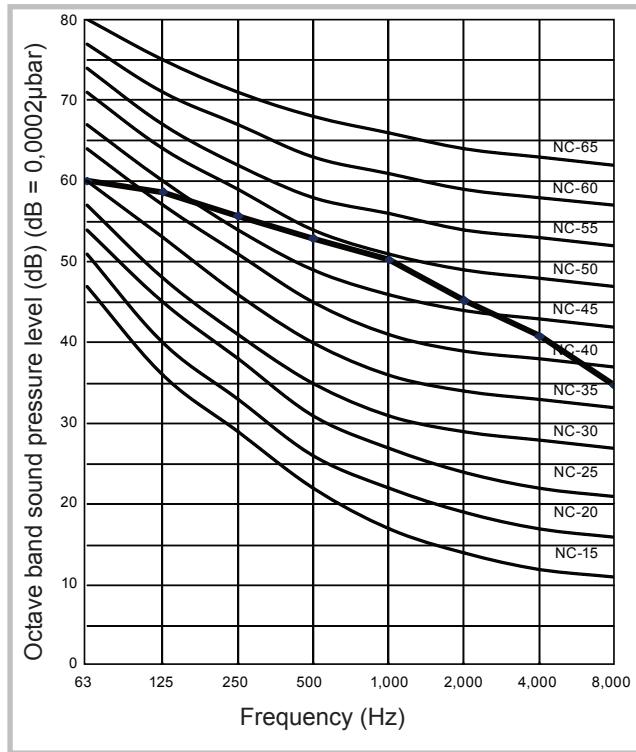
alféa excellia A.I. tri 16 / alféa excellia duo A.I. tri 16

		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

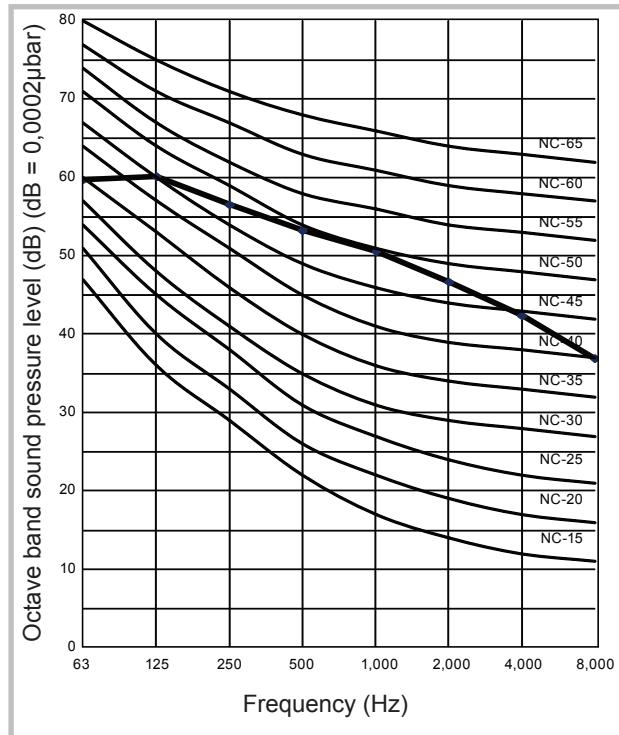
2.5 Sound power of the outdoor unit

2.5.1 Sound power curves of single phase models in heating mode

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

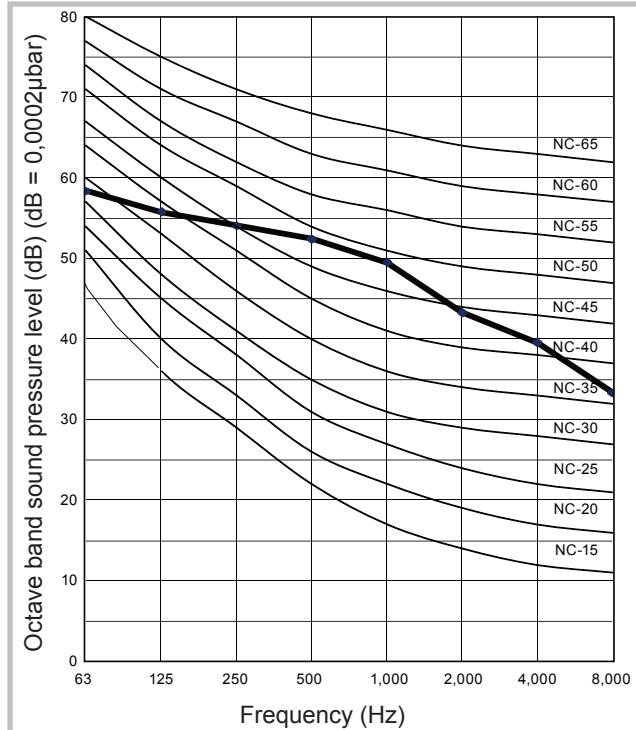


alféa excellia A.I. 14 / alféa excellia duo A.I. 14

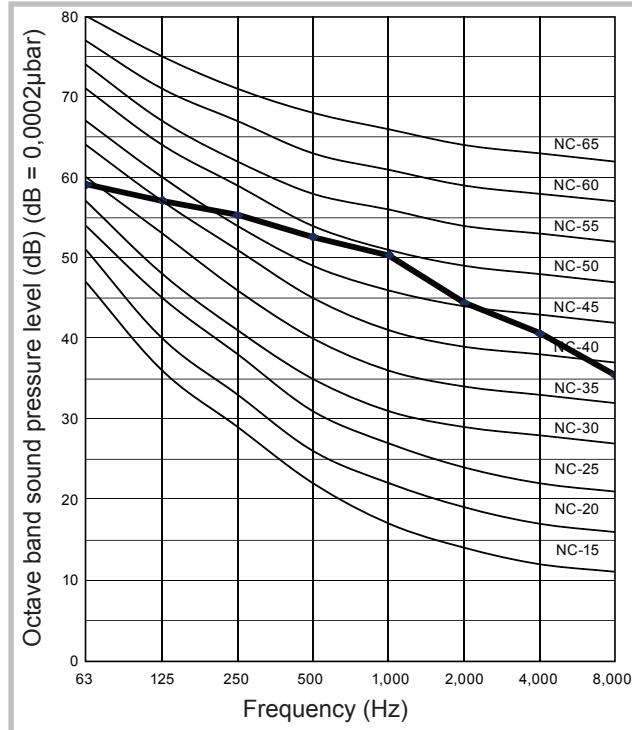


2.5.2 Sound power curves of 3-phase models in heating mode

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

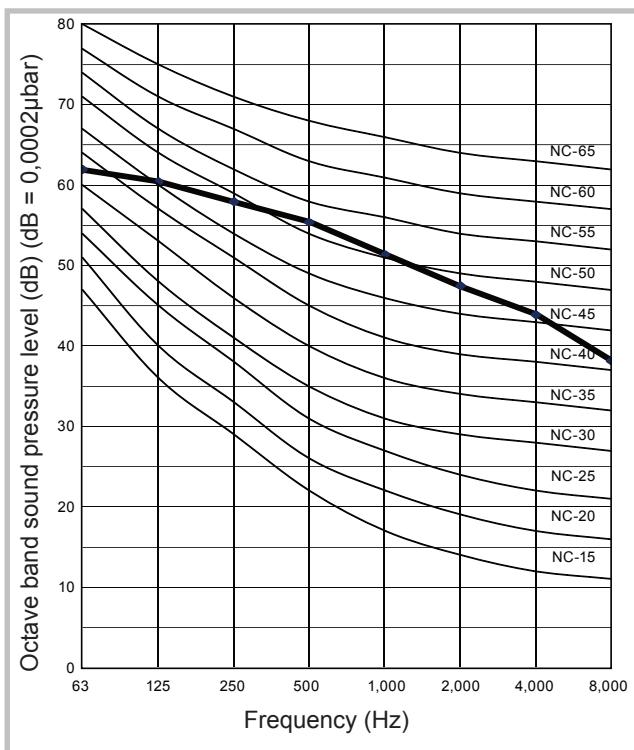


alféa excellia A.I. tri 14 / alféa excellia duo A.I. tri 14



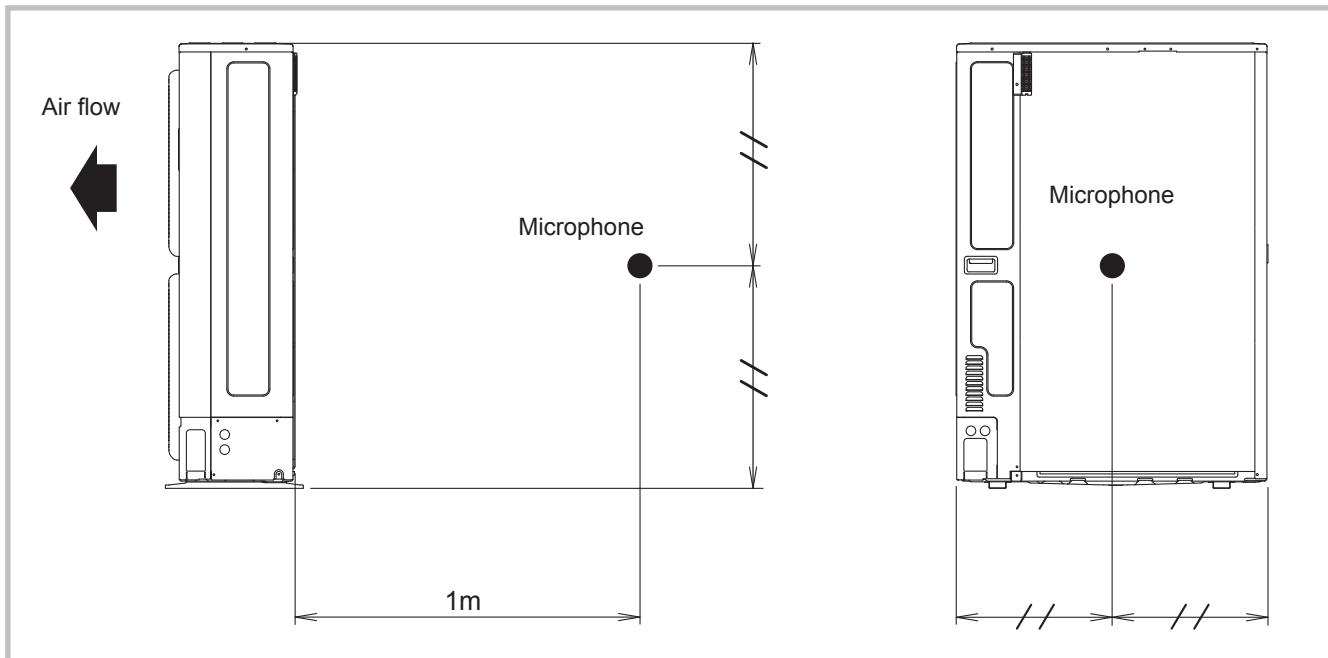
NC : Level of acoustic comfort

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

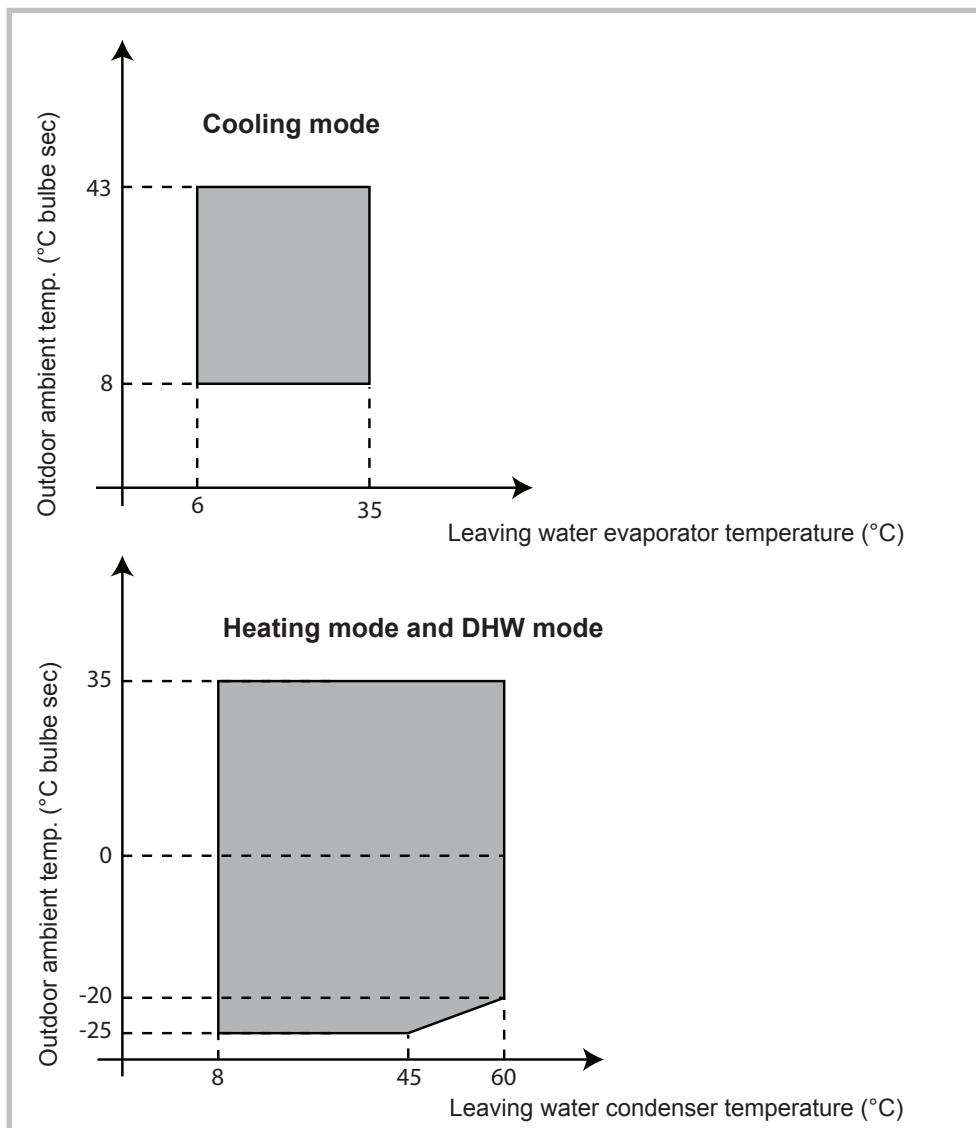


NC : Level of acoustic comfort

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 protector	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				

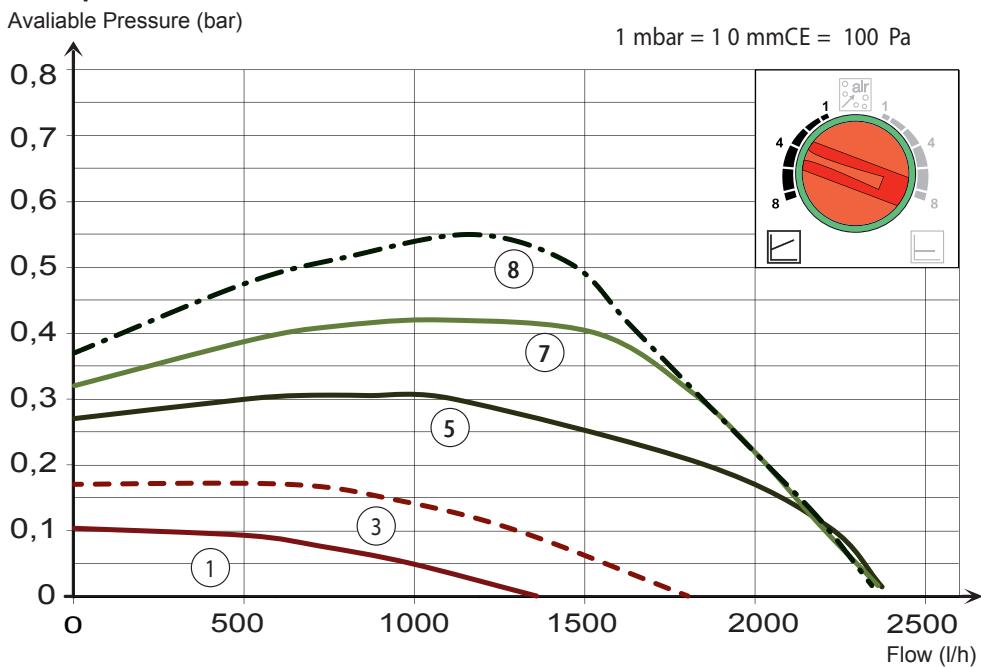
2.7.2 Hydraulic unit

		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				

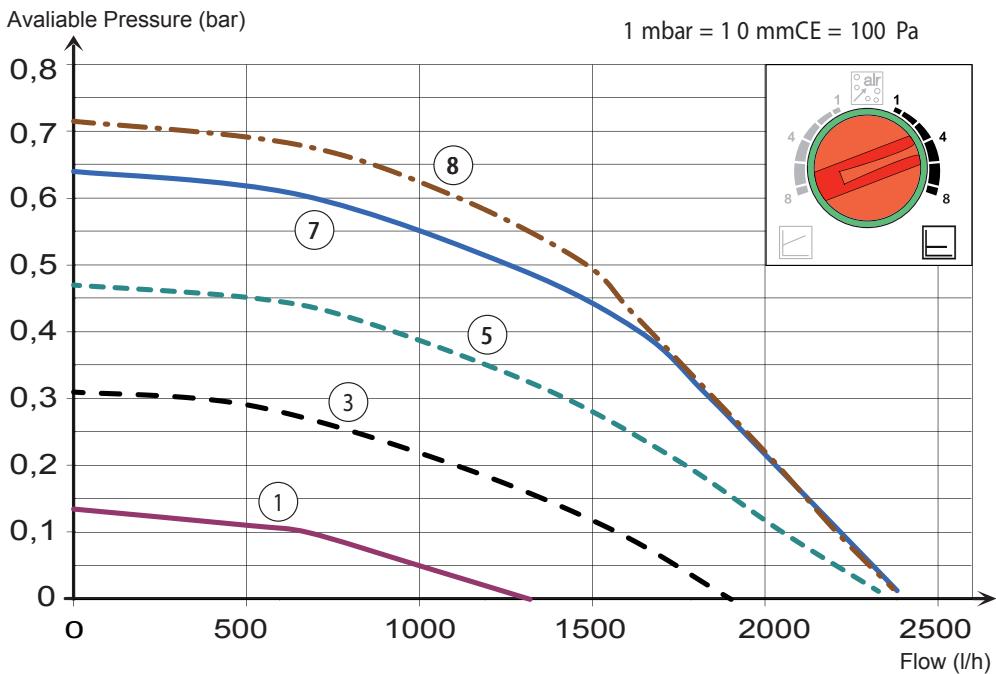
3. Hydraulic circuit

3.1 Availables pressure

Variable pressure



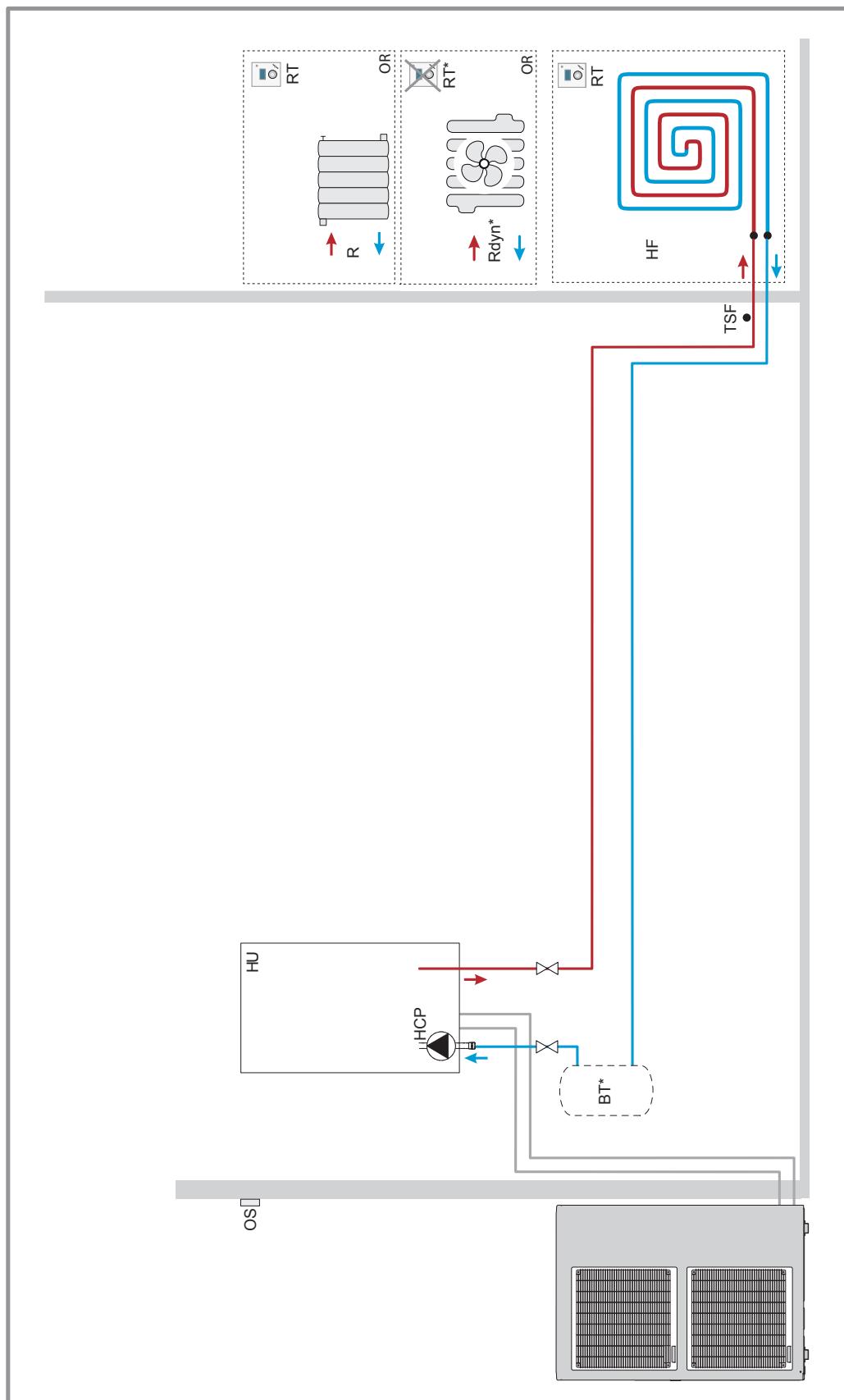
Constant pressure



3.2 Overall hydraulic layout

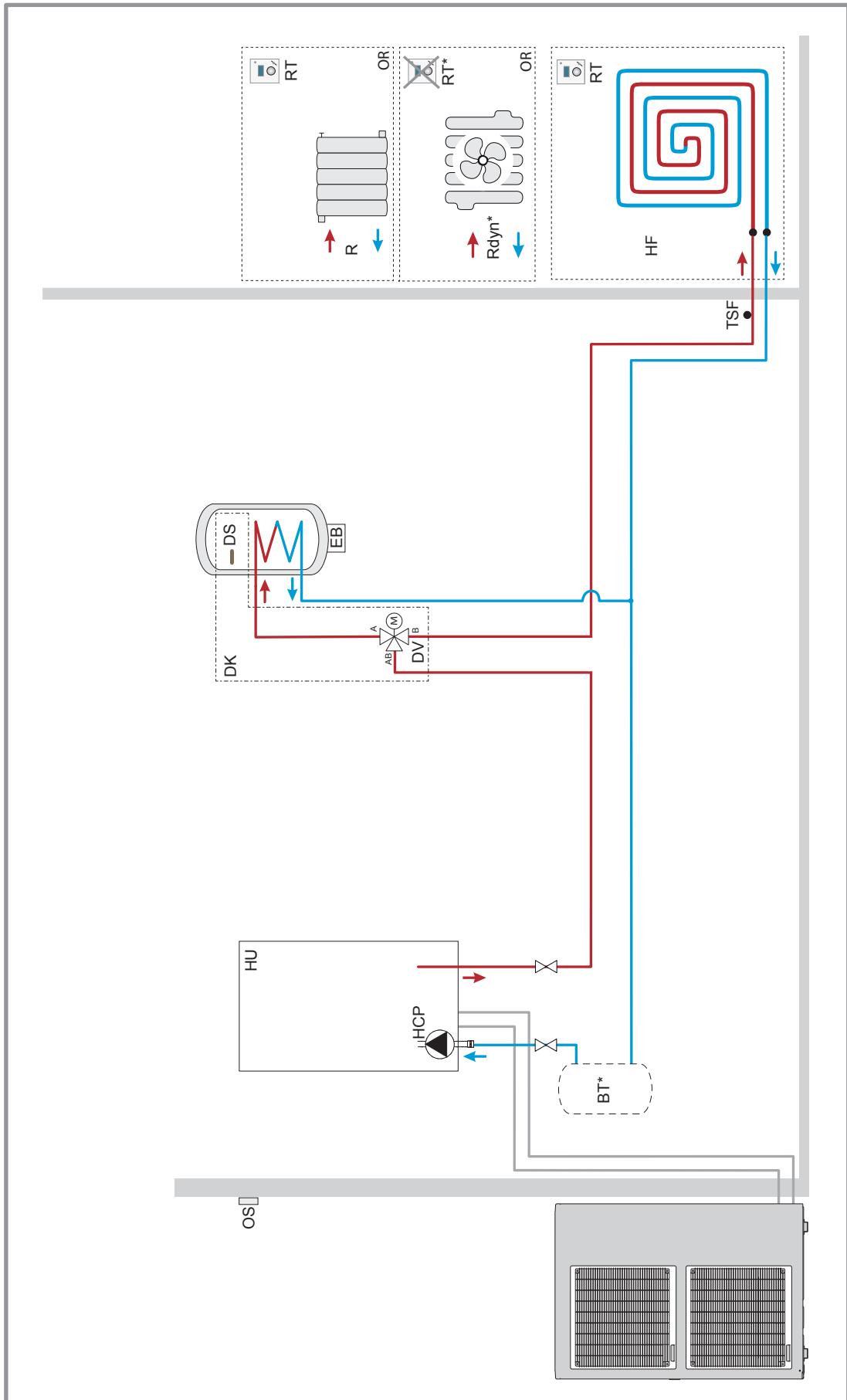
3.2.1 alféa excellia A.I. models

- 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
RT - 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:

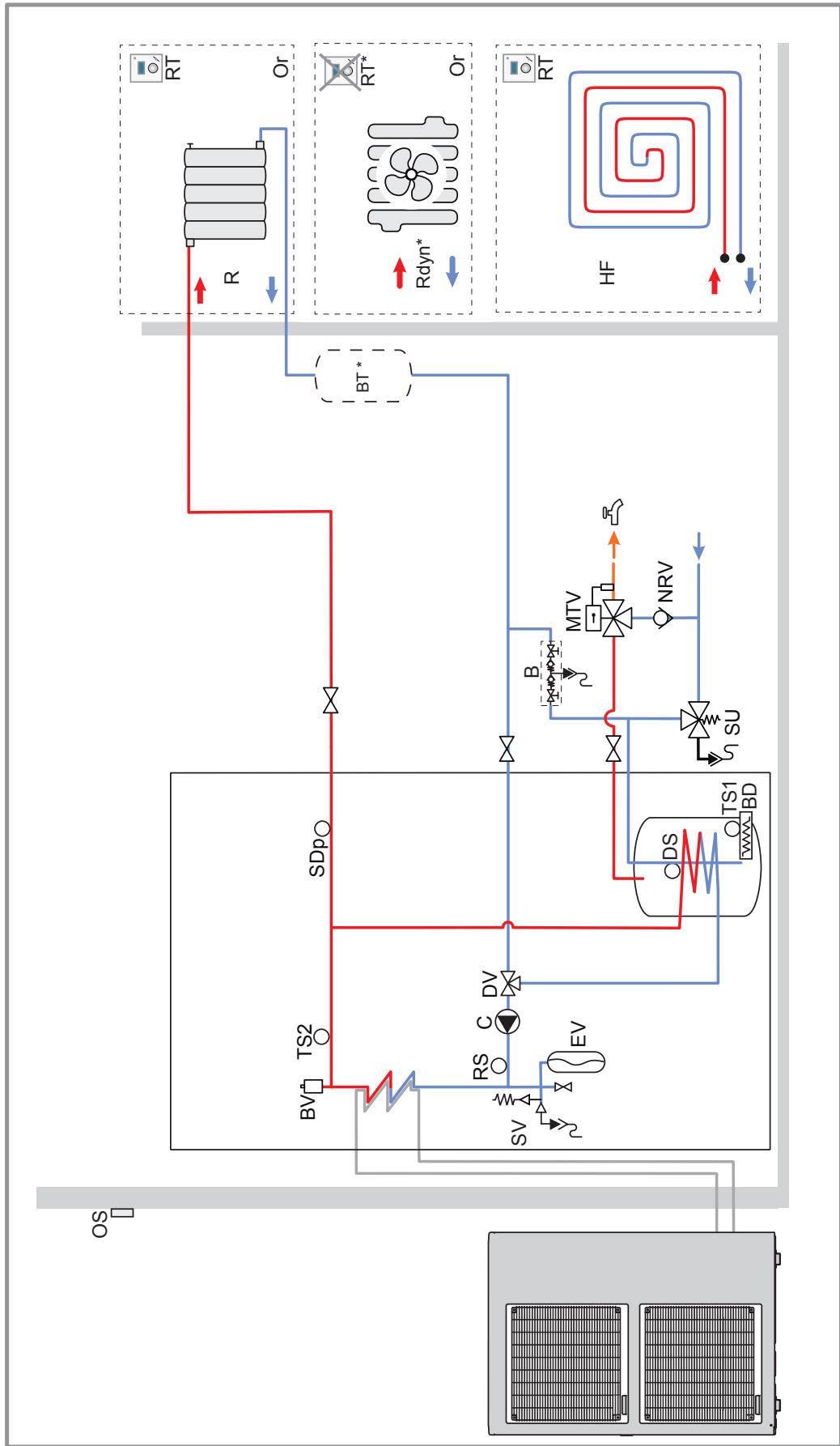
EB - Electrical back-up
BT - Buffer tank (obligatory with **Rdyn**, if $HP > 11\text{ kW}$)
HCP - Heating circulation pump
DK - DHW kit
HU - Hydraulic unit

DS - DHW sensor
OS - Outdoor sensor
DV - Distribution valve
RT* - Room thermostat or room control unit (option/except with **Rdyn**)

HF - Heating-cooling floor
RT - Radiators (or fan coils)
Rdyn* - Dynamic radiators

3.2.2 alféa excellia duo A.I. models

- Configuration 1 : 1 heating circuit



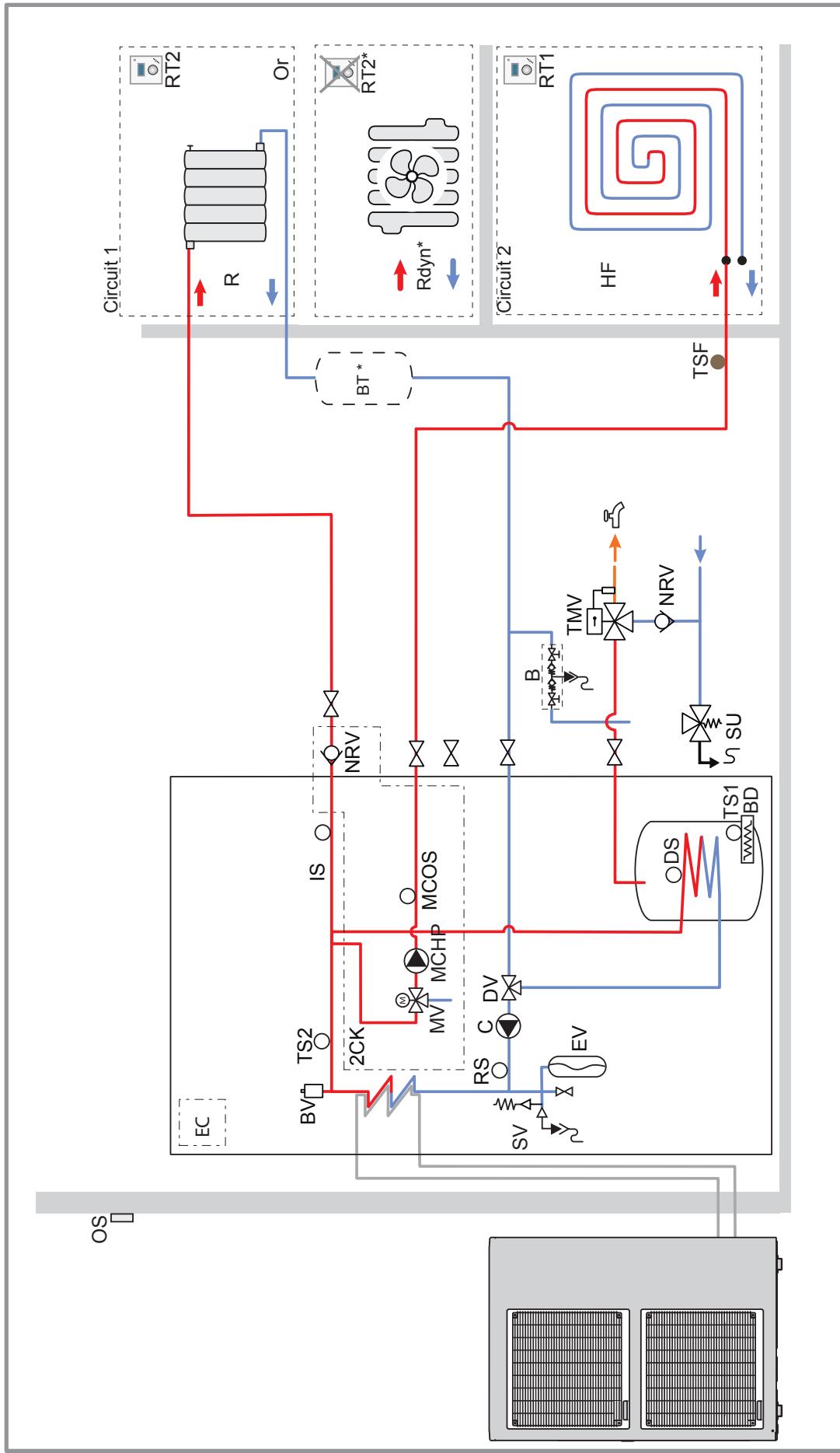
Caption :

BD - Back-up DHW
NRV - Non-return valve
C - Circulateur heat pump
B - Breaker
SU - Safety unit
MTV - Thermostatic mixer valve
BT* - Buffer tank (required with Rdyn) Necessary if the volume of the installation is smaller than the volume recommended.

HF - Heating-cooling floor
BV - Bleeder valve
R - Radiators (or fan coils)
RT* - Room thermostat (option / without Rdyn)

IS - HP Initial sensor
OS - Outdoor sensor
RS - Return sensor
DS - DHW sensor
SV - Safety valve
EV - Expansion vessel

- 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
 BT* - Buffer tank (required with Rdyn*) Necessary if the volume of the installation is smaller than the volume recommended.

Legend:

- IS - HP Initial sensor
- MCOS - Mixed circuit output sensor
- OS - Outdoor sensor
- TSF - Heated floor thermal safety fuse
- SV - Safety valve
- DV - Distribution valve
- EV - Expansion vessel
- MV - Mixer valve
- 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)

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	•	•
Accessoories 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.



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