

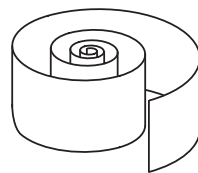
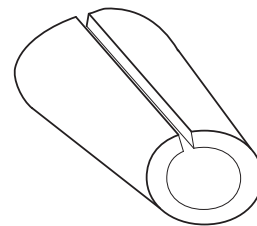
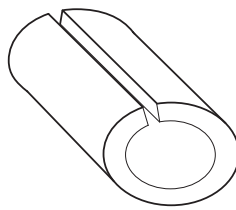
INSTALLATION

EN

Cooling kit

For heat pump, split single service or 2 services

code 075328



1825_EN_3
27/03/2019

For professionals.
To be kept by the user for future reference



It is strictly forbidden to use a radiator circuit in cooling mode.

To avoid any risk of condensation, damp rooms such as kitchens and bathrooms must be equipped with valves to prevent water from flowing into the corresponding floor circuit in cooling mode.

Before switching on the heating-cooling circuit in the floor, check that the floor's construction and coverings are compatible with cooling mode.

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This appliance is marked with this symbol. This means that electrical and electronic products shall not be mixed with general household waste. European Community countries(*), Norway, Iceland and Liechtenstein should have a dedicated collection system for these products. Do not try to dismantle the system yourself as this could have harmful effects on your health and on the environment. The dismantling and treatment of refrigerant, oil and other parts must be done by a qualified installer in accordance with relevant local and national regulations. This appliance must be treated at a specialized treatment facility for re-use, recycling and other forms of recovery and shall not be disposed of in the municipal waste stream. Please contact the installer or local authority for more information. * subject to the national law of each member state

Nominal cooling performances

Designation Model <i>alféa extensa (duo) A.I.</i>		5	6	8	10
Cool output					
+35°C / +18°C - Cooling floor system	kW	5.48	5.77	7.89	9.84
+35°C / +7°C - Fan convector	kW	3.17	4.22	5.95	7.28
Power absorbed					
+35°C / +18°C - Cooling floor system	kW	1.81	1.80	2.63	3.12
+35°C / +7°C - Fan convector	kW	1.64	1.81	2.64	3.14
Cooling Efficiency (EER)					
+35°C / +18°C - Cooling floor system		3.03	3.21	3.00	3.15
+35°C / +7°C - Fan convector		1.94	2.32	2.25	2.32

Designation Model <i>alféa excellia (duo) A.I.</i>		11 mono	14 mono	11 tri	14 tri	16 tri
Cool output						
+35°C / +18°C - Cooling floor system	kW	9.80	12.50	9.80	12.50	13.50
+35°C / +7°C - Fan convector	kW	8.50	9.00	8.50	9.00	9.50
Power absorbed						
+35°C / +18°C - Cooling floor system	kW	2.38	3.38	2.57	3.61	4.14
+35°C / +7°C - Fan convector	kW	3.11	3.34	3.41	3.66	3.99
Cooling Efficiency (EER)						
+35°C / +18°C - Cooling floor system		4.12	3.70	3.82	3.46	3.26
+35°C / +7°C - Fan convector		2.73	2.69	2.50	2.46	2.38

Designation Model <i>alféa excellia HP (duo) A.I.</i>		16 mono		15 tri	17 tri
Cool output					
+35°C / +18°C - Cooling floor system	kW	14.00		14.00	14.50
+35°C / +7°C - Fan convector	kW	8.50		8.50	9.00
Power absorbed					
+35°C / +18°C - Cooling floor system	kW	5.15		4.66	5.05
+35°C / +7°C - Fan convector	kW	4.34		4.11	4.39
Cooling Efficiency (EER)					
+35°C / +18°C - Cooling floor system		2.72		3.00	2.87
+35°C / +7°C - Fan convector		1.96		2.07	2.05

Remarks and Recommendations:

If the installation is fitted with a DHW tank :

- The production of DHW takes priority over cooling. After a DHW load, the heat pump shifts to the cooling mode after few minutes (maximum 10 minutes).
- For an optimal cooling, Cooling time program and DHW time program will be set at different times (example: cooling the day and DHW the night).

Use glycol if the "Min flow temperature" is less than 10 ° C. Use monopropylene glycol only. The recommended concentration is 30% minimum.



Never use monoethylene glycol.

In the case of using PANAMA fan coil, do not use a room sensor and set an operating range in Comfort mode from 00:00 to 24:00.

Assembly and setting

► Thermal insulation

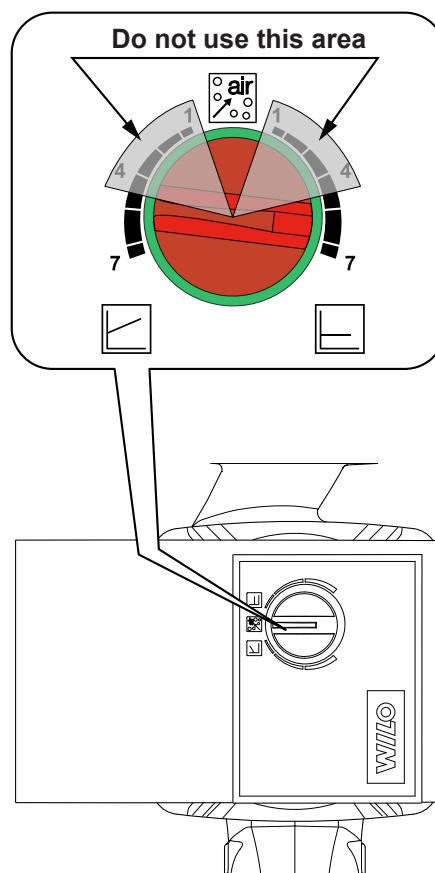
Install the thermal insulation kit on the metal parts to avoid the inconvenient effects of condensation.

- **1** - Install **the straight insulating sleeves** on the exchanger's heating fittings.
- **2** - Install **the conical insulating sleeves** on the exchanger's refrigeration fittings.
- **3** - Place the insulating adhesive tape on all the piping fittings (connection kit and/or 2-circuit included).

Proceed to insulate the gas and liquid pipes to avoid any condensation:

Use pipe insulators resistant to temperatures over 90°C. In addition if the humidity level in areas where the refrigeration pipes are installed is expected to exceed 70%, protect the pipes with pipe insulators. Use an insulating material thicker than 15mm if the humidity level is 70~80%, and an insulating material thicker than 20mm if the humidity exceeds 80%. If the recommended thicknesses are not observed under the conditions described above, condensation will form on the surface of the insulating material. Lastly, take care to use pipe insulators whose thermal conductivity is 0.045 W/mK or less when the temperature is 20°C. The insulation must be impermeable to resist the passage of steam during the defrosting cycles (fibreglass wool is prohibited).

► Heating circulation pump speed settings



► Commissioning

Please refer to the instructions supplied with the heat pump

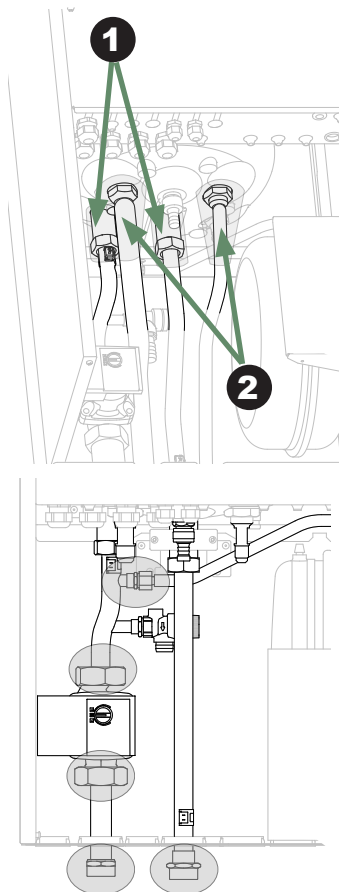


fig. 3 - Thermal insulation
(Heat pump Split single service)

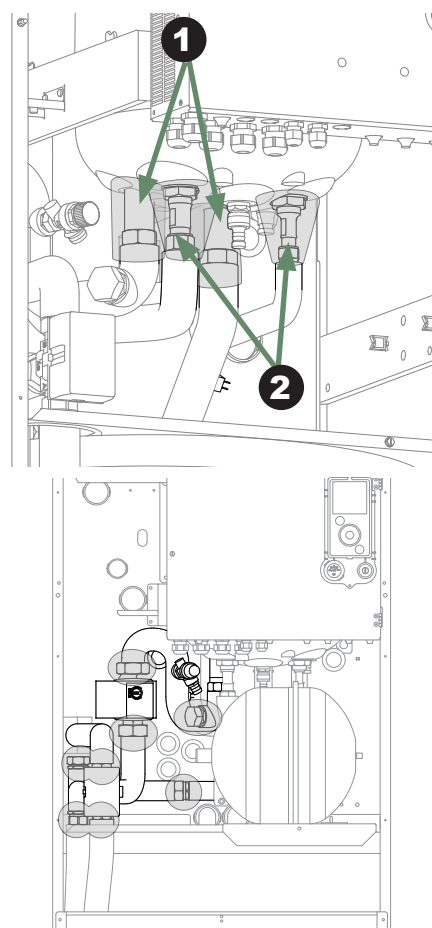


fig. 4 - Thermal insulation
(Heat pump Split 2 services)

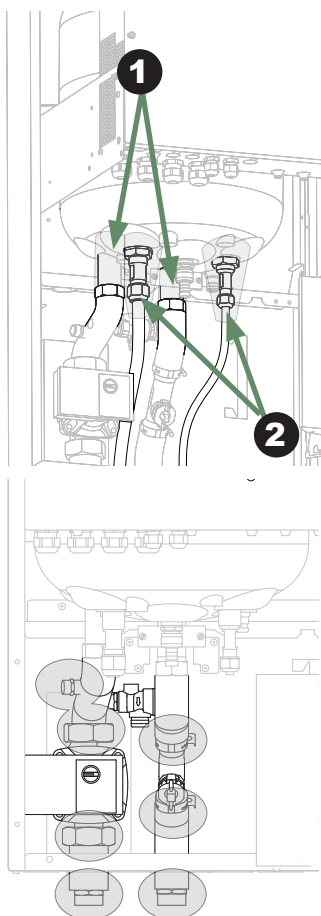


fig. 1 - Thermal insulation
(Heat pump Excellia HP A.I.)

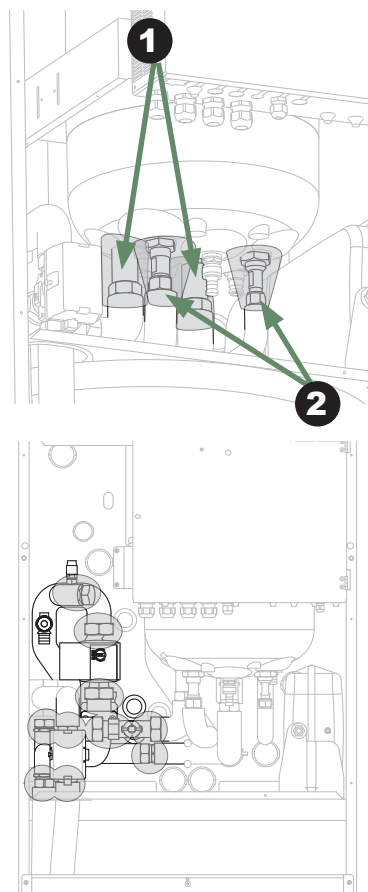


fig. 2 - Thermal insulation
(Heat pump Excellia HP duo A.I.)

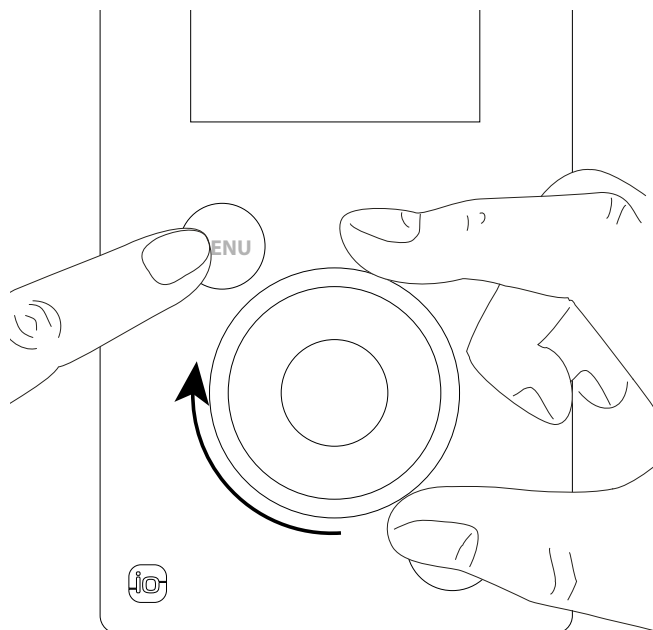
Setting parameter

► Setting parameters "Cooling"

See installation manual

To access the Installer Menu, press and hold the  button and turn the knob a **quarter turn to the right**.
To return to the User Menu, repeat the same operation.

- In Installed Options, allow cooling function in the compatible zone(s).
- Configure settings specific to the cooling function.



Installed options

► Installed options

Installed options are configured during commissioning. However, you can modify them by accessing the "Installed Options" menu.

Name of Appliance

- Choose the appliance's power.

Electrical backup

- Choose the electrical backup power.

Boiler connection

- If the electrical backup is set to "No", you can then set the boiler connection to "Yes".
- If a power setting is applied to the electrical backup, the boiler connection setting remains set to "No" and cannot be changed.

Number of Circuits

- Choose the number of circuits.

Cooling

- If the installation is fitted with cooling function, choose the zone(s):
None / Area 1 / Area 2 / Area 1 and 2.

Installed options	
Name of Appliance	-- KW
Electrical back-up	3 KW
Boiler connection	No
Number of circuits	2
Cooling	Area 1
Complete	

Hydraulic configuration > Area 1

► Hydraulic configuration

▼ Heating / Cooling

- Choose the heating zone to configure.

Hydraulic configuration
Area 1 (Direct circuit)
Area 2 (Mixed circuit)
Hot water

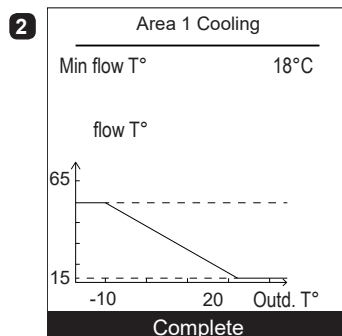
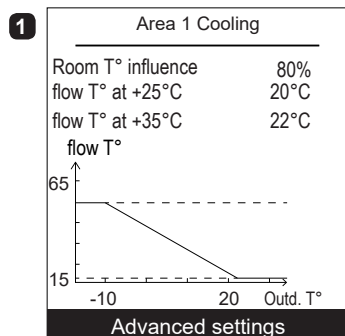
Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

Temperature control

Choose the temperature control to adjust: "**Cooling**".

• Control using flow temperature

- 1 - Set "Room T° influence", "flow T° to $+25^\circ\text{C}$ " and "flow T° to $+35^\circ\text{C}$ ".
- 2 - Set "Min flow T° ".



• Use 100% ambient temperature

If set to use 100%, adjust the radiator type on "Heat. floor system".

Area 1 Cooling	
Room T° influence	100%
Emitters type	Heat. floor system
Max flow T°	55°C
Min flow T°	17°C

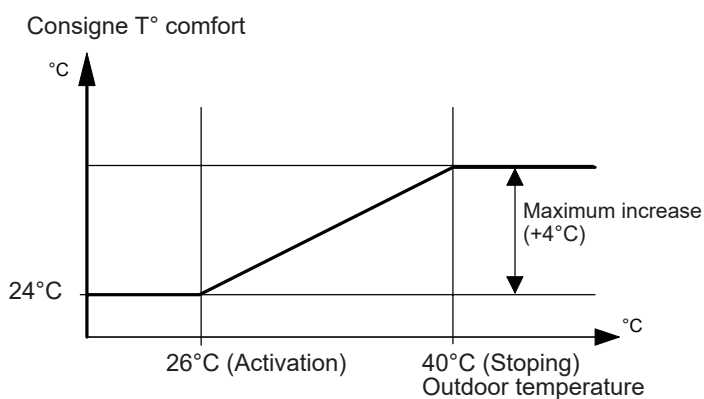
Comfort mode limitation

"Activation outd. T° ": $-30^\circ\text{C} / +10^\circ\text{C}$

"Stopping outd. T° ": $-30^\circ\text{C} / +10^\circ\text{C}$

"Maximum increase": $1^\circ\text{C} \dots 10^\circ\text{C}$

Area 1 : Cooling	
Comfort mode limitation	
Activation outd. T°	26°C
Stopping outd. T°	40°C
Maximum increase	4°C



In summer, the "Comfort T° " setting for cooling is offset upwards in line with the increase in outdoor temperature. This saves on cooling power and prevents too great a differential between the ambient indoor and outdoor temperatures.

Remark: Summer compensation explains the difference between the value "Comfort T° " and the value reading.

"Comfort T°": ECO Temperature ... 5°C.

"ECO T°": Absence Temperature ... Comfort Temperature.

"Absence T°": 40°C... ECO Temperature.

Cooling temperatures factory settings:

Comfort 24°C, ECO 26°C, Absence 35°C.

Heating temperatures factory settings:

Comfort 20°C, ECO 19°C, Absence 8°C.

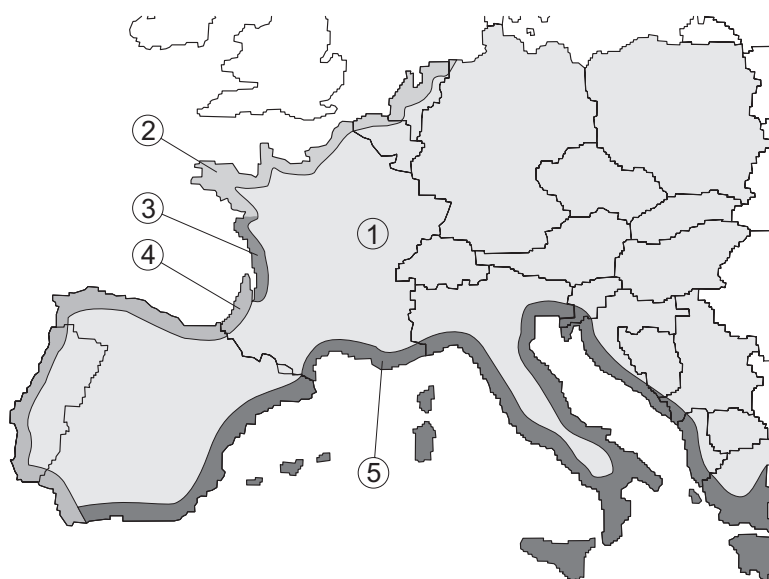
Zone 1	
Cooling Setpoint T°	
Comfort T°	24°C
ECO T°	26°C
Absence T°	8°C

Setting temperatures "Temperature control" in "Cooling"

	Heating floor system / Cooling	Fan-coil / Panama
Influence T° ambiance	10 à 100%	No room thermostat
Min flow T°	see table below	10°C
Flow T° at +25°C	>20°C	16°C
Flow T° at +35°C	>16°C	6°C

"Min flow temperature" with Heating floor system / Cooling

The water temperature must be restricted to a value set according to the geographical area. Setting to the lowest temperatures runs the risk of causing condensation on the floor, together with all the other risks this may engender. If the limit temperatures are not observed, the manufacturer may not be held responsible for any physical injuries or damage to equipment that may be caused.



Geographical area	Min flow temperature
① Internal area	18°C
② Coastal area (Width 30 km)	19°C
③ Coastal area (Width 50 km)	20°C
④ Coastal area (Width 50 km)	21°C
⑤ Coastal area (Width 50 km)	22°C

Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

1 - Choose "Cooling" as well as the appropriate zone by accessing the menu:

"Programming" > "Heating" / "Cooling" > "Area 1" / "Area 2"

2 - Select the day.

3 - Adjust the Comfort period start and end times.

If 2 or 3 Comfort periods are not required, click on "--:--".

- To return to the previous setting (e.g. end 1st heating period to start of 1st heating period), press the  button.

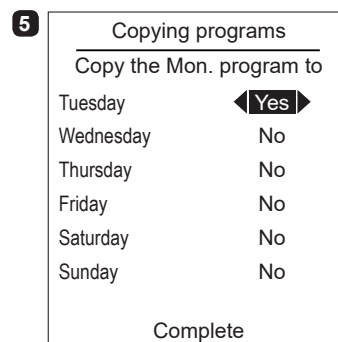
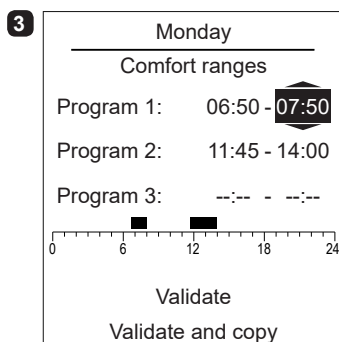
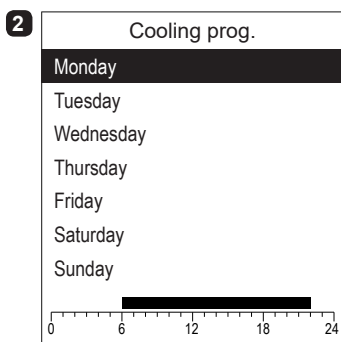
• **To copy the program to other days:**

4 - Select "Validate and copy".

5 - Set the required days to "Yes" and then select "Complete".

• **Else "Validate".**

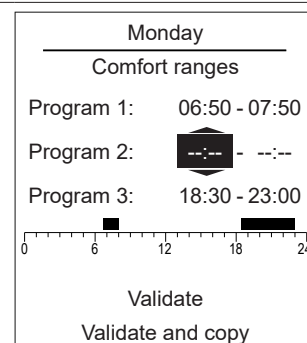
Heating / cooling period factory setting: 06:00 - 22:00.



To delete a Comfort period, set its start and end times to the same value.

When accepting a setting, the screen displays:

Program X: --:-- - --:--



- 1** - "Summer/winter switchover outd. T°" Zone 1: 8°C... 30°C.
 "Mini. cooling switchover outd. T°": 8°C... 35°C.
 "Mini. time prior to heat./cool.switchover": 8h... 100h
- 2** - "Circuit 2 heating": 0°C... 20°C.
 - "Circuit 2 cooling": 0°C... 20°C.

1

HP	
Heating/cooling configuration	
Summer/winter switchover outd. T°	18°C
Mini. cooling switchover outd. T°	---
Mini. time prior to heat./cool.switchover	24h
Next	

2

HP	
Heating/cooling configuration	
Mixing valve compensation	
Area 2	
Area 2 heating	0°C
Area 2 cooling	0°C
Complete	

⇄ Spare parts

When ordering spare parts, specify the appliance type and serial number, the name of the part and the part number.

Nr	Code	Designation	Type	Qty
2	140638	Insulation		2,80 m
3	140637	Insulation nipple		.02
4	140639	Insulation nipple		.02

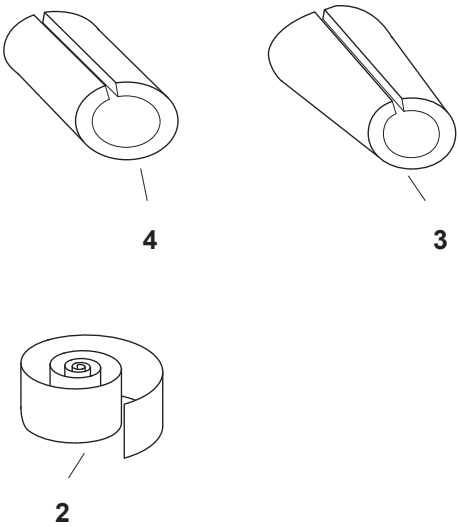


fig. 5 - Spare parts Cooling kit



Complies with:
- Low voltage directive 2014/35/UE, under standard EN 60335-1.
- Electromagnetic compatibility Directive 2014/30/UE.

Date of installation :

Contact of your heating technician or your after-sales service.