



improve your life

PROFESSIONAL

CATALOGUE

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OUR HISTORY

Founded in 1929 in Gallarate, near Varese, Argo is an Italian company focused on the production and marketing of solutions for heating and air conditioning. Still today, on an area of 42,000 m², the facility includes the manufacturing area, consisting of 6 production lines, research and development and quality control. This location is joined by the Alfianello headquarters in the Brescia area which, with its 32,000 m², houses a logistics center and management offices.

The know-how acquired and developed over the years has allowed us to offer on the international market a wide range of products that includes air-to-air and air-to-water heat pumps for heating, cooling, domestic hot water production and air treatment.

RESEARCH, DEVELOPMENT AND PRODUCTION

INDUSTRIAL AND ENGINEERING SELF-RELIANCE, A HERITAGE THAT WE HAVE BEEN PURSUING FOR OVER 90 YEARS

A research and development team of specialized engineers and technicians and the production site with cutting-edge technologies and equipment, allow us to propose systems based on quality, reliability and high-performances. The skills developed within the company guarantee the total control over the product design, development and manufacturing process of the products.





OUR TEAM

COMMERCIAL AND TECHNICAL ASSISTANCE, VALUES AT THE CUSTOMERS' SERVICE

The sales network is distributed throughout the national and foreign territory and allows us to be easily reachable and updated with the needs of local supplies which, also because of different climatic conditions, require specific know-how. A dedicated team answers to all the needs both in the evaluation phases and for after-sales inquiries.

*dedicated professionals,
at your side at all times*





ARGO ACADEMY

A SPACE DEDICATED TO TECHNICAL SPECIALIZATION

Argo Academy welcomes customers and collaborators for training sessions tailored on the specific needs of the interlocutors. To ensure high standards, the training combines theoretical modules with practical sessions, also carried out with the means of the working systems installed in the training room.

MAIN GOALS

- **TECHNICAL TRAINING** on several levels for operators who work in the air conditioning and heating sector
- **COMMERCIAL TRAINING** with constant updates on the Argo product range

THE RECIPIENTS OF OUR TRAINING OFFER

- INSTALLERS
- AGENTS - DISTRIBUTORS - CLIENTS
- DESIGNERS - HEATING ENGINEERS

TYPES OF TRAINING OFFER

To pursue high learning standards, our training offer is divided by type of product, application sector and level of detail in the topics:

1. **Product type:** direct expansion/hydronic solutions
2. **Application sector:** residential/commercial/big systems
3. **Specialization level:** base - installers/advanced - designers

THE COURSES

The training offer is initially articulated in the following courses:

1. Residential – air to air heat pumps
2. Residential – air to water heat pumps: monobloc units and split systems
3. Commercial and big systems



HEAT PUMPS

GENERA: air to water R290 MONOBLOC heat pumps - NEW

X3 air to water heat pumps: residential and commercial applications

Heat pumps accessories

X3 Reversible Modular Chiller

X3 Domestic Hot Water heat pumps

GENERA

THE NEW R290 HEAT PUMP RANGE
GENERATED IN ITALY



MADE IN ITALY

The new range of R290 air to water monobloc heat pumps is entirely designed and developed in Italy and it is produced in the Gallarate factory.

QUALITY, RELIABILITY, EFFICIENCY

Argo – improve your life

GENERA

The range of R290 air to water monobloc heat pumps, full DC Inverter, offers a complete comfort system capable of heating, cooling and domestic hot water production. The system uses the natural refrigerant R290, which guarantees almost zero impact on global warming and excellent performance in terms of energy efficiency. All products in the GENERA range are classified A+++ (35 °C). The technical characteristics of these systems ensure maximum versatility of application, both within new constructions and as replacements of traditional heating systems.



Code	Model			Nominal capacity EN14511 (kW)	
		1PH	3PH	Heating (1)	Cooling (2)
387032090	ANGHP06S	●		6.3	5.2
387032091	ANGHP08S	●		8.4	9.0
387032092	ANGHP08T		●	8.4	9.0
387032093	ANGHP12S	●		12.6	12.2
387032094	ANGHP12T		●	12.6	12.2
387032095	ANGHP16S	●		15.9	15.3
387032096	ANGHP16T		●	15.9	15.3

(1) Water temperature 30 °C/35 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

(2) Water temperature 23 °C/18 °C, outdoor air temperature 35 °C



Code	Description
387030740*	ANGHP Controller (two probes included)
T9900027**	External probe
108602 ***	Anti-freeze valve 1" (1 pcs.)

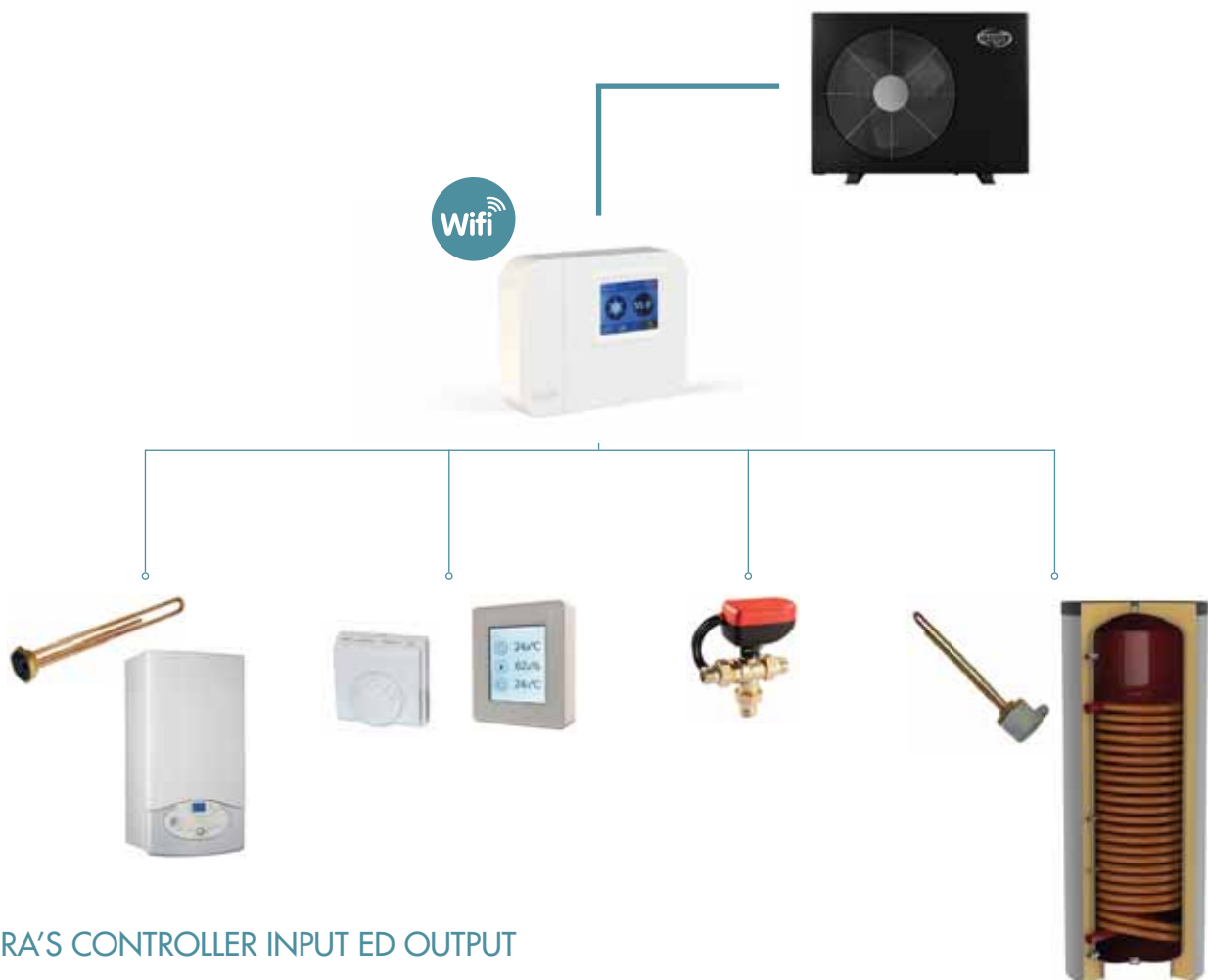
*Not included, mandatory accessory, one for each system

** Strongly recommended for using the "climatic curve" function

*** To be foreseen for installations that can reach temperatures below 0 °C.

It is recommended to install a pair of valves (leaving and return pipes)

CONNECTIVITY



GENERA'S CONTROLLER INPUT ED OUTPUT

RS485 PORTS

- 1) Dedicated port for ODU communication;
- 2) Secondary port for optional expansion-boards/Modbus for third-party BMS.

DIGITAL INPUTS (dry-contacts)

- 1) ON/OFF: stand by or operation;
- 2) Summer/Winter: Summer/Winter commutation;
- 3) ECO MODE: if the contact is open the maximum usable electrical power is 100%, if closed it can be set with a parameter to a percentage value of the maximum.
- 4) 2 dry contacts for Smart Grid or dynamic set point management (for example with advanced photovoltaic systems)

ANALOG INPUTS

- 1) Additional external air probe input: wiring of a second external probe to measure the temperature in a more suitable position (if necessary). Automatically identified by the unit.
- 2) DHW temperature probe input
- 3) System water temperature probe input (downstream of the integration element)

DIGITAL OUTPUTS

- 1) 230 Vac output for DHW diverting valve servomotor (diversion to DHW);
- 2) 230 Vac output for DHW diverting valve servomotor (repositioning towards the system - optional);
- 3) 230 Vac output for ALARM;
- 4) 230 Vac output for integrative heating element (electrical resistance, boiler, etc.) via specific external relay if necessary;
- 5) 230 Vac output for DHW tank supplementary heating element via specific external relay if necessary

GENERA

ADVANTAGES

R290 refrigerant

R290 refrigerant has a GWP (global warming potential) of 3 and an ODP (ozone depletion potential) of 0, which reduces the impact on the greenhouse effect and the ozone layer to almost zero. R290 meets today's maximum performance requirements both in terms of maximum deliverable water temperature and external temperature operating range. It also effectively reduces energy consumption, thanks to the high efficiency achievable and for this reason it is currently considered the best refrigerant to be used in air-to-water heat pumps.

High temperature constant delivery even with low outdoor temperature

The system is suitable for both new structures and renovations: it can replace traditional boilers combined with radiators. From -10 °C to +38 °C the outlet water temperature can reach 75 °C. Even at the lower operating limit of -25 °C the water temperature can still reach 65 °C. In addition to the high capacities always available throughout the external temperature range, these products are excellent for ensuring complete heating, often without the need for installing additional electrical resistances and/or oversizing the unit. This will ensure optimal operation performances of the unit, using the minimum space during installation and keeping low the cost of the system.

Maximum silence

Achieving a low sound level is a goal for any modern heat pump. Argo's research and development department has dedicated great efforts to optimize this characteristic, selecting and isolating with great care the compressor. Furthermore, an in-depth aerodynamic analysis was carried out to minimize the sound of the fan's airflow. A very large fan allows noise to be minimized by reducing the rotation speed. The overall structure has also been developed and insulated to optimize silence, making the product ideal even in residential areas.

The machine is also equipped with SILENT and SUPER-SILENT modes which further reduces the sound level when necessary.

Reliability

Genera is equipped with refrigerant pressure and water flow control systems, in order to protect the system in all working conditions. The safety gas-liquid separator is incorporated into the unit, for ensuring no-worries when using the R290 refrigerant. To ensure correct operation of the gas-liquid separator, glycol cannot be added to the fluid.

Compact dimensions

Thanks to the reduced size and low weight obtained by optimizing the components and their arrangement, the units can be easily installed even in narrow spaces or on surfaces with low load capacity. Even the more powerful 16 kW version is characterized by a reduced footprint.

Single or group management

The control panel can control a single unit or, if the installation includes a group of units, it can control up to 4 at the same time.

Innovative interface

The control panel is equipped with a color LCD touch emergency display, while the main interface can be managed from a dedicated App, available on smartphone, tablet or PC. The controller is separate from the monobloc unit and requires internal installation. It incorporates all the electrical connections of the system accessories, so the connection to the unit is made with a simple communication cable which, in addition to the power supply, is the only electrical wiring needed for the external unit.

Consumption accounting

The consumption and efficiency of the system are always available via the App. The actual performance data can be viewed at any time and it is possible to recall the archived data for constant improvement in use and performance optimization.

Integrated Wi-fi and Modbus

For easy remote management, the controller is equipped with a built-in WiFi module which also includes the possibility of updating the firmware. For more advanced management, Modbus connectivity is available as standard, which allows to monitor and adjust all the necessary parameters.

Dynamic set-points

Two input dry-contacts allow to interface with smart electrical grids or other systems for optimizing consumption. Depending on the system complexity, two or four cases are available, providing for differentiated operations and/or set-points for DHW and system, depending on the cost and availability of electrical energy.

Main components

The main components have been selected from the most reliable and cutting-edge suppliers:

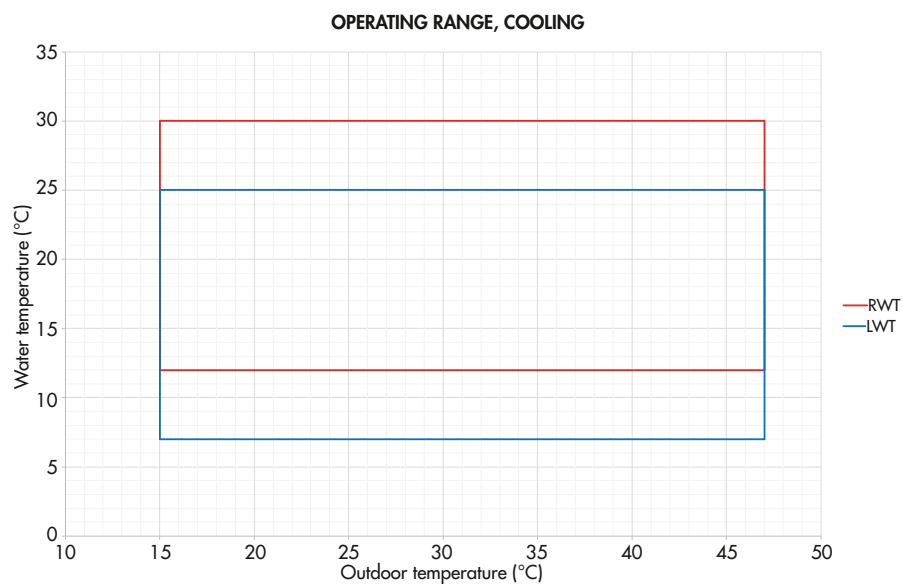
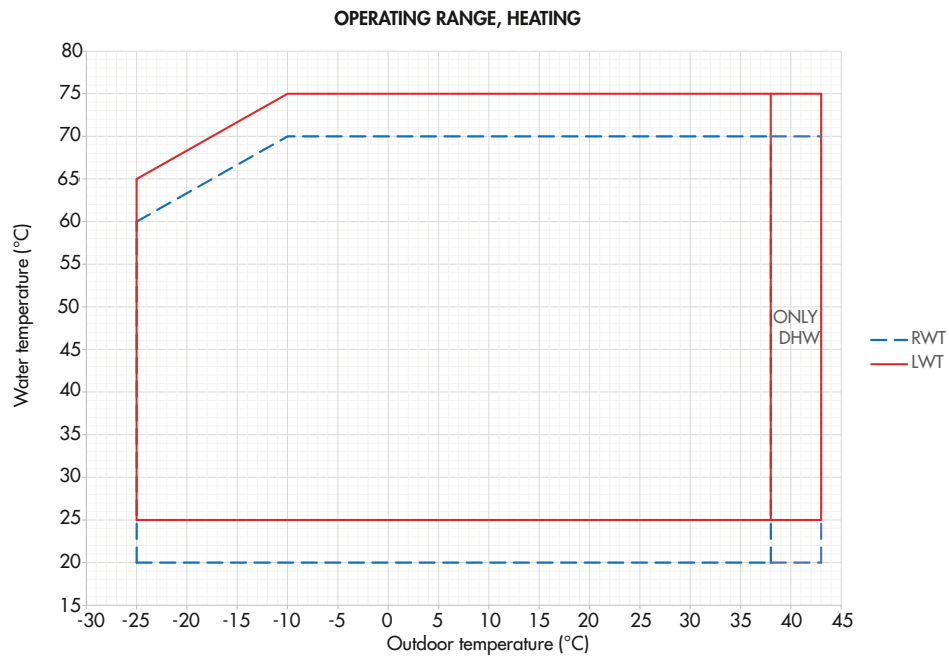
- The latest generation Twin-rotary compressor, optimized for the use of R290, can guarantee excellent performance in a wide range of action.
- DC-brushless axial fans are designed for aerodynamic optimization: they guarantee a low noise level, but high efficiency and powerful airflow.
- Finned heat exchangers have a special superficial treatment: the fins are coated to ensure corrosion resistance and hydrophilic reaction.

Hydraulic components

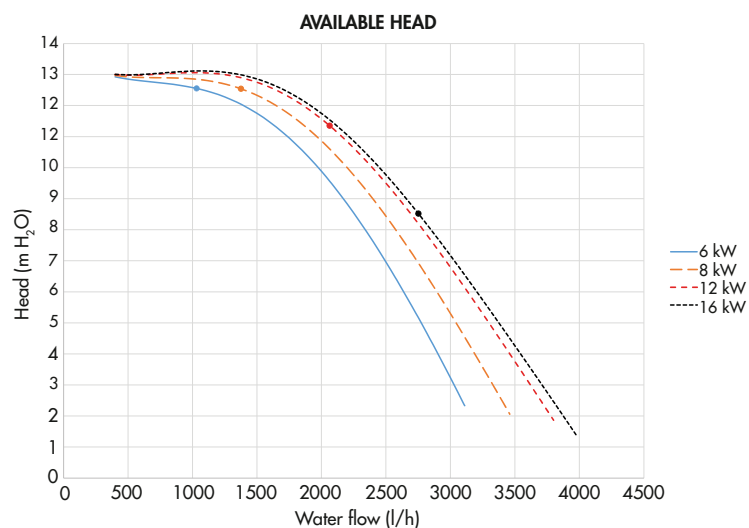
Installation is simplified as the unit is already internally equipped with most of the necessary hydraulic components:

- Inverter circulator
- Plate heat exchanger
- Flowmeter
- Safety valve
- Safety Gas-liquid separator

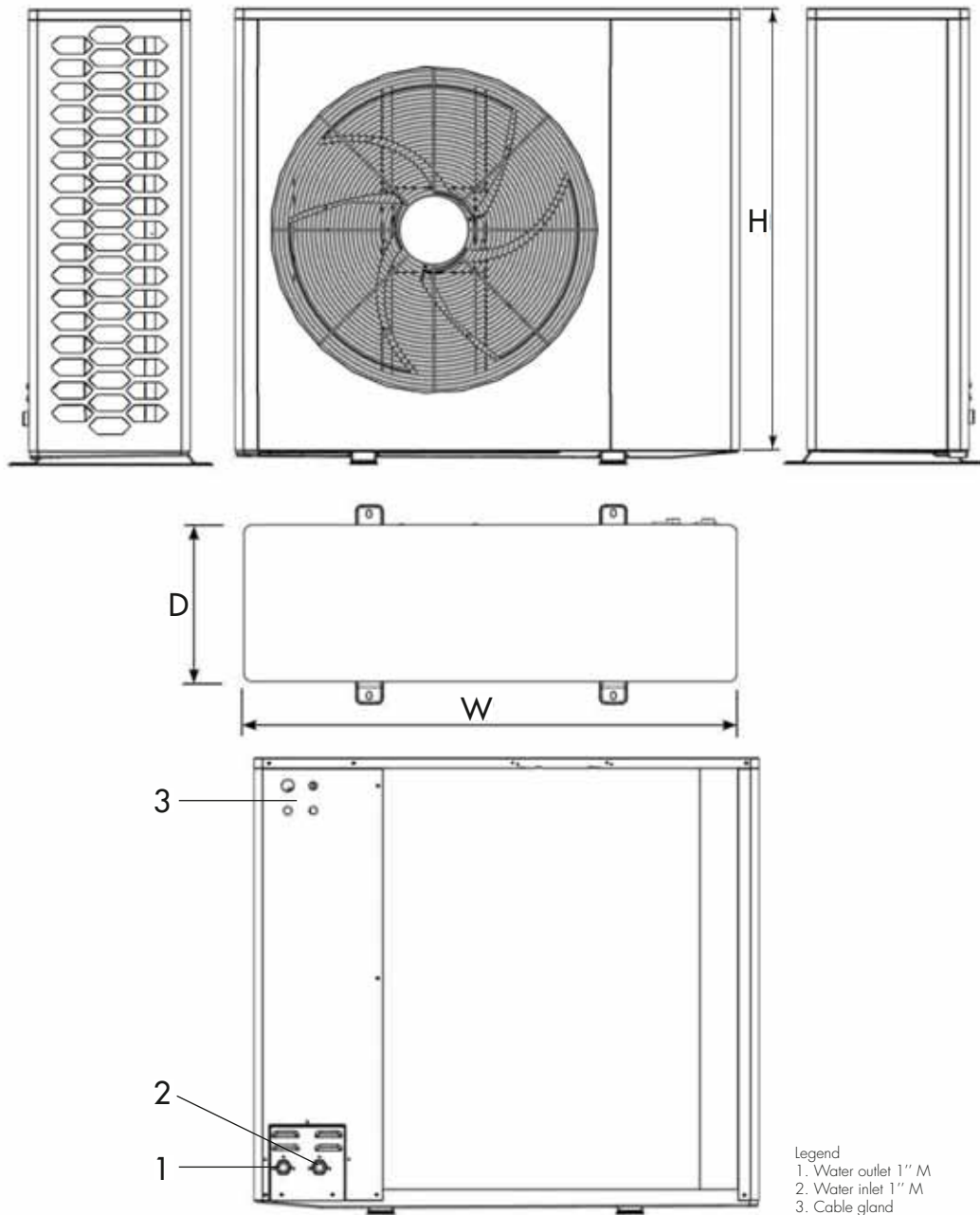
OPERATING CURVE



AVAILABLE HEAD



DIMENSIONAL DATA



Model	W (mm)	D (mm)	H (mm)	Weight (kg)
ANGHP06S	914	355	708	68
ANGHP08S	1204	385	880	95
ANGHP08T	1204	385	880	103
ANGHP12S	1204	385	1090	112
ANGHP12T	1204	385	1090	120
ANGHP16S	1204	385	1384	140
ANGHP16T	1204	385	1384	148

TECHNICAL DATA

MODEL				ANGHP06S	
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve	
				Cooling	Heating
Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	5.23	6.29
		Rated electrical power input	kW _{el}	1.17	1.39
		EER/COP		4.45	4.52
	Air +35 °C - Water 12/7 °C Air -7 °C - Water 30/35 °C	Rated capacity	kW	4.11	4.33
		Rated electrical power input	kW _{el}	1.22	1.54
		EER/COP		3.36	2.81
Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	5.1	
		Energy efficiency class		A+++	
		SCOP		4.64	
	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	4.6	
		Energy efficiency class		A++	
		SCOP		3.31	
DHW production	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL	
		Energy efficiency class		A+	
Unit operation data		Maximum delivery water temperature	°C	75	
		Outdoor temperature range (heating)	°C	-25/+38	
		Outdoor temperature range (cooling)	°C	+15/+47	
		Outdoor temperature range (DHW)	°C	-25/+43	
		Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50	
		Max current	A	10	
		Delayed fuse	A	13	
		Sound power*	dB(A)	50	
		Sound pressure (super silent)**	dB(A)	40	
Components and dimensions		Circulator pump head	mH ₂ O	12	
		Hydraulic connections	inches	G1"	
		Safety valve	bar	2,5	
		Weight	kg	68	
		Dimensions (W./D./H.)	mm	914/355/708	
		Compressor type		Twin-rotary	
Refrigerant	Refrigerant type e GWP			R290/3 kg CO ₂ eq.	
	Quantity		kg	0.5	

Data declared in accordance with REGULATION no. 811/2013/EU regarding the labeling indicating the energy consumption of space and combination heating appliances and the (EU) REGULATION No. 813/2013/EU containing methods of application of Directive 2009/125/EC regarding the specifications for the eco-design of space and combination heating appliances.

* Data as per EN12102-1 from ERP regulation (35% part load)

** Data at 6 m frontal distance, in supersilent mode

MODEL				ANGHP08S		ANGHP08T	
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve	
				Cooling	Heating	Cooling	Heating
Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	8.97	8.36	8.97	8.36
		Rated electrical power input	kW _{el}	2.36	1.73	2.36	1.73
		EER/COP		3.80	4.83	3.80	4.83
	Air +35 °C - Water 12/7 °C Air -7 °C - Water 30/35 °C	Rated capacity	kW	7.07	6.88	7.07	6.88
		Rated electrical power input	kW _{el}	2.32	2.40	2.32	2.40
		EER/COP		3.05	2.87	3.05	2.87
Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	7.5		7.5	
		Energy efficiency class		A+++		A+++	
		SCOP		4.99		4.99	
	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	6.5		6.5	
		Energy efficiency class		A++		A++	
		SCOP		3.70		3.70	
DHW production	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL	
		Energy efficiency class		A+		A+	
Unit operation data		Maximum delivery water temperature	°C	75		75	
		Outdoor temperature range (heating)	°C	-25/+38		-25/+38	
		Outdoor temperature range (cooling)	°C	+15/+47		+15/+47	
		Outdoor temperature range (DHW)	°C	-25/+43		-25/+43	
		Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50	
		Max current	A	12.5		5	
		Delayed fuse	A	16		6	
		Sound power*	dB(A)	54		54	
		Sound pressure (super silent)**	dB(A)	39		39	
Components and dimensions		Circulator pump head	mH ₂ O	12		12	
		Hydraulic connections	inches	G1"		G1"	
		Safety valve	bar	2.5		2.5	
		Weight	kg	95		103	
		Dimensions (W./D./H.)	mm	1204/385/880		1204/385/880	
		Compressor type		Twin-rotary		Twin-rotary	
Refrigerant		Refrigerant type e GWP		R290/3 kg CO ₂ eq.		R290/3 kg CO ₂ eq.	
		Quantity	kg	0.8		0.8	

Data declared in accordance with REGULATION no. 811/2013/EU regarding the labeling indicating the energy consumption of space and combination heating appliances and the (EU) REGULATION No. 813/2013/EU containing methods of application of Directive 2009/125/EC regarding the specifications for the eco-design of space and combination heating appliances.

* Data as per EN12102-1 from ERP regulation (35% part load)

** Data at 6 m frontal distance, in super-silent mode

TECHNICAL DATA

MODEL				ANGHP12S		ANGHP12T	
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve	
				Cooling	Heating	Cooling	Heating
Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	12.21	12.61	1.21	12.61
		Rated electrical power input	kW _{el}	2.88	2.68	2.88	2.68
		EER/COP		4.24	4.71	4.24	4.71
	Air +35 °C - Water 12/7 °C Air -7 °C - Water 30/35 °C	Rated capacity	kW	9.57	8.72	9.57	8.72
		Rated electrical power input	kW _{el}	2.99	3.21	2.99	3.21
		EER/COP		3.20	2.71	3.20	2.71
Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	10.5		10.5	
		Energy efficiency class		A+++		A+++	
		SCOP		4.71		4.71	
	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	9		9	
		Energy efficiency class		A++		A++	
		SCOP		3.75		3.75	
DHW production	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL	
		Energy efficiency class		A+		A+	
Unit operation data		Maximum delivery water temperature	°C	75		75	
		Outdoor temperature range (heating)	°C	-25/+38		-25/+38	
		Outdoor temperature range (cooling)	°C	+15/+47		+15/+47	
		Outdoor temperature range (DHW)	°C	-25/+43		-25/+43	
		Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50	
		Max current	A	16		6	
		Delayed fuse	A	20		10	
		Sound power*	dB(A)	52		52	
		Sound pressure (super silent)**	dB(A)	45		45	
Components and dimensions		Circulator pump head	mH ₂ O	12		12	
		Hydraulic connections	inches	G1"		G1"	
		Safety valve	bar	2,5		2,5	
		Weight	kg	112		120	
		Dimensions (W./D./H.)	mm	1204/385/1090		1204/385/1090	
		Compressor type		Twin-rotary		Twin-rotary	
Refrigerant	Refrigerant type e GWP		R290/3 kg CO ₂ eq.		R290/3 kg CO ₂ eq.		
	Quantity	kg	1.1		1.1		

Data declared in accordance with REGULATION no. 811/2013/EU regarding the labeling indicating the energy consumption of space and combination heating appliances and the (EU) REGULATION No. 813/2013/EU containing methods of application of Directive 2009/125/EC regarding the specifications for the eco-design of space and combination heating appliances.

* Data as per EN12102-1 from ERP regulation (35% part load)

** Data at 6 m frontal distance, in supersilent mode

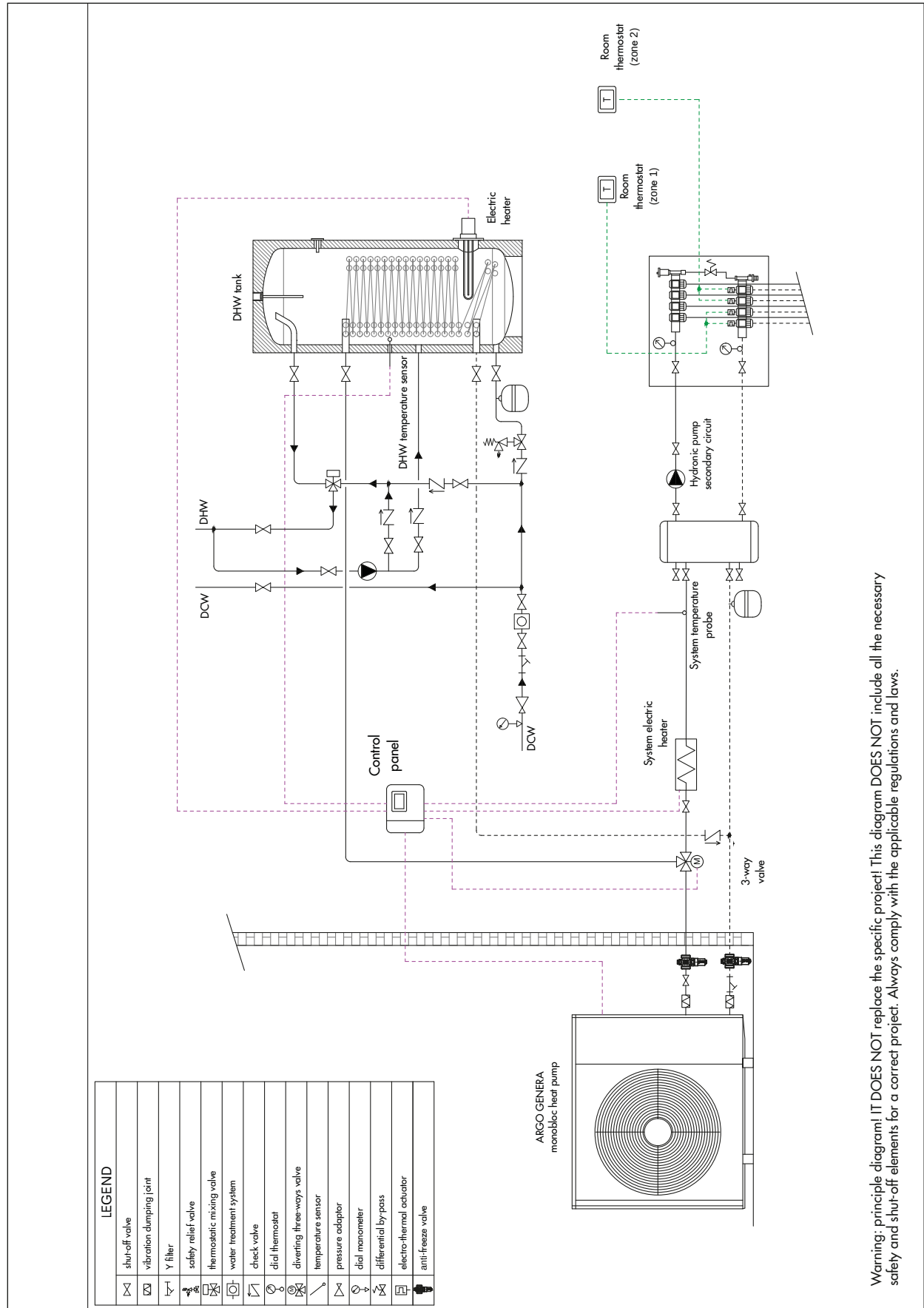
MODEL				ANGHP16S		ANGHP16T	
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve	
				Cooling	Heating	Cooling	Heating
Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	15.29	15.9	15.29	15.9
		Rated electrical power input	kW _{el}	3.55	3.56	3.55	3.56
		EER/COP		4.31	4.47	4.31	4.47
	Air +35 °C - Water 12/7 °C Air -7 °C - Water 30/35 °C	Rated capacity	kW	13.01	11.94	13.01	11.94
		Rated electrical power input	kW _{el}	4.04	4.23	4.04	4.23
		EER/COP		3.22	2.82	3.22	2.82
Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	13.50		13.50	
		Energy efficiency class		A+++		A+++	
		SCOP		5.32		5.32	
	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	13		13	
		Energy efficiency class		A+++		A+++	
		SCOP		3.99		3.99	
DHW production	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL	
		Energy efficiency class		A+		A+	
Unit operation data		Maximum delivery water temperature	°C	75		75	
		Outdoor temperature range (heating)	°C	-25/+38		-25/+38	
		Outdoor temperature range (cooling)	°C	+15/+47		+15/+47	
		Outdoor temperature range (DHW)	°C	-25/+43		-25/+43	
		Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50	
		Max current	A	22		9	
		Delayed fuse	A	25		10	
		Sound power*	dB(A)	53		53	
		Sound pressure (super silent)**	dB(A)	50		50	
Components and dimensions		Circulator pump head	mH ₂ O	12		12	
		Hydraulic connections	inches	G1"		G1"	
		Safety valve	bar	2.5		2.5	
		Weight	kg	140		148	
		Dimensions (W./D./H.)	mm	1204/385/1384		1204/385/1384	
		Compressor type		Twin-rotary		Twin-rotary	
Refrigerant	Refrigerant type e GWP		R290/3 kg CO ₂ eq.		R290/3 kg CO ₂ eq.		
	Quantity	kg	1.6		1.6		

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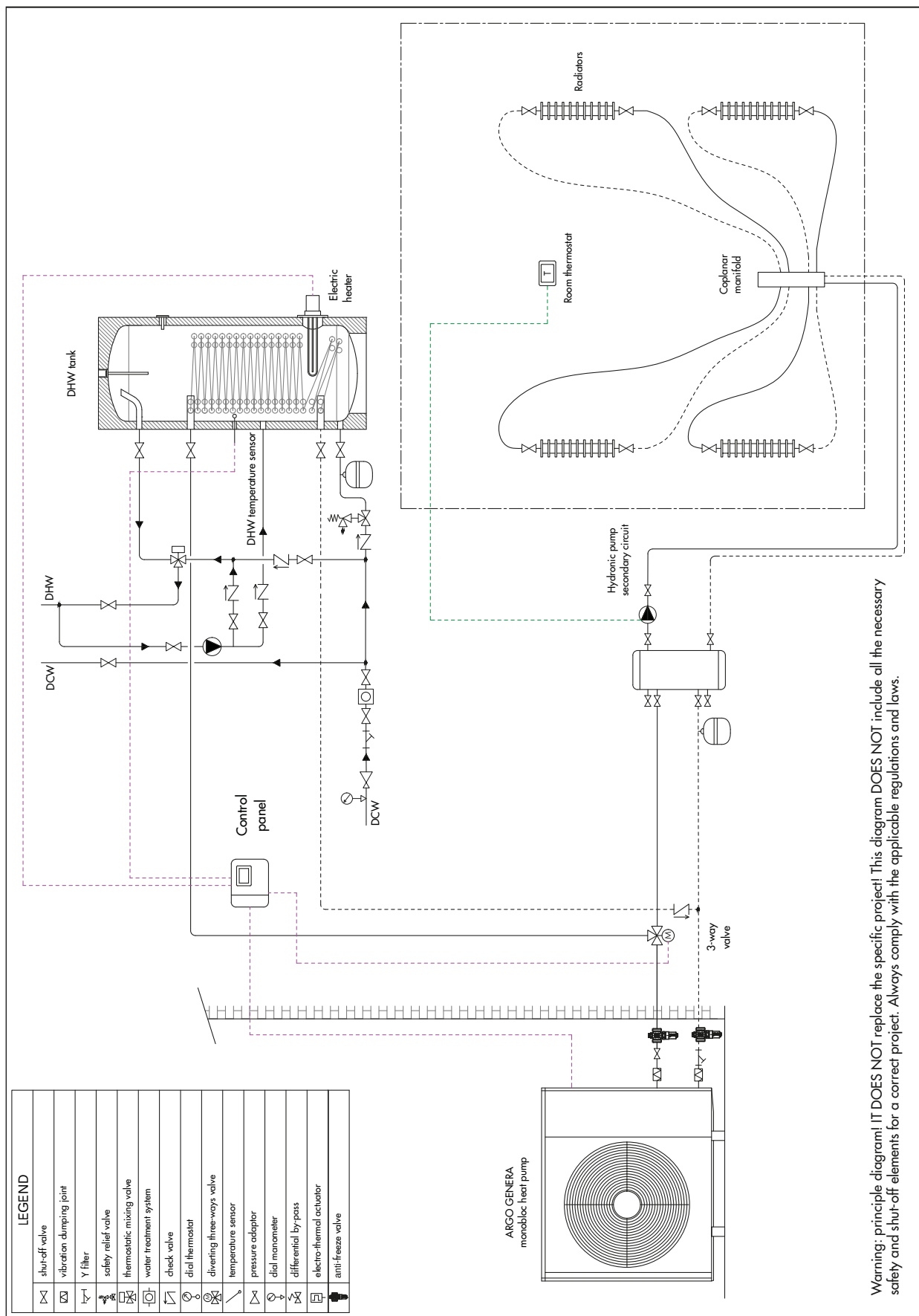
* Data as per EN12102-1 from ERP regulation (35% part load)

** Data at 6 m frontal distance, in super-silent mode

INSTALLATION DIAGRAM EXAMPLES



Warning: principle diagram! IT DOES NOT replace the specific project! This diagram DOES NOT include all the necessary safety and shut-off elements for a correct project. Always comply with the applicable regulations and laws.



GENERA INDOOR UNIT



Controller included

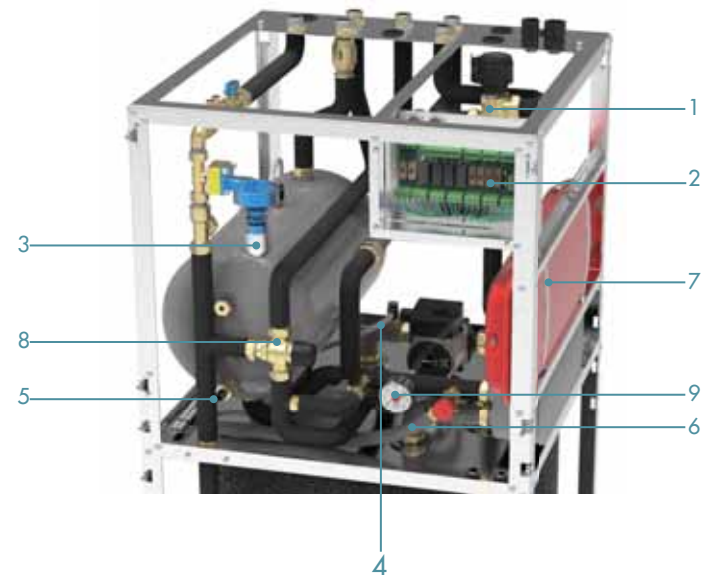


Code	Description
387030745	Genera indoor unit

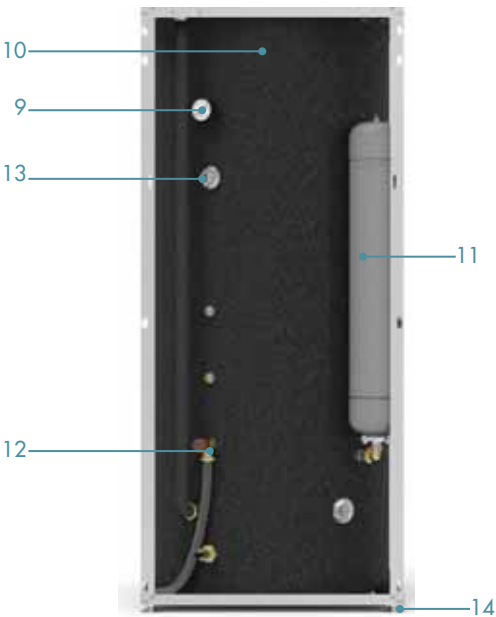
Code	Description
387030756	Recirculation kit
387030757	Solar thermal kit
387030758	DHW resistance kit
387030759	System resistance kit

The Genera hydronic indoor unit is the ideal completion of the system that integrates with the furnishings of the kitchen or other rooms of the house. It contains all the hydraulic accessories for a complete system in a metal chassis with a brushed steel finish. It includes a 185 liter DHW tank, a 20-liter buffer tank, a 3-way valve and two expansion vessels, for the system and for the DHW tank. Various optional features are also available to meet all needs: recirculation kit, solar thermal integration kit, DHW resistance kit and heating system resistance kit. The Genera controller is included as standard, which therefore does not need to be purchased separately.

MAIN COMPONENTS



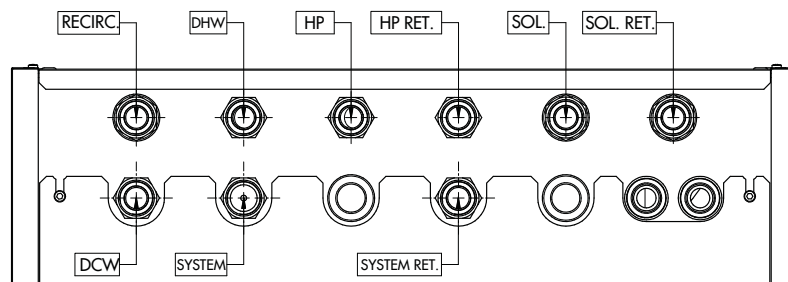
- 1. 3-way valve
- 2. Electronic board
- 3. Polyphosphate dispenser
- 4. Air vents conveyed to a tray
- 5. Accessible inertial drain
- 6. Safety valve drain conveyed to a tray
- 7. System expansion vessel



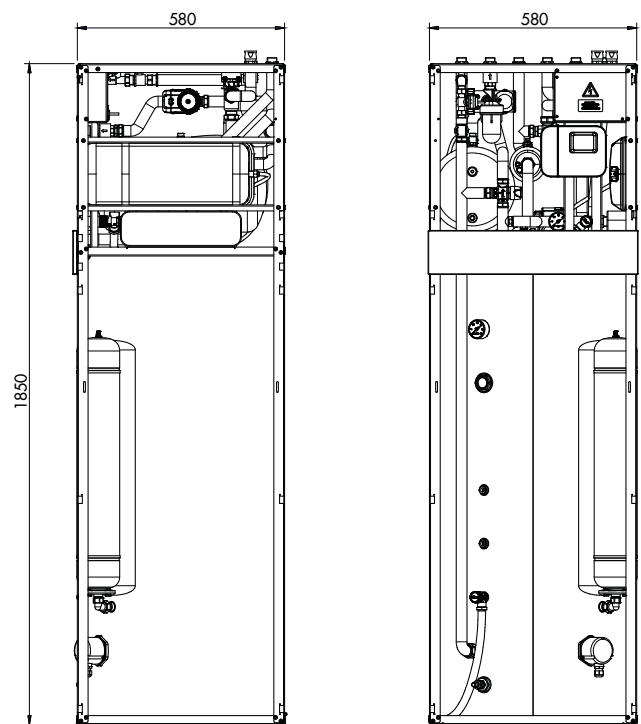
- 8. Thermostatic mixer
- 9. Analogue pressure gauge
- 10. Expanded PE insulation
- 11. DHW expansion vessel
- 12. Safety valve drain conveyed
- 13. Magnesium anode
- 14. Stabilising feet

Technical data		Genera IDU
Power supply	V/Ph/Hz	230/1/50
Max electric consumption (without res.)	W	60
Max electric consumption (with res.)	W	3600
Water connections to heat pump	inch	1"
Other water connections	inch	3/4"
Adjustable by-pass valve	mca	0,3-5
DHW analog pressure gauge	bar	0-6
DHW tank insulation thickness	mm	50
DHW expansion vessel	l	8
System expansion vessel	l	7
DHW tank	l	185
Buffer tank	l	20
Net weight	kg	128
DHW thermostatic valve	°C	35-60
Dimensions (H./W./D.)	mm	1800/580/580
DHW safety valve	bar	10
System safety valve	bar	3

CONNECTIONS FROM ABOVE



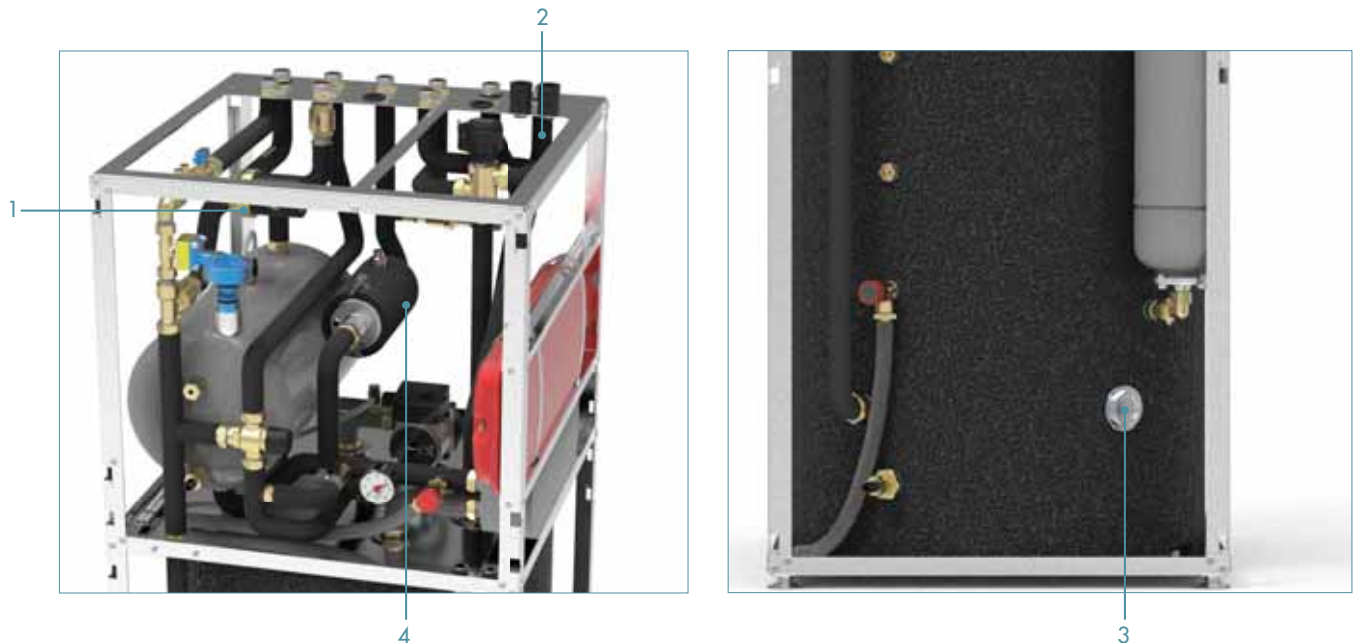
DIMENSIONAL DATA



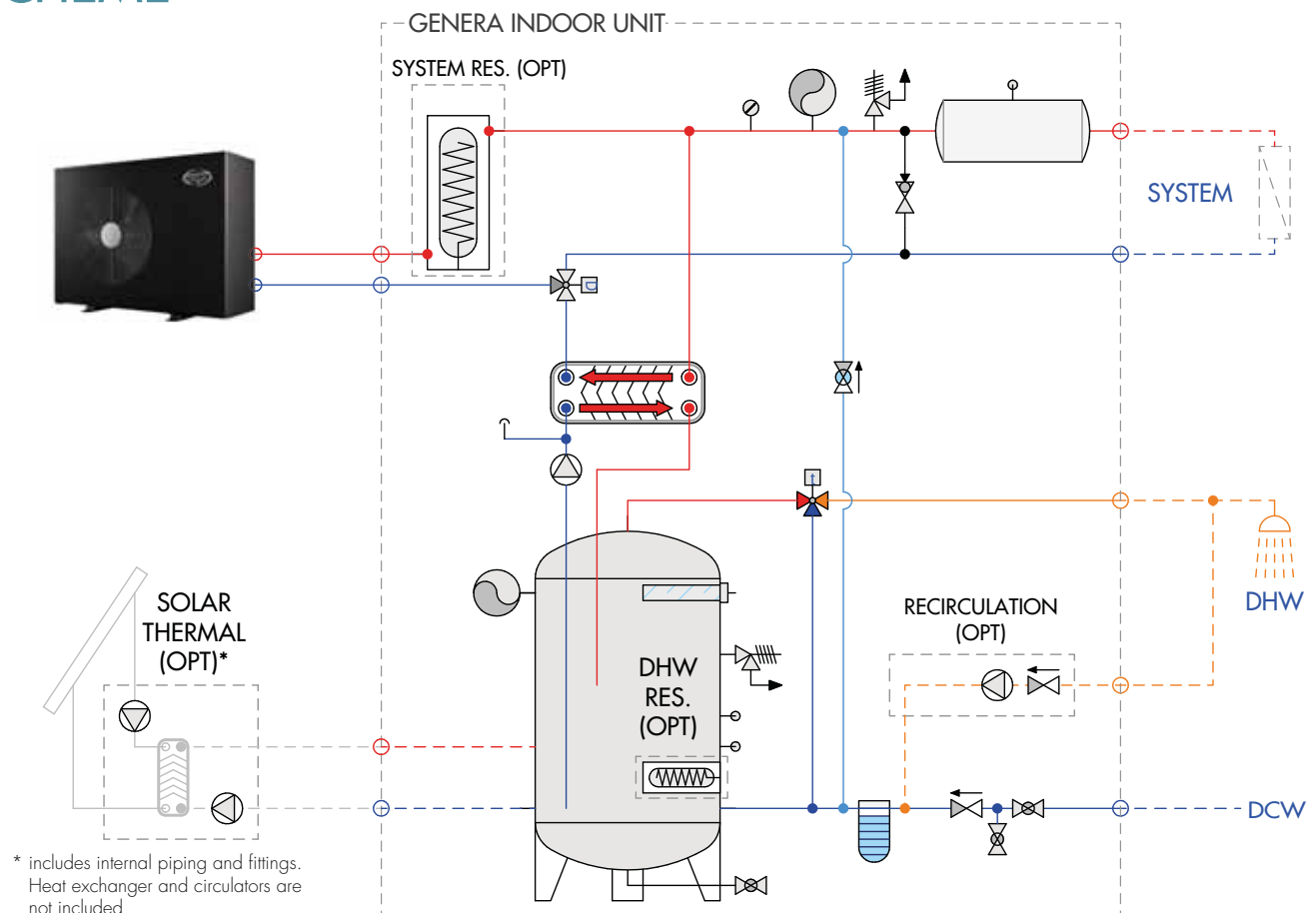
OPTIONAL KIT

The indoor unit can be completed with:

1. recirculation kit (includes pipe section with circulation pump, check valve and relevant fittings)
2. solar thermal integration kit (includes internal piping and relevant fittings; plate heat exchanger and pump not included)
3. DHW resistance kit (includes 2 kW resistance)
4. heating system resistance kit (includes pipe section with 1.5 kW resistance)



SCHEME



This diagram represents the circuits of the internal unit. For the remaining part, the diagram does NOT replace the specific project! These system diagrams do NOT contain the necessary safety elements for correct installation. Always comply with the local regulations and laws.





X3 AIR TO WATER HEAT PUMPS

Residential and commercial applications - R32 DC Inverter

Monobloc

Split

Built-in solution for split heat pumps

All in one

X3 AIR TO WATER HEAT PUMPS

ADVANTAGES

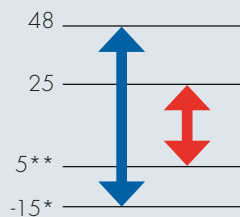


WIDE OPERATING RANGE

The outdoor temperature range varies between -25 °C and +35 °C, while the leaving water temperature interval is 20-60 °C: this means that the heat pump can be used with radiant floor systems, fan coil units and also medium-temperature radiators.

Cooling mode

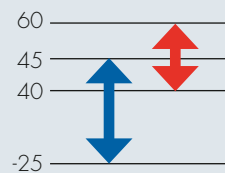
- from -15 °C* to 48 °C
- from 5 °C** to 25 °C



* +10 °C for split and all-in-one models
** +7 °C for split and all-in-one models
*** 60 °C for split and all-in-one models

DHM production

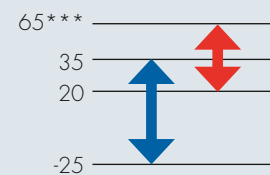
- from -25 °C to 45 °C
- from 40 °C to 60 °C
(80 °C with electric heater)



Outdoor air temperature
 Water temperature

Heating mode

- from -25 °C to 35 °C
- from 20 °C to 65 °C***



VERSATILITY AND EASE OF INSTALLATION

The unit is compact and has reduced overall dimensions: it can therefore be used also in tight spaces and is easy to carry and to install. In addition, it can be paired with heating systems that use medium-temperature radiators, as well as with radiant floor systems and fan coil units. It is not necessary to create any connection to the cooling circuit: the hydraulic connections are sufficient.



R32 REFRIGERANT WITH LOW ENVIRONMENTAL IMPACT

Heat pumps run on GREEN technology that uses renewable energy: this system captures the thermal energy present in the air and transfers it from one place to another, multiplying it. For every kW consumed, it produces over 4 kW of thermal energy: 75% of the energy is free, renewable and clean. The use of R32, a refrigerant gas with a low global environmental impact, makes these heat pumps even more environment-friendly.



REMOTE CONTROL

The unit can be integrated with a BMS supervision system, using the Modbus protocol.

By installing the EWPE application on the smartphone, most of the heat pump's parameters can be controlled remotely in a comfortable way.

MONOBLOC
SPLIT
ALL IN ONE



ADVANTAGES



HIGH ENERGY EFFICIENCY

Steam-injection compressor

- With low outdoor temperatures, the compressor with steam injection reduces the thermal capacity losses and has a greater efficiency compared to a traditional compressor.
- In the same conditions, the compressor's high discharge temperatures and other problems can be completely avoided, making the compressor significantly more reliable.
- Two-stage compression, two-stage lamination and steam injection increase the leaving water temperature and improve the control accuracy.

Heat exchanger fins

The heat exchange batteries are subjected to a special "Golden Fin" anti-corrosion protective treatment. The battery fins, made of aluminium-manganese (Al-Mn), are coated with a special layer of epoxy resin, which gives them their typical golden colour, and a further hydrophilic layer.

This special treatment is able to protect the heat exchanger against rust and corrosion in zones where the air is very salty, typical of coastal areas.

Circulator pump

The high-efficiency Class A inverter hydronic pump satisfies the requirements imposed by the European ErP directive. Its operating frequency adapts to the system's load. In this way, it is possible to improve the efficiency and temperature control of the heat transfer fluid.

DC brushless axial fans

The DC inverter axial fan with high air flow rate controls the volume of air delivered in a precise way and guarantees operating stability.

Plate heat exchanger

- The heat exchanger has a compact structure, minimal overall dimensions and a reduced pressure loss. Moreover, it guarantees a highly efficient heat exchange and boasts excellent resistance to corrosion.
- It is coated externally with anti-condensate material and is equipped with a heating element to protect it against frost build-up.

TOUCH-SCREEN CONTROL PANEL

The control panel, supplied with the heat pump or installed on board the corresponding internal unit, allows the complete management and set-up of the unit.



In particular it is possible to:

- Define the operating mode of the heat pump and its priorities (heating, cooling, production of Domestic Hot Water)
- Set all the main operating parameters (set point, hysteresis, etc.)
- Activate external (or internal) systems to integrate or replace the heating and Domestic Hot Water production unit
- Manage the commissioning of the unit
- Display the status of the operating parameters of the main components of the heat pump
- Manage the unit remotely via MODBUS gateway or WiFi module directly integrated into the panel.

Specific auxiliary functions are also available in the control panel, including:

- Automatic management of the flow temperature of the fluid according to the external temperature (climate curve)
- Programming of weekly and hourly operation
- Activation of "silent" operation
- Emergency management in case of unit failure
- Programmable activation of the anti-legionella cycle
- Automatic activation of the antifreeze protection.



MONOBLOC

Single-phase 6-8 kW range

Single/three-phase 10-12-14-16 kW range

MONOBLOC HEAT PUMPS

MAIN FEATURES



(Standard)

Touch-screen control panel

- Monobloc Air to Water heat pumps with new-generation DC Inverter technology.
- Equipped with the heating, cooling and domestic hot water production functions.
- Single-phase version with 6-8 kW heating capacity.
- Single/three-phase version with 10-12-14-16 kW heating capacity.
- Achieves very high efficiency levels in heating mode, up to 5 COP.
- Its integrated structure, which includes all the hydraulic components, ensures easy installation and, consequently, savings on the relative costs.
- It uses R32, a refrigerant with low impact on global warming and ozone layer, characterised by high energy efficiency and a 30% lower charge compared to R410A.
- The vapour-injection compressor, thanks to its special technology, guarantees exceptional performances and a wide operating range.
- The leaving water temperature range is 20 °C-65 °C: this means that the heat pump can be used with radiant floor systems, fan coil units and also medium-temperature radiators.
- The DC brushless axial fans are designed to ensure aerodynamic optimisation: they guarantee low noise levels coupled with high efficiency and a high air flow rate.
- It is equipped with a heating element on the base to prevent ice build-up during winter operation.
- It is equipped with an electronic expansion valve.

 Internal copper groove	 Quiet mode	 Weekly timer	 Heating down to low temperatures	 Door control	 Full protection	 Timer	 Child lock	 Wide operating range	 Wide voltage range	 Auto diagnosis	 Low-voltage start-up
 Auto restart memory	 Intelligent defrosting	 °C / °F switching	 Long-distance monitoring	 Exch. condenser gold fin treatment	 Min. outdoor temp. heating	 Max. outdoor temp. heating	 Min. outdoor temp. cooling	 Max. outdoor temp. cooling	 Min. outdoor temp. DHW	 Max. outdoor temp. DHW	 Max. output temp. DHW

A+++ Heating mode 35 °C

A++ Heating mode 55 °C

A DHW

THE RANGE

	Model	Code			Rated capacity according to EN14511 (kW)	
			1PH	3PH	 Heating (1)	 Cooling (2)
	AG4HP061PH	398600069	●		6.0	6.5
	AG4HP081PH	398600071	●		8.2	8.3
	AG4HP101PH	398600072	●		10.2	10.2
	AG4HP121PH	398600073	●		12.0	12.0
	AG4HP141PH	398600074	●		14.2	13.7
	AG4HP161PH	398600075	●		15.7	15.5
	AG4HP103PH	398600076		●	10.2	10.2
	AG4HP123PH	398600077		●	12.0	12.0
	AG4HP143PH	398600078		●	14.2	13.9
	AG4HP163PH	398600079		●	15.7	15.4

(1) Water temperature 30 °C/35 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

(2) Water temperature 23 °C/18 °C, outdoor air temperature 35 °C

INCLUDED ACCESSORIES

Ambient air temperature sensor
DHW temperature sensor
Additional system water temperature sensor
Y-shaped filter
Remote control panel

TECHNICAL DATA 6 kW

Model					AG4HP061PH		
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve		
					Cooling	Heating	
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	6.50	6.00	
			Rated electrical power input	kW _{el}	1.27	1.11	
			EER/COP		5.10	5.40	
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	5.70	6.80	
			Rated electrical power input	kW _{el}	1.65	1.66	
			EER/COP		3.45	4.10	
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	6		
			Seasonal energy efficiency η _s	%	199		
			Energy efficiency class		A+++		
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	5		
			Seasonal energy efficiency η _s	%	135		
			Energy efficiency class		A++		
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		
			Energy efficiency class		A+		
			ERP efficiency	%	127		
Unit operation data			Maximum delivery water temperature	°C	Up to 65		
			Outdoor temperature range (heating)	°C	-25/+35		
			Outdoor temperature range (cooling)	°C	-15/+48		
			Nominal water flow rate	m³/h	at 35 °C	1.03	
					at 45 °C	1.01	
					at 55 °C	0.97	
					at 7 °C	0.84	
					at 18 °C	1.12	
			Minimum efficient water volume of the system	liters	40		
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		
			Maximum electricity consumption	A	25		
			Sound pressure level (cooling mode)	dB(A)	56		
			Sound pressure level (heating mode)	dB(A)	58		
Components and dimensions			Expansion vessel	liters	2		
			Maximum circulator pump head	kPa	(see H/Q graphs)		
			Hydraulic connections	inches	G1 "		
			Safety valve	bar	3		
			Weight	kg	90		
			Dimensions (H/W/D)	mm	733/1150/372		
			Compressor type		Twin Rotary with vapour injection		
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq		
			Quantity	kg	0.95		

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to Regulations (EU) 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2018 STANDARD

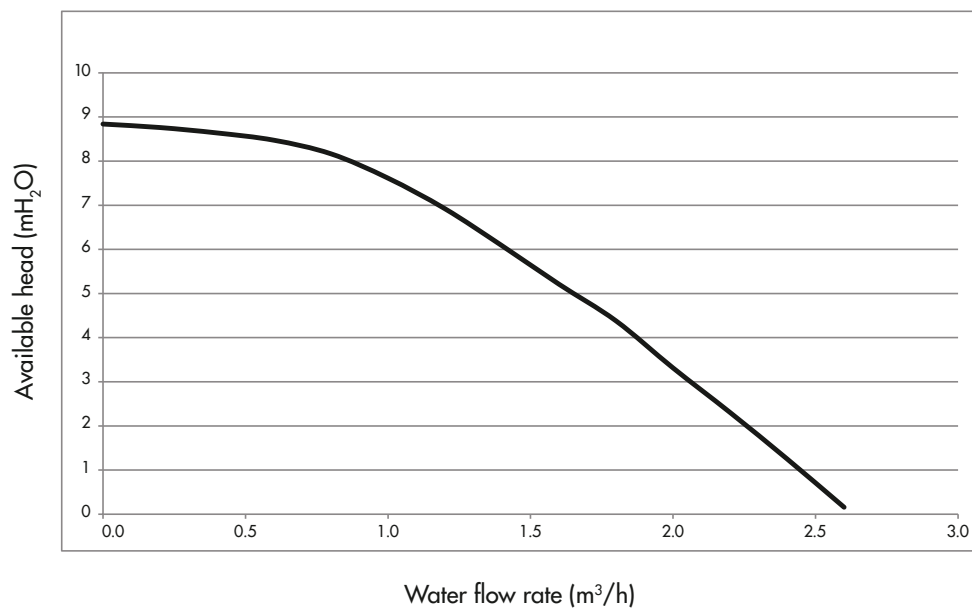
LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AG4HP061PH)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	5.25	6.31	5.00	5.69	4.79	5.11	6.16	4.52	5.87	3.97	5.70	3.45	3.13	2.99	2.27	2.37	2.08	1.92
8	5.42	6.53	5.16	5.89	4.94	5.28	6.35	4.68	6.06	4.11	5.88	3.57	3.23	3.09	2.34	2.45	2.15	1.99
9	5.59	6.75	5.32	6.09	5.09	5.46	6.55	4.83	6.25	4.24	6.06	3.69	3.33	3.20	2.41	2.53	2.21	2.06
10	5.75	6.97	5.48	6.28	5.25	5.64	6.75	4.99	6.43	4.38	6.25	3.81	3.43	3.30	2.49	2.61	2.28	2.12
11	5.92	7.19	5.64	6.48	5.40	5.81	6.94	5.15	6.62	4.52	6.43	3.93	3.53	3.40	2.56	2.70	2.35	2.19
12	6.09	7.41	5.80	6.68	5.55	5.99	7.14	5.30	6.81	4.65	6.61	4.05	3.63	3.50	2.63	2.78	2.41	2.26
13	6.26	7.62	5.96	6.87	5.71	6.17	7.34	5.46	7.00	4.79	6.79	4.17	3.73	3.61	2.70	2.86	2.48	2.32
14	6.43	7.84	6.12	7.07	5.86	6.34	7.53	5.61	7.19	4.93	6.98	4.28	3.83	3.71	2.78	2.94	2.54	2.39
15	6.59	8.06	6.28	7.27	6.01	6.52	7.73	5.77	7.37	5.06	7.16	4.40	3.93	3.81	2.85	3.02	2.61	2.46
18	7.07	8.71	6.73	7.86	6.44	7.05	8.29	6.24	7.90	5.48	6.50	5.10	4.21	4.12	3.05	3.27	2.80	2.66
20	7.43	9.14	7.08	8.24	6.78	7.39	8.72	6.54	8.31	5.74	8.07	5.00	4.43	4.33	3.21	3.43	2.94	2.79
23	7.91	9.80	7.53	8.83	7.21	7.92	9.27	7.01	8.84	6.16	8.58	5.35	4.71	4.64	3.42	3.67	3.13	2.99
25	8.21	10.23	7.82	9.22	7.49	8.27	9.63	7.32	9.18	6.43	8.91	5.59	4.89	4.84	3.55	3.84	3.25	3.12

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	2.31	2.24	2.48	2.64	2.97	3.04	3.25	3.56	3.58	3.96	4.02	4.52	4.35	5.02	5.94	6.60	6.12	6.77	6.84	7.36	5.88	7.82	6.44	8.28	5.36	8.66	5.80	8.99
30	2.37	2.06	2.53	2.42	3.03	2.79	3.30	3.27	3.63	3.64	4.07	4.15	4.40	4.60	6.00	6.06	6.18	6.21	6.90	6.76	5.92	7.18	6.49	7.60	5.40	7.95	5.83	8.26
35	2.37	1.84	2.53	2.16	3.03	2.49	3.30	2.92	3.63	3.25	4.07	3.71	4.40	4.11	6.00	5.41	6.18	5.55	6.90	6.03	5.92	6.41	6.49	6.79	5.40	7.10	5.83	7.37
40	2.37	1.62	2.53	1.90	3.03	2.19	3.30	2.57	3.63	2.86	4.07	3.26	4.40	3.62	6.00	4.76	6.18	4.88	6.90	5.31	5.92	5.64	6.49	5.97	5.40	6.25	5.83	6.49
45	2.37	1.47	2.53	1.73	3.03	1.99	3.30	2.34	3.63	2.60	4.07	2.96	4.40	3.29	6.80	4.10	6.18	4.44	6.90	4.83	5.92	5.13	6.49	5.43	5.40	5.68	5.83	5.90
50			2.48	1.56	2.97	1.79	3.25	2.10	3.58	2.34	4.02	2.67	4.35	2.96	5.94	3.90	6.12	3.99	6.84	4.34	5.88	4.62	6.44	4.89	5.36	5.11	5.77	5.31
55					2.97	1.57	3.25	1.84	3.58	2.04	4.02	2.33	4.35	2.59	5.80	3.15	6.12	3.49	6.84	3.80	5.88	4.04	6.44	4.28	5.36	4.47	5.77	4.64
60									3.52	1.82	3.96	2.08	4.29	2.30	5.88	3.03	6.06	3.11	6.76	3.38	5.80	3.59	6.36	3.80	5.29	3.98	5.72	4.13
65															5.82	2.71	5.99	2.77	6.69	3.02	5.74	3.21						

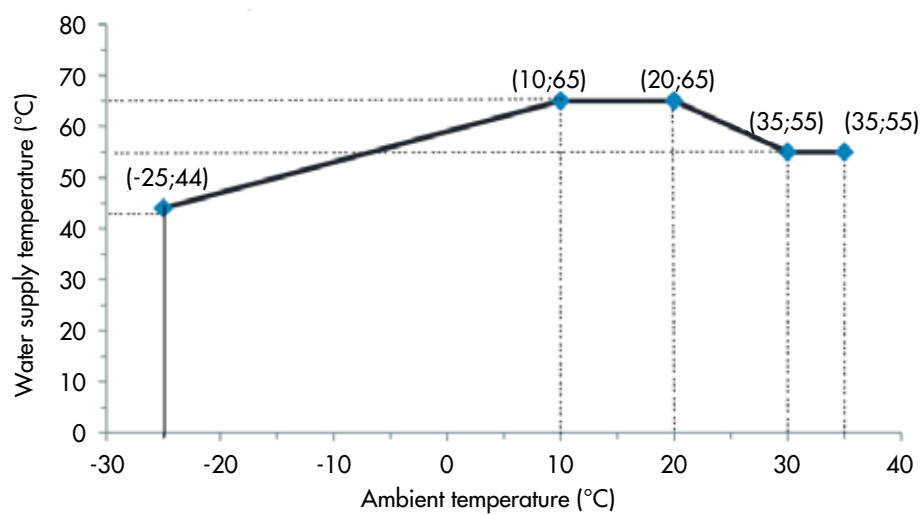
LWT: Leaving water temperature
Qh: Heating capacity
COP: Coefficient of performance

LWT: Leaving water temperature
Qc: Cooling capacity
EER: Energy efficiency ratio

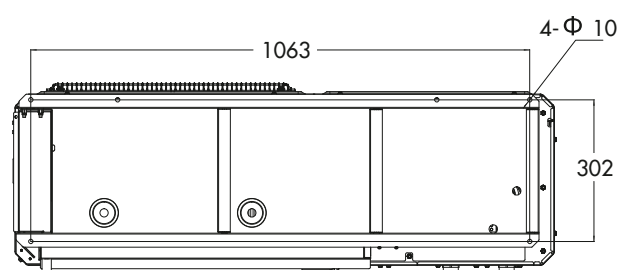
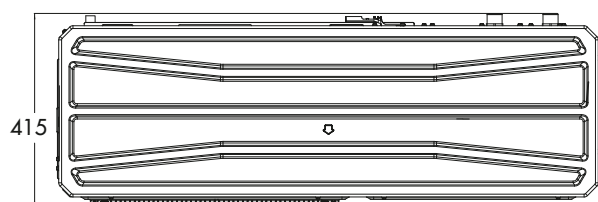
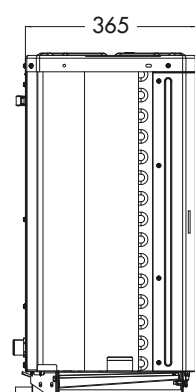
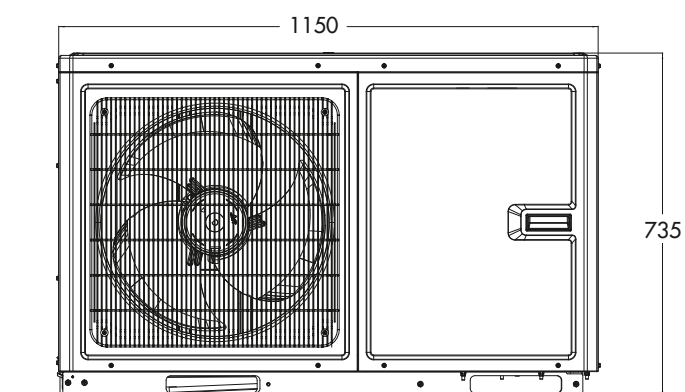
FLOW RATE CURVES FOR 6 kW



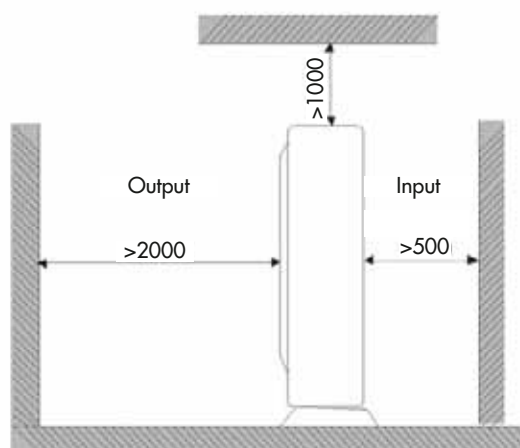
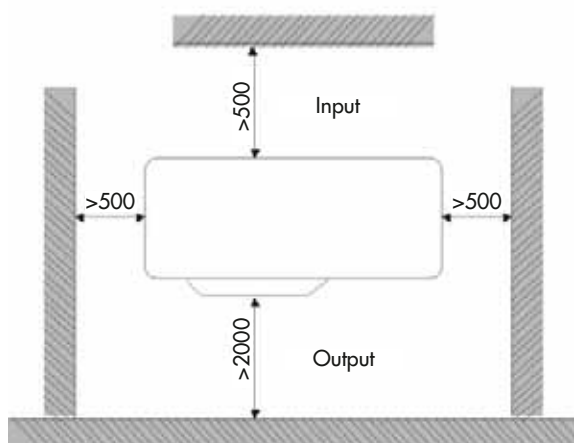
MAXIMUM TEMPERATURE IN HEATING 6 kW



DIMENSIONAL DRAWINGS 6 kW



SPACE REQUIRED FOR INSTALLATION 6 kW



TECHNICAL DATA FOR 8-10-12-14-16 kW

Model					AG4HP081PH	
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve	
					Cooling	Heating
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	8.30	8.20
			Rated electrical power input	kW _{el}	1.56	1.54
			EER/COP		5.32	5.32
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	7.40	8.30
			Rated electrical power input	kW _{el}	2.00	1.90
			EER/COP		3.70	4.36
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	8	
			Seasonal energy efficiency η _s	%	187	
			Energy efficiency class		A+++	
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	9	
			Seasonal energy efficiency η _s	%	146	
			Energy efficiency class		A++	
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL	
			Energy efficiency class		A	
			ERP efficiency	%	123	
Unit operation data			Maximum delivery water temperature	°C	Up to 65	
			Outdoor temperature range (heating)	°C	-25/+35	
			Outdoor temperature range (cooling)	°C	-15/+48	
			Nominal water flow rate	m³/h	at 35 °C	1.41
					at 45 °C	1.40
					at 55 °C	1.34
					at 7 °C	0.98
					at 18 °C	1.43
			Minimum efficient water volume of the system	liters	40	
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50	
			Maximum electricity consumption	A	25	
			Sound pressure level (cooling mode)	dB(A)	60	
Sound pressure level (heating mode)	dB(A)	62				
Components and dimensions			Expansion vessel	liters	3	
			Maximum circulator pump head	kPa	(see H/Q graphs)	
			Hydraulic connections	inches	G1"	
			Safety valve	bar	3	
			Weight	kg	120	
			Dimensions (H/W/D)	mm	878/1206/445	
			Compressor type		Twin Rotary with vapour injection	
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq	
			Quantity	kg	1.6	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2018 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AG4HP081PH)																	
	10		15		20		25		30		35		40		45		48	
	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER
7	9.25	6.77	8.81	6.11	8.44	5.48	7.99	4.85	7.62	4.26	7.40	3.70	5.15	3.07	4.70	2.37	3.73	1.98
8	9.55	7.01	9.09	6.32	8.71	5.67	8.25	5.02	7.87	4.40	7.64	3.83	5.32	3.18	4.85	2.45	3.85	2.05
9	9.84	7.24	9.37	6.53	8.98	5.86	8.50	5.18	8.11	4.55	7.87	3.96	5.48	3.28	5.01	2.53	3.97	2.11
10	10.14	7.48	9.65	6.74	9.25	6.05	8.76	5.35	8.35	4.70	8.11	4.08	5.65	3.39	5.16	2.61	4.09	2.18
11	10.43	7.71	9.93	6.95	9.52	6.23	9.01	5.52	8.60	4.84	8.35	4.21	5.81	3.50	5.31	2.70	4.21	2.25
12	10.73	7.94	10.21	7.16	9.79	6.42	9.27	5.69	8.84	4.99	8.58	4.34	5.98	3.60	5.46	2.78	4.33	2.32
13	11.03	8.18	10.50	7.37	10.06	6.61	9.53	5.85	9.09	5.14	8.82	4.47	6.14	3.71	5.61	2.86	4.45	2.39
14	11.32	8.41	10.78	7.58	10.33	6.80	9.78	6.02	9.33	5.28	9.06	4.60	6.31	3.81	5.76	2.94	4.57	2.45
15	11.62	8.64	11.06	7.79	10.60	6.99	10.04	6.19	9.57	5.43	9.29	4.72	6.47	3.92	5.91	3.02	4.69	2.52
18	12.45	9.34	11.85	8.42	11.35	7.56	10.76	6.69	10.26	5.87	8.30	5.32	6.93	4.24	6.33	3.27	5.03	2.73
20	13.10	9.80	12.47	8.84	11.95	7.93	11.32	7.02	10.79	6.16	10.48	5.36	7.30	4.45	6.66	3.43	5.29	2.86
23	13.93	10.51	13.26	9.47	12.70	8.50	12.04	7.52	11.48	6.60	11.14	5.74	7.76	4.76	7.08	3.67	5.62	3.07
25	14.47	10.97	13.77	9.89	13.19	8.87	12.50	7.85	11.92	6.90	11.57	6.00	8.06	4.98	7.36	3.84	5.84	3.20

	HEATING - Dry bulb outdoor air temperature in °C																											
LWT [°C]	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	4.73	2.17	4.95	2.56	6.27	2.94	6.49	3.45	7.15	3.84	7.48	4.26	8.10	4.73	8.12	6.49	8.36	6.65	9.35	7.24	8.75	6.48	9.59	6.86	8.94	8.92	9.66	9.26
30	4.84	2.00	5.06	2.35	6.38	2.70	6.60	3.17	7.26	3.52	7.59	3.91	8.20	4.34	8.20	5.96	8.45	6.11	9.43	6.64	8.82	5.95	9.66	6.30	9.00	8.18	9.72	8.50
35	4.84	1.78	5.06	2.10	6.38	2.41	6.60	2.83	7.26	3.14	7.59	3.49	8.20	3.88	8.20	5.32	8.45	5.45	9.43	5.93	8.82	5.31	9.66	5.62	9.00	7.31	9.72	7.59
40	4.84	1.57	5.06	1.84	6.38	2.12	6.60	2.49	7.26	2.77	7.59	3.07	8.20	3.41	8.20	4.68	8.45	4.80	9.43	5.22	8.82	4.67	9.66	4.95	9.00	6.43	9.72	6.68
45	4.84	1.43	5.06	1.68	6.38	1.93	6.60	2.26	7.26	2.52	7.59	2.79	8.20	3.10	8.30	4.36	8.45	4.36	9.43	4.75	8.82	4.25	9.66	4.50	9.00	5.85	9.72	6.07
50			4.95	1.51	6.27	1.74	6.49	2.04	7.15	2.26	7.48	2.52	8.10	2.79	8.12	3.83	8.36	3.93	9.35	4.27	8.75	3.82	9.59	4.05	8.94	5.26	9.62	5.46
55					6.27	1.52	6.49	1.78	7.15	1.98	7.48	2.20	8.10	2.44	7.81	3.20	8.36	3.44	9.35	3.74	8.75	3.34	9.59	3.54	8.94	4.60	9.62	4.78
60									7.04	1.76	7.38	1.96	8.00	2.17	8.04	2.98	8.28	3.05	9.24	3.32	8.64	2.97	9.47	3.15	8.82	4.09	9.53	4.25
65															7.95	2.66	8.19	2.73	9.15	2.97	8.56	2.65						

LWT: Leaving water temperature
Q_h: Heating capacity
COP: Coefficient of performance

LWT: Leaving water temperature
Q_c: Cooling capacity
EER: Energy efficiency ratio

TECHNICAL DATA FOR 8-10-12-14-16 kW

Model					AG4HP101PH		AG4HP103PH				
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve				
					Cooling	Heating	Cooling	Heating			
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	10.20	10.20	10.20	10.20			
			Rated electrical power input	kW _{el}	2.00	2.02	2.13	2.06			
			EER/COP		5.10	5.05	4.79	4.95			
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	9.00	10.20	9.10	10.20			
			Rated electrical power input	kW _{el}	2.65	2.50	2.80	2.60			
			EER/COP		3.40	4.08	3.25	3.92			
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	9		9				
			Seasonal energy efficiency η _s	%	178		190				
			Energy efficiency class		A+++		A+++				
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	10		10				
			Seasonal energy efficiency η _s	%	136		141				
			Energy efficiency class		A++		A++				
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL				
			Energy efficiency class		A		A				
			ERP efficiency	%	123		123				
Unit operation data			Maximum delivery water temperature	°C	Up to 65		Up to 65				
			Outdoor temperature range (heating)	°C	-25/+35		-25/+35				
			Outdoor temperature range (cooling)	°C	-15/+48		-15/+48				
			Nominal water flow rate	m³/h	at 35 °C	1.75	at 35 °C	1.75			
					at 45 °C	1.74	at 45 °C	1.74			
					at 55 °C	1.67	at 55 °C	1.67			
					at 7 °C	1.24	at 7 °C	1.24			
					at 18 °C	1.75	at 18 °C	1.75			
			Minimum efficient water volume of the system	liters	80		80				
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50				
			Maximum electricity consumption	A	25		9				
			Sound pressure level (cooling mode)	dB(A)	60		57				
			Sound pressure level (heating mode)	dB(A)	62		60				
			Components and dimensions			Expansion vessel	liters	3		3	
						Maximum circulator pump head	kPa	(see H/Q graphs)		(see H/Q graphs)	
Hydraulic connections	inches	G1"				G1"					
Safety valve	bar	3				3					
Weight	kg	120				134					
Dimensions (H/W/D)	mm	878/1206/445				878/1206/445					
Compressor type		Twin Rotary with vapour injection				Twin Rotary with vapour injection					
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq		R32/675 kg CO ₂ eq				
			Quantity	kg	1.6		1.6				

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

PRELIMINARY data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2018 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AG4HP101PH)																	
	10		15		20		25		30		35		40		45		48	
	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER
7	11.25	6.22	10.71	5.61	10.26	5.03	9.72	4.45	9.27	3.91	9.00	3.40	5.65	3.07	5.16	2.37	3.87	1.98
8	11.61	6.44	11.05	5.81	10.59	5.21	10.03	4.61	9.57	4.05	9.29	3.52	5.83	3.18	5.32	2.45	4.00	2.05
9	11.97	6.65	11.40	6.00	10.92	5.38	10.34	4.76	9.86	4.18	9.58	3.64	6.01	3.28	5.49	2.53	4.12	2.11
10	12.33	6.87	11.74	6.19	11.24	5.56	10.65	4.92	10.16	4.32	9.86	3.75	6.19	3.39	5.65	2.61	4.24	2.18
11	12.69	7.08	12.08	6.39	11.57	5.73	10.96	5.07	10.46	4.45	10.15	3.87	6.37	3.50	5.82	2.70	4.37	2.25
12	13.05	7.30	12.42	6.58	11.90	5.90	11.28	5.22	10.75	4.59	10.44	3.99	6.55	3.60	5.98	2.78	4.49	2.32
13	13.41	7.51	12.77	6.77	12.23	6.08	11.59	5.38	11.05	4.72	10.73	4.11	6.73	3.71	6.15	2.86	4.62	2.39
14	13.77	7.73	13.11	6.97	12.56	6.25	11.90	5.53	11.35	4.86	11.02	4.22	6.91	3.81	6.31	2.94	4.74	2.45
15	14.13	7.94	13.45	7.16	12.89	6.42	12.21	5.69	11.64	4.99	11.30	4.34	7.09	3.92	6.48	3.02	4.86	2.52
18	15.14	8.59	14.42	7.74	13.81	6.94	13.08	6.15	12.48	5.40	10.20	5.10	7.60	4.24	6.94	3.27	5.21	2.73
20	15.93	9.01	15.17	8.12	14.53	7.29	13.76	6.45	13.13	5.66	12.74	4.92	8.00	4.45	7.30	3.43	5.48	2.86
23	16.94	9.65	16.13	8.70	15.45	7.81	14.64	6.91	13.96	6.07	13.55	5.28	8.51	4.76	7.77	3.67	5.83	3.07
25	17.60	10.08	16.75	9.09	16.05	8.15	15.20	7.22	14.50	6.34	14.08	5.51	8.83	4.98	8.07	3.84	6.06	3.20

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	5.07	2.03	5.31	2.39	6.73	2.75	6.96	3.23	7.67	3.59	8.03	4.38	8.69	4.86	10.10	6.16	10.40	6.32	11.63	6.87	9.25	7.95	10.14	8.42	9.69	8.92	10.47	9.26
30	5.19	1.87	5.43	2.20	6.84	2.52	7.08	2.96	7.79	3.29	8.14	4.02	8.80	4.46	10.20	5.66	10.51	5.80	11.73	6.31	9.32	7.30	10.21	7.73	9.75	8.18	10.53	8.50
35	5.19	1.67	5.43	1.96	6.84	2.25	7.08	2.65	7.79	2.94	8.14	3.59	8.80	3.98	10.20	5.05	10.51	5.18	11.73	5.63	9.32	6.52	10.21	6.90	9.75	7.31	10.53	7.59
40	5.19	1.47	5.43	1.72	6.84	1.98	7.08	2.33	7.79	2.59	8.14	3.16	8.80	3.50	10.20	4.44	10.51	4.56	11.73	4.96	9.32	5.74	10.21	6.07	9.75	6.43	10.53	6.68
45	5.19	1.33	5.43	1.57	6.84	1.80	7.08	2.12	7.79	2.35	8.14	2.87	8.80	3.19	10.20	4.08	10.51	4.14	11.73	4.50	9.32	5.21	10.21	5.52	9.75	5.85	10.53	6.07
50			5.31	1.41	6.73	1.62	6.96	1.91	7.67	2.12	8.03	2.58	8.69	2.87	10.10	3.64	10.40	3.73	11.63	4.05	9.25	4.69	10.14	4.97	9.69	5.26	10.42	5.46
55					6.73	1.42	6.96	1.67	7.67	1.85	8.03	2.26	8.69	2.51	10.30	3.12	10.40	3.26	11.63	3.55	9.25	4.11	10.14	4.35	9.69	4.60	10.42	4.78
60									7.55	1.65	7.92	2.01	8.58	2.23	10.00	2.83	10.30	2.90	11.50	3.15	9.14	3.65	10.01	3.87	9.56	4.09	10.32	4.25
65															9.89	2.53	10.19	2.59	11.38	2.82	9.04	3.26						

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C - (AG4HP103PH)																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP	Q _h [kW]	COP
25	5.07	2.05	5.31	2.42	6.73	2.78	6.96	3.26	7.67	3.62	8.03	4.17	8.69	4.63	10.10	6.04	10.40	6.19	11.63	6.73	9.25	7.45	10.14	7.89	9.69	8.34	10.47	8.66
30	5.19	1.88	5.43	2.22	6.84	2.55	7.08	2.99	7.79	3.33	8.14	3.83	8.80	4.25	10.20	5.54	10.51	5.68	11.73	6.18	9.32	6.84	10.21	7.24	9.75	7.66	10.53	7.95
35	5.19	1.68	5.43	1.98	6.84	2.28	7.08	2.67	7.79	2.97	8.14	3.42	8.80	3.79	10.20	4.95	10.51	5.07	11.73	5.52	9.32	6.10	10.21	6.46	9.75	6.84	10.53	7.10
40	5.19	1.48	5.43	1.74	6.84	2.00	7.08	2.35	7.79	2.61	8.14	3.01	8.80	3.34	10.20	4.36	10.51	4.46	11.73	4.86	9.32	5.37	10.21	5.69	9.75	6.02	10.53	6.25
45	5.19	1.35	5.43	1.58	6.84	1.82	7.08	2.14	7.79	2.38	8.14	2.73	8.80	3.03	10.20	3.92	10.51	4.06	11.73	4.42	9.32	4.88	10.21	5.17	9.75	5.47	10.53	5.68
50			5.31	1.43	6.73	1.64	6.96	1.92	7.67	2.14	8.03	2.46	8.69	2.73	10.10	3.56	10.40	3.65	11.63	3.97	9.25	4.39	10.14	4.65	9.69	4.92	10.42	5.11
55					6.73	1.43	6.96	1.68	7.67	1.87	8.03	2.15	8.69	2.39	10.30	3.05	10.40	3.20	11.63	3.48	9.25	3.84	10.14	4.07	9.69	4.31	10.42	4.47
60									7.55	1.66	7.92	1.91	8.58	2.12	10.00	2.77	10.30	2.84	11.50	3.09	9.14	3.42	10.01	3.62	9.56	3.83	10.32	3.98
65															9.89	2.48	10.19	2.54	11.38	2.76	9.04	3.05						

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	11.25	5.89	10.71	5.31	10.26	4.77	9.72	4.22	9.27	3.70	9.10	3.25	5.65	2.81	5.16	2.16	3.87	1.93
8	11.61	6.10	11.05	5.50	10.59	4.93	10.03	4.37	9.57	3.83	9.29	3.33	5.83	2.90	5.32	2.24	4.00	2.00
9	11.97	6.30	11.40	5.68	10.92	5.10	10.34	4.51	9.86	3.96	9.58	3.44	6.01	3.00	5.49	2.31	4.12	2.06
10	12.33	6.51	11.74	5.87	11.24	5.26	10.65	4.66	10.16	4.09	9.86	3.55	6.19	3.10	5.65	2.39	4.24	2.13
11	12.69	6.71	12.08	6.05	11.57	5.43	10.96	4.80	10.46	4.22	10.15	3.67	6.37	3.19	5.82	2.46	4.37	2.20
12	13.05	6.91	12.42	6.23	11.90	5.59	11.28	4.95	10.75	4.34	10.44	3.78	6.55	3.29	5.98	2.54	4.49	2.26
13	13.41	7.12	12.77	6.42	12.23	5.75	11.59	5.09	11.05	4.47	10.73	3.89	6.73	3.39	6.15	2.61	4.62	2.33
14	13.77	7.32	13.11	6.60	12.56	5.92	11.90	5.24	11.35	4.60	11.02	4.00	6.91	3.48	6.31	2.69	4.74	2.40
15	14.13	7.52	13.45	6.78	12.89	6.08	12.21	5.38	11.64	4.73	11.30	4.11	7.09	3.58	6.48	2.76	4.86	2.46
18	15.14	8.13	14.42	7.33	13.81	6.58	13.08	5.82	12.48	5.11	10.20	4.79	7.60	3.87	6.94	2.99	5.21	2.66
20	15.93	8.53	15.17	7.69	14.53	6.90	13.76	6.11	13.13	5.36	12.74	4.66	8.00	4.06	7.30	3.13	5.48	2.79
23	16.94	9.14	16.13	8.24	15.45	7.39	14.64	6.54	13.96	5.75	13.55	5.00	8.51	4.35	7.77	3.36	5.83	2.95
25	17.60	9.55	16.75	8.61	16.05	7.72	15.20	6.84	14.50	6.00	14.08	5.22	8.83	4.55	8.07	3.51	6.06	3.13

TECHNICAL DATA FOR 8-10-12-14-16 kW

Model					AG4HP121PH		AG4HP123PH	
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve	
					Cooling	Heating	Cooling	Heating
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	12.00	12.00	12.00	12.00
			Rated electrical power input	kW _{el}	2.45	2.43	2.61	2.49
			EER/COP		4.90	4.94	4.60	4.82
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	11.10	13.00	11.10	13.00
			Rated electrical power input	kW _{el}	3.58	3.45	3.58	3.45
			EER/COP		3.10	3.77	3.10	3.77
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	12		12	
			Seasonal energy efficiency η _s	%	188		180	
			Energy efficiency class		A+++		A+++	
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	12		12	
			Seasonal energy efficiency η _s	%	144		137	
			Energy efficiency class		A++		A++	
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL	
			Energy efficiency class		A		A	
			ERP efficiency	%	110		110	
Unit operation data			Maximum delivery water temperature	°C	Up to 65		Up to 65	
			Outdoor temperature range (heating)	°C	-25/+35		-25/+35	
			Outdoor temperature range (cooling)	°C	-15/+48		-15/+48	
			Nominal water flow rate	m³/h	at 35 °C	2.06	at 35 °C	2.06
					at 45 °C	2.06	at 45 °C	2.06
					at 55 °C	1.98	at 55 °C	1.98
					at 7 °C	1.49	at 7 °C	1.49
					at 18 °C	2.06	at 18 °C	2.06
			Minimum efficient water volume of the system	liters	80		80	
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50	
			Maximum electricity consumption	A	29		11.5	
			Sound pressure level (cooling mode)	dB(A)	61		61	
Sound pressure level (heating mode)	dB(A)	63		63				
Components and dimensions			Expansion vessel	liters	3		3	
			Maximum circulator pump head	kPa	(see H/Q graphs)		(see H/Q graphs)	
			Hydraulic connections	inches	G1"		G1"	
			Safety valve	bar	3		3	
			Weight	kg	138		144	
			Dimensions (H/W/D)	mm	878/1206/445		878/1206/445	
			Compressor type		Twin Rotary with vapour injection		Twin Rotary with vapour injection	
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq		R32/675 kg CO ₂ eq	
			Quantity	kg	2.2 kg		2.2 kg	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2018 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AG4HP121PH)																	
	10		15		20		25		30		35		40		45		48	
	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER
7	11.88	5.67	11.31	5.12	10.83	4.59	10.26	4.06	9.79	3.57	11.10	3.10	8.19	2.95	6.72	2.37	6.16	1.92
8	12.26	5.87	11.67	5.29	11.18	4.75	10.59	4.20	10.10	3.69	11.46	3.21	8.45	3.05	6.94	2.45	6.36	1.99
9	12.64	6.07	12.03	5.47	11.52	4.91	10.92	4.34	10.41	3.81	11.81	3.32	8.71	3.15	7.15	2.53	6.55	2.06
10	13.02	6.26	12.39	5.65	11.87	5.07	11.24	4.48	10.72	3.94	12.17	3.42	8.97	3.25	7.37	2.61	6.75	2.12
11	13.40	6.46	12.75	5.82	12.22	5.22	11.57	4.62	11.04	4.06	12.52	3.53	9.24	3.35	7.58	2.70	6.95	2.19
12	13.78	6.65	13.11	6.00	12.56	5.38	11.90	4.76	11.35	4.18	12.88	3.64	9.50	3.46	7.80	2.78	7.15	2.26
13	14.16	6.85	13.48	6.18	12.91	5.54	12.23	4.90	11.66	4.30	13.23	3.74	9.76	3.56	8.01	2.86	7.34	2.32
14	14.54	7.05	13.84	6.35	13.26	5.70	12.56	5.04	11.98	4.43	13.59	3.85	10.02	3.66	8.23	2.94	7.54	2.39
15	14.92	7.24	14.20	6.53	13.60	5.86	12.89	5.18	12.29	4.55	13.94	3.96	10.28	3.76	8.44	3.02	7.74	2.46
18	15.98	7.83	15.22	7.06	14.58	6.33	13.81	5.60	13.17	4.92	12.00	4.90	11.02	4.07	9.05	3.27	8.29	2.66
20	16.82	8.21	16.01	7.41	15.34	6.64	14.53	5.88	13.86	5.16	15.72	4.49	11.59	4.27	9.52	3.43	8.72	2.79
23	17.88	8.80	17.03	7.94	16.31	7.12	15.45	6.30	14.74	5.53	16.72	4.81	12.33	4.57	10.12	3.67	9.28	2.99
25	18.57	9.19	17.68	8.29	16.94	7.43	16.05	6.58	15.30	5.78	17.36	5.02	12.81	4.77	10.51	3.84	9.63	3.12

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	5.80	2.03	6.21	2.39	7.45	2.74	8.14	3.22	8.97	3.58	10.07	4.09	10.90	4.53	11.88	6.03	12.24	6.18	13.68	6.72	11.25	7.60	12.33	8.05	11.92	8.57	12.88	8.89
30	5.93	1.86	6.35	2.19	7.59	2.52	8.28	2.96	9.11	3.29	10.21	3.75	11.04	4.16	12.00	5.53	12.36	5.67	13.80	6.17	11.34	6.98	12.42	7.39	12.00	7.86	12.96	8.16
35	5.93	1.66	6.35	1.96	7.59	2.25	8.28	2.64	9.11	2.93	10.21	3.35	11.04	3.72	12.00	4.94	12.36	5.06	13.80	5.51	11.34	6.23	12.42	6.60	12.00	7.02	12.96	7.29
40	5.93	1.46	6.35	1.72	7.59	1.98	8.28	2.32	9.11	2.58	10.21	2.95	11.04	3.27	12.00	4.35	12.36	4.46	13.80	4.85	11.34	5.49	12.42	5.81	12.00	6.18	12.96	6.42
45	5.93	1.33	6.35	1.56	7.59	1.80	8.28	2.11	9.11	2.35	10.21	2.68	11.04	2.97	13.00	3.77	12.36	4.05	13.80	4.41	11.34	4.99	12.42	5.28	12.00	5.62	12.96	5.83
50			6.21	1.41	7.45	1.62	8.14	1.90	8.97	2.11	10.07	2.41	10.90	2.68	11.88	3.56	12.24	3.65	13.68	3.97	11.25	4.49	12.33	4.75	11.92	5.06	12.83	5.25
55					7.45	1.42	8.14	1.66	8.97	1.85	10.07	2.11	10.90	2.34	12.00	3.05	12.24	3.19	13.68	3.47	11.25	3.93	12.33	4.16	11.92	4.42	12.83	4.59
60									8.83	1.64	9.94	1.88	10.76	2.08	11.76	2.77	12.11	2.84	13.52	3.08	11.11	3.49	12.17	3.70	11.76	3.93	12.70	4.08
65															11.64	2.47	11.99	2.53	13.39	2.75	11.00	3.12						

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C - (AG4HP123PH)																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	5.80	1.95	6.21	2.29	7.45	2.63	8.14	3.09	8.97	3.43	10.07	3.92	10.90	4.35	11.88	5.88	12.24	6.03	13.68	6.56	11.25	7.30	12.33	7.73	11.92	8.22	12.88	8.53
30	5.93	1.79	6.35	2.10	7.59	2.42	8.28	2.84	9.11	3.15	10.21	3.60	11.04	3.99	12.00	5.40	12.36	5.53	13.80	6.02	11.34	6.70	12.42	7.10	12.00	7.54	12.96	7.83
35	5.93	1.59	6.35	1.88	7.59	2.16	8.28	2.53	9.11	2.81	10.21	3.21	11.04	3.56	12.00	4.82	12.36	4.94	13.80	5.37	11.34	5.98	12.42	6.34	12.00	6.73	12.96	6.99
40	5.93	1.40	6.35	1.65	7.59	1.90	8.28	2.23	9.11	2.48	10.21	2.83	11.04	3.14	12.00	4.24	12.36	4.35	13.80	4.73	11.34	5.27	12.42	5.58	12.00	5.93	12.96	6.15
45	5.93	1.28	6.35	1.50	7.59	1.73	8.28	2.03	9.11	2.25	10.21	2.57	11.04	2.85	13.00	3.77	12.36	3.95	13.80	4.30	11.34	4.79	12.42	5.07	12.00	5.39	12.96	5.59
50			6.21	1.35	7.45	1.55	8.14	1.82	8.97	2.03	10.07	2.31	10.90	2.57	11.88	3.47	12.24	3.56	13.68	3.87	11.25	4.31	12.33	4.56	11.92	4.85	12.83	5.03
55					7.45	1.36	8.14	1.60	8.97	1.77	10.07	2.02	10.90	2.25	12.00	2.91	12.24	3.11	13.68	3.39	11.25	3.77	12.33	3.99	11.92	4.24	12.83	4.40
60									8.83	1.58	9.94	1.80	10.76	2.00	11.76	2.70	12.11	2.77	13.52	3.01	11.11	3.35	12.17	3.55	11.76	3.77	12.70	3.92
65															11.64	2.41	11.99	2.47	13.39	2.69	11.00	2.99						

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	11.88	5.67	11.31	5.12	10.83	4.59	10.26	4.06	9.79	3.57	11.10	3.10	8.19	2.80	6.72	2.25	6.16	1.83
8	12.26	5.87	11.67	5.29	11.18	4.75	10.59	4.20	10.10	3.69	11.46	3.21	8.45	2.89	6.94	2.33	6.36	1.89
9	12.64	6.07	12.03	5.47	11.52	4.91	10.92	4.34	10.41	3.81	11.81	3.32	8.71	2.99	7.15	2.41	6.55	1.96
10	13.02	6.26	12.39	5.65	11.87	5.07	11.24	4.48	10.72	3.94	12.17	3.42	8.97	3.09	7.37	2.49	6.75	2.02
11	13.40	6.46	12.75	5.82	12.22	5.22	11.57	4.62	11.04	4.06	12.52	3.53	9.24	3.18	7.58	2.56	6.95	2.08
12	13.78	6.65	13.11	6.00	12.56	5.38	11.90	4.76	11.35	4.18	12.88	3.64	9.50	3.28	7.80	2.64	7.15	2.15
13	14.16	6.85	13.48	6.18	12.91	5.54	12.23	4.90	11.66	4.30	13.23	3.74	9.76	3.38	8.01	2.72	7.34	2.21
14	14.54	7.05	13.84	6.35	13.26	5.70	12.56	5.04	11.98	4.43	13.59	3.85	10.02	3.47	8.23	2.80	7.54	2.27
15	14.92	7.24	14.20	6.53	13.60	5.86	12.89	5.18	12.29	4.55	13.94	3.96	10.28	3.57	8.44	2.88	7.74	2.34
18	15.98	7.83	15.22	7.06	14.58	6.33	13.81	5.60	13.17	4.92	12.00	4.60	11.02	3.86	9.05	3.11	8.29	2.53
20	16.82	8.21	16.01	7.41	15.34	6.64	14.53	5.88	13.86	5.16	15.72	4.49	11.59	4.05	9.52	3.26	8.72	2.65
23	17.88	8.80	17.03	7.94	16.31	7.12	15.45	6.30	14.74	5.53	16.72	4.81	12.33	4.34	10.12	3.50	9.28	2.84
25	18.57	9.19	17.68	8.29	16.94	7.43	16.05	6.58	15.30	5.78	17.36	5.02	12.81	4.53	10.51	3.65	9.63	2.97

TECHNICAL DATA FOR 8-10-12-14-16 kW

Model					AG4HP141PH		AG4HP143PH				
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve				
					Cooling	Heating	Cooling	Heating			
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	13.7	14.20	13.90	14.20			
			Rated electrical power input	kW _{el}	3.00	2.99	3.32	3.09			
			EER/COP		4.57	4.75	4.19	4.60			
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	13.30	14.20	13.30	14.20			
			Rated electrical power input	kW _{el}	4.75	3.84	4.75	3.84			
			EER/COP		2.80	3.70	2.80	3.70			
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	13		13				
			Seasonal energy efficiency η _s	%	185		179				
			Energy efficiency class		A+++		A+++				
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	13		13				
			Seasonal energy efficiency η _s	%	145		138				
			Energy efficiency class		A++		A++				
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL				
			Energy efficiency class		A		A				
			ERP efficiency	%	110		110				
Unit operation data			Maximum delivery water temperature	°C	Up to 65		Up to 65				
			Outdoor temperature range (heating)	°C	-25/+35		-25/+35				
			Outdoor temperature range (cooling)	°C	-15/+48		-15/+48				
			Nominal water flow rate	m³/h	at 35 °C	2.44	at 35 °C	2.44			
					at 45 °C	2.42	at 45 °C	2.42			
					at 55 °C	2.32	at 55 °C	2.32			
					at 7 °C	1.64	at 7 °C	1.64			
					at 18 °C	2.36	at 18 °C	2.36			
			Minimum efficient water volume of the system	liters	80		80				
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50				
			Maximum electricity consumption	A	30		12				
			Sound pressure level (cooling mode)	dB(A)	61		61				
			Sound pressure level (heating mode)	dB(A)	63		63				
			Components and dimensions			Expansion vessel	liters	3		3	
						Maximum circulator pump head	kPa	(see H/Q graphs)		(see H/Q graphs)	
Hydraulic connections	inches	G1 "				G1 "					
Safety valve	bar	3				3					
Weight	kg	138				144					
Dimensions (H/W/D)	mm	878/1206/445				878/1206/445					
Compressor type		Twin Rotary with vapour injection				Twin Rotary with vapour injection					
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq		R32/675 kg CO ₂ eq				
			Quantity	kg	2.2		2.2				

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2018 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AG4HP141PH)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	12.69	5.12	12.08	4.62	11.57	4.14	10.96	3.67	10.45	3.22	13.30	2.80	8.42	2.95	6.80	2.37	6.24	1.92
8	13.09	5.30	12.47	4.78	11.94	4.29	11.31	3.80	10.79	3.33	13.73	2.90	8.69	3.05	7.02	2.45	6.44	1.99
9	13.50	5.48	12.85	4.94	12.31	4.43	11.66	3.92	11.12	3.44	14.15	2.99	8.96	3.15	7.24	2.53	6.64	2.06
10	13.91	5.66	13.24	5.10	12.68	4.57	12.01	4.05	11.46	3.55	14.58	3.09	9.23	3.25	7.46	2.61	6.84	2.12
11	14.31	5.83	13.62	5.26	13.05	4.72	12.37	4.18	11.79	3.67	15.00	3.19	9.50	3.35	7.67	2.70	7.04	2.19
12	14.72	6.01	14.01	5.42	13.42	4.86	12.72	4.30	12.13	3.78	15.43	3.28	9.77	3.46	7.89	2.78	7.23	2.26
13	15.12	6.19	14.40	5.58	13.79	5.00	13.07	4.43	12.46	3.89	15.85	3.38	10.04	3.56	8.11	2.86	7.43	2.32
14	15.53	6.36	14.78	5.74	14.16	5.15	13.42	4.56	12.80	4.00	16.28	3.48	10.31	3.66	8.33	2.94	7.63	2.39
15	15.94	6.54	15.17	5.90	14.53	5.29	13.77	4.68	13.13	4.11	16.70	3.57	10.58	3.76	8.55	3.02	7.83	2.46
18	17.08	7.07	16.26	6.38	15.57	5.72	14.75	5.06	14.07	4.44	13.70	4.57	11.34	4.07	9.16	3.27	8.40	2.66
20	17.97	7.42	17.10	6.69	16.38	6.00	15.52	5.31	14.80	4.66	18.83	4.05	11.93	4.27	9.63	3.43	8.83	2.79
23	19.11	7.95	18.19	7.17	17.43	6.43	16.51	5.69	15.74	5.00	20.03	4.34	12.68	4.57	10.25	3.67	9.39	2.99
25	19.84	8.30	18.89	7.49	18.10	6.72	17.14	5.94	16.35	5.22	20.80	4.54	13.17	4.77	10.64	3.84	9.75	3.12

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	6.22	2.01	6.66	2.37	7.99	2.72	8.73	3.20	9.62	3.55	10.80	4.05	11.69	4.50	14.06	5.80	14.48	5.94	16.19	6.46	11.50	7.60	12.60	8.05	12.22	8.53	13.20	8.86
30	6.36	1.85	6.81	2.17	8.14	2.50	8.88	2.93	9.77	3.26	10.95	3.72	11.84	4.13	14.20	5.32	14.63	5.45	16.33	5.93	11.59	6.98	12.70	7.39	12.30	7.83	13.28	8.13
35	6.36	1.65	6.81	1.94	8.14	2.23	8.88	2.62	9.77	2.91	10.95	3.32	11.84	3.69	14.20	4.75	14.63	4.87	16.33	5.30	11.59	6.23	12.70	6.60	12.30	6.99	13.28	7.26
40	6.36	1.45	6.81	1.71	8.14	1.96	8.88	2.30	9.77	2.56	10.95	2.92	11.84	3.24	14.20	4.18	14.63	4.28	16.33	4.66	11.59	5.49	12.70	5.81	12.30	6.16	13.28	6.39
45	6.36	1.32	6.81	1.55	8.14	1.78	8.88	2.10	9.77	2.33	10.95	2.66	11.84	2.95	14.20	3.70	14.63	3.90	16.33	4.24	11.59	4.99	12.70	5.28	12.30	5.60	13.28	5.81
50			6.66	1.40	7.99	1.61	8.73	1.89	9.62	2.10	10.80	2.39	11.69	2.65	14.06	3.42	14.48	3.51	16.19	3.81	11.50	4.49	12.60	4.75	12.22	5.04	13.15	5.23
55					7.99	1.41	8.73	1.65	9.62	1.83	10.80	2.09	11.69	2.32	13.80	2.95	14.48	3.07	16.19	3.34	11.50	3.93	12.60	4.16	12.22	4.41	13.15	4.58
60									9.47	1.63	10.66	1.86	11.54	2.06	13.92	2.66	14.33	2.73	16.00	2.97	11.36	3.49	12.44	3.70	12.05	3.92	13.02	4.07
65															13.77	2.38	14.19	2.43	15.84	2.65	11.24	3.12						

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C - (AG4HP143PH)																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	6.22	1.93	6.66	2.27	7.99	2.61	8.73	3.06	9.62	3.40	10.80	3.89	11.69	4.31	14.06	5.61	14.48	5.75	16.19	6.26	11.50	7.30	12.60	7.73	12.22	8.18	13.20	8.50
30	6.36	1.77	6.81	2.08	8.14	2.40	8.88	2.81	9.77	3.12	10.95	3.57	11.84	3.96	14.20	5.15	14.63	5.28	16.33	5.74	11.59	6.70	12.70	7.10	12.30	7.51	13.28	7.80
35	6.36	1.58	6.81	1.86	8.14	2.14	8.88	2.51	9.77	2.79	10.95	3.19	11.84	3.53	14.20	4.60	14.63	4.72	16.33	5.13	11.59	5.98	12.70	6.34	12.30	6.71	13.28	6.96
40	6.36	1.39	6.81	1.64	8.14	1.88	8.88	2.21	9.77	2.46	10.95	2.80	11.84	3.11	14.20	4.05	14.63	4.15	16.33	4.51	11.59	5.27	12.70	5.58	12.30	5.90	13.28	6.13
45	6.36	1.26	6.81	1.49	8.14	1.71	8.88	2.01	9.77	2.23	10.95	2.55	11.84	2.83	14.20	3.70	14.63	3.77	16.33	4.10	11.59	4.79	12.70	5.07	12.30	5.37	13.28	5.57
50			6.66	1.34	7.99	1.54	8.73	1.81	9.62	2.01	10.80	2.29	11.69	2.54	14.06	3.31	14.48	3.39	16.19	3.69	11.50	4.31	12.60	4.56	12.22	4.83	13.15	5.01
55					7.99	1.35	8.73	1.58	9.62	1.76	10.80	2.01	11.69	2.23	13.80	2.85	14.48	2.97	16.19	3.23	11.50	3.77	12.60	3.99	12.22	4.23	13.15	4.39
60									9.47	1.56	10.66	1.78	11.54	1.98	13.92	2.58	14.33	2.64	16.00	2.87	11.36	3.35	12.44	3.55	12.05	3.76	13.02	3.90
65															13.77	2.30	14.19	2.36	15.84	2.56	11.24	2.99						

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	12.69	5.12	12.08	4.62	11.57	4.14	10.96	3.67	10.45	3.22	13.30	2.80	8.42	2.80	6.80	2.25	6.24	1.83
8	13.09	5.30	12.47	4.78	11.94	4.29	11.31	3.80	10.79	3.33	13.73	2.90	8.69	2.89	7.02	2.33	6.44	1.89
9	13.50	5.48	12.85	4.94	12.31	4.43	11.66	3.92	11.12	3.44	14.15	2.99	8.96	2.99	7.24	2.41	6.64	1.96
10	13.91	5.66	13.24	5.10	12.68	4.57	12.01	4.05	11.46	3.55	14.58	3.09	9.23	3.09	7.46	2.49	6.84	2.02
11	14.31	5.83	13.62	5.26	13.05	4.72	12.37	4.18	11.79	3.67	15.00	3.19	9.50	3.18	7.67	2.56	7.04	2.08
12	14.72	6.01	14.01	5.42	13.42	4.86	12.72	4.30	12.13	3.78	15.43	3.28	9.77	3.28	7.89	2.64	7.23	2.15
13	15.12	6.19	14.40	5.58	13.79	5.00	13.07	4.43	12.46	3.89	15.85	3.38	10.04	3.38	8.11	2.72	7.43	2.21
14	15.53	6.36	14.78	5.74	14.16	5.15	13.42	4.56	12.80	4.00	16.28	3.48	10.31	3.47	8.33	2.80	7.63	2.27
15	15.94	6.54	15.17	5.90	14.53	5.29	13.77	4.68	13.13	4.11	16.70	3.57	10.58	3.57	8.55	2.88	7.83	2.34
18	17.08	7.07	16.26	6.38	15.57	5.72	14.75	5.06	14.07	4.44	13.90	4.19	11.34	3.86	9.16	3.11	8.40	2.53
20	17.97	7.42	17.10	6.69	16.38	6.00	15.52	5.31	14.80	4.66	18.83	4.05	11.93	4.05	9.63	3.26	8.83	2.65
23	19.11	7.95	18.19	7.17	17.43	6.43	16.51	5.69	15.74	5.00	20.03	4.34	12.68	4.34	10.25	3.50	9.39	2.84
25	19.84	8.30	18.89	7.49	18.10	6.72	17.14	5.94	16.35	5.22	20.80	4.54	13.17	4.53	10.64	3.65	9.75	2.97

TECHNICAL DATA FOR 8-10-12-14-16 kW

Model					AG4HP161PH		AG4HP163PH				
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve		200/300 liters external tank with diverting valve				
					Cooling	Heating	Cooling	Heating			
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	15.50	15.70	15.40	15.70			
			Rated electrical power input	kW _{el}	3.60	3.45	4.05	3.57			
			EER/COP		4.31	4.55	3.80	4.40			
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	13.80	16.20	13.80	16.20			
			Rated electrical power input	kW _{el}	5.09	4.49	5.09	4.49			
			EER/COP		2.71	3.61	2.71	3.61			
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	14		13				
			Seasonal energy efficiency η _s	%	184		179				
			Energy efficiency class		A+++		A+++				
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	14		14				
			Seasonal energy efficiency η _s	%	144		138				
			Energy efficiency class		A++		A++				
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		XL				
			Energy efficiency class		A		A				
			ERP efficiency	%	110		110				
Unit operation data			Maximum delivery water temperature	°C	Up to 65		Up to 65				
			Outdoor temperature range (heating)	°C	-25/+35		-25/+35				
			Outdoor temperature range (cooling)	°C	-15/+48		-15/+48				
			Nominal water flow rate	m³/h	at 35 °C	2.70	at 35 °C	2.70			
					at 45 °C	2.69	at 45 °C	2.69			
					at 55 °C	2.58	at 55 °C	2.58			
					at 7 °C	1.86	at 7 °C	1.86			
					at 18 °C	2.67	at 18 °C	2.67			
			Minimum efficient water volume of the system	liters	80		80				
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1/50		400/3/50				
			Maximum electricity consumption	A	30		12.5				
			Sound pressure level (cooling mode)	dB(A)	61		61				
			Sound pressure level (heating mode)	dB(A)	63		63				
			Components and dimensions			Expansion vessel	liters	3		3	
						Maximum circulator pump head	kPa	(see H/Q graphs)		(see H/Q graphs)	
Hydraulic connections	inches	G1"				G1"					
Safety valve	bar	3				3					
Weight	kg	138				144					
Dimensions (H/W/D)	mm	878/1206/445				878/1206/445					
Compressor type		Twin Rotary with vapour injection				Twin Rotary with vapour injection					
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq		R32/675 kg CO ₂ eq				
			Quantity	kg	2.2		2.2				

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2018 STANDARD

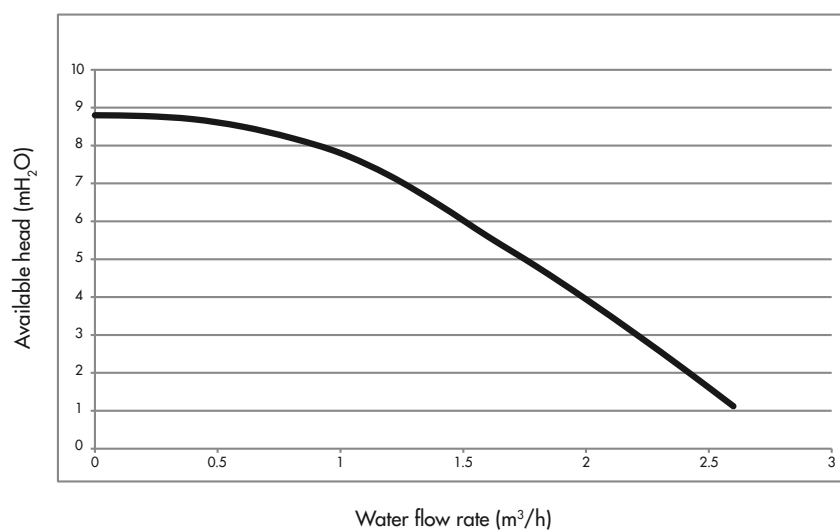
LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AG4HP161PH)																	
	10		15		20		25		30		35		40		45		48	
	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER
7	13.49	4.96	12.84	4.47	12.30	4.01	11.65	3.55	11.11	3.12	13.80	2.71	9.02	2.95	7.14	2.37	6.55	1.92
8	13.92	5.13	13.25	4.63	12.69	4.15	12.03	3.67	11.47	3.23	14.24	2.80	9.30	3.05	7.37	2.45	6.75	1.99
9	14.35	5.30	13.66	4.78	13.09	4.29	12.40	3.80	11.82	3.33	14.68	2.90	9.59	3.15	7.60	2.53	6.96	2.06
10	14.78	5.48	14.07	4.94	13.48	4.43	12.77	3.92	12.18	3.44	15.12	2.99	9.88	3.25	7.83	2.61	7.17	2.12
11	15.21	5.65	14.48	5.09	13.88	4.57	13.14	4.04	12.54	3.55	15.57	3.09	10.17	3.35	8.05	2.70	7.38	2.19
12	15.65	5.82	14.89	5.25	14.27	4.70	13.52	4.16	12.89	3.66	16.01	3.18	10.46	3.46	8.28	2.78	7.59	2.26
13	16.08	5.99	15.31	5.40	14.66	4.84	13.89	4.29	13.25	3.76	16.45	3.27	10.75	3.56	8.51	2.86	7.80	2.32
14	16.51	6.16	15.72	5.55	15.06	4.98	14.26	4.41	13.60	3.87	16.89	3.37	11.04	3.66	8.74	2.94	8.01	2.39
15	16.94	6.33	16.13	5.71	15.45	5.12	14.64	4.53	13.96	3.98	17.33	3.46	11.32	3.76	8.97	3.02	8.22	2.46
18	18.15	6.84	17.28	6.17	16.56	5.53	15.69	4.90	14.96	4.30	15.50	4.31	12.14	4.07	9.61	3.27	8.81	2.66
20	19.10	7.18	18.18	6.47	17.42	5.81	16.50	5.14	15.74	4.51	19.54	3.92	12.77	4.27	10.11	3.43	9.27	2.79
23	20.31	7.69	19.34	6.94	18.52	6.22	17.55	5.51	16.74	4.84	20.78	4.20	13.58	4.57	10.75	3.67	9.86	2.99
25	21.09	8.04	20.08	7.25	19.24	6.50	18.23	5.75	17.38	5.05	21.58	4.39	14.10	4.77	11.17	3.84	10.24	3.12

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	6.64	2.00	7.11	2.35	8.53	2.70	9.32	3.18	10.27	3.53	11.53	4.03	12.48	4.47	15.54	5.55	16.01	5.69	17.90	6.19	11.75	7.53	12.88	7.98	13.11	8.42	14.17	8.74
30	6.79	1.84	7.27	2.16	8.69	2.48	9.48	2.92	10.43	3.24	11.69	3.70	12.64	4.10	15.70	5.10	16.17	5.22	18.06	5.68	11.84	6.91	12.97	7.32	13.20	7.73	14.26	8.03
35	6.79	1.64	7.27	1.93	8.69	2.22	9.48	2.60	10.43	2.89	11.69	3.30	12.64	3.66	15.70	4.55	16.17	4.66	18.06	5.07	11.84	6.17	12.97	6.54	13.20	6.90	14.26	7.17
40	6.79	1.44	7.27	1.70	8.69	1.95	9.48	2.29	10.43	2.54	11.69	2.91	12.64	3.22	15.70	4.00	16.17	4.10	18.06	4.46	11.84	5.43	12.97	5.75	13.20	6.08	14.26	6.31
45	6.79	1.31	7.27	1.54	8.69	1.77	9.48	2.08	10.43	2.31	11.69	2.64	12.64	2.93	16.20	3.61	16.17	3.73	18.06	4.06	11.84	4.94	12.97	5.23	13.20	5.52	14.26	5.73
50			7.11	1.39	8.53	1.60	9.32	1.87	10.27	2.08	11.53	2.38	12.48	2.64	15.54	3.28	16.01	3.36	17.90	3.65	11.75	4.45	12.88	4.71	13.11	4.97	14.11	5.16
55					8.53	1.40	9.32	1.64	10.27	1.82	11.53	2.08	12.48	2.31	15.40	2.90	16.01	2.94	17.90	3.20	11.75	3.89	12.88	4.12	13.11	4.35	14.11	4.52
60									10.11	1.62	11.38	1.85	12.32	2.05	15.39	2.55	15.85	2.61	17.69	2.84	11.61	3.46	12.71	3.66	12.94	3.87	13.97	4.01
65															15.23	2.28	15.69	2.33	17.51	2.54	11.49	3.09						

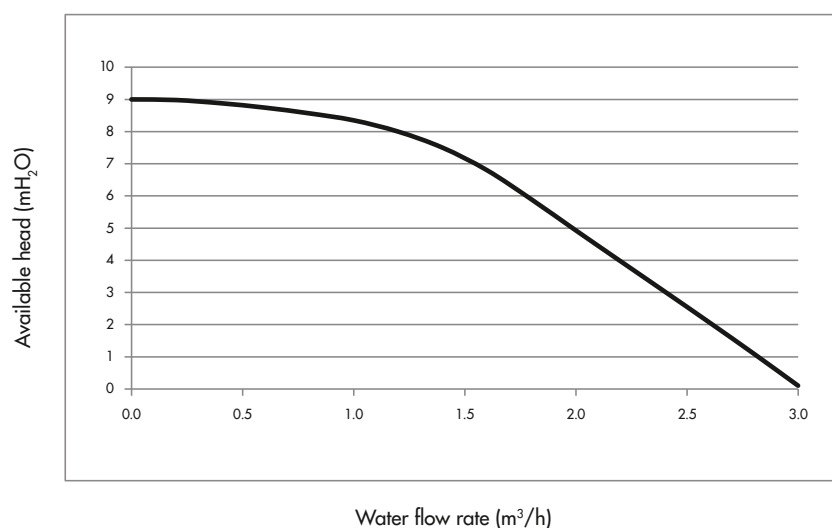
LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C - (AG4HP163PH)																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	6.64	1.92	7.11	2.25	8.53	2.59	9.32	3.04	10.27	3.38	11.53	3.86	12.48	4.28	15.54	5.37	16.01	5.50	17.90	5.99	11.75	7.23	12.88	7.66	13.11	8.07	14.17	8.38
30	6.79	1.76	7.27	2.07	8.69	2.38	9.48	2.79	10.43	3.10	11.69	3.54	12.64	3.93	15.70	4.93	16.17	5.05	18.06	5.49	11.84	6.64	12.97	7.03	13.20	7.41	14.26	7.69
35	6.79	1.57	7.27	1.85	8.69	2.13	9.48	2.49	10.43	2.77	11.69	3.16	12.64	3.51	15.70	4.40	16.17	4.51	18.06	4.91	11.84	5.93	12.97	6.28	13.20	6.62	14.26	6.87
40	6.79	1.38	7.27	1.63	8.69	1.87	9.48	2.20	10.43	2.44	11.69	2.78	12.64	3.09	15.70	3.87	16.17	3.97	18.06	4.32	11.84	5.21	12.97	5.52	13.20	5.82	14.26	6.05
45	6.79	1.26	7.27	1.48	8.69	1.70	9.48	2.00	10.43	2.22	11.69	2.53	12.64	2.81	16.20	3.61	16.17	3.61	18.06	3.92	11.84	4.74	12.97	5.02	13.20	5.29	14.26	5.50
50			7.11	1.33	8.53	1.53	9.32	1.80	10.27	2.00	11.53	2.28	12.48	2.53	15.54	3.17	16.01	3.25	17.90	3.53	11.75	4.27	12.88	4.52	13.11	4.76	14.11	4.95
55					8.53	1.34	9.32	1.57	10.27	1.75	11.53	1.99	12.48	2.21	15.40	2.75	16.01	2.84	17.90	3.09	11.75	3.73	12.88	3.95	13.11	4.17	14.11	4.33
60									10.11	1.55	11.38	1.77	12.32	1.97	15.39	2.46	15.85	2.53	17.69	2.75	11.61	3.32	12.71	3.51	12.94	3.71	13.97	3.85
65															15.23	2.20	15.69	2.26	17.51	2.45	11.49	2.96						

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	13.49	4.96	12.84	4.47	12.30	4.01	11.65	3.55	11.11	3.12	13.80	2.71	9.02	2.25	7.14	1.73	6.55	1.41
8	13.92	5.13	13.25	4.63	12.69	4.15	12.03	3.67	11.47	3.23	14.24	2.80	9.30	2.33	7.37	1.80	6.75	1.46
9	14.35	5.30	13.66	4.78	13.09	4.29	12.40	3.80	11.82	3.33	14.68	2.90	9.59	2.41	7.60	1.85	6.96	1.51
10	14.78	5.48	14.07	4.94	13.48	4.43	12.77	3.92	12.18	3.44	15.12	2.99	9.88	2.48	7.83	1.91	7.17	1.56
11	15.21	5.65	14.48	5.09	13.88	4.57	13.14	4.04	12.54	3.55	15.57	3.09	10.17	2.56	8.05	1.97	7.38	1.60
12	15.65	5.82	14.89	5.25	14.27	4.70	13.52	4.16	12.89	3.66	16.01	3.18	10.46	2.64	8.28	2.03	7.59	1.65
13	16.08	5.99	15.31	5.40	14.66	4.84	13.89	4.29	13.25	3.76	16.45	3.27	10.75	2.72	8.51	2.09	7.80	1.70
14	16.51	6.16	15.72	5.55	15.06	4.98	14.26	4.41	13.60	3.87	16.89	3.37	11.04	2.79	8.74	2.15	8.01	1.75
15	16.94	6.33	16.13	5.71	15.45	5.12	14.64	4.53	13.96	3.98	17.33	3.46	11.32	2.87	8.97	2.21	8.22	1.80
18	18.15	6.84	17.28	6.17	16.56	5.53	15.69	4.90	14.96	4.30	15.50	3.80	12.14	3.10	9.61	2.39	8.81	1.94
20	19.10	7.18	18.18	6.47	17.42	5.81	16.50	5.14	15.74	4.51	19.54	3.92	12.77	3.26	10.11	2.51	9.27	2.04
23	20.31	7.69	19.34	6.94	18.52	6.22	17.55	5.51	16.74	4.84	20.78	4.20	13.58	3.49	10.75	2.69	9.86	2.19
25	21.09	8.04	20.08	7.25	19.24	6.50	18.23	5.75	17.38	5.05	21.58	4.39	14.10	3.64	11.17	2.81	10.24	2.28

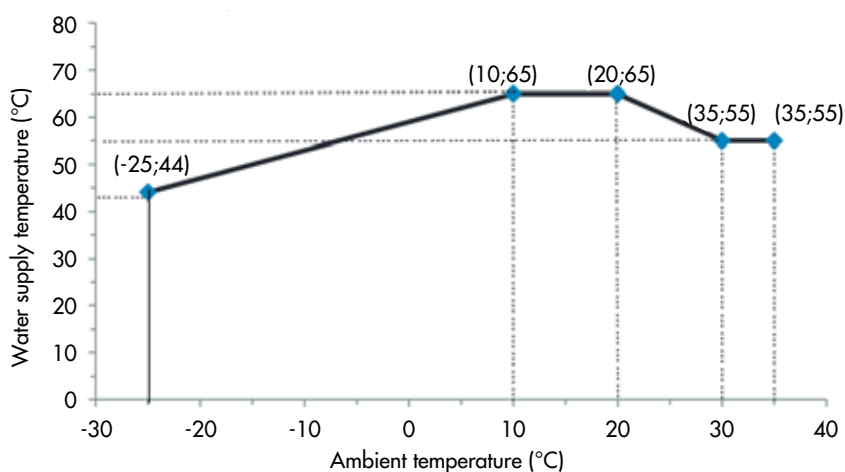
FLOW RATE CURVES FOR 8-10 kW



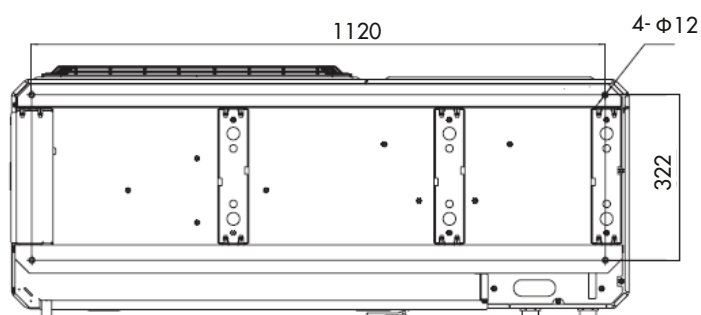
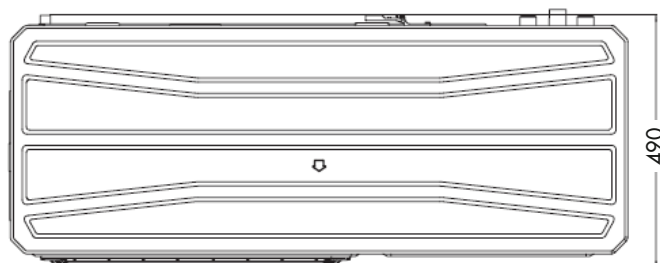
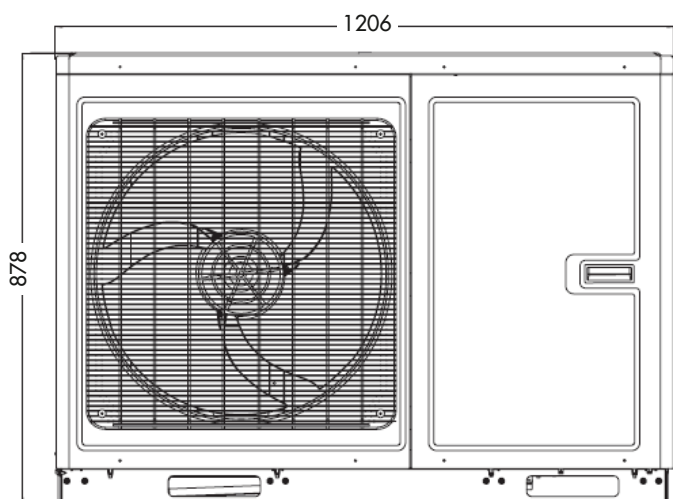
FLOW RATE CURVES FOR 12-14-16 kW



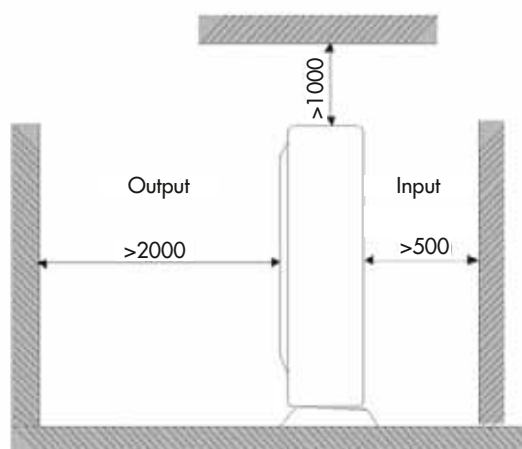
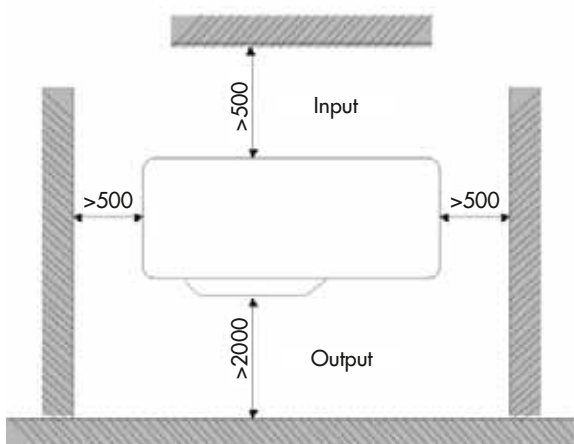
MAXIMUM TEMPERATURE IN HEATING 8-10-12-14-16 kW



DIMENSIONAL DRAWINGS 8-10-12-14-16 kW



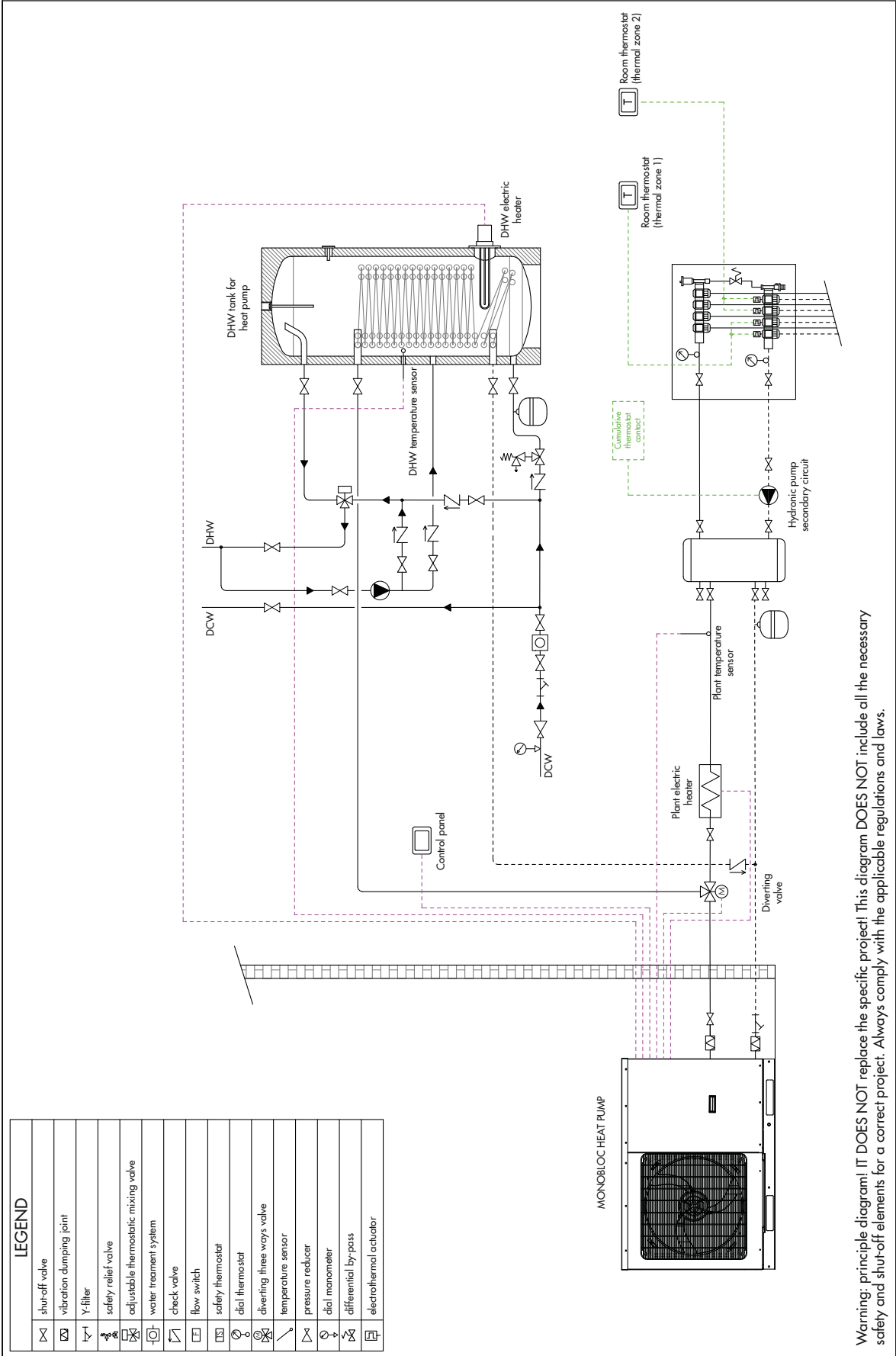
SPACE REQUIRED FOR INSTALLATION 8-10-12-14-16 kW



INSTALLATION EXAMPLES

EXAMPLE 1

Radiant heating and DHW with three-way valve and tank

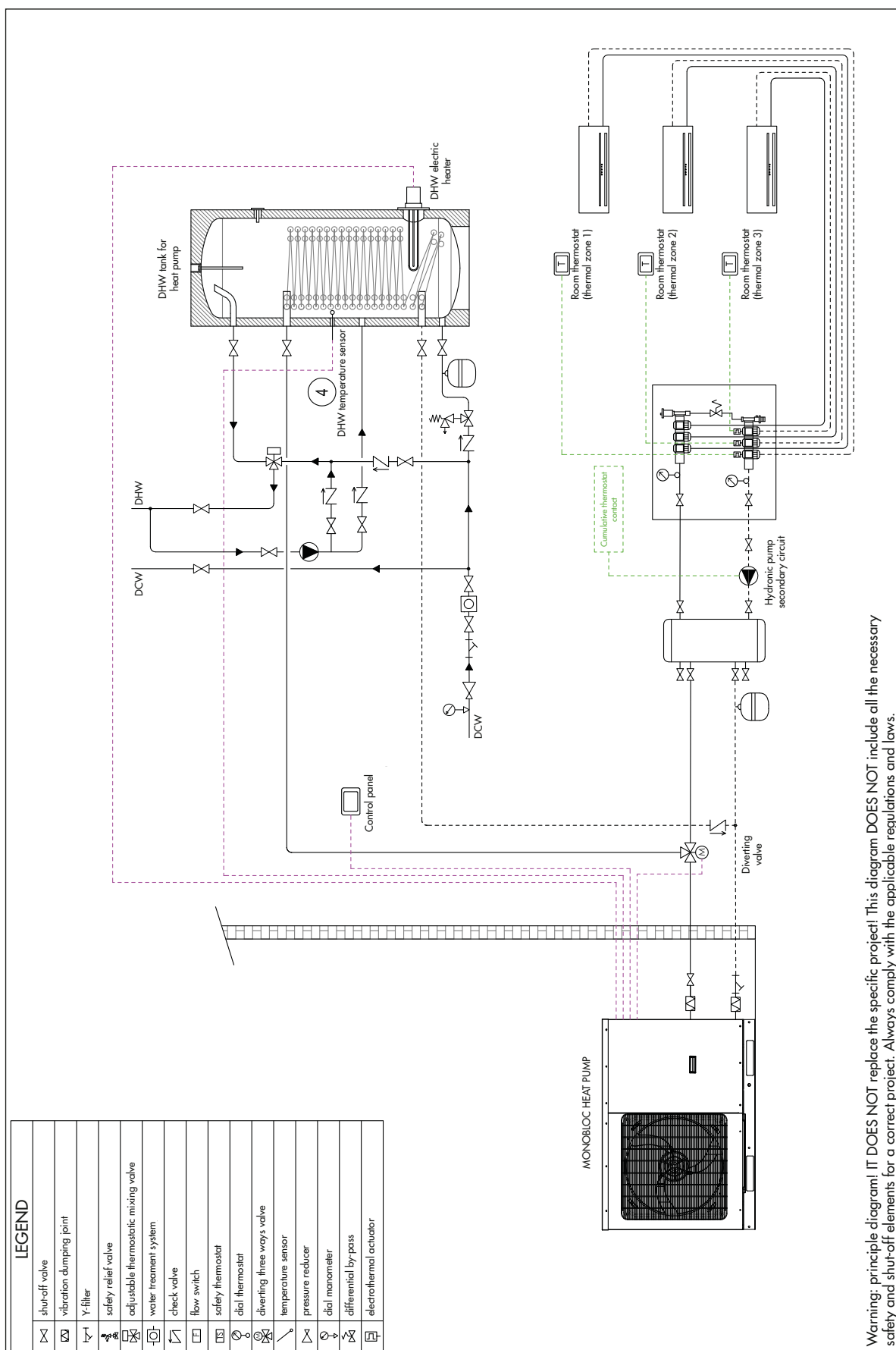


INSTALLATION EXAMPLES

EXAMPLE 2

Heating (cooling) with fan coil units and DHW with three-way valve and tank

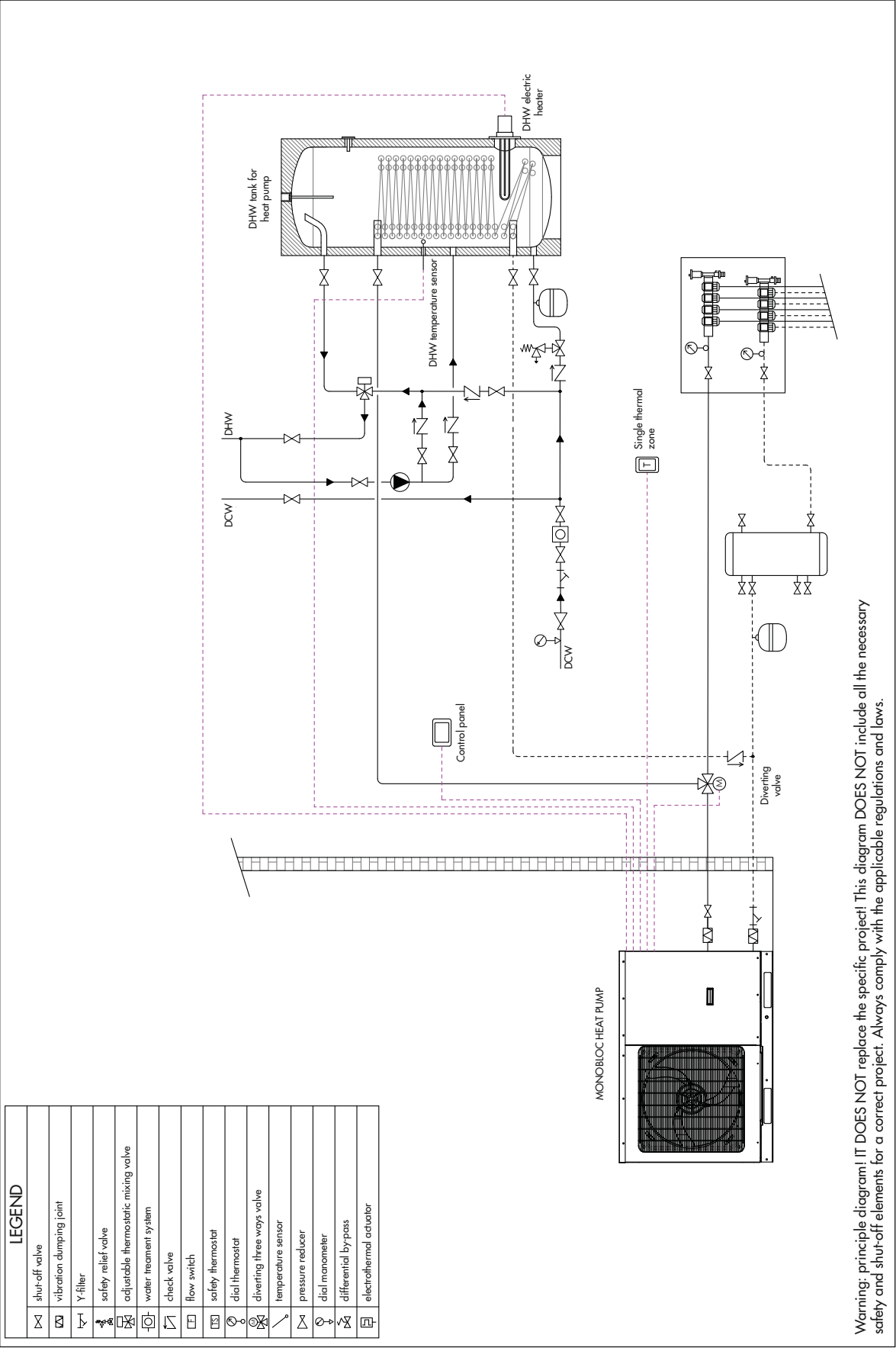
HEAT
PUMPS



INSTALLATION EXAMPLES

EXAMPLE 3

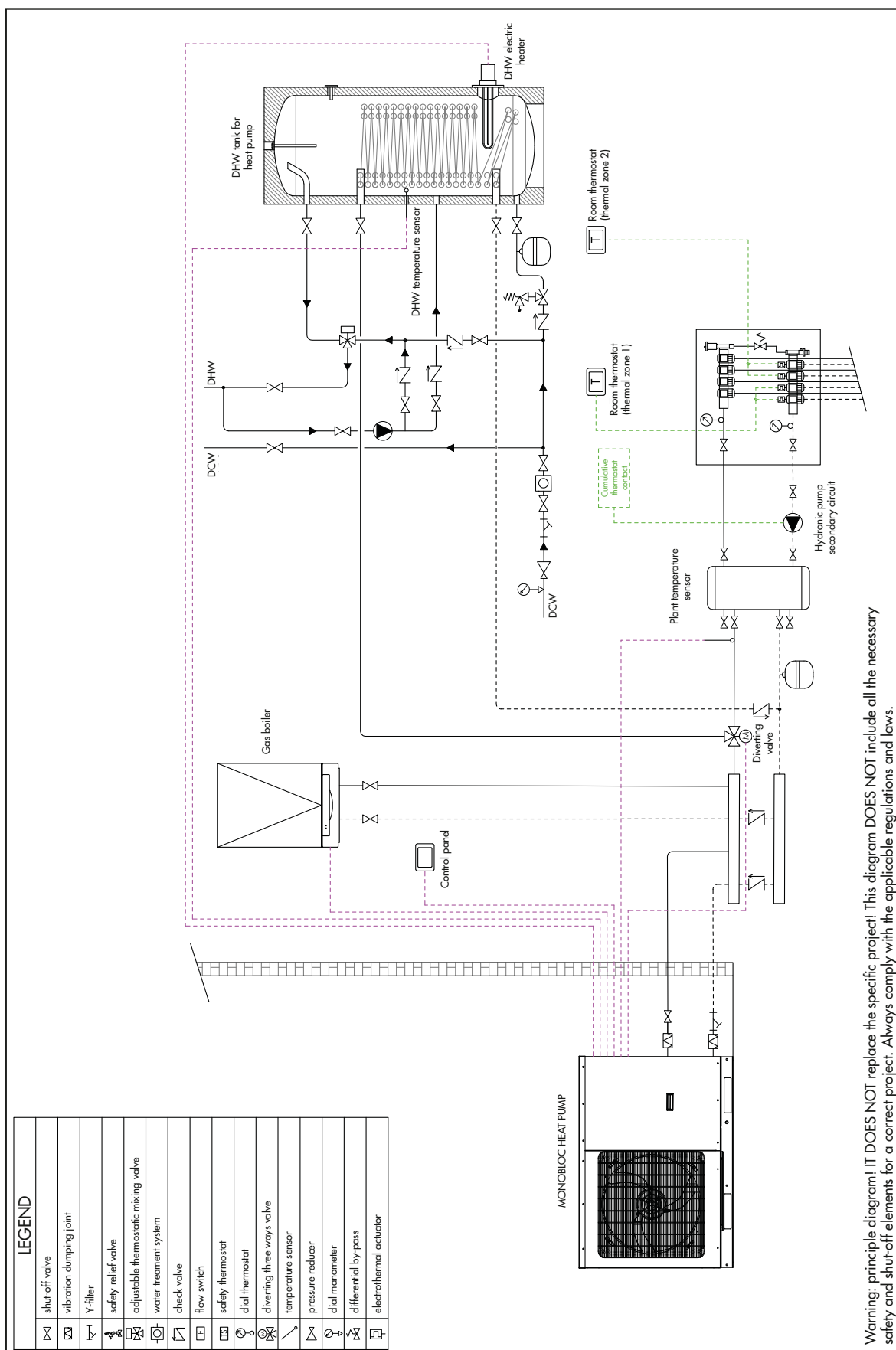
Radiant heating, single thermal zone and DHW with three-way valve and tank



INSTALLATION EXAMPLES

EXAMPLE 4

Radiant heating, integration with gas boiler and DHW with three-way valve and tank





SPLIT

Single-phase 6-8-10 kW range

SPLIT HEAT PUMPS

MAIN FEATURES



(Standard on the indoor unit)

Touch-screen control panel installed on the indoor unit

- Split Air to Water heat pumps with new-generation DC Inverter technology.
- Equipped with the heating, cooling and domestic hot water production functions.
- Single-phase version with 6-8-10 kW heating capacity.
- Achieves very high efficiency levels in heating mode, up to 5 COP.
- It uses R32, a refrigerant with low impact on global warming and ozone layer, characterised by high energy efficiency and a 30% lower charge compared to R410A.
- The vapour-injection compressor, thanks to its special technology, guarantees exceptional performances within a wide operating range.
- The leaving water temperature range is 20 °C - 60 °C: this means that the heat pump can be used with radiant floor systems, fan coil units and also medium-temperature radiators.
- The DC brushless axial fans are designed to ensure aerodynamic optimisation: they guarantee low noise levels coupled with high efficiency and a high air flow rate.
- It is equipped with a heating element on the base to prevent ice build-up during winter operation.
- The outdoor unit is equipped with an electronic expansion valve, while the indoor unit contains all the hydraulic components: inverter pump, plate heat exchanger, expansion vessel, safety valve, flow switch and water filter supplied (installation mandatory).

 Internal copper groove	 Quiet mode	 Weekly timer	 Heating down to low temperatures	 Door control	 Full protection	 Timer	 Child lock	 Wide operating range	 Wide voltage range	 Auto diagnosis	 Low-voltage start-up
 Auto restart memory	 Intelligent defrosting	 °C / °F switching	 Long-distance monitoring	 Exch. condenser gold fin treatment	 Min. outdoor temp. heating	 Max. outdoor temp. heating	 Min. outdoor temp. cooling	 Max. outdoor temp. cooling	 Min. outdoor temp. DHW	 Max. outdoor temp. DHW	 Max. output temp. DHW

A+++ Heating mode 35 °C

A++ Heating mode 55 °C

A DHW

THE RANGE

		Model	Code		Rated capacity according to EN14511 (kW)	
				1PH	 Heating (1)	 Cooling (2)
OUTDOOR UNIT - 1PH		AGHPSA061SH	398600012	●	6.0	5.8
		AGHPSA081SH	398600013	●	8.0	7.0
		AGHPSA101SH	398600014	●	9.5	8.5
HYDRONIC INDOOR UNIT		AGHPS061W	398600016	●	6.0	5.8
		AGHPS081W	398600017	●	8.0	7.0
		AGHPS101W	398600018	●	9.5	8.5

(1) Water temperature 30 °C/35 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

(2) Water temperature 23 °C/18 °C, outdoor air temperature 35 °C

INCLUDED ACCESSORIES

Ambient air temperature sensor
DHW temperature sensor
Y-shaped filter
Control panel (integrated into the indoor unit)

TECHNICAL DATA FOR 6 kW

MODEL					AGHPSA061	
Outdoor unit model					AGHPSA061SH	
Hydronic indoor unit model					AGHPS061W	
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve	
					Cooling	Heating
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	5.80	6.00
			Rated electrical power input	kW _{el}	1.32	1.20
			EER/COP		4.39	5.00
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	4.09	5.90
			Rated electrical power input	kW _{el}	1.28	1.51
			EER/COP		3.20	3.91
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	6.00	
			Seasonal energy efficiency η _s	%	178.7	
			Energy efficiency class		A+++	
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	5.00	
			Seasonal energy efficiency η _s	%	127.4	
			Energy efficiency class		A++	
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL	
			Energy efficiency class		A	
			Water heating efficiency - ERP η _{wh}	%	107.5	
Indoor unit			Nominal water flow rate	m³/h	at 35 °C	1.03
					at 45 °C	1.02
					at 7 °C	0.70
					at 18 °C	1.00
			Minimum efficient water volume of the system	liters	40	
			Maximum delivery water temperature	°C	Up to 60	
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	220-240/1/50	
			Electrical power input	kW	3.10	
			Heating element	nxkW	2x1.5	
			Expansion vessel	liters	10	
			Maximum circulator pump head	kPa	see H/Q graph	
			Hydraulic connections	inches	G1" female	
			Safety valve	bar	3	
			Indoor unit sound pressure	dB(A)	29	29
			Outdoor unit			Net weight
Dimensions (H/W/D)	mm	860/460/318				
Outdoor temperature range (heating)	°C	-25/+35				
Outdoor temperature range (cooling)	°C	+10/+48				
Electrical power supply	V/Ph/Hz	220-240~/1/50				
Maximum power input (cooling)	kW	2.30				
Maximum power input (heating)	kW	2.30				
Maximum current draw (cooling)	A	10				
Maximum current draw (heating)	A	10				
Liquid cooling pipe diameter	mm (inches)	6.35 (1/4)				
Gas cooling pipe diameter	mm (inches)	12.7 (1/2)				
Outdoor unit sound pressure	dB(A)	52				52
Fan air flow rate	m³/h	3200				
Net weight	kg	55				
Dimensions (H/W/D)	mm	702/975/396				
Refrigerant			Compressor type		Twin Rotary with vapour injection	
			Type and GWP		R32/675 kg CO ₂ eq.	
			Quantity		1 kg/0.675 tons CO ₂ eq.	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

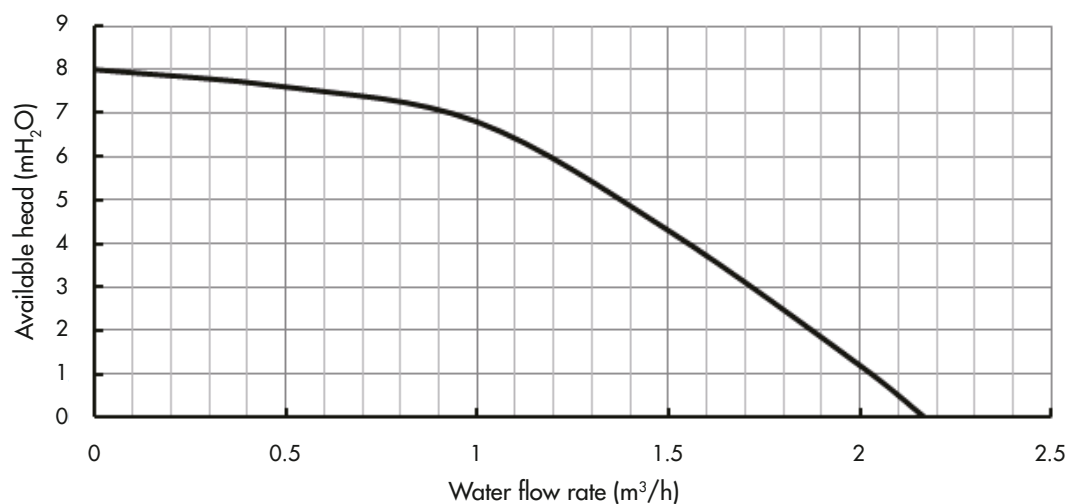
LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA061)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	3.35	4.35	3.72	4.19	3.93	4.06	4.17	3.87	4.25	3.55	4.09	3.20	3.72	2.65	2.90	1.95	2.45	1.57
8	3.48	4.47	3.89	4.31	4.09	4.19	4.34	3.99	4.42	3.64	4.25	3.29	3.89	2.75	3.03	2.01	2.54	1.63
9	3.64	4.67	4.01	4.47	4.21	4.35	4.46	4.12	4.54	3.80	4.38	3.42	4.01	2.84	3.15	2.08	2.66	1.66
10	3.72	4.79	4.13	4.60	4.38	4.47	4.62	4.25	4.70	3.90	4.54	3.51	4.13	2.91	3.23	2.17	2.74	1.73
11	3.84	4.92	4.29	4.76	4.50	4.60	4.79	4.41	4.91	4.06	4.70	3.64	4.29	3.00	3.31	2.20	2.82	1.76
12	3.97	5.08	4.42	4.92	4.66	4.76	4.95	4.54	5.07	4.15	4.87	3.74	4.42	3.10	3.44	2.30	2.90	1.85
13	4.13	5.24	4.58	5.05	4.79	4.89	5.11	4.67	5.19	4.28	4.99	3.87	4.58	3.20	3.56	2.33	2.99	1.89
14	4.25	5.40	4.66	5.21	4.95	5.05	5.28	4.79	5.36	4.41	5.15	3.96	4.66	3.29	3.68	2.43	3.07	1.95
15	4.34	5.53	4.83	5.34	5.11	5.18	5.44	4.92	5.52	4.51	5.32	4.09	4.83	3.39	3.76	2.49	3.19	1.98
18	4.74	5.98	5.24	5.75	5.52	5.59	5.89	5.34	6.01	4.89	5.77	4.41	5.24	3.64	4.09	2.68	3.48	2.17
20	4.95	6.29	5.52	6.07	5.85	5.88	6.18	5.59	6.30	5.14	6.05	4.63	5.52	3.83	4.34	2.84	3.64	2.27
23	5.36	6.74	5.93	6.49	6.26	6.33	6.67	6.01	6.79	5.50	6.54	4.95	5.93	4.12	4.62	3.00	3.93	2.43
25	5.60	7.03	6.22	6.77	6.54	6.58	6.95	6.29	7.12	5.75	6.83	5.18	6.22	4.31	4.87	3.16	4.09	2.56

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	2.94	4.34	3.12	4.57	3.72	4.88	4.26	5.08	5.16	5.39	5.76	5.63	6.36	5.86	6.24	6.10	6.42	6.37	6.78	6.95	6.72	7.38	6.12	7.31	5.34	7.97	4.20	8.44
30	2.70	3.52	3.06	3.79	3.60	4.06	4.14	4.30	4.74	4.53	5.22	4.77	5.82	5.00	6.18	5.55	6.36	5.90	6.72	6.29	6.66	6.72	6.06	6.72	5.34	7.27	4.14	7.78
35	2.52	2.97	2.88	3.13	3.36	3.32	3.90	3.59	4.26	3.83	4.80	4.06	5.22	4.18	6.00	5.00	6.30	5.27	6.66	5.74	6.60	5.98	6.00	5.98	5.28	6.64	4.08	7.03
40	2.46	2.54	2.88	2.81	3.36	3.05	3.90	3.24	4.26	3.40	4.74	3.67	5.16	3.91	6.00	4.45	6.24	4.69	6.60	5.08	6.54	5.35	5.94	5.31	5.22	5.86	4.08	6.25
45			2.88	2.46	3.36	2.70	3.90	2.93	4.20	3.05	4.68	3.24	5.10	3.44	6.00	3.91	6.18	4.10	6.54	4.45	6.48	4.69	5.88	4.92	5.16	5.16	4.02	5.47
50					3.24	2.27	3.78	2.46	4.14	2.58	4.62	2.77	5.04	2.85	5.94	3.36	6.12	3.52	6.48	3.87	6.42	4.02	5.82	4.22	5.10	4.42	3.96	4.73
55							3.60	2.03	4.14	2.11	4.56	2.31	4.98	2.42	5.88	2.81	6.06	2.97	6.42	3.20	6.36	3.40	5.76	3.52	5.04	3.71	3.96	3.99
60									4.08	1.72	4.56	1.80	4.92	1.91	5.82	2.27	6.00	2.34	6.36	2.50	6.30	2.62	5.70	2.77	4.98	2.89	3.90	3.09

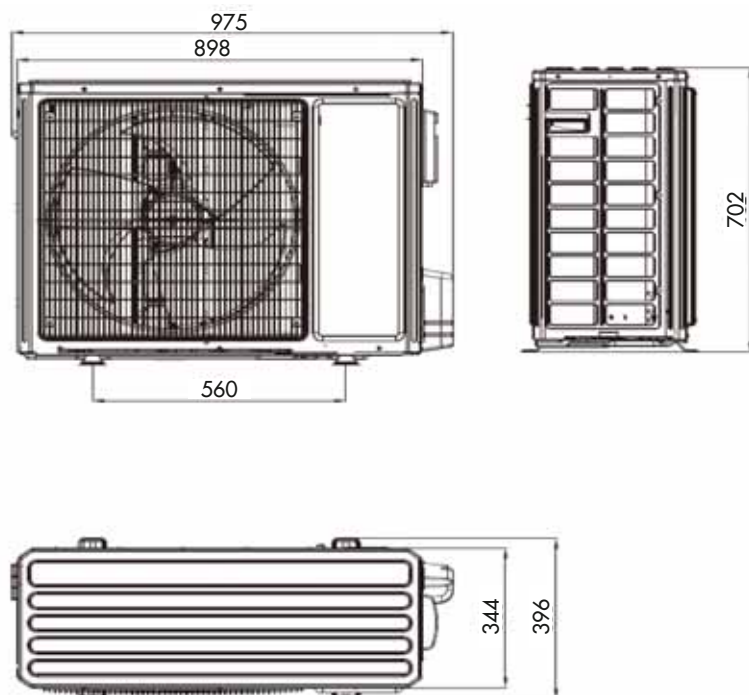
LWT: Leaving water temperature
Qh: Heating capacity
COP: Coefficient of performance

LWT: Leaving water temperature
Qc: Cooling capacity
EER: Energy efficiency ratio

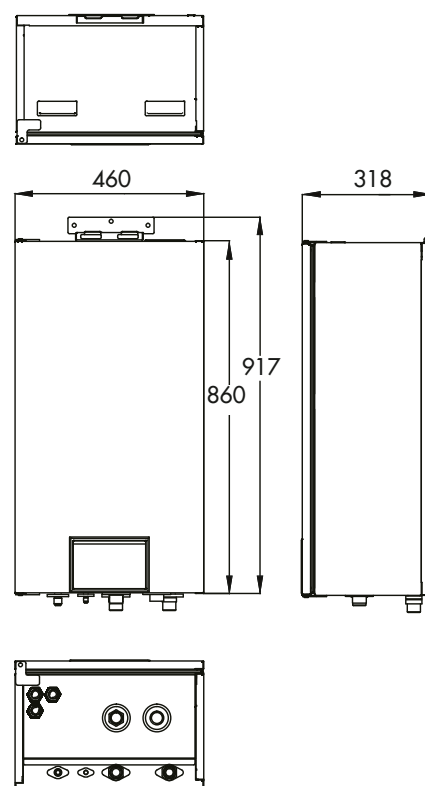
FLOW RATE CURVES FOR 6 kW



DIMENSIONAL DRAWINGS 6 kW

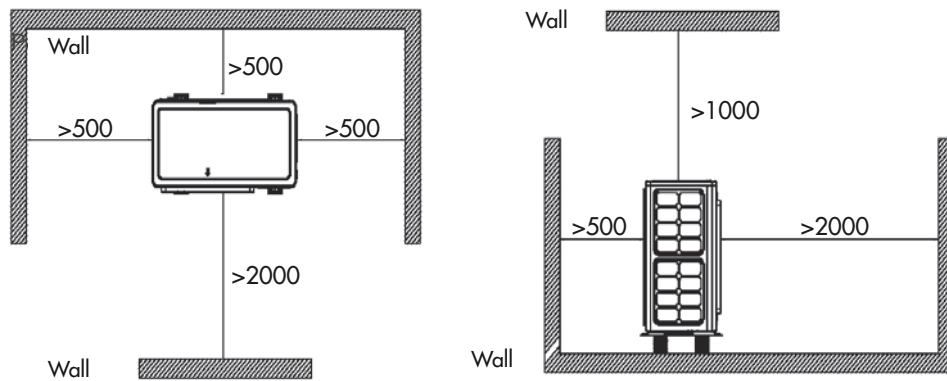


OUTDOOR UNIT 6 kW

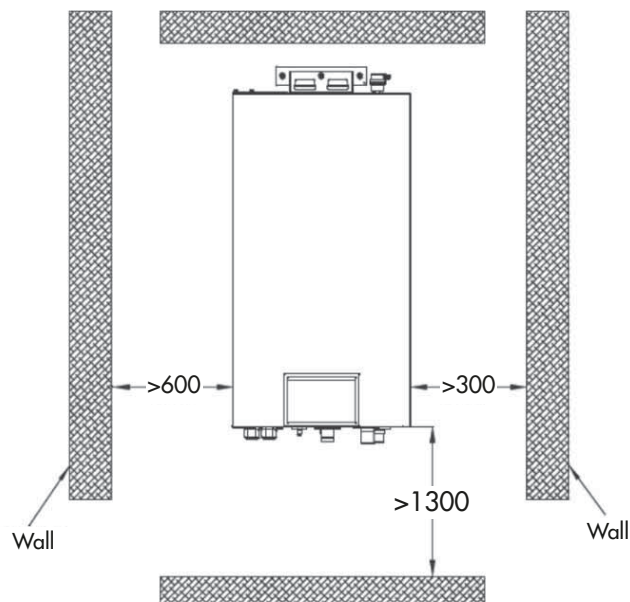


INDOOR UNIT 6 kW

SPACE REQUIRED FOR OUTDOOR UNIT INSTALLATION 6 kW



SPACE REQUIRED FOR INDOOR UNIT INSTALLATION 6 kW



TECHNICAL DATA FOR 8 kW

MODEL					AGHPSA081				
Outdoor unit model					AGHPSA081SH				
Hydronic indoor unit model					AGHPS081W				
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve				
					Cooling	Heating			
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	7.00	8.00			
			Rated electrical power input	kW _{el}	1.75	1.70			
			EER/COP		4.00	4.71			
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	5.30	8.00			
			Rated electrical power input	kW _{el}	1.73	2.14			
			EER/COP		3.06	3.74			
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	7.00				
			Seasonal energy efficiency η _s	%	181				
			Energy efficiency class		A+++				
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	7.00				
			Seasonal energy efficiency η _s	%	129				
			Energy efficiency class		A++				
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL				
			Energy efficiency class		A				
			Water heating efficiency - ERP η _{wh}	%	111				
Indoor unit			Nominal water flow rate	m³/h	at 35 °C	1.38			
					at 45 °C	1.38			
					at 7 °C	0.91			
					at 18 °C	1.20			
			Minimum efficient water volume of the system		liters	40			
			Maximum delivery water temperature		°C	Up to 60			
			Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	220-240/1/50			
			Electrical power input		kW	3.10			
			Heating element		n×kW	2×3			
			Expansion vessel		liters	10			
			Maximum circulator pump head		kPa	see H/Q graph			
			Hydraulic connections		inches	G1" female			
			Safety valve		bar	3			
			Indoor unit sound pressure		dB(A)	29	29		
			Net weight		kg	62			
			Dimensions (H/W/D)		mm	860/460/318			
			Outdoor unit			Outdoor temperature range (heating)		°C	-25/+35
						Outdoor temperature range (cooling)		°C	+10/+48
						Electrical power supply		V/Ph/Hz	220-240~/1/50
Maximum power input (cooling)		kW				4.32			
Maximum power input (heating)		kW				3.00			
Maximum current draw (cooling)		A				19			
Maximum current draw (heating)		A				13			
Liquid cooling pipe diameter		mm (inches)				6.35 (1/4)			
Gas cooling pipe diameter		mm (inches)				12.7 (1/2)			
Outdoor unit sound pressure		dB(A)				55	55		
Fan air flow rate		m³/h				3300			
Net weight		kg				82			
Dimensions (H/W/D)		mm				787/982/427			
Compressor type						Twin Rotary with vapour injection			
Refrigerant						Type and GWP		R32/675 kg CO ₂ eq.	
						Quantity		1.6 kg/1.08 tons CO ₂ eq.	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA081)																	
	10		15		20		25		30		35		40		45		48	
	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER
7	4.35	4.17	4.82	4.01	5.09	3.89	5.41	3.71	5.51	3.40	5.30	3.06	4.82	2.54	3.76	1.87	3.18	1.50
8	4.51	4.26	4.98	4.11	5.25	4.01	5.57	3.80	6.04	3.49	5.46	3.16	4.98	2.60	3.87	1.90	3.29	1.53
9	4.56	4.41	5.09	4.23	5.35	4.11	5.72	3.92	6.20	3.58	5.62	3.25	5.09	2.70	3.98	1.96	3.34	1.56
10	4.72	4.50	5.25	4.35	5.51	4.23	5.88	4.01	6.36	3.68	5.78	3.31	5.25	2.76	4.08	1.99	3.45	1.62
11	4.88	4.63	5.41	4.47	5.72	4.35	6.04	4.14	6.57	3.80	5.94	3.40	5.41	2.85	4.19	2.08	3.55	1.68
12	4.98	4.75	5.57	4.56	5.88	4.44	6.25	4.20	6.73	3.89	6.10	3.49	5.57	2.91	4.35	2.14	3.66	1.72
13	5.09	4.87	5.67	4.72	5.99	4.56	6.31	4.35	6.89	3.98	6.20	3.58	5.67	3.00	4.40	2.18	3.71	1.75
14	5.25	4.99	5.83	4.81	6.10	4.66	6.47	4.44	7.05	4.07	6.36	3.68	5.83	3.06	4.51	2.24	3.82	1.78
15	5.35	5.15	5.99	4.93	6.25	4.78	6.68	4.53	7.21	4.17	6.52	3.77	5.99	3.12	4.66	2.30	3.92	1.84
18	5.78	5.45	6.36	5.27	6.73	5.12	7.16	4.84	7.69	4.44	7.00	4.01	6.36	3.31	4.98	2.45	4.24	1.96
20	5.99	5.70	6.63	5.48	7.00	5.33	7.42	5.09	8.06	4.66	7.31	4.20	6.63	3.46	5.14	2.54	4.40	2.05
23	6.41	6.04	7.10	5.79	7.47	5.64	7.90	5.39	8.53	4.93	7.79	4.44	7.10	3.68	5.51	2.73	4.66	2.18
25	6.63	6.28	7.37	6.07	7.79	5.85	8.22	5.58	8.85	5.12	8.06	4.63	7.37	3.83	5.72	2.82	4.82	2.27

	HEATING - Dry bulb outdoor air temperature in °C																											
LWT [°C]	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	3.44	4.04	4.16	4.26	4.96	4.56	5.68	4.75	6.08	5.05	6.80	5.27	7.52	5.46	7.36	5.72	7.60	5.94	8.00	6.50	7.92	6.88	7.20	6.84	6.32	7.44	4.96	7.89
30	3.36	3.29	4.08	3.59	4.80	3.81	5.52	4.04	5.92	4.26	6.56	4.49	7.28	4.71	7.76	5.23	8.00	5.53	8.48	5.94	8.40	6.32	7.60	6.32	6.64	6.84	5.20	7.29
35	3.28	2.77	3.84	2.92	4.48	3.10	5.20	3.40	5.60	3.59	6.24	3.81	6.80	3.93	8.00	4.71	8.24	4.97	8.72	5.38	8.64	5.61	7.84	5.61	6.88	6.24	5.36	6.62
40	3.28	2.39	3.84	2.65	4.48	2.92	5.20	3.10	5.60	3.25	6.24	3.51	6.80	3.70	8.00	4.22	8.24	4.45	8.72	4.86	8.64	5.08	7.84	5.05	6.88	5.57	5.36	5.94
45			3.84	2.36	4.48	2.58	5.20	2.80	5.60	2.92	6.24	3.10	6.80	3.29	8.00	3.74	8.24	3.93	8.72	4.26	8.64	4.49	7.84	4.71	6.88	4.93	5.36	5.23
50					4.32	2.21	5.04	2.39	5.44	2.50	6.08	2.69	6.56	2.77	7.76	3.25	8.00	3.40	8.48	3.74	8.40	3.93	7.60	4.11	6.64	4.30	5.20	4.60
55							4.80	1.98	5.12	2.09	5.76	2.28	6.24	2.39	7.36	2.77	7.60	2.92	8.00	3.18	7.92	3.33	7.20	3.48	6.32	3.66	4.96	3.93
60								4.88	1.72	5.44	1.79	5.92	1.91	6.96	2.28	7.20	2.32	7.60	2.50	7.52	2.62	6.80	2.77	6.00	2.88	4.64	3.10	

LWT: Leaving water temperature
Q_h: Heating capacity
COP: Coefficient of performance

LWT: Leaving water temperature
Q_c: Cooling capacity
EER: Energy efficiency ratio

TECHNICAL DATA FOR 10 kW

MODEL					AGHPSA101	
Outdoor unit model					AGHPSA101SH	
Hydronic indoor unit model					AGHPS101W	
Matchable units for domestic hot water production (DHW)					200/300 liters external tank with diverting valve	
					Cooling	Heating
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	8.50	9.50
			Rated electrical power input	kW _{el}	2.24	2.07
			EER/COP		3.79	4.59
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	6.50	9.50
			Rated electrical power input	kW _{el}	2.27	2.64
			EER/COP		2.86	3.60
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	9.00	
			Seasonal energy efficiency η _s	%	181	
			Energy efficiency class		A+++	
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	8.00	
			Seasonal energy efficiency η _s	%	127	
			Energy efficiency class		A++	
DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		
		Energy efficiency class		A		
		Water heating efficiency - ERP η _{wh}	%	111		
Indoor unit		Nominal water flow rate	m³/h	at 35 °C	1.63	
				at 45 °C	1.63	
				at 7 °C	1.12	
				at 18 °C	1.46	
	Minimum efficient water volume of the system	liters	80			
	Maximum delivery water temperature	°C	Up to 60			
	Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	220-240/1/50			
	Electrical power input	kW	3.10			
	Heating element	nxkW	2x3			
	Expansion vessel	liters	10			
	Maximum circulator pump head	kPa	see H/Q graph			
	Hydraulic connections	inches	G1" female			
	Safety valve	bar	3			
	Indoor unit sound pressure	dB(A)	29	29		
	Net weight	kg	62			
	Dimensions (H/W/D)	mm	860/460/318			
Outdoor unit		Outdoor temperature range (heating)	°C	-25/+35		
		Outdoor temperature range (cooling)	°C	+10/+48		
		Electrical power supply	V/Ph/Hz	220-240~/1/50		
		Maximum power input (cooling)	kW	5.06		
		Maximum power input (heating)	kW	3.40		
		Maximum current draw (cooling)	A	22		
		Maximum current draw (heating)	A	15		
		Liquid cooling pipe diameter	mm (inches)	6.35 (1/4)		
		Gas cooling pipe diameter	mm (inches)	12.7 (1/2)		
		Outdoor unit sound pressure	dB(A)	55	55	
		Fan air flow rate	m³/h	3300		
		Net weight	kg	82		
		Dimensions (H/W/D)	mm	787/982/427		
		Compressor type		Twin Rotary with vapour injection		
		Refrigerant	Type and GWP		R32/675 kg CO ₂ eq.	
			Quantity		1.6 kg/1.08 tons CO ₂ eq.	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

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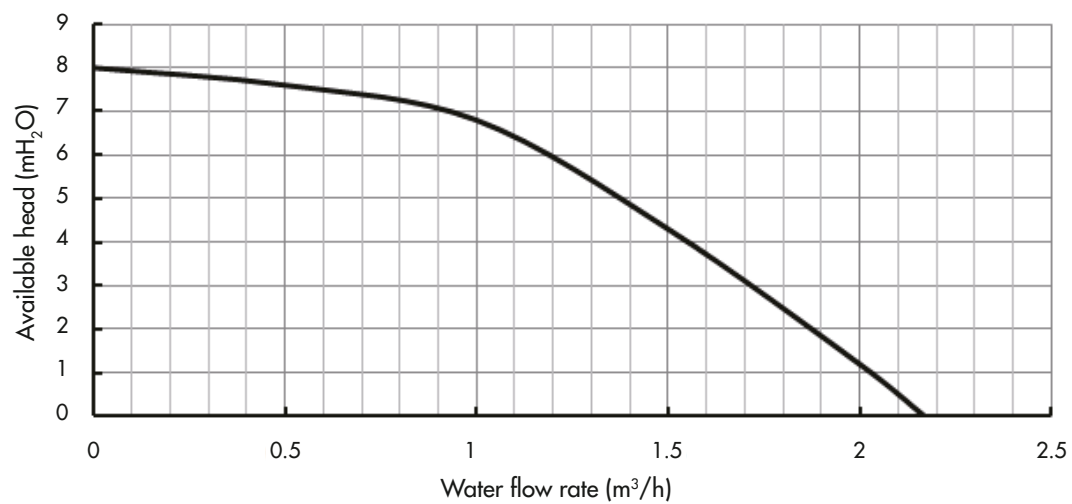
CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA101)																	
	10		15		20		25		30		35		40		45		48	
	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER	Q _c [kW]	EER
7	5.33	3.89	5.92	3.75	6.24	3.64	6.63	3.46	6.76	3.18	6.50	2.86	5.92	2.38	4.62	1.75	3.90	1.40
8	5.46	4.01	6.11	3.87	6.44	3.75	6.83	3.58	6.96	3.26	6.70	2.95	6.11	2.43	4.75	1.78	4.03	1.46
9	5.66	4.15	6.24	4.01	6.57	3.87	7.02	3.69	7.15	3.38	6.89	3.04	6.24	2.52	4.94	1.86	4.10	1.52
10	5.79	4.24	6.37	4.09	6.70	3.95	7.22	3.81	7.35	3.46	7.02	3.12	6.37	2.58	5.01	1.92	4.23	1.52
11	5.92	4.35	6.57	4.21	6.96	4.07	7.35	3.87	7.54	3.58	7.22	3.21	6.57	2.66	5.07	1.95	4.36	1.57
12	6.11	4.47	6.70	4.30	7.15	4.18	7.54	3.98	7.67	3.67	7.41	3.29	6.70	2.72	5.27	2.00	4.49	1.60
13	6.24	4.61	6.89	4.44	7.35	4.30	7.74	4.09	7.87	3.78	7.61	3.38	6.89	2.83	5.40	2.09	4.55	1.66
14	6.44	4.70	7.15	4.52	7.48	4.41	7.93	4.21	8.13	3.84	7.80	3.46	7.15	2.89	5.53	2.12	4.68	1.72
15	6.57	4.84	7.28	4.64	7.67	4.50	8.19	4.30	8.32	3.92	8.00	3.55	7.28	2.95	5.72	2.15	4.81	1.75
18	7.02	5.18	7.74	5.01	8.13	4.84	8.65	4.61	8.91	4.24	8.52	3.81	7.74	3.15	6.05	2.32	5.14	1.86
20	7.35	5.44	8.13	5.21	8.58	5.10	9.10	4.84	9.30	4.44	8.91	3.98	8.13	3.32	6.31	2.43	5.33	1.98
23	7.74	5.76	8.58	5.53	9.04	5.38	9.62	5.13	9.82	4.70	9.43	4.24	8.58	3.49	6.63	2.58	5.66	2.06
25	8.00	5.98	8.91	5.78	9.36	5.58	10.01	5.33	10.21	4.90	9.82	4.41	8.91	3.67	6.96	2.69	0.00	2.18

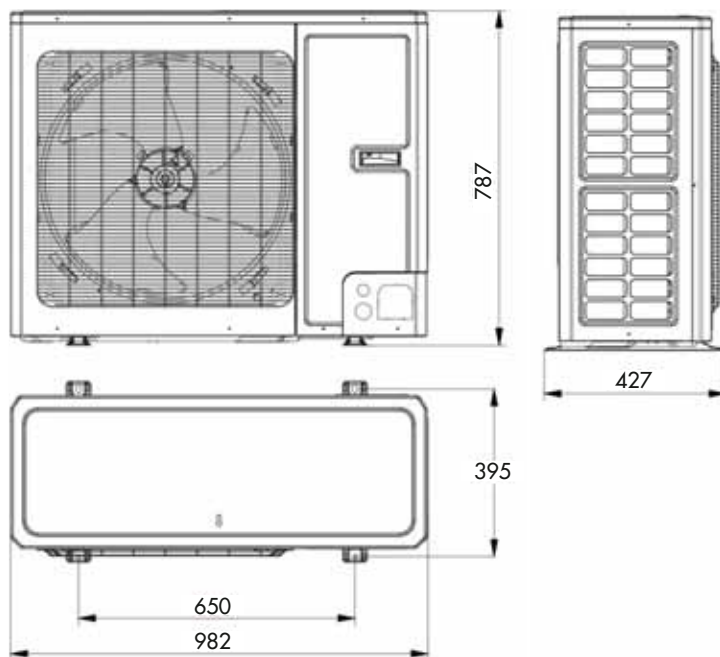
LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	4.09	3.99	4.94	4.21	5.89	4.50	6.75	4.68	7.22	4.97	8.08	5.18	8.93	5.40	8.74	5.61	9.03	5.87	9.50	6.41	9.41	6.80	8.55	6.73	7.51	7.34	5.89	7.77
30	3.99	3.24	4.85	3.49	5.70	3.74	6.56	3.96	7.03	4.17	7.79	4.39	8.65	4.61	9.22	5.11	9.50	5.43	10.07	5.79	9.98	6.19	9.03	6.19	7.89	6.69	6.18	7.16
35	3.90	2.73	4.56	2.88	5.32	3.06	6.18	3.31	6.65	3.53	7.41	3.74	8.08	3.85	9.50	4.61	9.79	4.86	10.36	5.29	10.26	5.51	9.31	5.51	8.17	6.12	6.37	6.48
40	3.90	2.34	4.56	2.59	5.32	2.81	6.18	2.99	6.65	3.13	7.41	3.38	8.08	3.60	9.50	4.10	9.79	4.32	10.36	4.68	10.26	4.93	9.31	4.89	8.17	5.40	6.37	5.76
45			4.56	2.27	5.32	2.48	6.18	2.70	6.65	2.81	7.41	2.99	8.08	3.17	9.50	3.60	9.79	3.78	10.36	4.10	10.26	4.32	9.31	4.53	8.17	4.75	6.37	5.04
50					5.13	2.09	5.99	2.27	6.46	2.38	7.22	2.55	7.79	2.63	9.22	3.09	9.50	3.24	10.07	3.56	9.98	3.71	9.03	3.89	7.89	4.07	6.18	4.35
55							5.70	1.87	6.08	1.94	6.84	2.12	7.41	2.23	8.74	2.59	9.03	2.73	9.50	2.95	9.41	3.13	8.55	3.24	7.51	3.42	5.89	3.67
60									5.80	1.58	6.46	1.66	7.03	1.76	8.27	2.09	8.55	2.16	9.03	2.30	8.93	2.41	8.08	2.55	7.13	2.66	5.51	2.84

LWT: Leaving water temperature
Q_h: Heating capacity
COP: Coefficient of performance
LWT: Leaving water temperature
Q_c: Cooling capacity
EER: Energy efficiency ratio

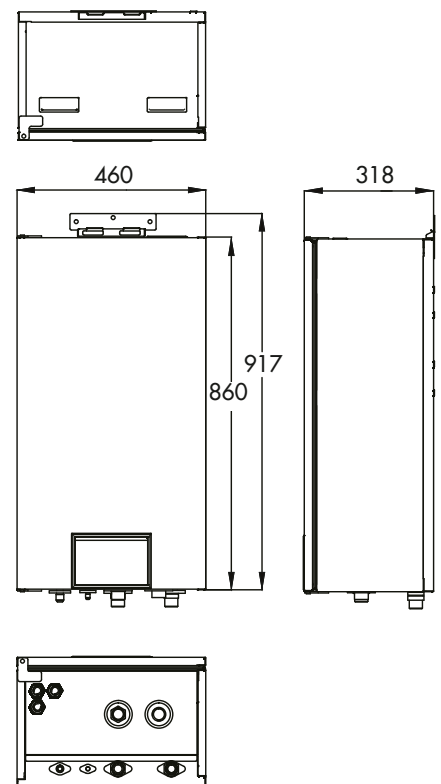
FLOW RATE CURVES 8-10 kW



DIMENSIONAL DRAWINGS 8-10 kW

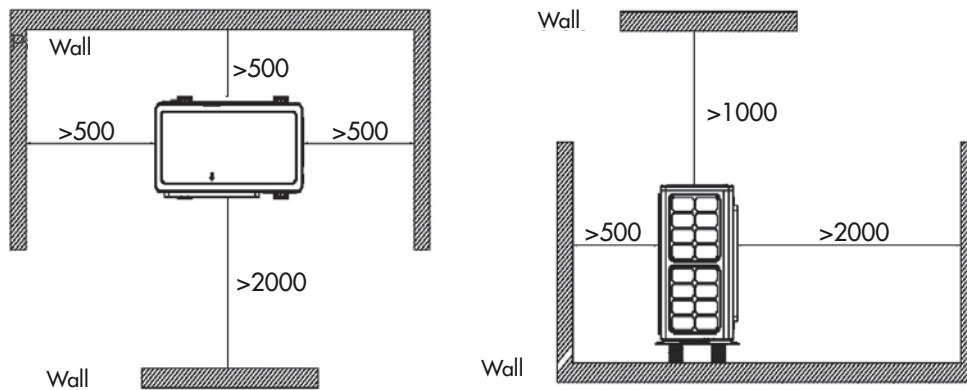


OUTDOOR UNIT 8-10 kW

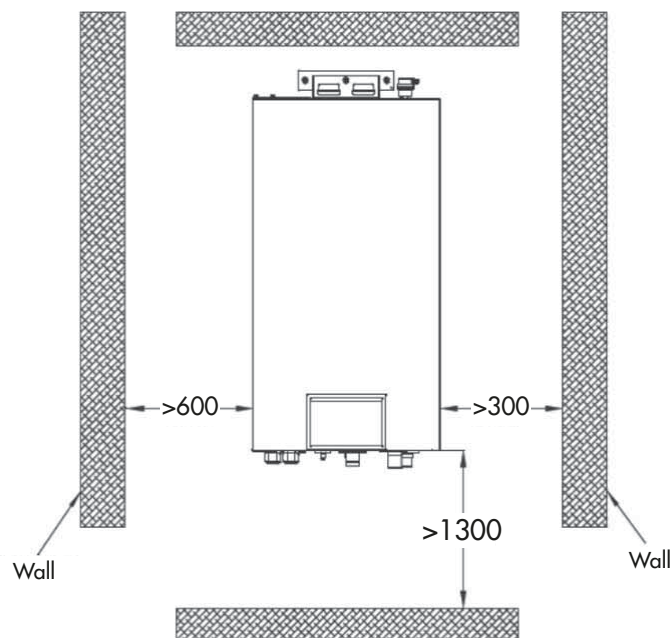


INDOOR UNIT 8-10 kW

SPACE REQUIRED FOR OUTDOOR UNIT INSTALLATION 8-10 kW



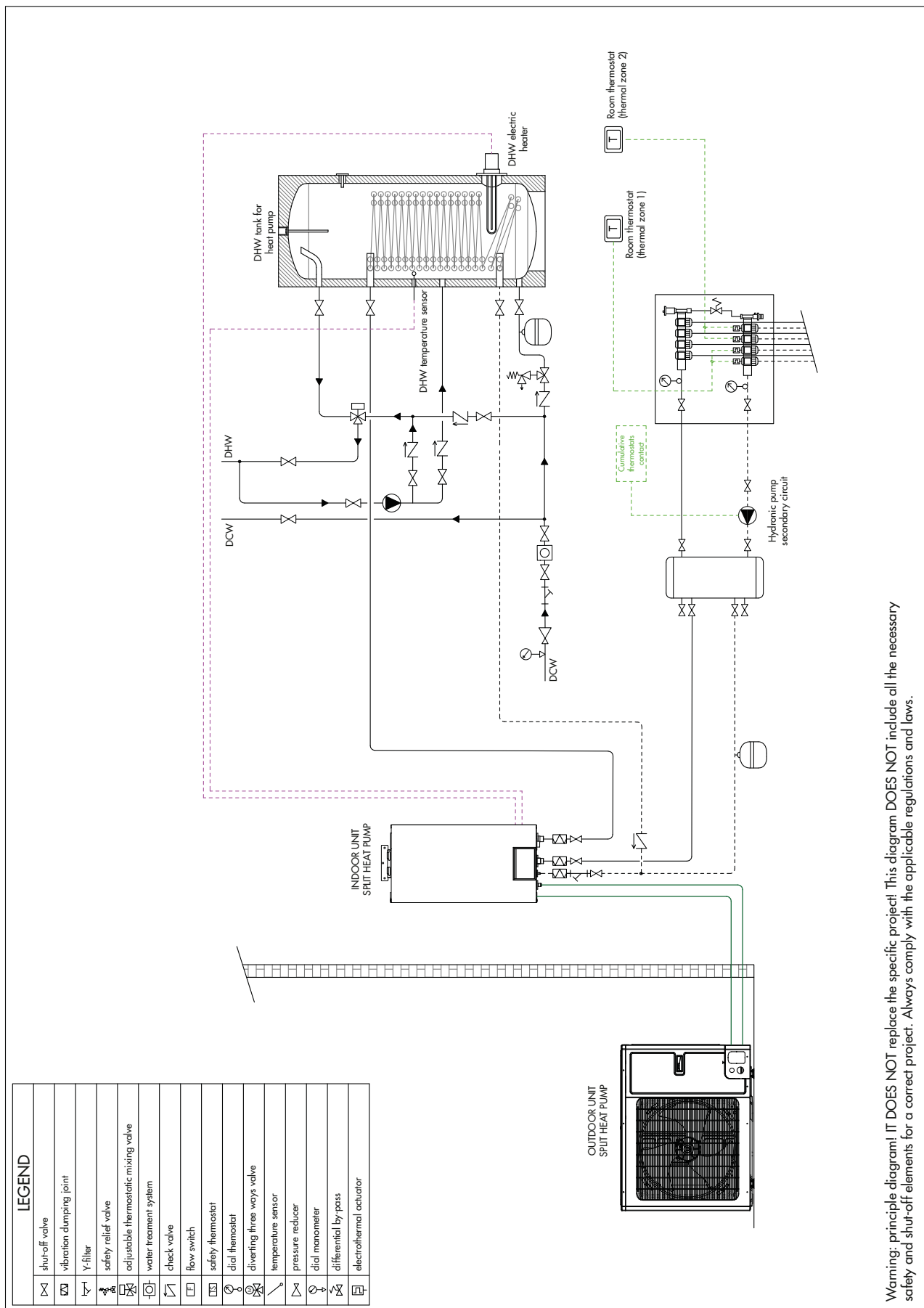
SPACE REQUIRED FOR INDOOR UNIT INSTALLATION 8-10 kW



INSTALLATION EXAMPLES

EXAMPLE 1

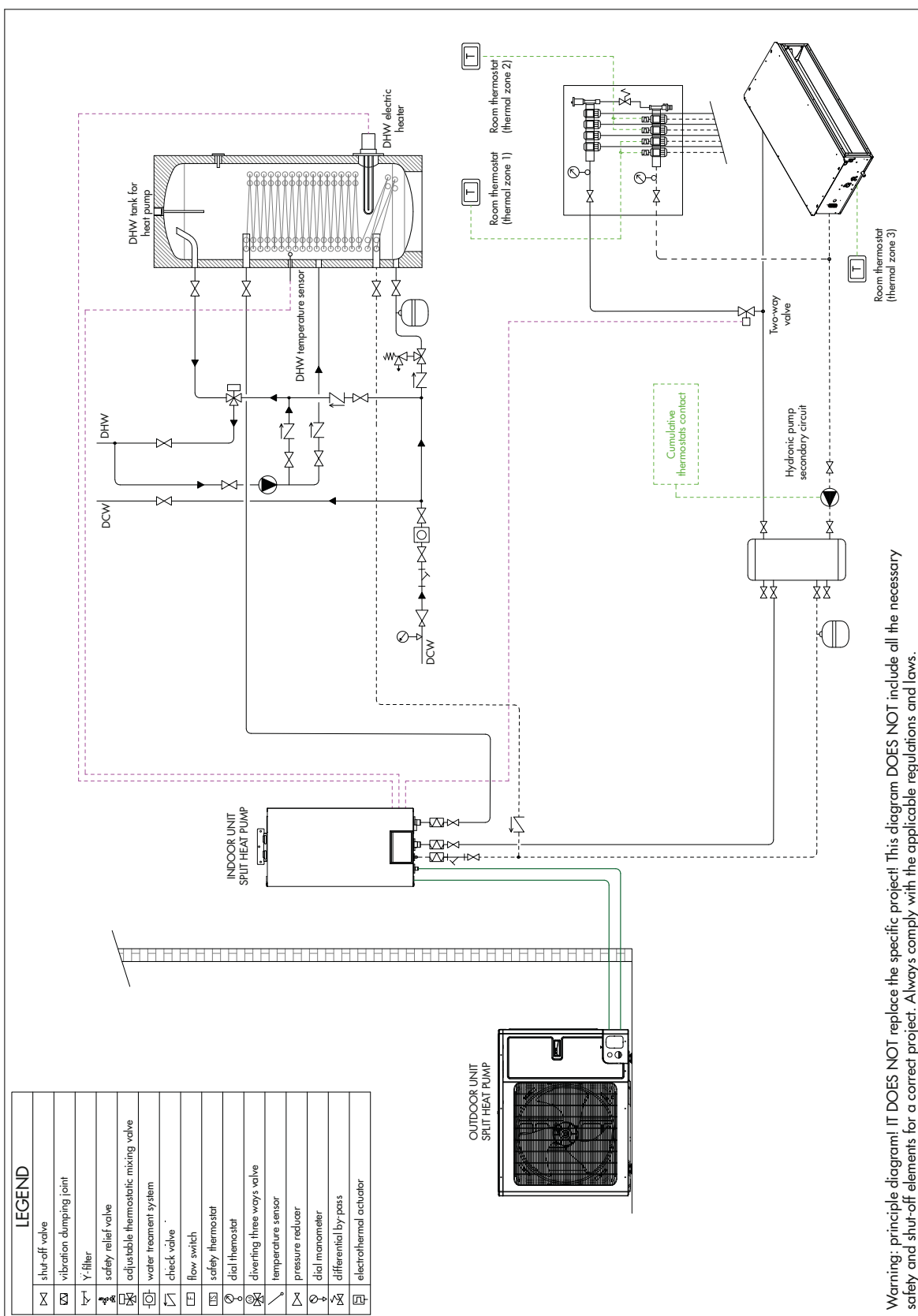
Radiant heating and DHW with three-way valve and tank



Warning: principle diagram! IT DOES NOT replace the specific project! This diagram DOES NOT include all the necessary safety and shut-off elements for a correct project. Always comply with the applicable regulations and laws.

EXAMPLE 2

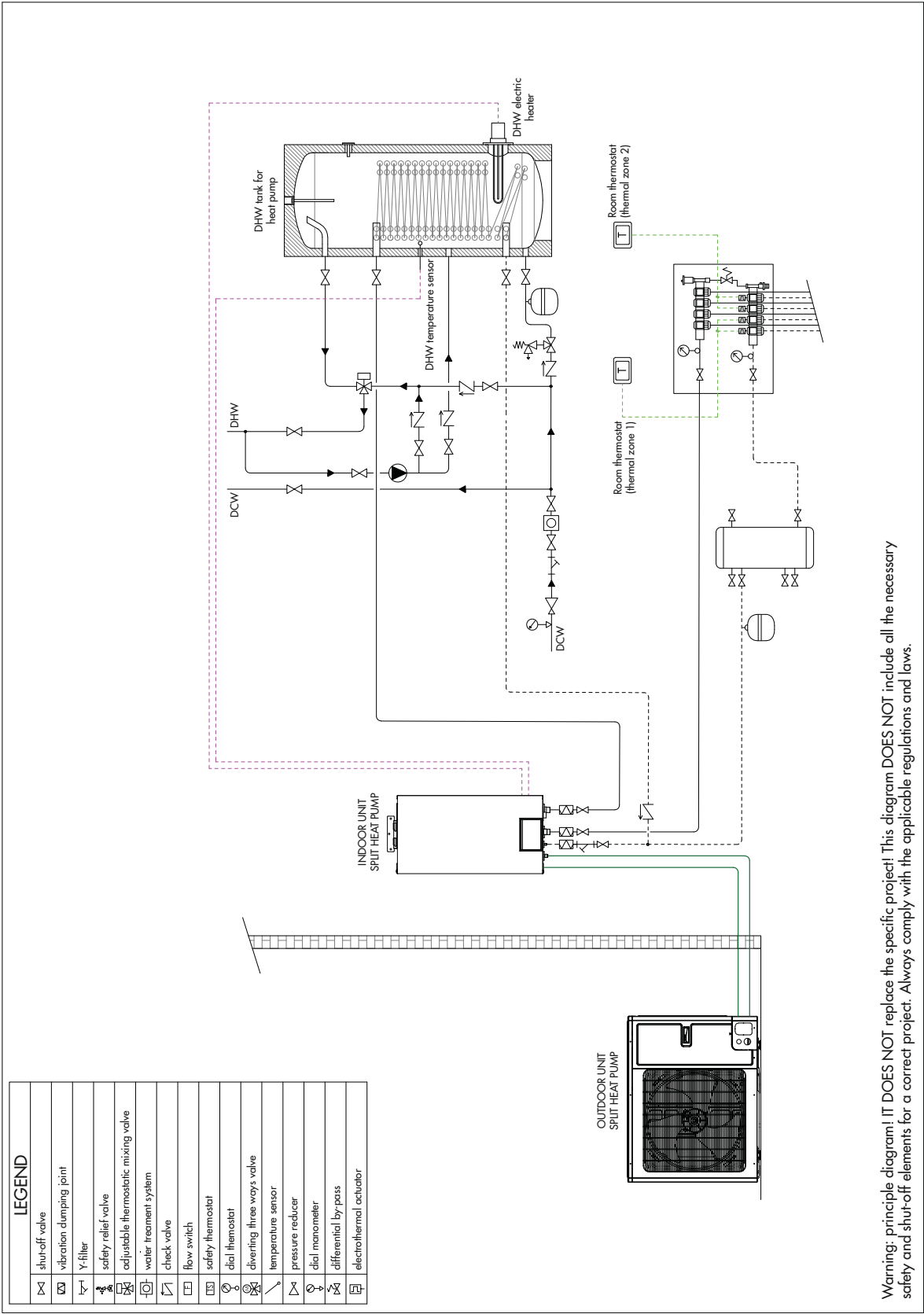
Heating (cooling) with fan coil units and DHW with three-way valve and tank



INSTALLATION EXAMPLES

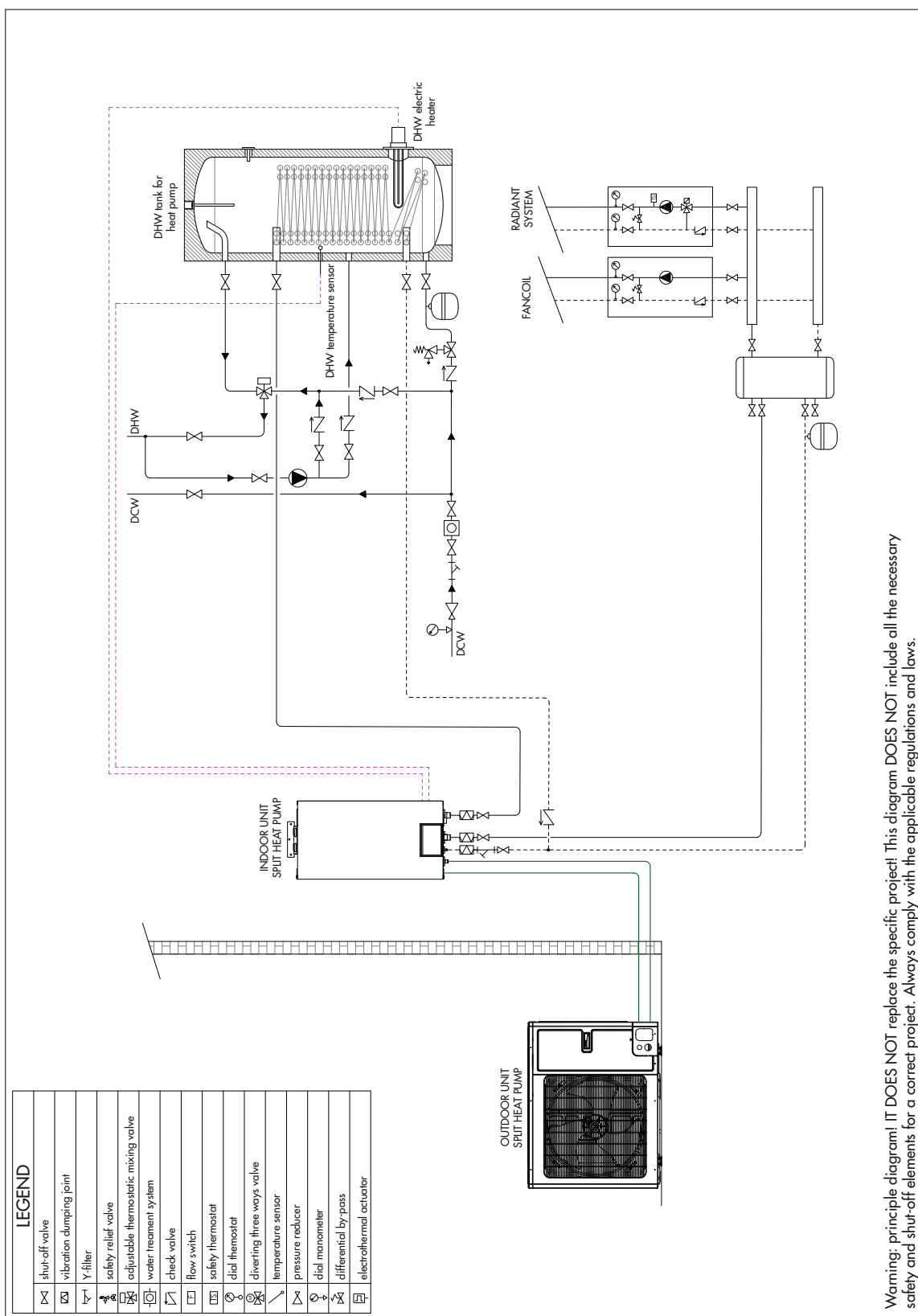
EXAMPLE 3

Radiant heating, single thermal zone and DHW with three-way valve and tank



EXAMPLE 4

Heating and Cooling with mixing modules and DHW with three-ways valve and tank





BUILT-IN SOLUTION

For SPLIT heat pumps

BUILT-IN SOLUTION

FOR SPLIT HEAT PUMPS

MAIN FEATURES

With the cabinet, the hydronic indoor unit of the X3 ARGO split heat pump can be installed built-in. This specific solution allows for reducing and optimising the installation spaces.

The production of DHW occurs by means of a three-way valve, installed directly on the unit. The cabinet, which is made of galvanised sheet steel, contains all the elements for setting up a space heating and/or cooling system and for producing DHW:

- Stainless steel DHW storage tank, equipped with a spiral corrugated fixed heat exchanger for increasing the heat exchange surface;
- Kit for connection to the indoor unit, with adequately configured and insulated pipes and an inertial storage tank. It is possible to directly use the pump supplied with the unit or a second pump in the primary/secondary circuit configuration;
- Safety and control device on the DHW and system sides.

BUILT-IN SOLUTION COMPONENTS (to be added to the indoor hydronic unit)

Code	Description
387030626	Built-in cabinet 2242 mm (H) x 998 mm (W) x 415 mm (D)
387030637	200 liters DHW storage tank with heat exchanger
387030638	X3 connection kit

ACCESSORIES

Code	Description
387030630	DHW inlet filter 3/4"
387030631	Pair of DHW shut-off valves 3/4"
387030632	Electrical resistance 1.5 kW for DHW tank
387030633	System output filter 3/4"
387030634	Pair of system shut-off valves 1"

MAIN COMPONENTS

1 X3 ARGO split hydronic indoor unit

2 DHW tank with the following characteristics:

- volume: 200 liters;
- AISI 316 L stainless steel structure;
- AISI 316 L stainless steel fixed heat exchanger;
- EPS insulation with graphite, thickness 25 mm.

3 Hydraulic kit for connection to the indoor unit, the main components of which include:

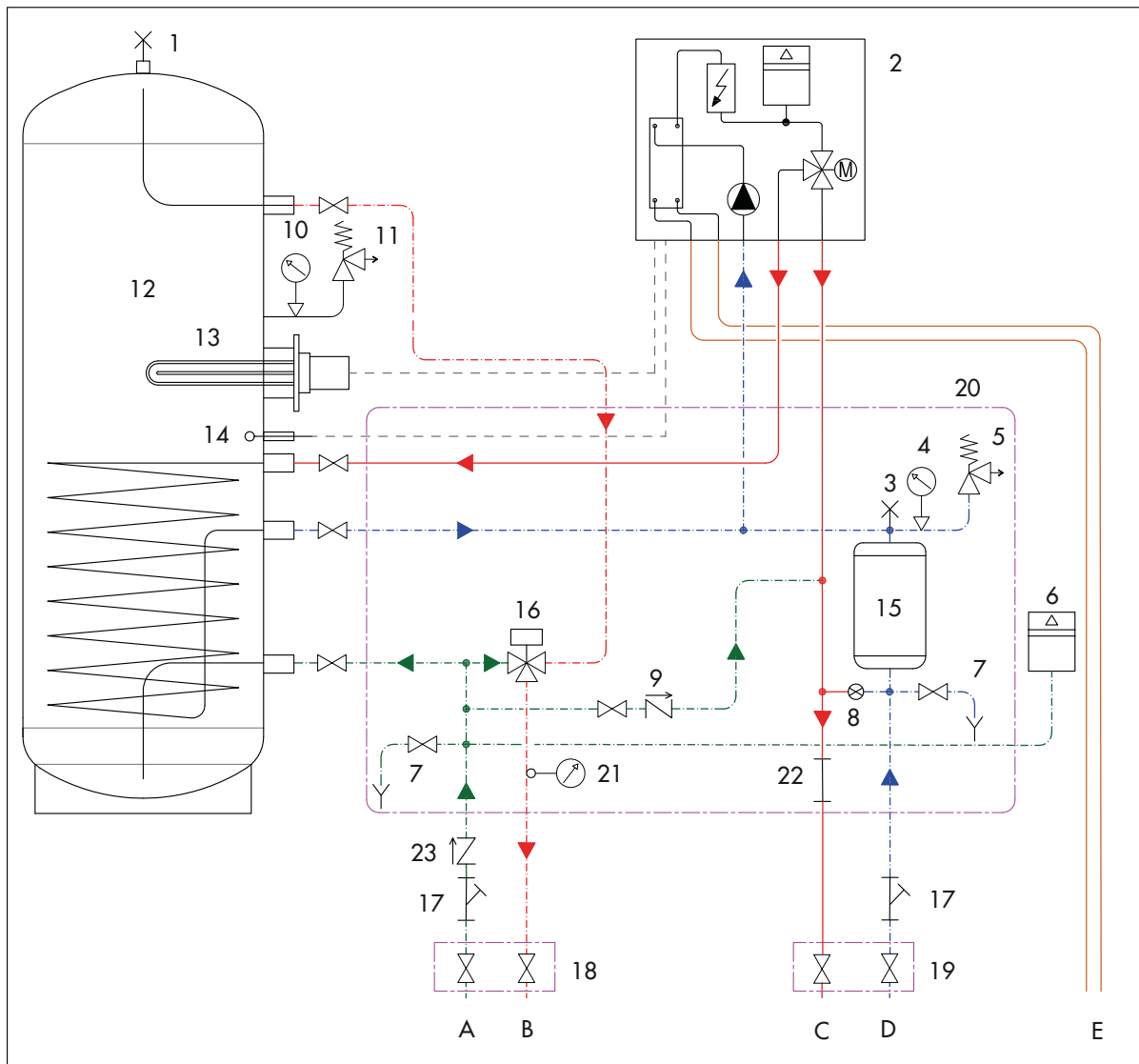
- AISI 316 L stainless steel 25 liters inertial tank;
- thermostatic mixer 25-50 °C;
- DHW-side expansion vessel, 6 bar, 12 liters;
- 6 bar safety valve on DHW side and 3 bar safety valve on system side;
- insulated connecting pipes.

4 Built-in metal cabinet, made of galvanised sheet steel



REFERENCE HYDRAULIC DIAGRAM

24



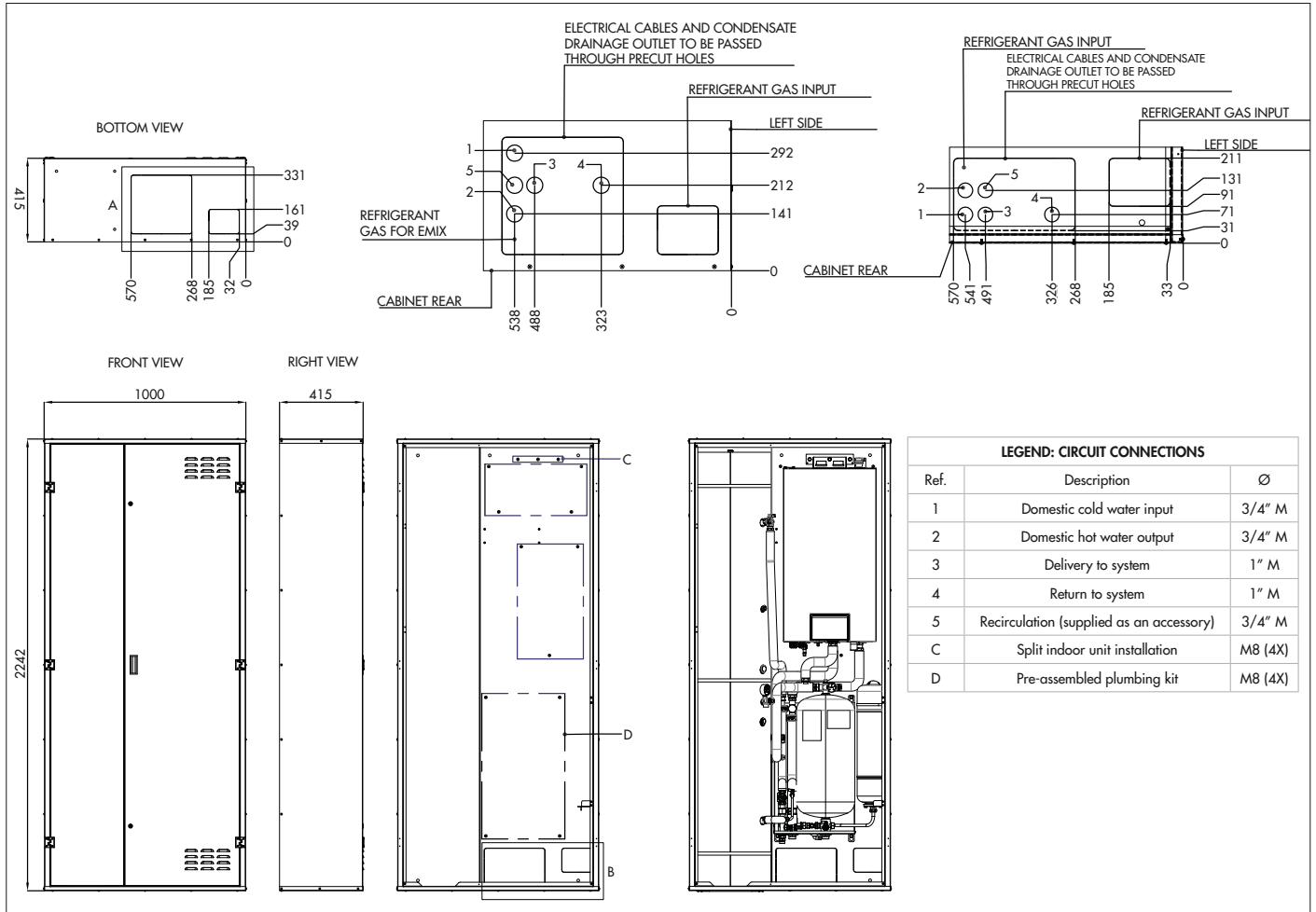
Key to components

- | | |
|---|--|
| 1. DHW tank manual air relief valve | 14. thermowell $\varnothing$ 6 mmx130 mm |
| 2. X3 ARGO split indoor unit | 15. grade AISI 316 L stainless steel system technical storage tank - 25 liters |
| 3. system manual air relief valve | 16. thermostatic mixing valve 25 °C-50 °C Kv=2.3 |
| 4. 0-4 bar system pressure gauge | 17. system and DHW filters |
| 5. safety valve for system, 3 bar | 18. 3/4" shut-off valve (optional) |
| 6. DHW expansion vessel, 6 bar - 12 liters | 19. 1" M shut-off valve (optional) |
| 7. discharge valve $\varnothing$ 1/2" | 20. pre-assembled hydronic module limits |
| 8. shut-off valve | 21. contact thermometer |
| 9. system filling non-return valve | 22. stub for secondary circuit hydronic pump configuration (not managed by the unit) |
| 10. 0-6 bar pressure gauge | 23. DHW non-return valve |
| 11. safety valve for DHW, 6 bar | 24. metal cabinet limit |
| 12. grade AISI 316 L stainless steel 200 liters DHW storage tank - pmax 8 bar | |
| 13. heating element 1.5 kW (optional) | |

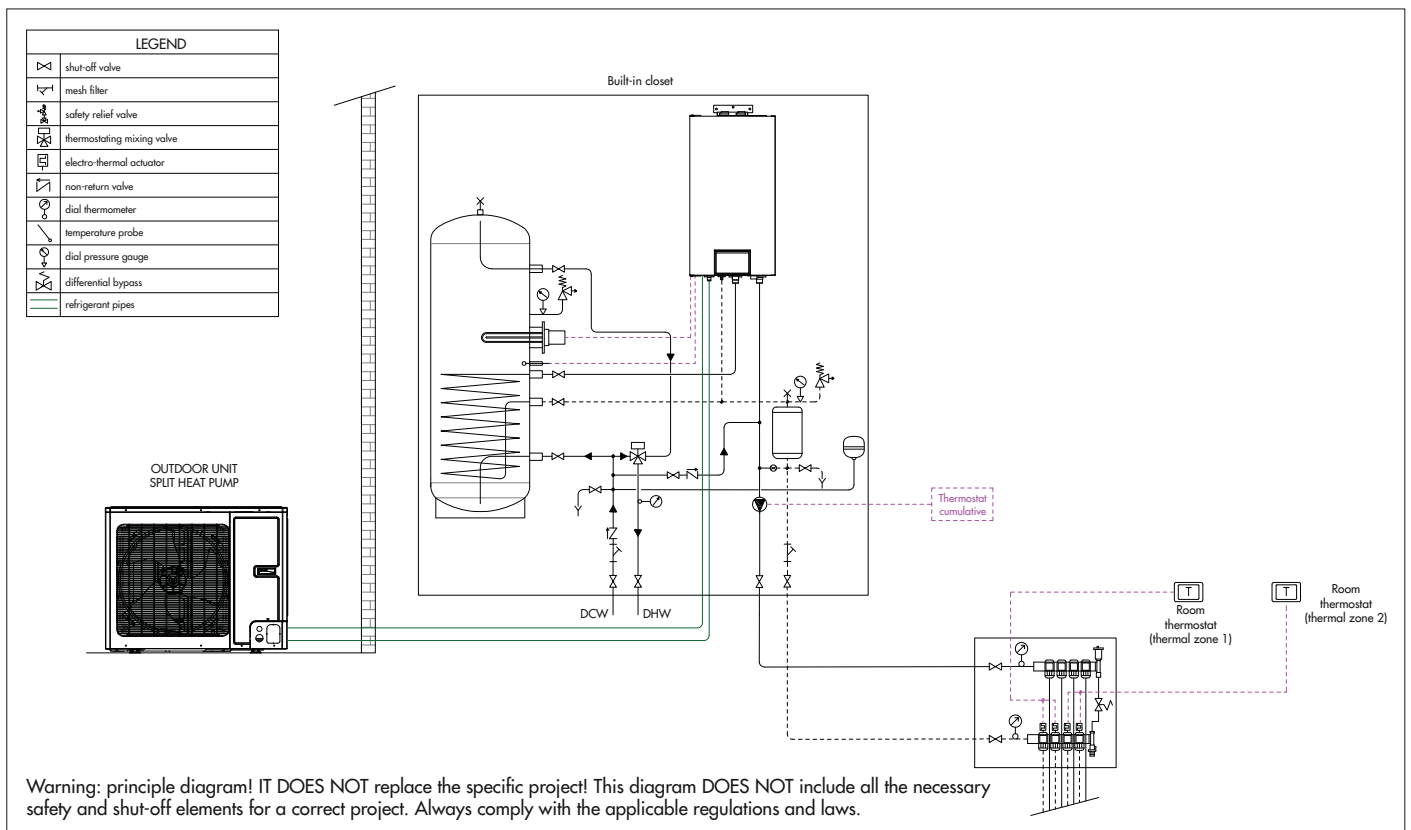
Key to fittings

- | | |
|-------------------------------------|---|
| A. 3/4" M domestic cold water inlet | D. 1" M system return |
| B. 3/4" M domestic hot water outlet | E. connection for indoor unit refrigerant pipes |
| C. 1" M system supply | |

DIMENSIONAL DRAWINGS



INSTALLATION EXAMPLE





ALL IN ONE

Single-phase 6-8-10 kW range

ALL-IN-ONE HEAT PUMPS

MAIN FEATURES



(Standard on the indoor unit)

Touch-screen control panel installed on the indoor unit

- All in one Air to Water heat pumps with integrated tank for the production of domestic hot water.
- New-generation DC Inverter technology.
- Equipped with the heating, cooling and domestic hot water production functions.
- Single-phase version with 6-8-10 kW heating capacity.
- Achieves very high efficiency levels in heating mode, up to 5 COP.
- It uses R32, a refrigerant with low impact on global warming and ozone layer, characterised by high energy efficiency and a 30% lower charge compared to R410A.
- The vapour-injection compressor, thanks to its special technology, guarantees exceptional performances within a wide operating range.
- The leaving water temperature range is 20 °C - 60 °C: this means that the heat pump can be used with radiant floor systems, fan coil units and also medium-temperature radiators.
- The DC brushless axial fans are designed to ensure aerodynamic optimisation: they guarantee low noise levels coupled with high efficiency and a high air flow rate.
- It is equipped with a heating element on the base to prevent ice build-up during winter operation.
- The outdoor unit is equipped with an electronic expansion valve, while the indoor unit contains - besides the tank - all the hydraulic components: inverter pump, plate heat exchanger, expansion vessel, safety valve, flow switch and water filter supplied (installation mandatory).

 Internal copper groove	 Quiet mode	 Weekly timer	 Heating down to low temperatures	 Door control	 Full protection	 Timer	 Child lock	 Wide operating range	 Wide voltage range	 Auto diagnosis	 Low-voltage start-up
 Auto restart memory	 Intelligent defrosting	 °C / °F switching	 Long-distance monitoring	 Exch., condenser gold fin treatment	 -25 °C Min. outdoor temp. heating	 +35 °C Max. outdoor temp. heating	 +10 °C Min. outdoor temp. cooling	 +48 °C Max. outdoor temp. cooling	 -25 °C Min. outdoor temp. DHW	 +45 °C Max. outdoor temp. DHW	 60 °C Max. output temp. DHW

A+++

Heating mode 35 °C

A++

Heating mode 55 °C

A

DHW

THE RANGE

		Model	Code		Rated capacity according to EN14511 (kW)		Integrated DHW tank capacity (l)
				1PH	 Heating (1)	 Cooling (2)	
OUTDOOR UNIT - 1PH		AGHPSA061SH	398600012	●	6.0	5.8	
		AGHPSA081SH	398600013	●	8.0	7.0	
		AGHPSA101SH	398600014	●	9.5	8.5	
HYDRONIC INDOOR UNIT		AGHPA061F	398600028	●	6.0	5.8	185
		AGHPA081F	398600029	●	8.0	7.0	185
		AGHPA101F	398600030	●	9.5	8.5	185

(1) Water temperature 30 °C/35 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

(2) Water temperature 23 °C/18 °C, outdoor air temperature 35 °C

INCLUDED ACCESSORIES

Ambient air temperature sensor
Y-shaped filter
Control panel (integrated into the indoor unit)

TECHNICAL DATA FOR 6 kW

MODEL					AGHPSA061			
Outdoor unit model					AGHPSA061SH			
Hydronic indoor unit model					AGHPA061F			
Matchable units for domestic hot water production (DHW)					Tank integrated into the indoor unit 185 liters - diverting valve included in the indoor unit			
					Cooling	Heating		
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	5.80	6.00		
			Rated electrical power input	kW _{el}	1.32	1.20		
			EER/COP		4.39	5.00		
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	4.09	5.90		
			Rated electrical power input	kW _{el}	1.28	1.51		
			EER/COP		3.20	3.91		
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	6.00			
			Seasonal energy efficiency η _s	%	179			
			Energy efficiency class		A+++			
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	5.00			
			Seasonal energy efficiency η _s	%	127			
			Energy efficiency class		A++			
DHW	DHW performance according to EN 16147	AVERAGE climate	Load profile		L			
			Energy efficiency class		A			
			Water heating efficiency - ERP η _{wh}	%	101			
Indoor unit			Nominal water flow rate	m³/h	at 35 °C	1.03		
					at 45 °C	1.02		
					at 7 °C	0.70		
					at 18 °C	1.00		
			Minimum efficient water volume of the system		liters	40		
			Maximum delivery water temperature		°C	Up to 60		
			Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	220-240/1/50		
			Electrical power input		kW	3.10		
			Heating element		n×kW	2×1.5		
			Expansion vessel		liters	10		
			Maximum circulator pump head		kPa	see H/Q graph		
			Hydraulic connections		inches	G1" female		
			Safety valve		bar	3		
			Indoor unit sound pressure		dB(A)	29	29	
			Net weight		kg	210		
			Dimensions (H/W/D)		mm	1756/600/600		
			DHW integrated capacity tank		liters	185		
			Outdoor unit			Outdoor temperature range (heating)		°C
Outdoor temperature range (cooling)		°C				+10/+48		
Electrical power supply		V/Ph/Hz				220-240~/1/50		
Maximum power input (cooling)		kW				2.30		
Maximum power input (heating)		kW				2.30		
Maximum current draw (cooling)		A				10		
Maximum current draw (heating)		A				10		
Liquid cooling pipe diameter		mm (inches)				6.35 (1/4)		
Gas cooling pipe diameter		mm (inches)				12.7 (1/2)		
Outdoor unit sound pressure		dB(A)				52	52	
Fan air flow rate		m³/h				3200		
Net weight		kg				55		
Dimensions (H/W/D)		mm				702/975/396		
Compressor type						Twin Rotary with vapour injection		
Refrigerant		Type and GWP					R32/675 kg CO ₂ eq.	
		Quantity					1 kg/0.675 tons CO ₂ eq.	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

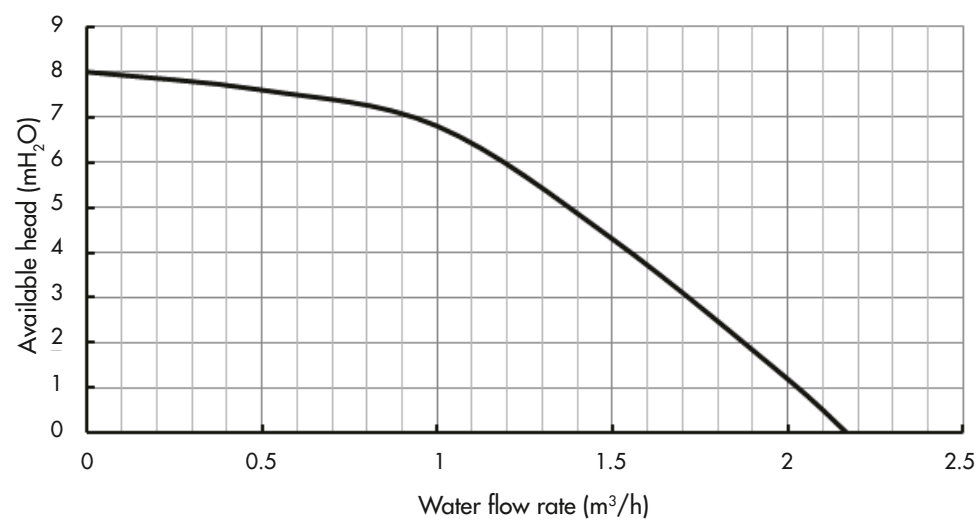
LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA061)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	3.35	4.35	3.72	4.19	3.93	4.06	4.17	3.87	4.25	3.55	4.09	3.20	3.72	2.65	2.90	1.95	2.45	1.57
8	3.48	4.47	3.89	4.31	4.09	4.19	4.34	3.99	4.42	3.64	4.25	3.29	3.89	2.75	3.03	2.01	2.54	1.63
9	3.64	4.67	4.01	4.47	4.21	4.35	4.46	4.12	4.54	3.80	4.38	3.42	4.01	2.84	3.15	2.08	2.66	1.66
10	3.72	4.79	4.13	4.60	4.38	4.47	4.62	4.25	4.70	3.90	4.54	3.51	4.13	2.91	3.23	2.17	2.74	1.73
11	3.84	4.92	4.29	4.76	4.50	4.60	4.79	4.41	4.91	4.06	4.70	3.64	4.29	3.00	3.31	2.20	2.82	1.76
12	3.97	5.08	4.42	4.92	4.66	4.76	4.95	4.54	5.07	4.15	4.87	3.74	4.42	3.10	3.44	2.30	2.90	1.85
13	4.13	5.24	4.58	5.05	4.79	4.89	5.11	4.67	5.19	4.28	4.99	3.87	4.58	3.20	3.56	2.33	2.99	1.89
14	4.25	5.40	4.66	5.21	4.95	5.05	5.28	4.79	5.36	4.41	5.15	3.96	4.66	3.29	3.68	2.43	3.07	1.95
15	4.34	5.53	4.83	5.34	5.11	5.18	5.44	4.92	5.52	4.51	5.32	4.09	4.83	3.39	3.76	2.49	3.19	1.98
18	4.74	5.98	5.24	5.75	5.52	5.59	5.89	5.34	6.01	4.89	5.77	4.41	5.24	3.64	4.09	2.68	3.48	2.17
20	4.95	6.29	5.52	6.07	5.85	5.88	6.18	5.59	6.30	5.14	6.05	4.63	5.52	3.83	4.34	2.84	3.64	2.27
23	5.36	6.74	5.93	6.49	6.26	6.33	6.67	6.01	6.79	5.50	6.54	4.95	5.93	4.12	4.62	3.00	3.93	2.43
25	5.60	7.03	6.22	6.77	6.54	6.58	6.95	6.29	7.12	5.75	6.83	5.18	6.22	4.31	4.87	3.16	4.09	2.56

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	2.94	4.34	3.12	4.57	3.72	4.88	4.26	5.08	5.16	5.39	5.76	5.63	6.36	5.86	6.24	6.10	6.42	6.37	6.78	6.95	6.72	7.38	6.12	7.31	5.34	7.97	4.20	8.44
30	2.70	3.52	3.06	3.79	3.60	4.06	4.14	4.30	4.74	4.53	5.22	4.77	5.82	5.00	6.18	5.55	6.36	5.90	6.72	6.29	6.66	6.72	6.06	6.72	5.34	7.27	4.14	7.78
35	2.52	2.97	2.88	3.13	3.36	3.32	3.90	3.59	4.26	3.83	4.80	4.06	5.22	4.18	6.00	5.00	6.30	5.27	6.66	5.74	6.60	5.98	6.00	5.98	5.28	6.64	4.08	7.03
40	2.46	2.54	2.88	2.81	3.36	3.05	3.90	3.24	4.26	3.40	4.74	3.67	5.16	3.91	6.00	4.45	6.24	4.69	6.60	5.08	6.54	5.35	5.94	5.31	5.22	5.86	4.08	6.25
45			2.88	2.46	3.36	2.70	3.90	2.93	4.20	3.05	4.68	3.24	5.10	3.44	6.00	3.91	6.18	4.10	6.54	4.45	6.48	4.69	5.88	4.92	5.16	5.16	4.02	5.47
50					3.24	2.27	3.78	2.46	4.14	2.58	4.62	2.77	5.04	2.85	5.94	3.36	6.12	3.52	6.48	3.87	6.42	4.02	5.82	4.22	5.10	4.42	3.96	4.73
55							3.60	2.03	4.14	2.11	4.56	2.31	4.98	2.42	5.88	2.81	6.06	2.97	6.42	3.20	6.36	3.40	5.76	3.52	5.04	3.71	3.96	3.99
60									4.08	1.72	4.56	1.80	4.92	1.91	5.82	2.27	6.00	2.34	6.36	2.50	6.30	2.62	5.70	2.77	4.98	2.89	3.90	3.09

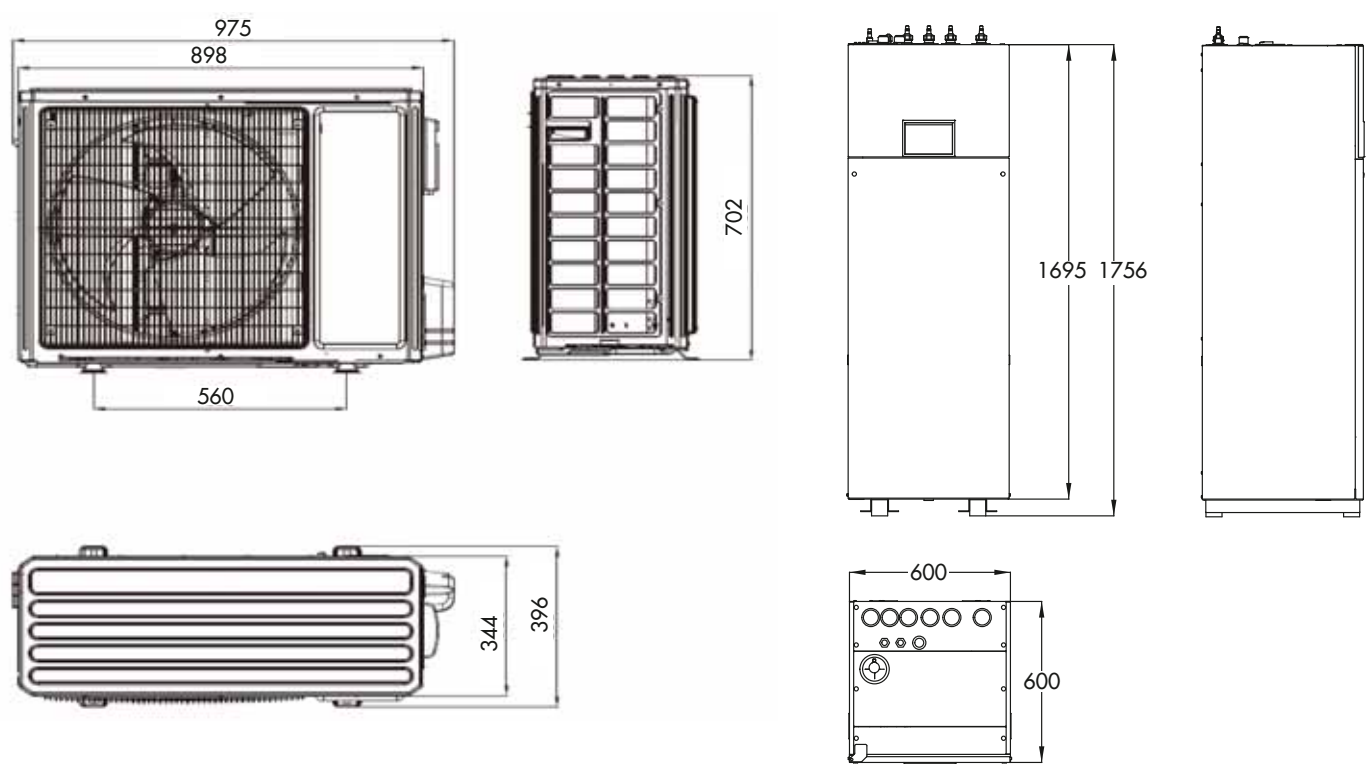
LWT: Leaving water temperature
Qh: Heating capacity
COP: Coefficient of performance

LWT: Leaving water temperature
Qc: Cooling capacity
EER: Energy efficiency ratio

FLOW RATE CURVES 6 kW



DIMENSIONAL DRAWINGS 6 kW



OUTDOOR UNIT 6 kW

INDOOR UNIT 6 kW

TECHNICAL DATA FOR 8-10 kW

MODEL					AGHPSA081				
Outdoor unit model					AGHPSA081SH				
Hydronic indoor unit model					AGHPA081F				
Matchable units for domestic hot water production (DHW)					Tank integrated into the indoor unit 185 liters - diverting valve included in the indoor unit				
					Cooling	Heating			
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	7.00	8.00			
			Rated electrical power input	kW _{el}	1.75	1.70			
			EER/COP		4.00	4.71			
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	5.30	8.00			
			Rated electrical power input	kW _{el}	1.73	2.14			
			EER/COP		3.06	3.74			
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	7.00				
			Seasonal energy efficiency η _s	%	181				
			Energy efficiency class		A+++				
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (Pdesign _h)	kW	7.00				
			Seasonal energy efficiency η _s	%	129				
			Energy efficiency class		A++				
DHW performance according to EN 16147	AVERAGE climate	Load profile		L					
		Energy efficiency class		A					
		Water heating efficiency - ERP η _{wh}	%	89					
Indoor unit			Nominal water flow rate	m³/h	at 35 °C	1.38			
					at 45 °C	1.38			
					at 7 °C	0.91			
					at 18 °C	1.20			
			Minimum efficient water volume of the system		liters	40			
			Maximum delivery water temperature		°C	Up to 60			
			Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	220-240/1/50			
			Electrical power input		kW	3.10			
			Heating element		n×kW	2×3			
			Expansion vessel		v	10			
			Maximum circulator pump head		kPa	see H/Q graph			
			Hydraulic connections		inches	G1" female			
			Safety valve		bar	3			
			Indoor unit sound pressure		dB(A)	29	29		
			Net weight		kg	210			
			Dimensions (H/W/D)		mm	1756/600/600			
			DHW integrated capacity tank		liters	185			
			Outdoor unit			Outdoor temperature range (heating)		°C	-25/+35
Outdoor temperature range (cooling)		°C				+10/+48			
Electrical power supply		V/Ph/Hz				220-240~/1/50			
Maximum power input (cooling)		kW				4.32			
Maximum power input (heating)		kW				3.00			
Maximum current draw (cooling)		A				19			
Maximum current draw (heating)		A				13			
Liquid cooling pipe diameter		mm (inches)				6.35 (1/4)			
Gas cooling pipe diameter		mm (inches)				12.7 (1/2)			
Outdoor unit sound pressure		dB(A)				55	55		
Fan air flow rate		m³/h				3300			
Net weight		kg				82			
Dimensions (H/W/D)		mm				787/982/427			
Compressor type						Twin Rotary with vapour injection			
Refrigerant						Type and GWP		R32/675 kg CO ₂ eq.	
						Quantity		1.6 kg/1.08 tons CO ₂ eq.	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.

These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

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TECHNICAL DATA FOR 8-10 kW

MODEL					AGHPSA101				
Outdoor unit model					AGHPSA101SH				
Hydronic indoor unit model					AGHPA101F				
Matchable units for domestic hot water production (DHW)					Tank integrated into the indoor unit 185 liters - diverting valve included in the indoor unit				
					Cooling	Heating			
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	8.50	9.50			
			Rated electrical power input	kW _{el}	2.24	2.07			
			EER/COP		3.79	4.59			
		Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	6.50	9.50			
			Rated electrical power input	kW _{el}	2.27	2.64			
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	EER/COP		2.86	3.60			
			Design thermal load (P _{design,h})	kW	9.00				
			Seasonal energy efficiency η _s	%	181				
		MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Energy efficiency class		A+++				
			Design thermal load (P _{design,h})	kW	8.00				
DHW	DHW performance according to EN 16147	AVERAGE climate	Seasonal energy efficiency η _s	%	127				
			Energy efficiency class		A++				
			Load profile		L				
			Energy efficiency class		A				
			Water heating efficiency - ERP η _{wh}	%	89				
Indoor unit			Nominal water flow rate	m³/h	at 35 °C	1.63			
					at 45 °C	1.63			
					at 7 °C	1.12			
					at 18 °C	1.46			
			Minimum efficient water volume of the system		liters	80			
			Maximum delivery water temperature		°C	Up to 60			
			Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	220-240/1/50			
			Electrical power input		kW	3.10			
			Heating element		nxkW	2x3			
			Expansion vessel		liters	10			
			Maximum circulator pump head		kPa	see H/Q graph			
			Hydraulic connections		inches	G1" female			
			Safety valve		bar	3			
			Indoor unit sound pressure		dB(A)	29	29		
			Net weight		kg	210			
			Dimensions (H/W/D)		mm	1756/600/600			
			DHW integrated capacity tank		liters	185			
			Outdoor unit			Outdoor temperature range (heating)	°C	-25/+35	
						Outdoor temperature range (cooling)	°C	+10/+48	
Electrical power supply	V/Ph/Hz	220-240~/1/50							
Maximum power input (cooling)	kW	5.06							
Maximum power input (heating)	kW	3.40							
Maximum current draw (cooling)	A	22							
Maximum current draw (heating)	A	15							
Liquid cooling pipe diameter	mm (inches)	6.35 (1/4)							
Gas cooling pipe diameter	mm (inches)	12.7 (1/2)							
Outdoor unit sound pressure	dB(A)	55				55			
Fan air flow rate	m³/h	3300							
Net weight	kg	82							
Dimensions (H/W/D)	mm	787/982/427							
Compressor type		Twin Rotary with vapour injection							
Refrigerant						Type and GWP		R32/675 kg CO ₂ eq.	
			Quantity		1.6 kg/1.08 tons CO ₂ eq.				

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
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CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA081)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	4.35	4.17	4.82	4.01	5.09	3.89	5.41	3.71	5.51	3.40	5.30	3.06	4.82	2.54	3.76	1.87	3.18	1.50
8	4.51	4.26	4.98	4.11	5.25	4.01	5.57	3.80	6.04	3.49	5.46	3.16	4.98	2.60	3.87	1.90	3.29	1.53
9	4.56	4.41	5.09	4.23	5.35	4.11	5.72	3.92	6.20	3.58	5.62	3.25	5.09	2.70	3.98	1.96	3.34	1.56
10	4.72	4.50	5.25	4.35	5.51	4.23	5.88	4.01	6.36	3.68	5.78	3.31	5.25	2.76	4.08	1.99	3.45	1.62
11	4.88	4.63	5.41	4.47	5.72	4.35	6.04	4.14	6.57	3.80	5.94	3.40	5.41	2.85	4.19	2.08	3.55	1.68
12	4.98	4.75	5.57	4.56	5.88	4.44	6.25	4.20	6.73	3.89	6.10	3.49	5.57	2.91	4.35	2.14	3.66	1.72
13	5.09	4.87	5.67	4.72	5.99	4.56	6.31	4.35	6.89	3.98	6.20	3.58	5.67	3.00	4.40	2.18	3.71	1.75
14	5.25	4.99	5.83	4.81	6.10	4.66	6.47	4.44	7.05	4.07	6.36	3.68	5.83	3.06	4.51	2.24	3.82	1.78
15	5.35	5.15	5.99	4.93	6.25	4.78	6.68	4.53	7.21	4.17	6.52	3.77	5.99	3.12	4.66	2.30	3.92	1.84
18	5.78	5.45	6.36	5.27	6.73	5.12	7.16	4.84	7.69	4.44	7.00	4.01	6.36	3.31	4.98	2.45	4.24	1.96
20	5.99	5.70	6.63	5.48	7.00	5.33	7.42	5.09	8.06	4.66	7.31	4.20	6.63	3.46	5.14	2.54	4.40	2.05
23	6.41	6.04	7.10	5.79	7.47	5.64	7.90	5.39	8.53	4.93	7.79	4.44	7.10	3.68	5.51	2.73	4.66	2.18
25	6.63	6.28	7.37	6.07	7.79	5.85	8.22	5.58	8.85	5.12	8.06	4.63	7.37	3.83	5.72	2.82	4.82	2.27

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	3.44	4.04	4.16	4.26	4.96	4.56	5.68	4.75	6.08	5.05	6.80	5.27	7.52	5.46	7.36	5.72	7.60	5.94	8.00	6.50	7.92	6.88	7.20	6.84	6.32	7.44	4.96	7.89
30	3.36	3.29	4.08	3.59	4.80	3.81	5.52	4.04	5.92	4.26	6.56	4.49	7.28	4.71	7.76	5.23	8.00	5.53	8.48	5.94	8.40	6.32	7.60	6.32	6.64	6.84	5.20	7.29
35	3.28	2.77	3.84	2.92	4.48	3.10	5.20	3.40	5.60	3.59	6.24	3.81	6.80	3.93	8.00	4.71	8.24	4.97	8.72	5.38	8.64	5.61	7.84	5.61	6.88	6.24	5.36	6.62
40	3.28	2.39	3.84	2.65	4.48	2.92	5.20	3.10	5.60	3.25	6.24	3.51	6.80	3.70	8.00	4.22	8.24	4.45	8.72	4.86	8.64	5.08	7.84	5.05	6.88	5.57	5.36	5.94
45			3.84	2.36	4.48	2.58	5.20	2.80	5.60	2.92	6.24	3.10	6.80	3.29	8.00	3.74	8.24	3.93	8.72	4.26	8.64	4.49	7.84	4.71	6.88	4.93	5.36	5.23
50					4.32	2.21	5.04	2.39	5.44	2.50	6.08	2.69	6.56	2.77	7.76	3.25	8.00	3.40	8.48	3.74	8.40	3.93	7.60	4.11	6.64	4.30	5.20	4.60
55							4.80	1.98	5.12	2.09	5.76	2.28	6.24	2.39	7.36	2.77	7.60	2.92	8.00	3.18	7.92	3.33	7.20	3.48	6.32	3.66	4.96	3.93
60									4.88	1.72	5.44	1.79	5.92	1.91	6.96	2.28	7.20	2.32	7.60	2.50	7.52	2.62	6.80	2.77	6.00	2.88	4.64	3.10

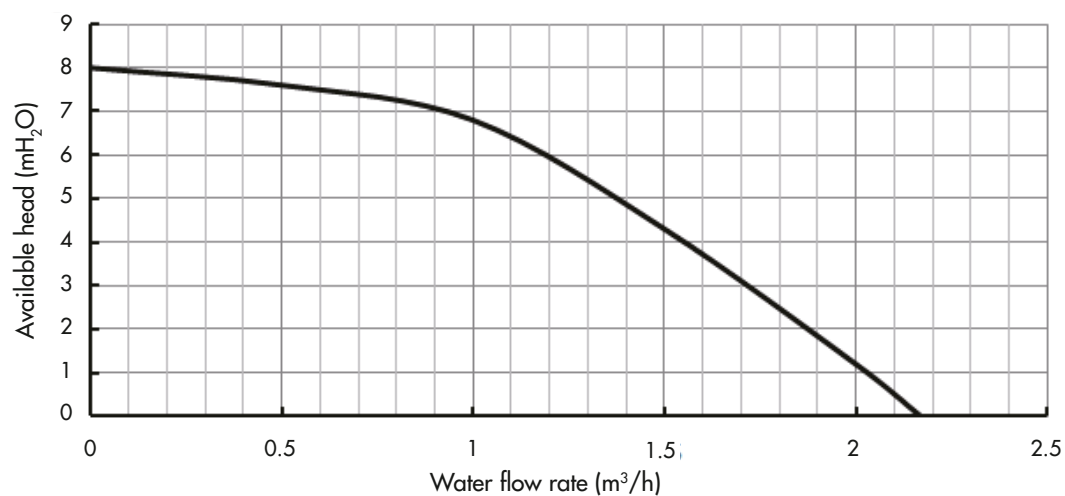
	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA101)																	
LWT [°C]	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	5.33	3.89	5.92	3.75	6.24	3.64	6.63	3.46	6.76	3.18	6.50	2.86	5.92	2.38	4.62	1.75	3.90	1.40
8	5.46	4.01	6.11	3.87	6.44	3.75	6.83	3.58	6.96	3.26	6.70	2.95	6.11	2.43	4.75	1.78	4.03	1.46
9	5.66	4.15	6.24	4.01	6.57	3.87	7.02	3.69	7.15	3.38	6.89	3.04	6.24	2.52	4.94	1.86	4.10	1.52
10	5.79	4.24	6.37	4.09	6.70	3.95	7.22	3.81	7.35	3.46	7.02	3.12	6.37	2.58	5.01	1.92	4.23	1.52
11	5.92	4.35	6.57	4.21	6.96	4.07	7.35	3.87	7.54	3.58	7.22	3.21	6.57	2.66	5.07	1.95	4.36	1.57
12	6.11	4.47	6.70	4.30	7.15	4.18	7.54	3.98	7.67	3.67	7.41	3.29	6.70	2.72	5.27	2.00	4.49	1.60
13	6.24	4.61	6.89	4.44	7.35	4.30	7.74	4.09	7.87	3.78	7.61	3.38	6.89	2.83	5.40	2.09	4.55	1.66
14	6.44	4.70	7.15	4.52	7.48	4.41	7.93	4.21	8.13	3.84	7.80	3.46	7.15	2.89	5.53	2.12	4.68	1.72
15	6.57	4.84	7.28	4.64	7.67	4.50	8.19	4.30	8.32	3.92	8.00	3.55	7.28	2.95	5.72	2.15	4.81	1.75
18	7.02	5.18	7.74	5.01	8.13	4.84	8.65	4.61	8.91	4.24	8.52	3.81	7.74	3.15	6.05	2.32	5.14	1.86
20	7.35	5.44	8.13	5.21	8.58	5.10	9.10	4.84	9.30	4.44	8.91	3.98	8.13	3.32	6.31	2.43	5.33	1.98
23	7.74	5.76	8.58	5.53	9.04	5.38	9.62	5.13	9.82	4.70	9.43	4.24	8.58	3.49	6.63	2.58	5.66	2.06
25	8.00	5.98	8.91	5.78	9.36	5.58	10.01	5.33	10.21	4.90	9.82	4.41	8.91	3.67	6.96	2.69	0.00	2.18

LWT: Leaving water temperature
Qh: Heating capacity
COP: Coefficient of performance

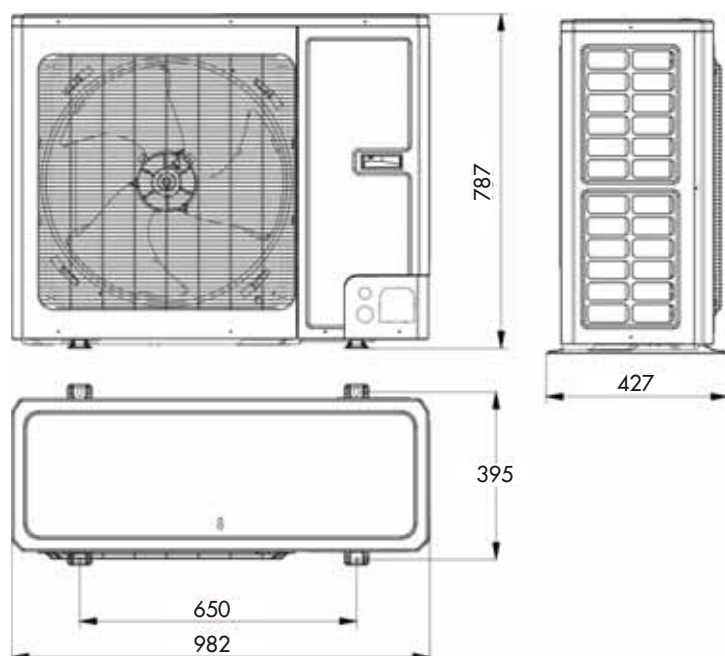
LWT: Leaving water temperature
Qc: Cooling capacity
EER: Energy efficiency ratio

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	4.09	3.99	4.94	4.21	5.89	4.50	6.75	4.68	7.22	4.97	8.08	5.18	8.93	5.40	8.74	5.61	9.03	5.87	9.50	6.41	9.41	6.80	8.55	6.73	7.51	7.34	5.89	7.77
30	3.99	3.24	4.85	3.49	5.70	3.74	6.56	3.96	7.03	4.17	7.79	4.39	8.65	4.61	9.22	5.11	9.50	5.43	10.07	5.79	9.98	6.19	9.03	6.19	7.89	6.69	6.18	7.16
35	3.90	2.73	4.56	2.88	5.32	3.06	6.18	3.31	6.65	3.53	7.41	3.74	8.08	3.85	9.50	4.61	9.79	4.86	10.36	5.29	10.26	5.51	9.31	5.51	8.17	6.12	6.37	6.48
40	3.90	2.34	4.56	2.59	5.32	2.81	6.18	2.99	6.65	3.13	7.41	3.38	8.08	3.60	9.50	4.10	9.79	4.32	10.36	4.68	10.26	4.93	9.31	4.89	8.17	5.40	6.37	5.76
45			4.56	2.27	5.32	2.48	6.18	2.70	6.65	2.81	7.41	2.99	8.08	3.17	9.50	3.60	9.79	3.78	10.36	4.10	10.26	4.32	9.31	4.53	8.17	4.75	6.37	5.04
50					5.13	2.09	5.99	2.27	6.46	2.38	7.22	2.55	7.79	2.63	9.22	3.09	9.50	3.24	10.07	3.56	9.98	3.71	9.03	3.89	7.89	4.07	6.18	4.35
55							5.70	1.87	6.08	1.94	6.84	2.12	7.41	2.23	8.74	2.59	9.03	2.73	9.50	2.95	9.41	3.13	8.55	3.24	7.51	3.42	5.89	3.67
60									5.80	1.58	6.46	1.66	7.03	1.76	8.27	2.09	8.55	2.16	9.03	2.30	8.93	2.41	8.08	2.55	7.13	2.66	5.51	2.84

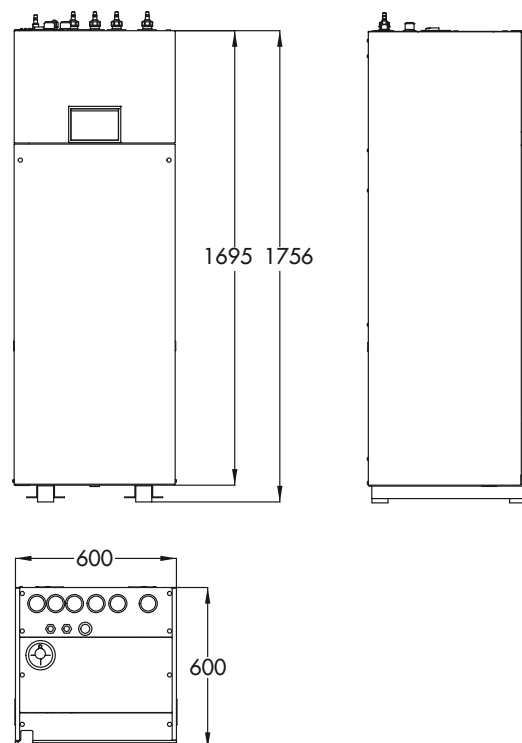
FLOW RATE CURVES 8-10 kW



DIMENSIONAL DRAWINGS 8-10 kW

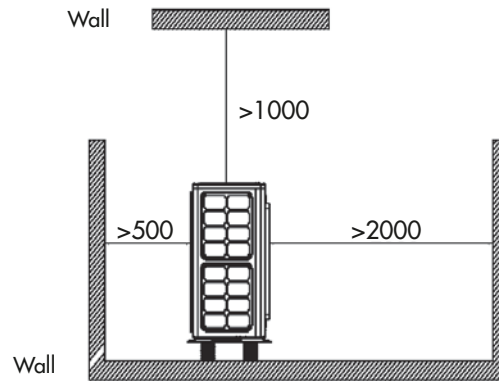
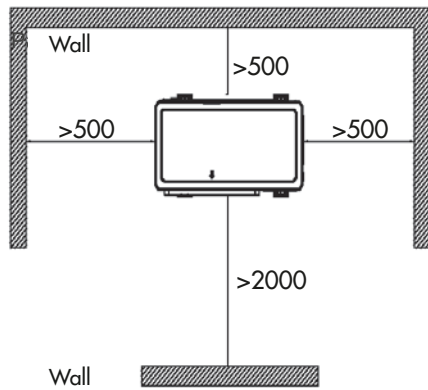


OUTDOOR UNIT 8-10 kW

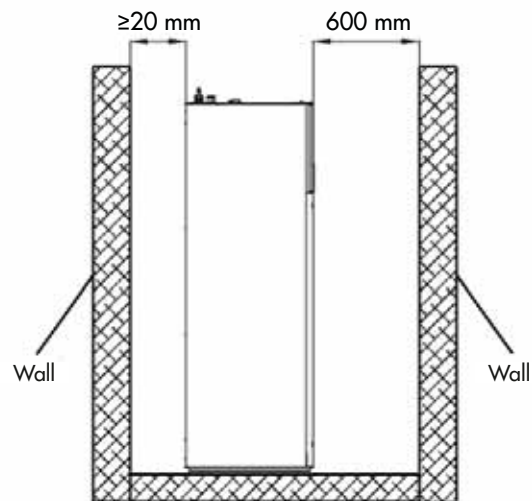
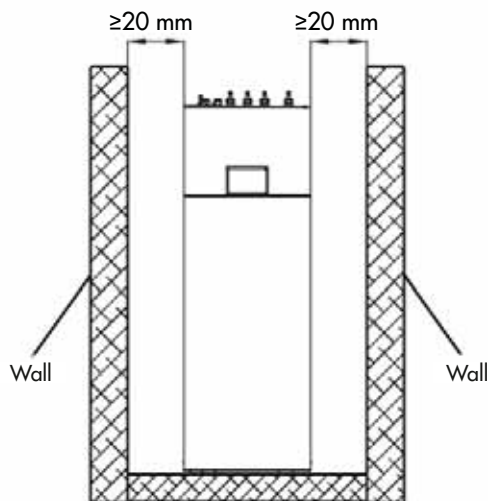


INDOOR UNIT 8-10 kW

SPACE REQUIRED FOR OUTDOOR UNIT INSTALLATION 6-8-10 kW



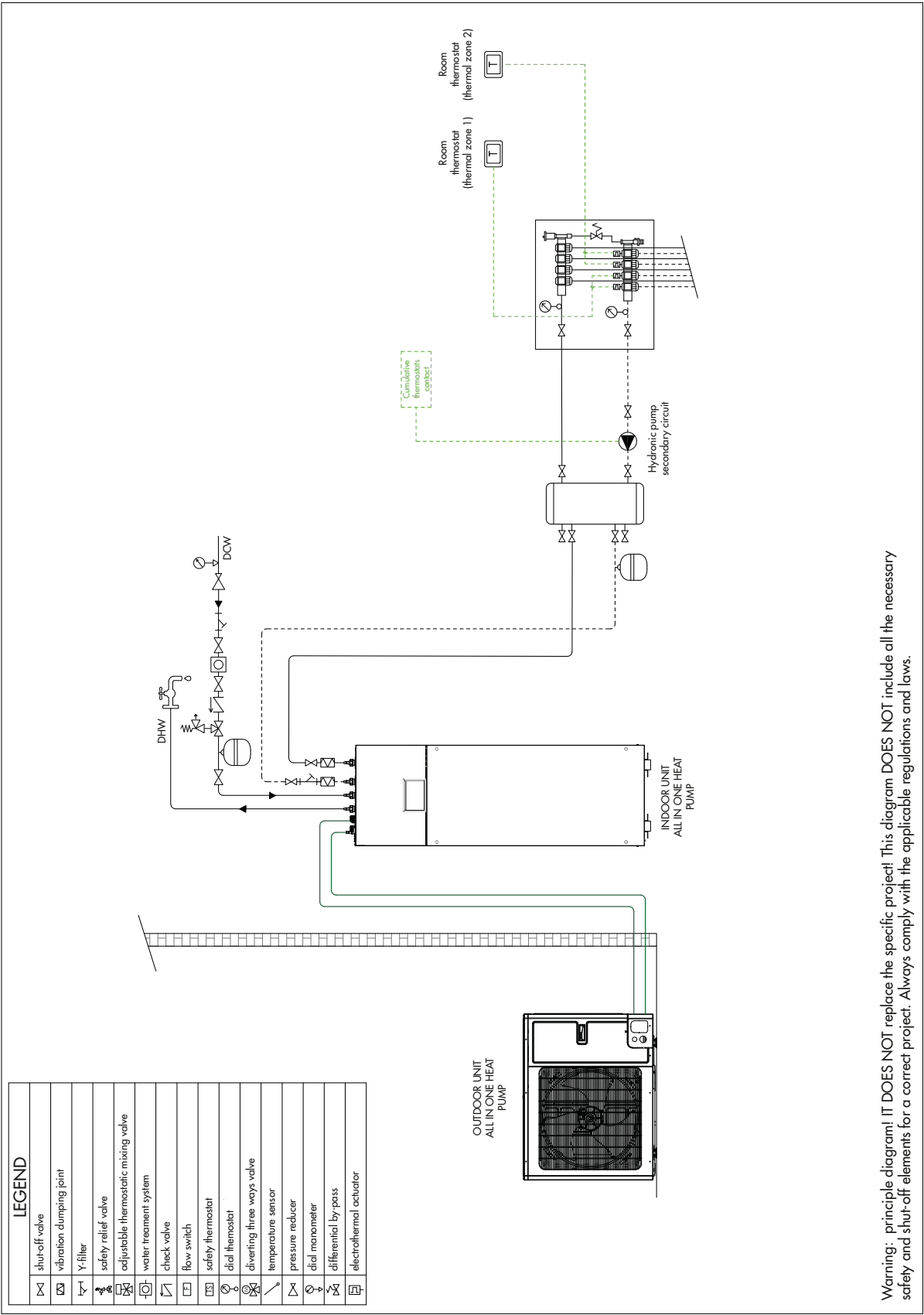
SPACE REQUIRED FOR INDOOR UNIT INSTALLATION 6-8-10 kW



INSTALLATION EXAMPLES

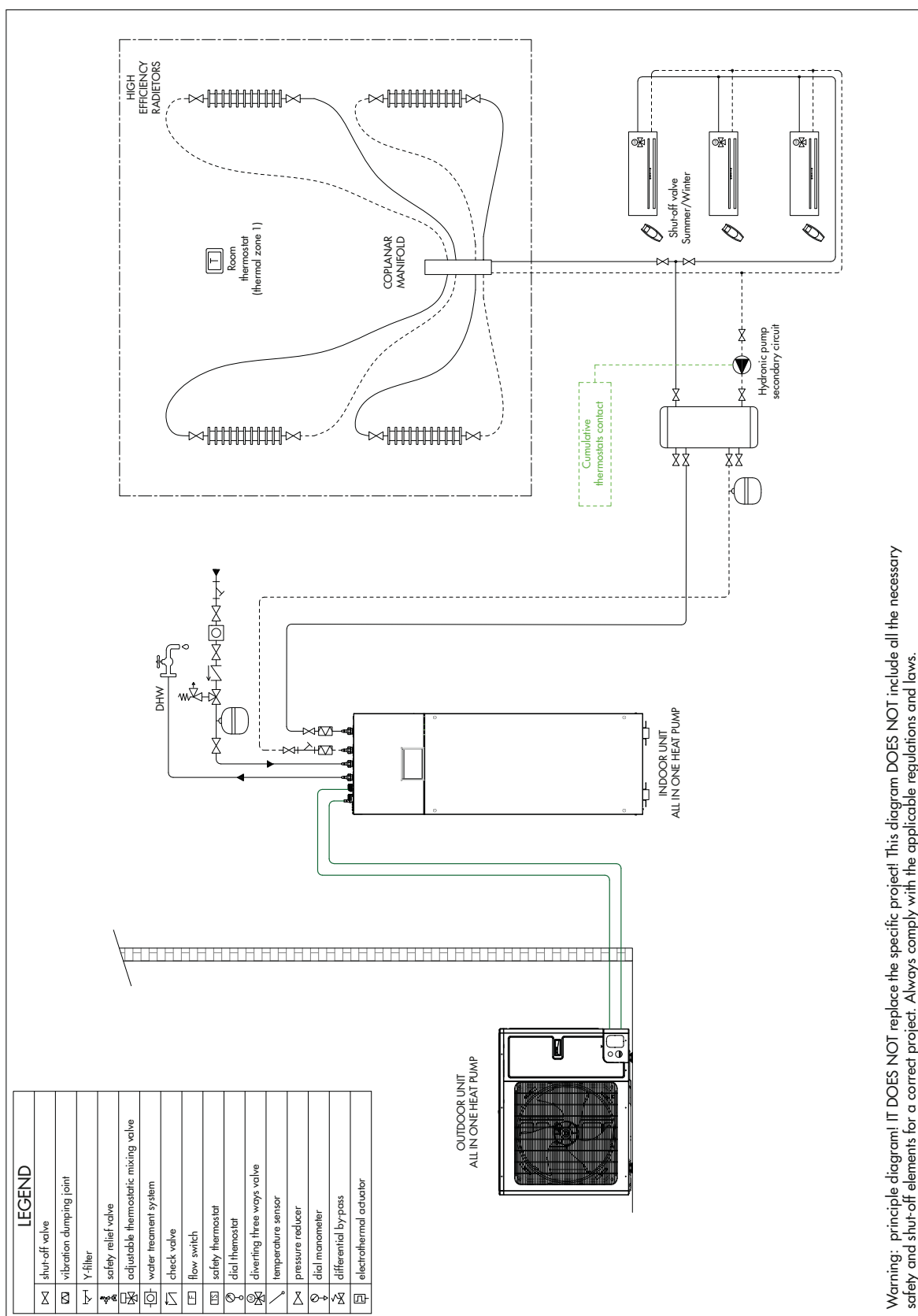
EXAMPLE 1

Radiant heating and DHW integrated in the indoor unit



EXAMPLE 2

Heating by high efficiency radiators, cooling by FCU units and DHW integrated in the indoor unit





HEAT PUMPS ACCESSORIES

ACCESSORIES

Image	Code	Description	Applicability			
			GENERA	X3 MONOBLOC heat pumps	X3 SPLIT heat pumps	X3 ALL IN ONE heat pumps
	387030210	Bidirectional servomotor for diverting valve, 230 Vac, three points	●	●		
	387030209	3-way diverting valve, 1"	●	●		
	387030701	200 liters DHW Tank - 1 heat exchanger for heat pump	●	●	●	
	387030702	300 liters DHW Tank - 1 heat exchanger for heat pump	●	●	●	
	387030700	300 liters DHW Tank - 2 heat exchangers for heat pump and solar power system	●	●	●	
	387030208	3 kW electric heater for DHW tank	●	●	●	
	387030727	Additional electric heating element for internal installation 3 kW 1ph	●	●		
	387030728	Additional electric heating element for internal installation 3 kW 3ph	●	●		

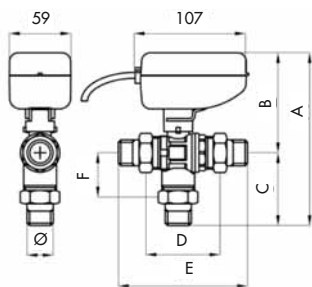
Image	Code	Description	Applicability			
			GENERA	X3 MONOBLOC heat pumps	X3 SPLIT heat pumps	X3 ALL IN ONE heat pumps
	387030705	45 liters tank/ isolated separator, 6 connections	●	●	●	●
	387030706	85 liters tank/ isolated separator, 6 connections	●	●	●	●
	387030738	COP-meter		●	●	●
	387030739	Additional phase transformer		●	●	●
	108602	Anti-freeze valve 1" (1 pcs.)	●			

ACCESSORIES

DIVERTING VALVE



The diverting valve consists of 2 elements: the valve body and the servomotor, supplied separately.



DIMENSIONS (mm)

ND	Ø OUTLETS	Ø VALVE BODY	A	B	C	D	E	F
20	3/4"	1"	170	100	70	67	128	40

SERVOMOTOR

Code	Description
387030210	Bidirectional servomotor for diverting valve, 230 Vac, three points



TECHNICAL DATA

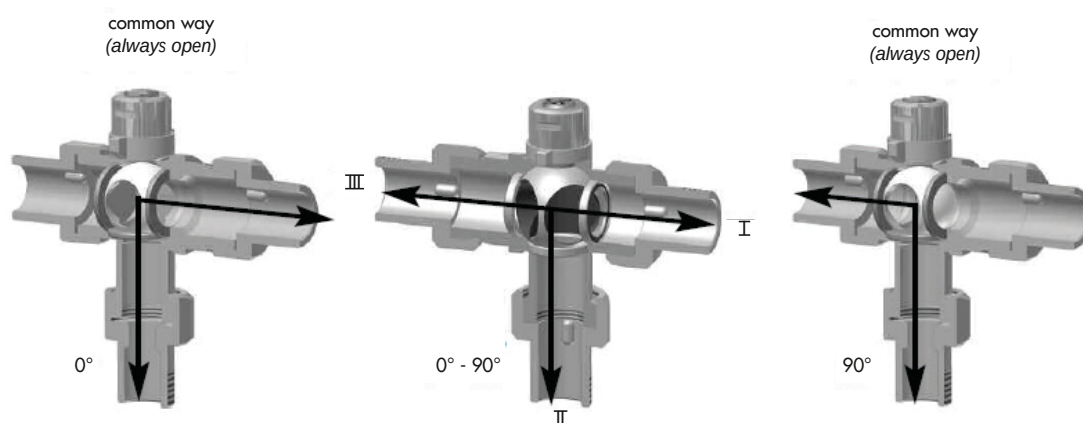
TECHNICAL SPECIFICATIONS	
Electric control	3 points
Valve body connection	quick fitting
Operating mode	ON/OFF
Rotation	90° clockwise and anticlockwise
Internal fuse	5 A delayed
Position indicator	rotating arrow wich indicates the position of the sphere
Motor	bidirectional
Electrical power supply	230 Vac - 50/60 Hz
Power cable lenght	80 cm
Diverting time and related starting torque	15 seconds - 5 Nm
Power usage	3.9 VA
Phase electric capacity in output to grey wire	1 A resistive
Electric capacity of the supplementary micro-switch	1 A resistive - 250 V
Indoor operating temperature	+5 °C ÷ +50 °C
Protection degree	IP 54
Insulation class	II - double insulation
External casing material	polyamide PA 6, 30% glass fibre
Certification	CE

VALVE BODY

Code	Description
387030209	3-way diverting valve, 1"

The main characteristic of the valve body is the presence of a 3-hole sphere, which has a hole directed to the common way (always open) and two other orthogonal holes to the first and between them.

When one of the last two holes is positioned on one of the two inlet ways, the second way is closed. The sphere turns 90° and the second hole is directed onto the second inlet way, thus closing the first. The 3-way valve body includes a condition in which the 3 ways are simultaneously communicating with one another while the sphere is rotating to switch from one position to the other. When the rotation completes, the valve goes completely back to its diverter function.



TECHNICAL DATA	
Type	3-way vertical, diverting
Body dimension	1" total flow
Valve body material	brass CW617N UNI EN 12165
Sleeve material	brass CW617N UNI EN 12165
Sphere material	brass CW617N UNI EN 12165
Seal material	P.T.F.E.
K _v	18.3 m ³ /h
Nominal operating pressure	30 bar
Maximum pressure differential	16 bar
Minimum fluid temperature	+5 °C
Maximum fluid temperature	+160 °C
Suitable fluid	water and fluids compatible with EPDM and P.T.F.E.

ENAMELED STEEL TANKS FOR HEAT PUMPS



DHW tank
200 L
1 heat exchanger

DHW tank
300 L
1 heat exchanger
2 heat exchangers

Made in enameled steel for the storage of domestic hot water (DHW). They are fitted with one or two fixed internal heat exchangers that can be powered by a heat pump and by a solar power system. The heat exchangers have a large surface area which means that the power supplied by the source can be transmitted faster and more effectively, thus reducing the number of start-up and shutdown cycles of the heat pump that will benefit the duration and reliability of the system. They are also designed and ready to allow the installation of an additional electric heating element

Accessories:

Electric heating element kit for DHW tank

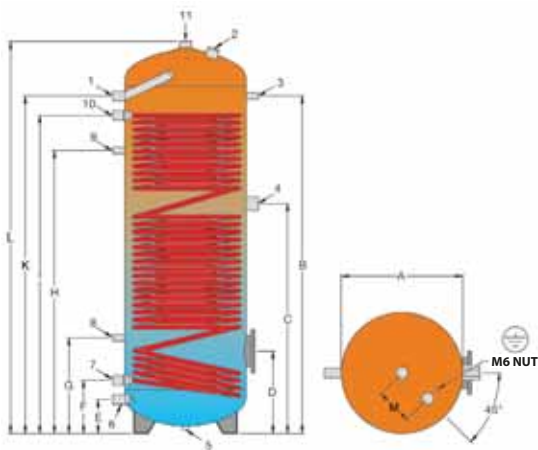
Model	Code	Description
DHW 200 LT - 1S	387030701	200 liters DHW Tank - 1 heat exchanger for heat pump
DHW 300 LT - 1S	387030702	300 liters DHW Tank - 1 heat exchanger for heat pump
DHW 300 LT - 2S	387030700	300 liters DHW Tank - 2 heat exchangers for heat pump and solar power system

TECHNICAL DATA

DOMESTIC WATER STORAGE TANK	
Material	Glazed, ceramic-coated S 235 Jr carbon steel
Internal protective treatment	Inorganic enamelling (DIN 4753-3)
Use limits (P max./T max.)	10 bar/95 °C
Cathodic protection	Magnesium anode
HEAT EXCHANGER	
Material	Glazed, ceramic-coated S 235 Jr carbon steel
Internal protective treatment	Untreated
External protective treatment	Inorganic enamelling (DIN 4753-3)
Type	Fixed coil heat exchanger
Use limits (P max./T max.)	10 bar/95 °C
GENERAL SPECIFICATIONS	
Capacity	200-300 liters
Warranty	2 years
Thermal insulation	Rigid polyurethane + PVC: Fire resistance class B3 (DIN 4102)
Reference legislation	Directive 2014/68/EU (PED) Art. 4 par. 3 (pressure equipment)
	Ministerial Decree No. 174 of 6 April 2004 (suitability of materials in contact with DHW)
	Directive 2009/125/EC (Energy Related Products)

200-300 L DHW TANK - 1 HEAT EXCHANGER

Model	Total diameter	Total height	Diagonal height	Insulation thickness	ErP class	Dispersion	Real capacity	Weight - no-load
	mm	mm	mm	mm		W	L	kg
DHW 200 LT - 1S	640	1215	1375	70	B	51	190	90
DHW 300 LT - 1S	640	1615	1735	70	B	63	263	124



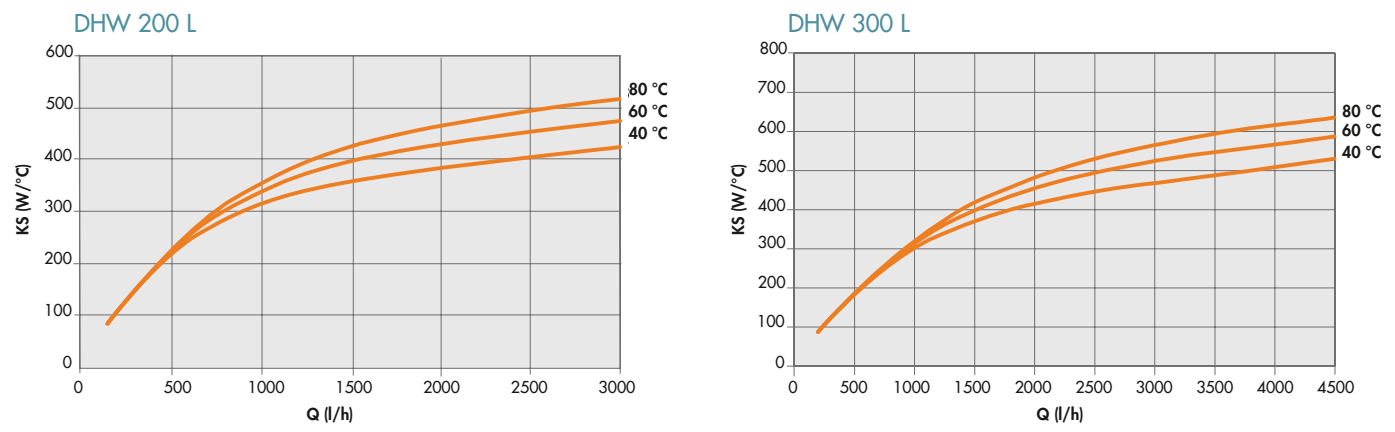
No.	TYPE OF CONNECTION	200-300
1	Hot water supply	1"
2	Anode	1" 1/4
3	Thermometer - Probe	1/2"
4	Electric heater connection	1" 1/2
5	Blind connection for fastening	1/2"
6	Cold water intake	1"
7	Return heat exchanger	1"
8	Probe	1/2"
9	Recirculation	1/2"
10	Supply heat exchanger	1"
11	Hot water supply	1" 1/4

Model	A	B	C	D	E	F	G	H	I	K	L	M
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
DHW 200 LT - 1S	500	995	735	320	140	220	370	835	990	1070	1215	150
DHW 300 LT - 1S	500	1390	945	340	140	220	395	1165	1310	1390	1615	150

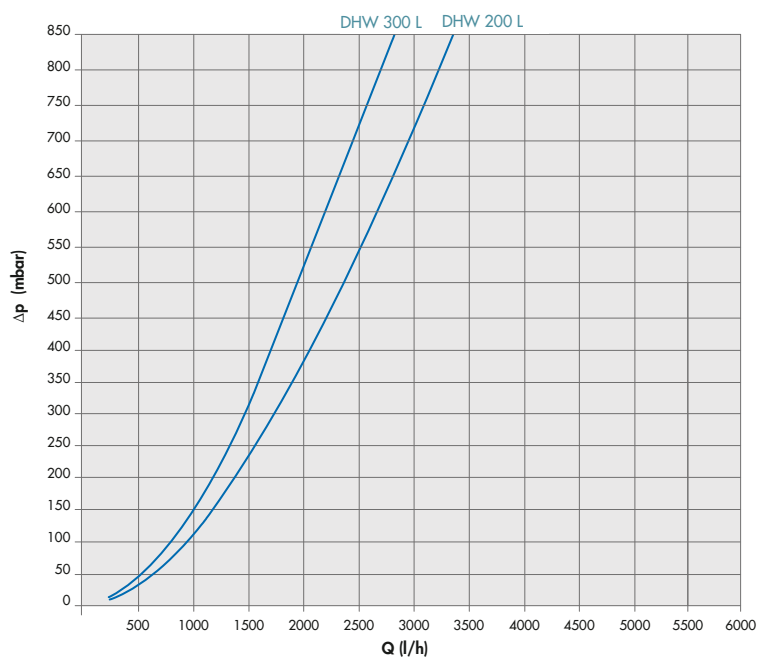
Model	Heat exchanger surface	Heat exchanger water content	Heating water	Power output	DHW production
	m ²	L	60 °C/50 °C	60 °C/50 °C	10 °C/45 °C
	m ²	L	m ³ /h	kW	m ³ /h
DHW 200 LT - 1S	3	17.2	1.2	14	0.3
DHW 300 LT - 1S	4	23	1.6	19	0.5

200-300 L DHW TANK - 1 HEAT EXCHANGER

SPECIFIC PERFORMANCE DIAGRAMS BASED ON HEAT EXCHANGER INLET TEMPERATURE



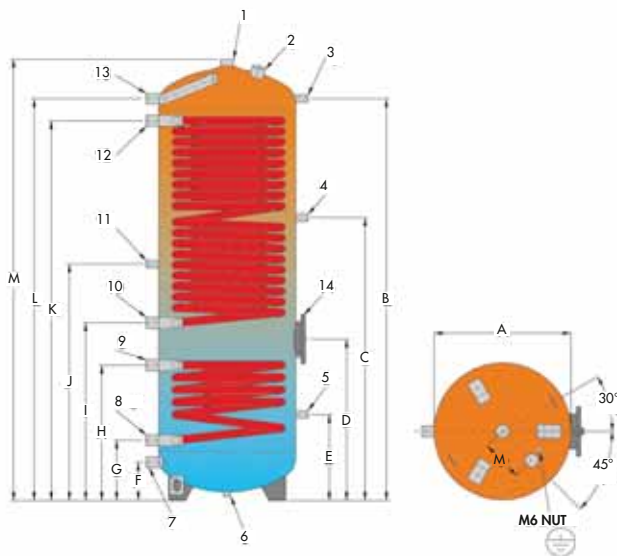
PRESSURE DROP HEAT EXCHANGERS



DHW TANK 300 L - DOUBLE HEAT EXCHANGER

Model	ErP class	Dispersion	Total diameter	Total height	Diagonal height	Insulation thickness
		W	mm	mm	mm	mm
DHW 300 LT - 2S	B	63	640	1615	1735	70

Model	Real capacity	Weight - no-load	Top heat exchanger		Bottom heat exchanger	
			Surface	Water content	Surface	Water content
	L	kg	m ²	L	m ²	L
DHW 300 LT - 2S	260	131	3.7	18	1.2	8



No.	TYPE OF CONNECTION	300
1	Hot water supply	1" 1/4
2	Anode	1" 1/4
3	Thermometer - Probe	1/2"
4	Thermostat	1/2"
5	Thermostat	1/2"
6	Blind connection for fastening	1/2"
7	Cold water intake	1"
8	Return bottom heat exchanger	1"
9	Supply bottom heat exchanger	1"
10	Return top heat exchanger	1"
11	Recirculation	1/2"
12	Supply top heat exchanger	1"
13	Hot water supply	1"
14	Flange with electric heater connection	1" 1/2

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
DHW 300 LT - 2S	500	1470	1035	590	315	140	220	495	650	865	1390	1470	1615	150

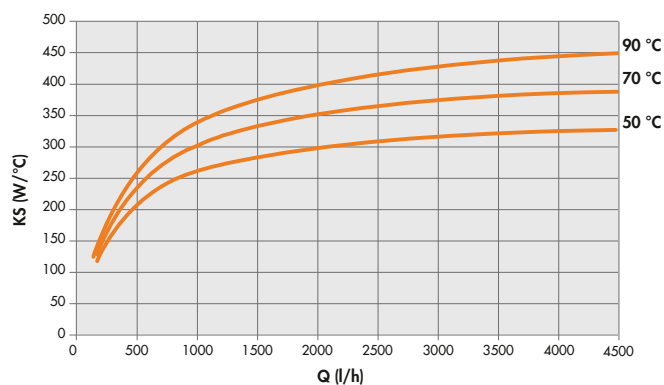
DHW TANK 300 L - DOUBLE HEAT EXCHANGER

PERFORMANCE

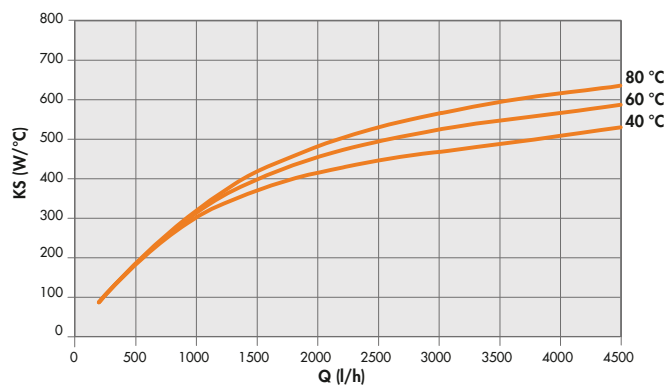
Model	Performance			
DHW 300 LT - 2S	Top heat exchanger			
	Heating water	Power output	DHW production	Pressure drop
	60 °C/50 °C	60 °C/50 °C	10 °C/45 °C	60 °C/50 °C
	m ³ /h	kW	m ³ /h	mbar
	1.59	18.5	0.45	31
	Bottom heat exchanger			
	Heating water	Power output	DHW production	Pressure drop
	80 °C/60 °C	80 °C/60 °C	10 °C/45 °C	80 °C/60 °C
	m ³ /h	kW	m ³ /h	mbar
	1.25	29	0.71	17

SPECIFIC PERFORMANCE DIAGRAMS BASED ON HEAT EXCHANGER INLET TEMPERATURE

Bottom heat exchanger

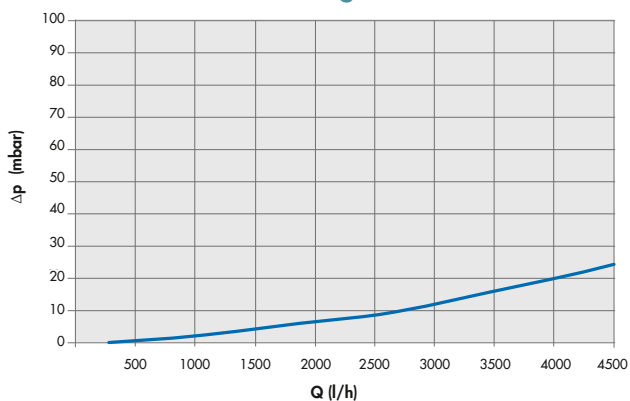


Top heat exchanger

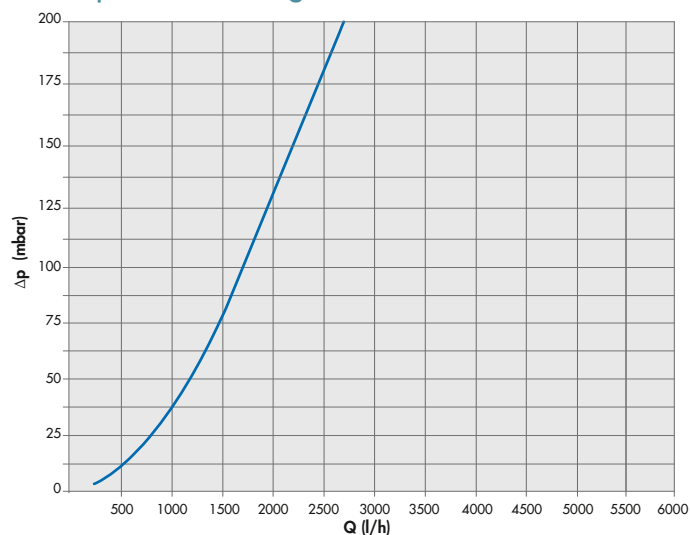


PRESSURE DROP HEAT EXCHANGERS

Bottom heat exchanger



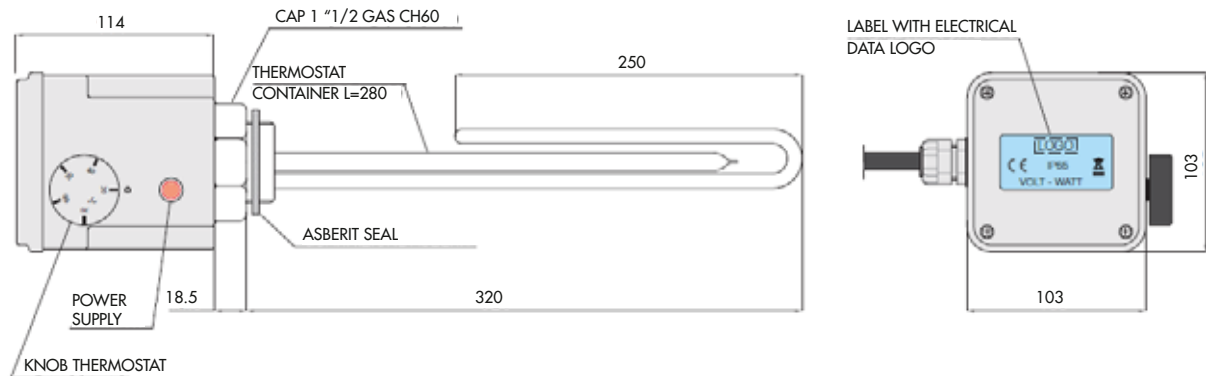
Top heat exchanger



ELECTRIC HEATER FOR DHW TANK

Code	Decription
387030208	3 kW electric heater for DHW tank

The 3 kW electric heater is used in the domestic hot water storage tank as an integrative element and as a backup if needed.



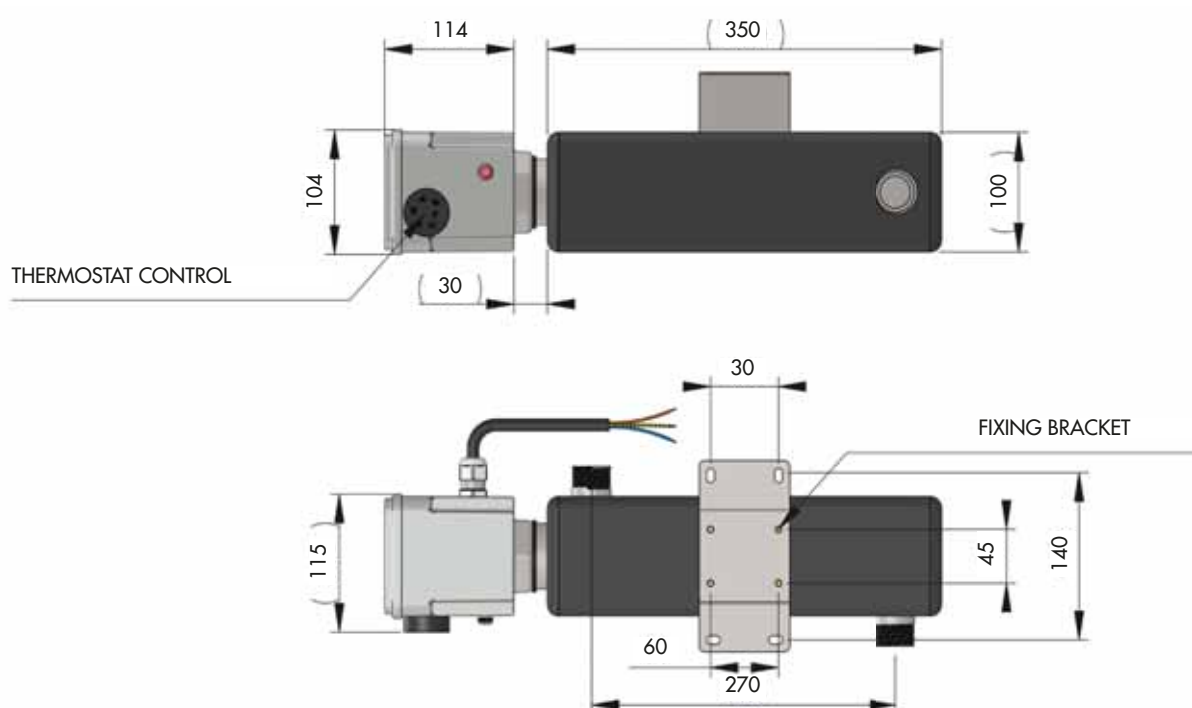
TECHNICAL DATA	
Nominal output	3 kW
Version	MgO
Class	I
Outdoor diameter	8.5 mm
Power supply voltage	230 V
Maximum specific load	13 W/cm ²
Seal material	AISI 316L
Threaded cup	1"1/2 gas in AISI 304
Protection cover	PP V0 IP 65
Temperature regulation	thermostat 30 ÷ 70 °C
Safaty	thermostat 90 °C
Wiring	cabl in PVC 3x1.5 mm ²
Approvals	CE
Tests	EN 60335-1, EN 50106

ADDITIONAL ELECTRIC HEATER FOR HEATING SYSTEM - INTERNAL INSTALLATION

Code	Description
387030727	Additional electric heating element for internal installation 3 kW 1ph
387030728	Additional electric heating element for internal installation 3 kW 3ph

This accessory is an electric heat exchanger supporting heat pumps which is activated, when necessary, for providing the heat required by the thermal demand. The component must be installed inside.

DIMENSIONAL DRAWING



TECHNICAL DATA		
	387030727	387030728
Nominal output	3 kW	3 kW
Power supply voltage - phases	230 V - 1 PH	400 V - 3 PH
Class	I	I
Electrical connection	PVC cable 3x1,5 mm ²	PVC cable 4x1,5 mm ²
Length of power cord	2 m	2 m
Maximum specific load	13,5 W/cm ²	13,1 W/cm ²
Heating elements material	INCOLOY 800	INCOLOY 800
Seal material	AISI 304	AISI 304
Protection cover	UL94V0	UL94V0
Temperature regulation	thermostat 30 ÷ 70 °C	thermostat 30 ÷ 70 °C
Safety	thermostat 90 °C	thermostat 90 °C
Hydraulic connections	1"	1"
Approvals	CE	CE
Tests	EN 60335-1/EN50106	EN 60335-1/EN50106

BUFFER TANKS/HYDRAULIC DISJUNCTORS



45 liters

85 liters

Code	Description
387030705	45 liters tank/isolated separator, 6 connections
387030706	85 liters tank/isolated separator, 6 connections

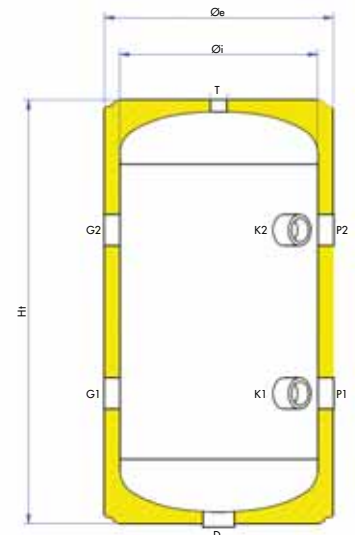
Indoor buffer tanks for air conditioning and heating systems, available in two different capacities, 45 liters and 85 liters. They are particularly suitable to be combined with reversible heat pumps acting as hydraulic circuit breaker (by making the various circuits of the system independent) and as thermal flywheel (minimising the start-ups and ensuring the minimum water supply for the correct operation of the heat pump). The tanks are provided with additional connections for the integration of an additional heat source.

KEY OF CONNECTIONS:

D: drain
G2/G1: plant outlet/inlet
K1/K2: auxiliary
P2/P1: energy source outlet/inlet
T: vent

CONNECTIONS:

Model	D	G1	G2	K1	K2	P1	P2	T
	(inch)							
45 L	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1/2"
85 L	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1/2"



DIMENSIONS:

Model	Øi	Øe	Ht	R*	G1	G2	K1	K2	P1	P2
	(mm)									
45 L	320	370	700	770	220	485	220	485	220	485
85 L	400	460	780	905	185	535	185	535	185	535

TECHNICAL DATA	
Volume	45 and 85 liters
Material	Carbon steel
Covering	White galvanised sheet metal
Thermal insulation	High-density polyurethane foam
Minimum operating temperature	-10 °C
Maximum operating temperature	90 °C
Maximum operating pressure	6 bar
Energy class	B

COP-METER

COP-Meter



Additional phase-Current Transformer for 3-phase systems



One CT is included in the COP-Meter, for 3-phase systems two additional CTs are required.

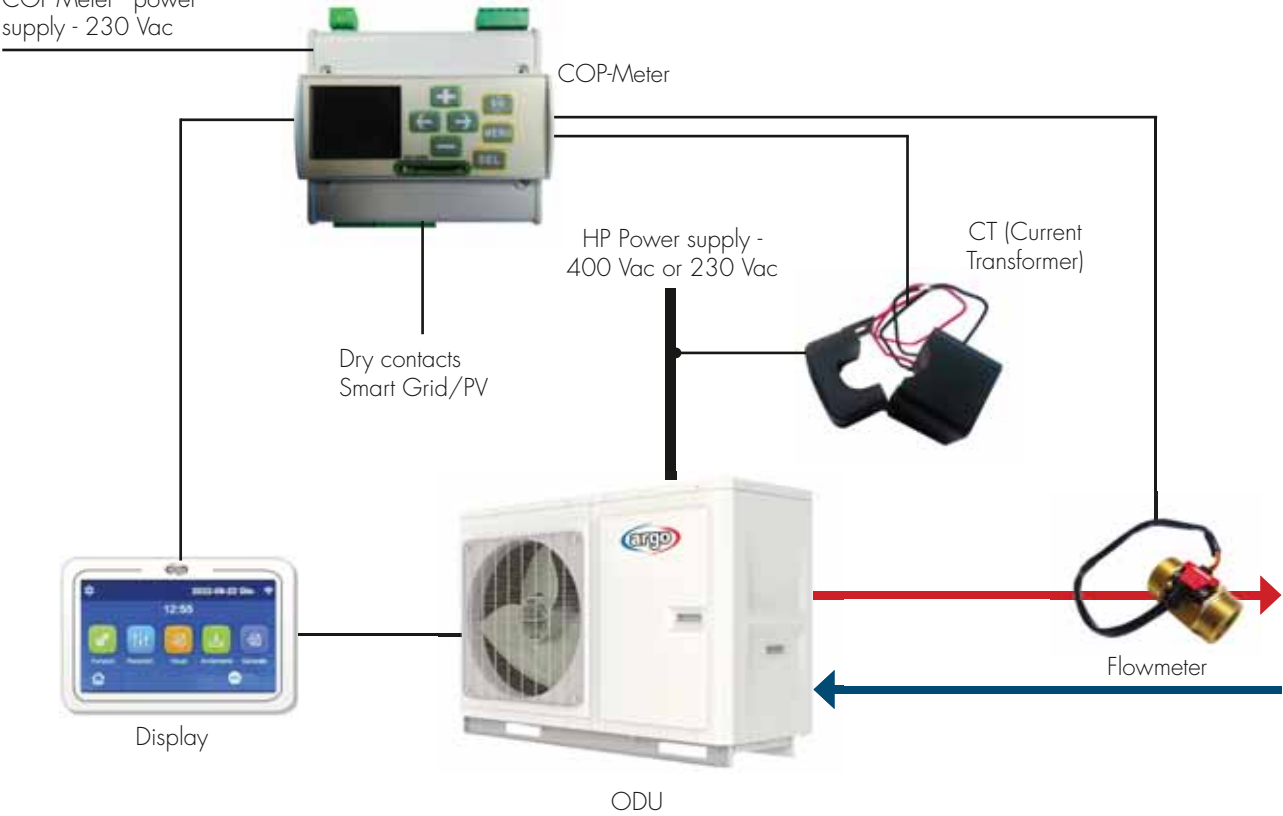
Code	Description
387030738	COP-meter
387030739	Additional phase-Current Transformer

The COP-METER is an accessory for X3 air-to-water heat pumps.

It adds further functionality to the units, it allows you to:

- Measure the delivered thermal energy
- Measure the used electrical energy
- Provide the relevant energy efficiency results (EER/COP)
- Show instant values or average values over selectable time intervals
- Export archived data in csv format (with SD card, not included)
- Have an interface with Smart Grid or photovoltaic systems (through 2 dry contacts)

COP-Meter - power supply - 230 Vac



DYNAMIC SET POINTS

Based on the combinations of the two dry contacts, 4 states can occur. The heat pump reacts to the various combinations as indicated in the table:

N°	States	Dry contact configuration	Logic	HP action
1	OFF	ON/OFF	1:0	Heat pump OFF, despite any system and/or DHW request. Frost protection is active.
2	Normal operation	OFF/OFF	0:0	Heat pump operating as per basic setting.
3	Recommended ON	OFF/ON	0:1	Recommended heat pump operation ON; both on the system side and for DHW production, with specific set-points.
4	Forced ON	ON/ON	1:1	Heat pump ON independently of the presence or absence of system and/or DHW request, with specific set-points.

States 2, 3 and 4 require specific set-points to be set on the COP-Meter for each state for both the system and the DHW. State 2 must replicate the basic settings found on the heat pump, for states 3 and 4 upward translations (or downwards in case of cooling) of the climatic curve or the fixed setpoint for the temperature of the water or DHW.

The system can therefore be configured to optimize consumption and/or alter standard operation, receiving remote inputs through the two clean contacts from various third-party systems such as Smart Grids, photovoltaic control units or other advanced systems.

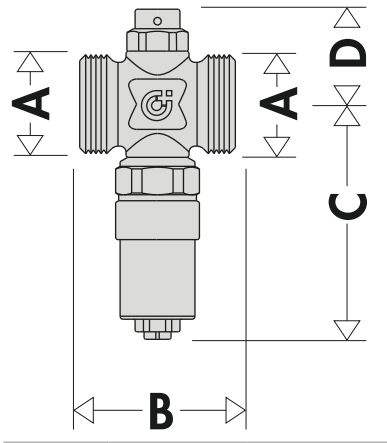
ANTI-FREEZE VALVE



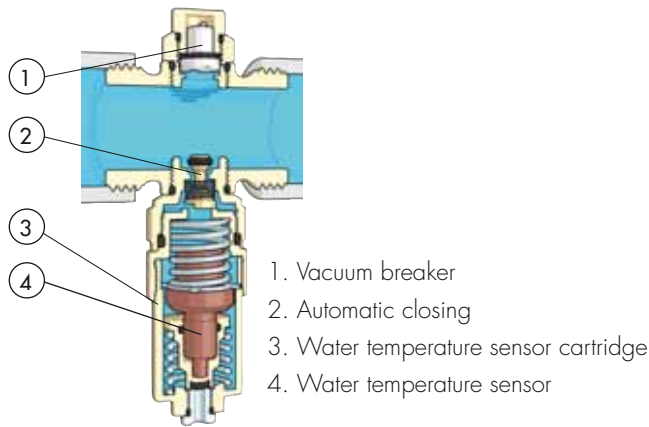
Code	Description
108602	Anti-freeze valve 1" (1 pcs.)

The antifreeze valve is designed to prevent ice from forming in the pipes. When the fluid temperature reaches 3 °C, the internal sensor opens and allows water to drain from the system. Designed for systems served by monobloc heat pumps, it prevents damage to the unit and system components in the event of a power failure and air temperature below zero. The valve is designed for heat pumps with leaving water temperatures up to 90 °C.

DIMENSIONS (mm)



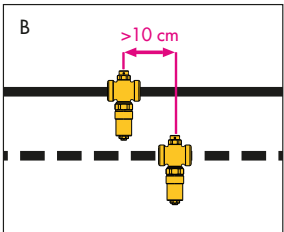
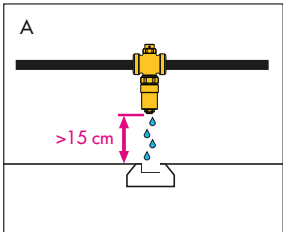
COMPONENTS



INSTALLATION

Antifreeze valves must be installed outdoors, where the lowest temperatures can be reached. The device must only be installed in a vertical position, with the outlet facing downwards, to allow the discharged water to flow correctly and without obstructions. Antifreeze valves must be protected from heat sources, rain, snow and direct sunlight. It is recommended to install antifreeze valves on both pipes (outlet and return). The pipes must not have siphons, otherwise frost protection will no longer be guaranteed. The antifreeze valve must be free of insulation for the system to operate correctly. It is recommended to always keep the system under pressure, even during discharge, to ensure the correct functioning of the antifreeze device. Leave at least 15 cm of free space from the ground (fig. A) to prevent the formation of ice. Maintain a distance of at least 10 cm between the antifreeze valves (fig. B).

TECHNICAL DATA	
Type	Antifreeze valves
Connection dimensions	G 1" (ISO 228-1)
Valve material	brass CW617N UNI EN 12165
Spring material	stainless steel
Gasket material	EPDM
K _v	33 m ³ /h
Max operating pressure	10 bar
Fluid T (open)	+3 °C
Fluid T (close)	+4 °C
Accuracy	±1 °C
Max Fluid T	+90 °C
Fluid	water





X3 REVERSIBLE MODULAR CHILLER

Commercial applications - R32 DC Inverter

X3 REVERSIBLE MODULAR CHILLER

WITH INCLUDED HYDRAULIC GROUP



Code	Model	Cooling capacity [kW] (1)	Heating capacity [kW] (2)
398600055	AGCHP353PH*	33	36
398600056	AGCHP603PH*	60	65

(1) Water temperature 12 °C/7 °C, outdoor air temperature 35 °C

(2) Water temperature 40 °C/45 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

*Each module requires commissioning (quoted separately)

WITHOUT HYDRAULIC GROUP



Code	Model	Cooling capacity [kW] (1)	Heating capacity [kW] (2)
398600050	AGCH353PH*	32	35
398600051	AGCH603PH*	60	65

(1) Water temperature 12 °C/7 °C, outdoor air temperature 35 °C

(2) Water temperature 40 °C/45 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

*Each module requires commissioning (quoted separately)

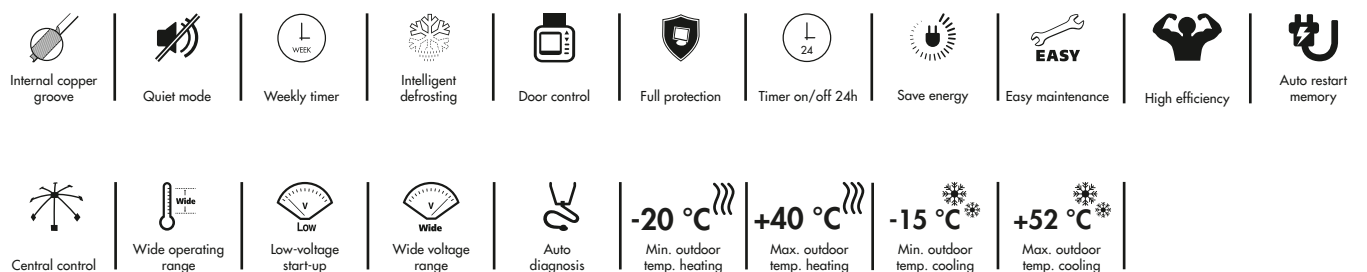
MAIN FEATURES

Argo X3 REVERSIBLE MODULAR CHILLER are units for the cooling and heating of buildings in the civil, commercial or industrial context. They use ecological R32 refrigerant, which combined with the "All DC Inverter" control guarantees high levels of energy efficiency and comfort with very low environmental impact.

They are available in two sizes, with or without incorporated hydraulic group. For all of them, the dedicated smart control is supplied as an accessory and can manage multiple units.

The AGCHP series includes the hydraulic group (Inverter pump, Plate heat exchanger, Expansion vessel, Safety valve, Flow switch), ideal for single configurations and more compact installations. Up to 3 modules can be combined, obtaining a maximum cooling capacity of 180 kW.

The AGCH series allows the configuration up to 16 units, connected by a single central control. The versatility and ease in configuration and installation allow these units to easily adapt to different system types. The series is also equipped with external hydronic modules, with and without buffer tank, with single or double circulator, in order to comply with the various needs of the systems they serve.



Code	Model	Description	Applicability
398610050	MOD. CH	Wired control*	All

*Mandatory accessory, one for each modular system

ADVANTAGES

SILENT OPERATION

- Active noise reduction: broad plastic blades of the fans
- Passive noise reduction: special design of the fan zone
- Passive noise reduction: "QUIET MODE" function
- Passive noise reduction: acoustic insulation of the compressor

At partial loads, the noise generated by the running unit can drop down to 52 dB(A)

HIGH EFFICIENCY

To increase the efficiency and capacity of the unit, the AGCH units are equipped with a shell and tube "DUAL FLOW" heat exchanger. The special design of the plate and the restrictions at the inlet of the heat exchanger keeps the flow of refrigerant regular and uniform in order to improve the exchange efficiency. The U-shaped thread inside the copper pipes improves the laminar flow of the fluid and facilitates heat exchange.

The AGCHP units are equipped with a compact and lightweight plate heat exchanger, capable of guaranteeing great reliability, thanks to the use of AISI 316L stainless steel.

The unit is able to estimate the building's thermal load based on the external air temperature, consequently modifying the delivery water temperature in order to reduce energy consumption.

RELIABILITY

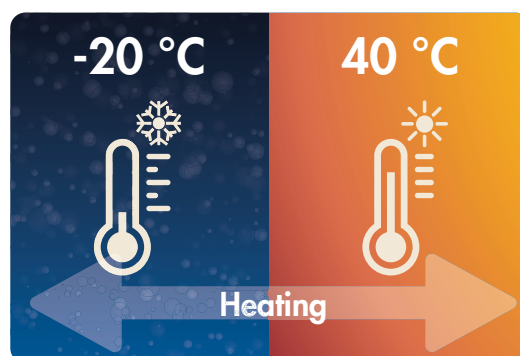
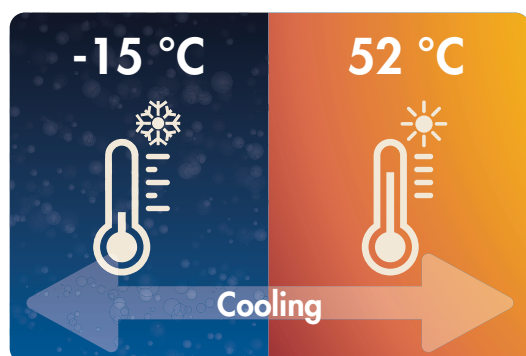
With the central control unit, it is possible to balance the work time of the compressors so as to avoid excess work only for some of them, as well as improve the system's efficiency and service life.

Only **one-third of the outdoor units** are simultaneously allowed to perform defrosting, thus reducing fluctuations of the leaving water temperature and, consequently, improving the environmental comfort.

- Each unit can be a MASTER unit;
- Timely communication between the units of the same system;
- A problem on one unit does not hinder the normal operation of the others.

The **anti-freeze protection** is automatically activated by the unit when the outdoor temperature drops to below 5 °C, regardless of whether it is operating in heating or cooling mode.

WIDE OPERATING RANGE



TOUCH-SCREEN CONTROL PANEL

The control panel, supplied separately as a mandatory accessory, allows the management and set-up of one or more units (up to 16).



In particular it is possible to:

- Define the operating mode of the heat pump and its priorities (heating, cooling);
- Set all the main operating parameters (set point, hysteresis, etc.);
- Activate external (or internal) systems to integrate or replace the heating production unit;
- Manage the commissioning of the unit or group of units;
- Display the status of the operating parameters of the main components of the heat pump;
- Manage the unit remotely via MODBUS gateway directly integrated into the panel.

Specific auxiliary functions are also available in the control panel, including:

- Automatic management of the flow temperature of the fluid according to the external temperature (climate curve);
- Programming of weekly and hourly operation;
- Activation of "silent" operation;
- Emergency management in case of unit failure of the single unit with detection of the unit in alarm, display of the corresponding alarm and storage of the history;
- Automatic activation of the antifreeze protection.

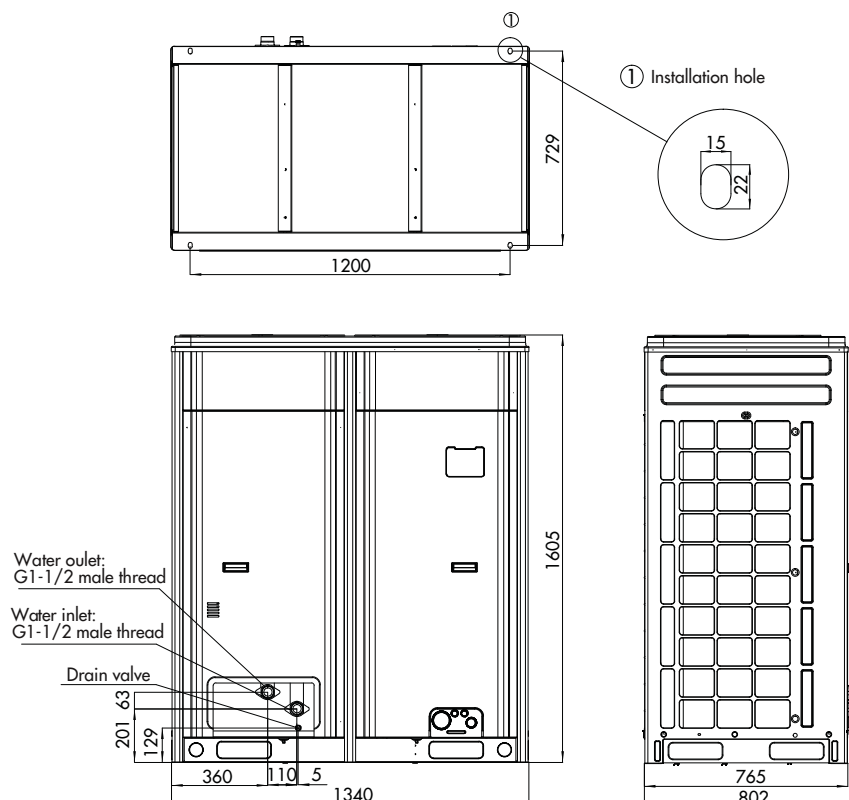
TECHNICAL DATA X3 REVERSIBLE MODULAR CHILLER WITH INCLUDED HYDRAULIC GROUP

MODEL				AGCHP353PH	
Characteristics				Cooling	Heating
Performances according to EN 14511	Air +35 °C - Water +12/7 °C Air +7 °C - Water +40/45 °C	Rated capacity	kW	33	36
		EER/COP		2.89	3.3
		Rated electrical power input	kW _{el}	11.4	10.9
	Air +35 °C - Water +23 °C/18 °C Air +7 °C - Water +30 °C/35 °C	Rated capacity	kW	32.83	33.45
		EER/COP		4.1	4
		Rated electrical power input	kW _{el}	8.00	8.36
	Maximum electrical power input		kW _{el}	13.4	
Performances according to Ecodesign (ERP) EN 14825	Capacity correction range		%	31,25% ~ 100%	
	LOW TEMPERATURE (35 °C) AVERAGE climate	Nominal heat output	kW	24.00	
		Seasonal energy efficiency η_s	%	157	
		Annual energy consumption	kWh	12640	
		SCOP		4.0	
		Energy efficiency class		A++	
	LOW TEMPERATURE (35 °C) WARMER climate	Nominal heat output	kW	21.00	
		Seasonal energy efficiency η_s	%	204.4	
		Annual energy consumption	kWh	5472	
	LOW TEMPERATURE (35 °C) COLDER climate	Nominal heat output	kW	27.00	
		Seasonal energy efficiency η_s	%	133	
		Annual energy consumption	kWh	20074	
	Unit operation data	Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	380-415V~/3N/50
Sound power level		dB(A)	66		
Refrigerant		Compressor type/no.		Inverter Rotary/1	
		Type and GWP		R32/675 kg CO ₂ eq.	
		Quantity		5.2 kg/3,51 Tonn CO ₂ eq.	
Fan		Type		Axial	
		Number	N°	2	
		Air flow rate	m³/h	2x6300	
Water side heat exchanger		Water flow rate	m³/h	5.68	
Hydraulic connections (IN and OUT)		inch	1"1/2		
Water side operating limits	Leaving water temperature		°C	5~20	35~50
	Water input/output temperature difference		°C	2.5~6	
Air side operating limits			°C	-15~52	-20~40
Components and dimensions	Net weight /Weight during operation		kg	323.0/355.3	
	Dimensions (H/W/D)		mm	1340/802/1605	

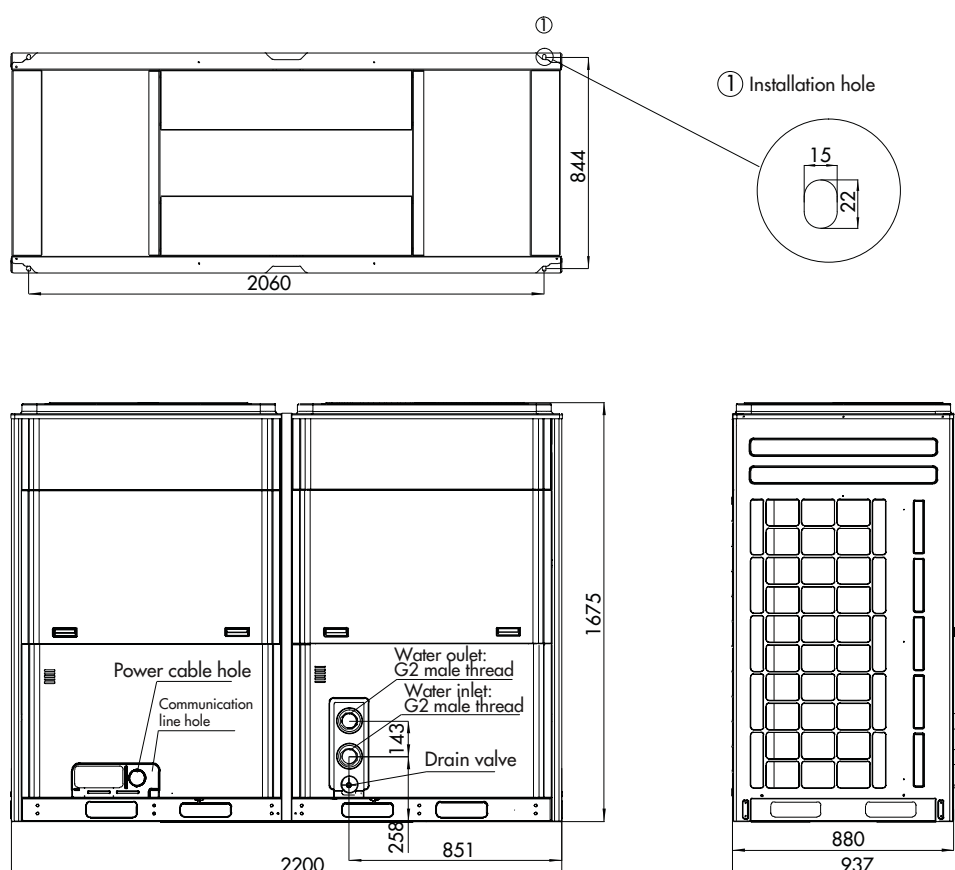
MODEL				AGCHP603PH	
Characteristics				Cooling	Heating
Performances according to EN 14511	Air +35 °C - Water +12/7 °C Air +7 °C - Water +40/45 °C	Rated capacity	kW	60	65
		EER/COP		2.88	3.29
		Rated electrical power input	kW _{el}	21.1	19.7
	Air +35 °C - Water +23 °C/18 °C Air +7 °C - Water +30 °C/35 °C	Rated capacity	kW	64.03	61.63
		EER/COP		3.57	3.86
		Rated electrical power input	kW _{el}	17.93	15.96
	Maximum electrical power input		kW _{el}	25.6	
Performances according to Ecodesign (ERP) EN 14825	Capacity correction range		%	31.25% ~ 100%	
	LOW TEMPERATURE (35 °C) AVERAGE climate	Nominal heat output	kW	52.00	
		Seasonal energy efficiency η_s	%	158	
		Annual energy consumption	kWh	26825	
		SCOP		4.0	
		Energy efficiency class		A++	
	LOW TEMPERATURE (35 °C) WARMER climate	Nominal heat output	kW	41.00	
		Seasonal energy efficiency η_s	%	205.0	
		Annual energy consumption	kWh	10675	
	LOW TEMPERATURE (35 °C) COLDER climate	Nominal heat output	kW	51.00	
		Seasonal energy efficiency η_s	%	125.4	
		Annual energy consumption	kWh	39532	
	Unit operation data	Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	380-415V~/3N/50
Sound power level		dB(A)	71		
Refrigerant		Compressor type/no.		Inverter Rotary/2	
		Type and GWP		R32/675 kg CO ₂ eq.	
		Quantity		5.35x2 kg/3.61x2 Tonn CO ₂ eq.	
Fan		Type		Axial	
		Number	N°	2	
		Air flow rate	m³/h	2x12000	
Water side heat exchanger		Water flow rate	m³/h	10.32	
Hydraulic connections (IN and OUT)		inch	2"		
Water side operating limits	Leaving water temperature		°C	5~20	35~50
	Water input/output temperature difference		°C	2.5~6	
Air side operating limits			°C	-15~52	-20~40
Components and dimensions	Net weight /Weight during operation		kg	609.0/669.9	
	Dimensions (H/W/D)		mm	2200x937x1675	

DIMENSIONAL DRAWINGS

Model AGCHP353PH

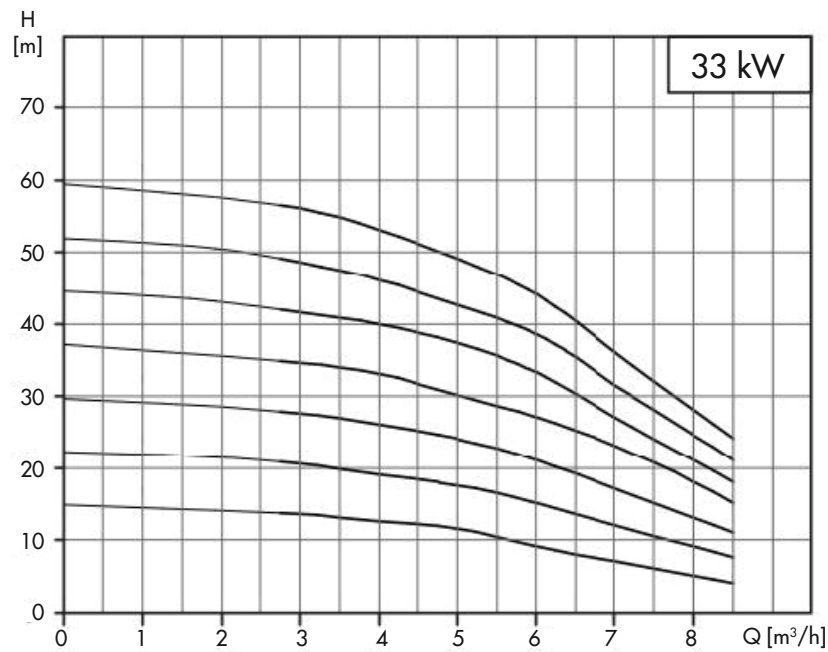


Model AGCHP603PH

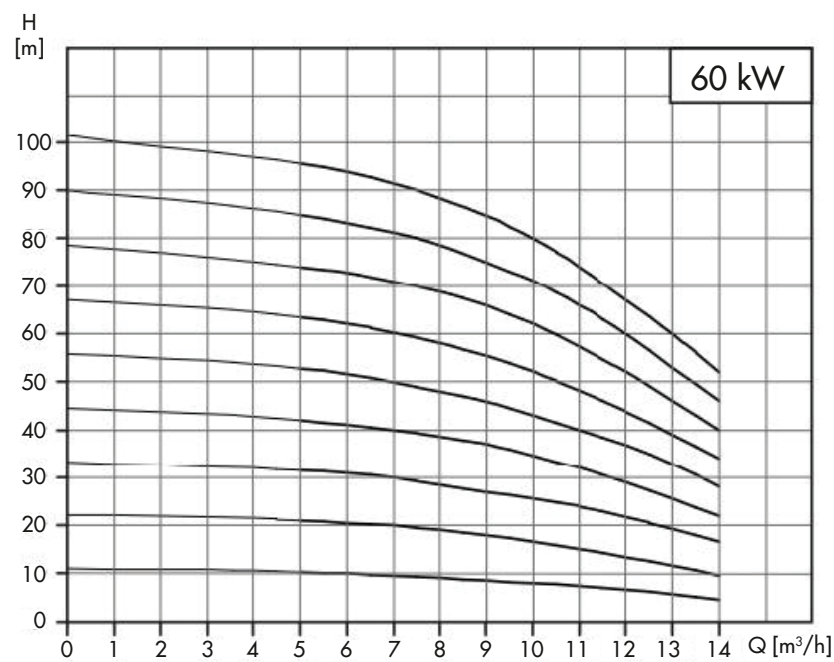


CHARACTERISTIC CIRCULATOR CURVES

Model AGCHP353PH



Model AGCHP603PH



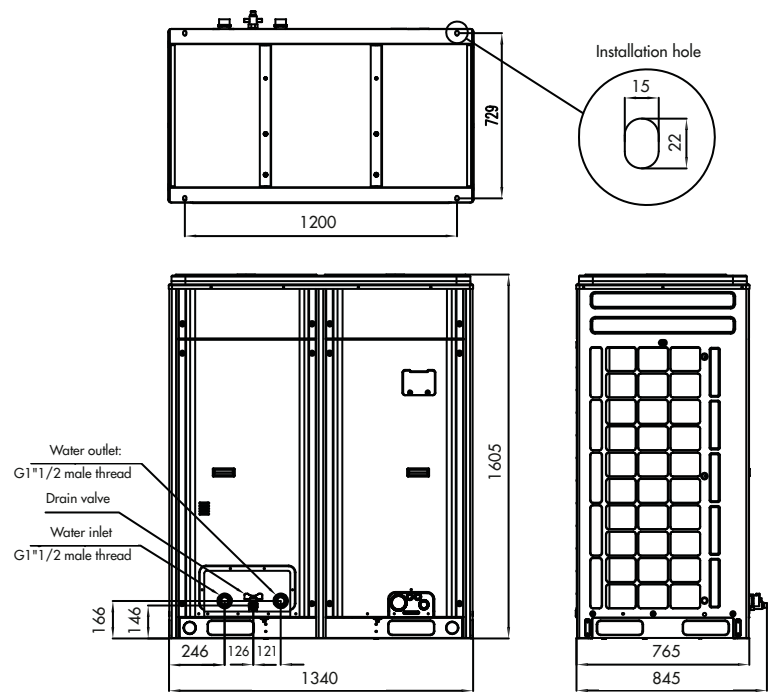
TECHNICAL DATA X3 REVERSIBLE MODULAR CHILLER WITHOUT HYDRAULIC GROUP

MODEL				AGCH353PH	
Characteristics				Cooling	Heating
Performances according to EN 14511	Air +35 °C - Water +12/7 °C Air +7 °C - Water +40/45 °C	Rated capacity	kW	32.00	35.00
		EER/COP		2.74	3.3
		Rated electrical power input	kW _{el}	11.67	10.60
	Air +35 °C - Water +23 °C/18 °C Air +7 °C - Water +30 °C/35 °C	Rated capacity	kW	41.38	36.00
		EER/COP		3.70	4.09
		Rated electrical power input	kW _{el}	11.18	8.80
	Maximum electrical power input		kW _{el}	13.40	
Performances according to Ecodesign (ERP) EN 14825	Capacity correction range		%	31% ~ 100%	
	LOW TEMPERATURE (35 °C) AVERAGE climate	Nominal heat output	kW	24.00	
		Seasonal energy efficiency η _s	%	153	
		Annual energy consumption	kWh	12504	
		SEER/SCOP		4.4	3.9
		Energy efficiency class		A++	
	LOW TEMPERATURE (35 °C) WARMER climate	Nominal heat output	kW	20.00	
		Seasonal energy efficiency η _s	%	218	
		Annual energy consumption	kWh	4834	
	LOW TEMPERATURE (35 °C) COLDER climate	Nominal heat output	kW	26.00	
		Seasonal energy efficiency η _s	%	138.9	
		Annual energy consumption	kWh	18068	
	Unit operation data	Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	380-415~/3N/50
Sound power level		dB(A)	78		
Sound pressure level (distance 1 m)		dB(A)	62		
Refrigerant		Compressor type/no.		Inverter Rotary/1	
		Type and GWP		R32/675 kg CO ₂ eq.	
		Quantity		5.5 kg/3.71 tons CO ₂ eq.	
Fan		Type		Axial	
		Number	No.	2	
		Air flow rate	m³/h	2x6300	
Water side heat exchanger		Water flow rate	m³/h	5.5	
	Head loss	kPa	80.0		
Hydraulic connections (IN and OUT)		inches	1"1/2		
Water side operating limits	Leaving water temperature		°C	5~20	35~50
	Water input/output temperature difference		°C	2.5~6	
Air side operating limits			°C	-15~52	-20~40
Components and dimensions	Net weight /Weight during operation		kg	405/445	
	Dimensions (H/W/D)		mm	1605/1340/920	

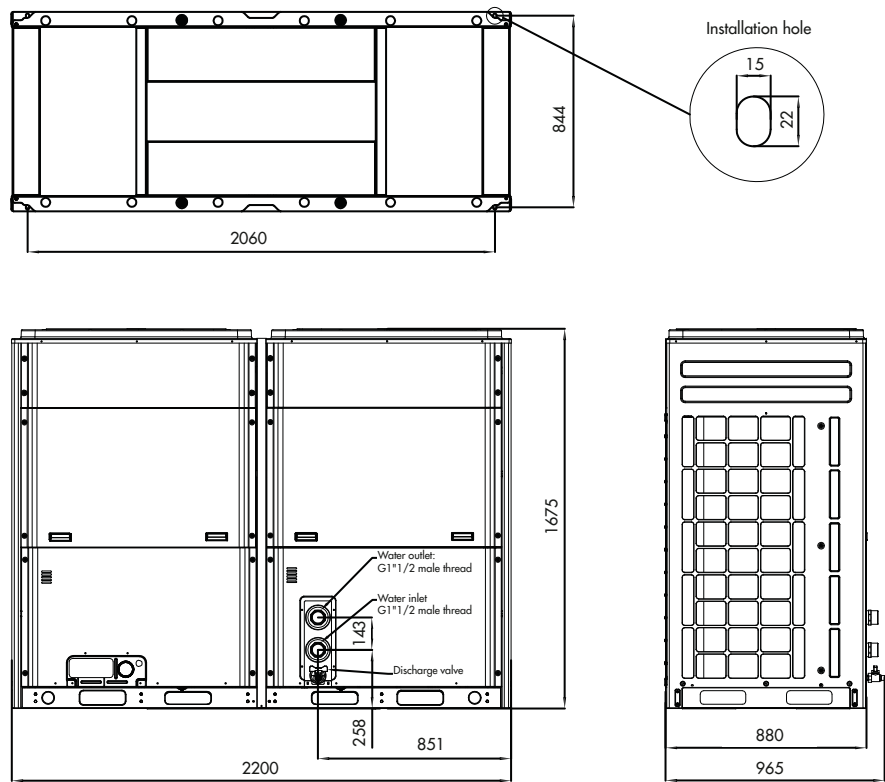
MODEL				AGCH603PH	
Characteristics				Cooling	Heating
Performances according to EN 14511	Air +35 °C - Water +12/7 °C Air +7 °C - Water +40/45 °C	Rated capacity	kW	60.00	65.00
		EER/COP		2.88	3.27
		Rated electrical power input	kW _{el}	20.83	19.87
	Air +35 °C - Water +23 °C/18 °C Air +7 °C - Water +30 °C/35 °C	Rated capacity	kW	72.18	62.60
		EER/COP		3.88	4.15
		Rated electrical power input	kW _{el}	18.60	15.08
	Maximum electrical power input		kW _{el}	28.80	
Performances according to Ecodesign (ERP) EN 14825	Capacity correction range		%	15% ~ 100%	
	LOW TEMPERATURE (35 °C) AVERAGE climate	Nominal heat output	kW	51.00	
		Seasonal energy efficiency η_s	%	153	
		Annual energy consumption	kWh	25964	
		SEER/SCOP		4.6	3.9
		Energy efficiency class		A++	
	LOW TEMPERATURE (35 °C) WARMER climate	Nominal heat output	kW	39.00	
		Seasonal energy efficiency η_s	%	238.8	
		Annual energy consumption	kWh	8620	
	LOW TEMPERATURE (35 °C) COLDER climate	Nominal heat output	kW	48.00	
		Seasonal energy efficiency η_s	%	135.1	
		Annual energy consumption	kWh	34271	
	Unit operation data	Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	380-415~/3N/50
Sound power level		dB(A)	86		
Sound pressure level (distance 1 m)		dB(A)	68		
Refrigerant		Compressor type/no.		Inverter Rotary/1	
		Type and GWP		R32/675 kg CO ₂ eq.	
		Quantity		5.5x2 kg/3.71x2 tons CO ₂ eq.	
Fan		Type		Axial	
		Number	No.	2	
		Air flow rate	m³/h	2x12000	
Water side heat exchanger		Water flow rate	m³/h	10.3	
	Head loss	kPa	55.0		
Hydraulic connections (IN and OUT)		inches	2"		
Water side operating limits	Leaving water temperature		°C	5~20	35~50
	Water input/output temperature difference		°C	2.5~6	
Air side operating limits			°C	-15~52	-20~40
Components and dimensions	Net weight/Weight during operation		kg	686/755	
	Dimensions (H/W/D)		mm	1675/2200/965	

DIMENSIONAL DRAWINGS

Model AGCH353PH



Model AGCH603PH



NOTE

HYDRONIC UNITS

MOD-HYDRO



MOD-HYDRO VT



They are used to distribute the heat transfer fluid, in heating and cooling mode. Easy to install, they can be positioned outdoors and are equipped with one or two circulator pumps and, sometimes, an buffer tank.

HYDRONIC KITS

Code	Model	Tank	No. of pumps	Applicability
387030644	MOD-HYDRO 1P 30		1	30 kW
387030645	MOD-HYDRO 2P 30		2	
387030646	MOD-HYDRO 1P 60		1	60 kW
387030647	MOD-HYDRO 2P 60		2	
387030648	MOD-HYDRO 1P 90		1	90 kW and 120 kW
387030649	MOD-HYDRO 2P 90		2	
387030650	MOD-HYDRO V T100 1P 30	100	1	30 kW
387030651	MOD-HYDRO V T100 2P 30	200	2	
387030652	MOD-HYDRO V T200 1P 60		1	60 kW
387030653	MOD-HYDRO V T200 2P 60	300	2	
387030654	MOD-HYDRO V T300 1P 90		1	90 kW and 120 kW
387030655	MOD-HYDRO V T300 2P 90		2	

HYDRONIC KIT ACCESSORIES

Code	Description	Applicability
387030660	Vibration dampers	MOD-HYDRO V T
387030661	Vibration dampers	MOD-HYDRO
387030656	Fitting kit 1"1/2*	MOD-HYDRO 1P/2P 30
387030657	Fitting kit 2"1/2*	MOD-HYDRO 1P/2P 60-90

*Mandatory accessory for adapting from Victaulic to threaded connections

MOD-HYDRO KIT

It can be combined with any type of modular chiller with single or multiple configuration (up to 120 kW) of the proposed range.



The unit includes:

- pipes insulated with anti-condensate elastomer;
- single or double centrifugal pump with shut-off valve;
- power electrical panel with device for pump alternation at every start-up (version with 2 pumps), reserve pump start-up in case of pump malfunction (version with 2 pumps), residual-current devices, contacts for remote signalling of running pumps, IP55 protection rating;
- safety valve;
- deaerator;
- pressure gauge;
- filling/discharge valve;
- base and panel made of galvanised and coated sheet metal, suitable for outdoor installations;
- easily and quickly removable panels.

MOD-HYDRO KIT VT

It can be combined with any type of modular chiller with single or multiple configuration (up to 120 kW) of the proposed range.

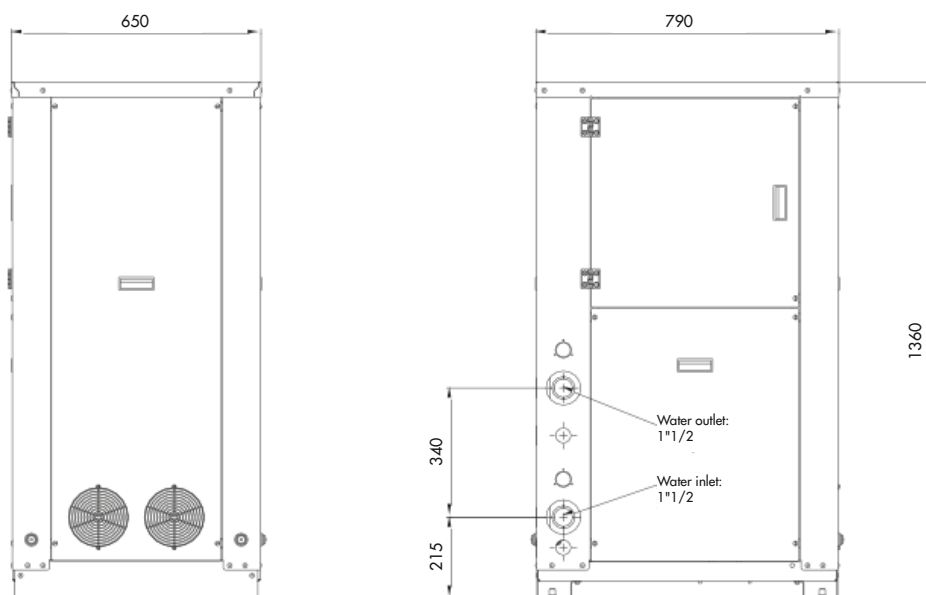


The unit includes:

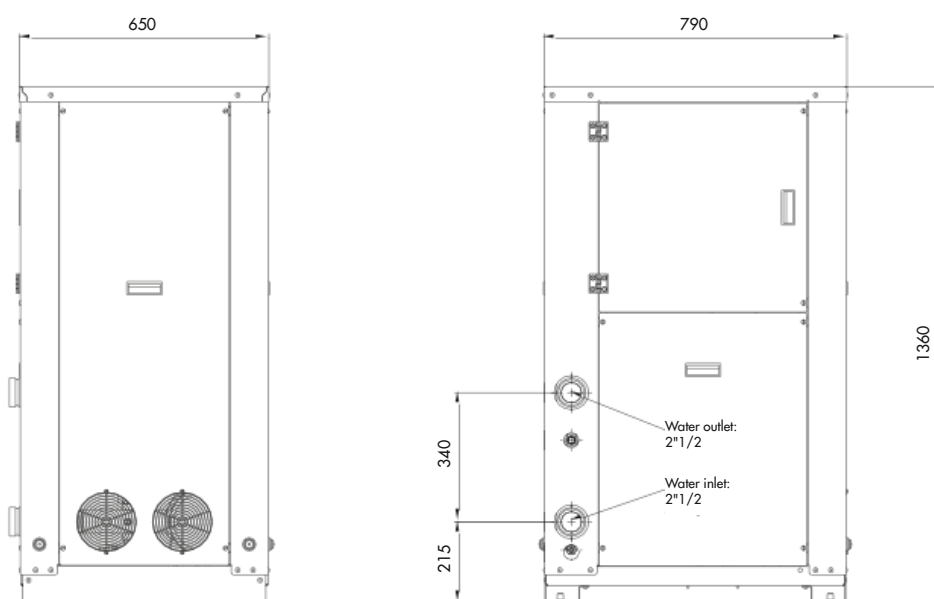
- carbon steel tanks and pipes insulated with anti-condensate elastomer (100, 200 and 300 liters);
- single or double centrifugal pump with shut-off valves;
- power electrical panel with device for pump alternation at every start-up (version with 2 pumps), reserve pump start-up in case of pump malfunction (version with 2 pumps), residual-current devices, dry contacts for remote signalling of running pumps, IP55 protection rating;
- expansion vessel;
- safety valve;
- deaerator;
- pressure gauge;
- filling/discharge valves;
- base and panel made of galvanised and coated sheet metal, suitable for outdoor installations.

DIMENSIONAL DRAWINGS

MOD-HYDRO 1P 30 - MOD-HYDRO 2P 30

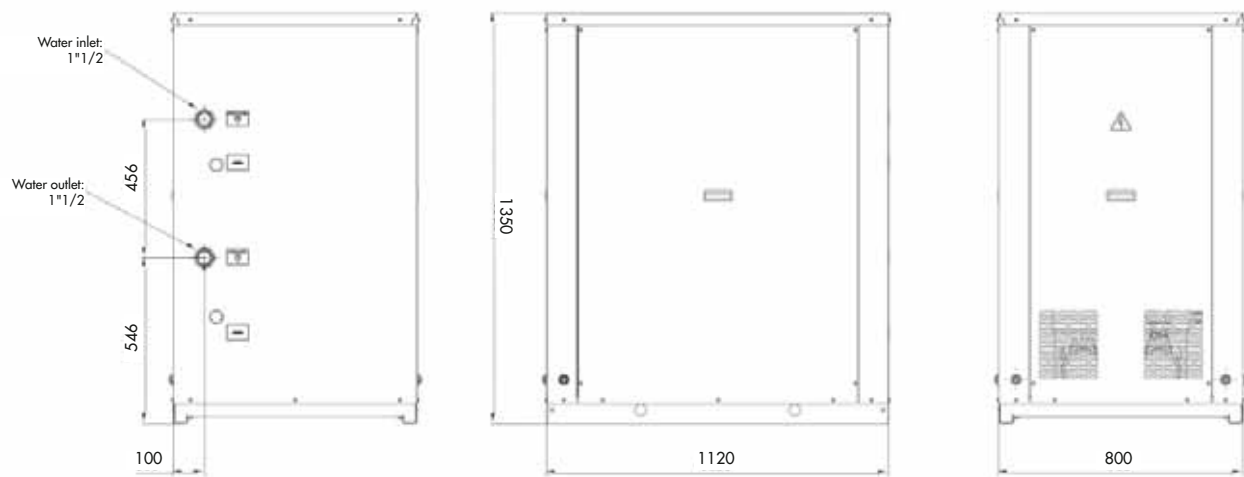


MOD-HYDRO 1P 60 - MOD-HYDRO 2P 60 MOD-HYDRO 1P 90 - MOD-HYDRO 2P 90

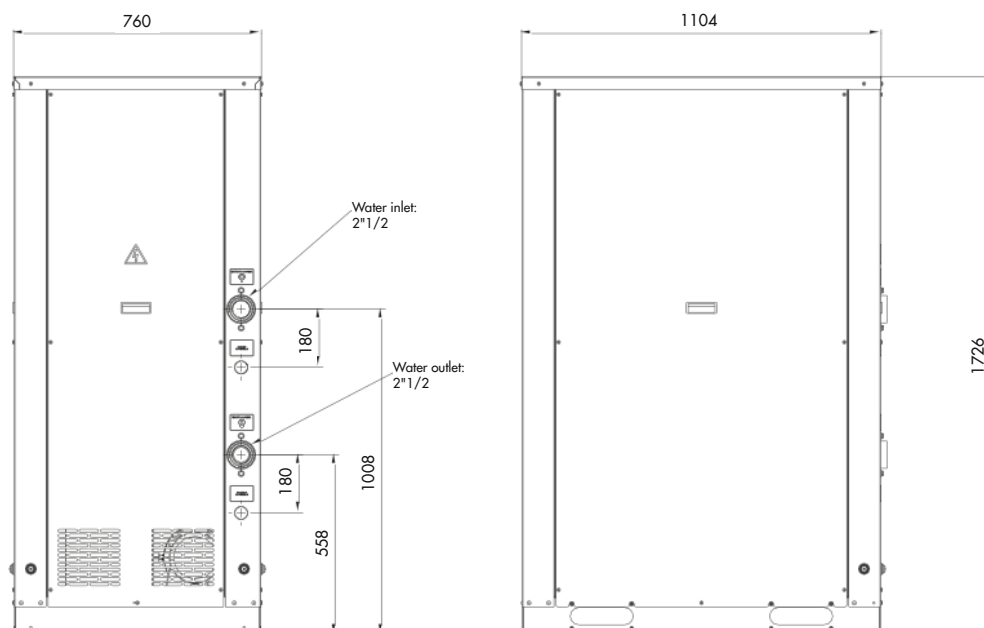


DIMENSIONAL DRAWINGS

MOD-HYDRO V T100 1P 30
MOD-HYDRO V T100 2P 30

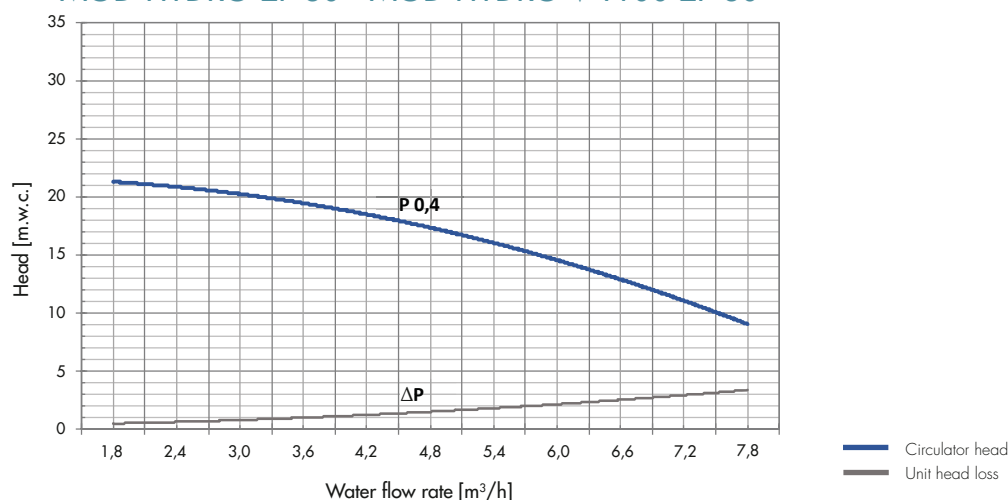


MOD-HYDRO V T200 1P 60 - MOD-HYDRO V T200 2P 60
MOD-HYDRO V T300 1P 90 - MOD-HYDRO V T300 2P 90

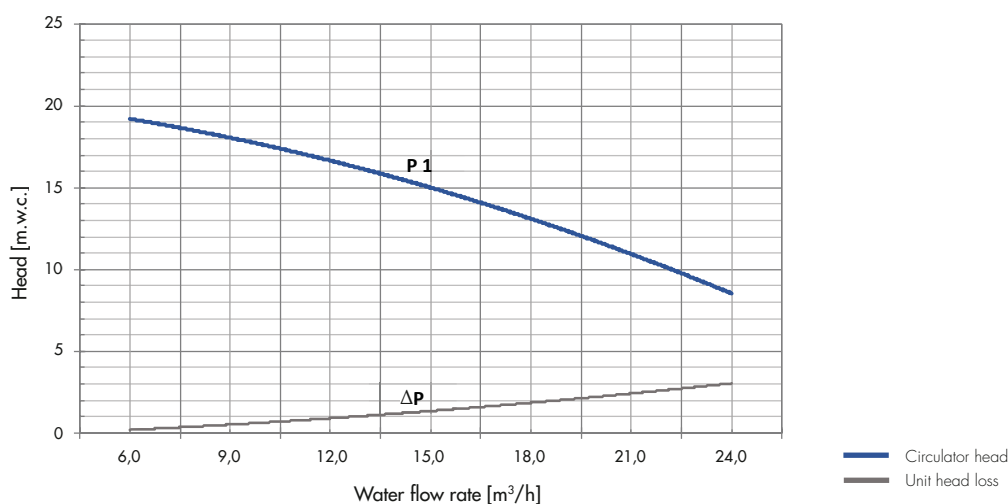


CHARACTERISTIC CIRCULATOR CURVES

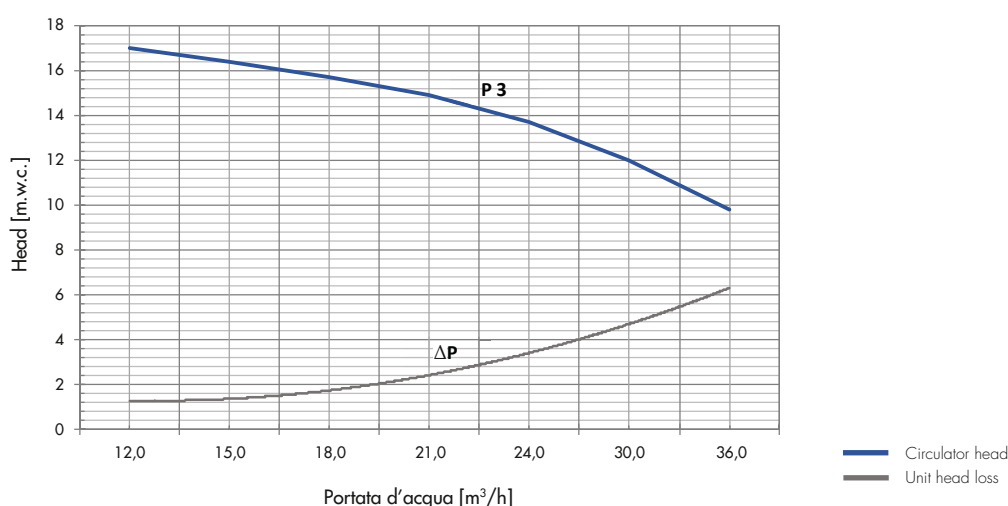
MOD-HYDRO 1P 30 - MOD-HYDRO V T100 1P 30
MOD-HYDRO 2P 30 - MOD-HYDRO V T100 2P 30



MOD-HYDRO 1P 60 - MOD-HYDRO V T200 1P 60
MOD-HYDRO 2P 60 - MOD-HYDRO V T200 2P 60



MOD-HYDRO 1P 90 - MOD-HYDRO V T300 1P 90
MOD-HYDRO 2P 90 - MOD-HYDRO V T300 2P 90

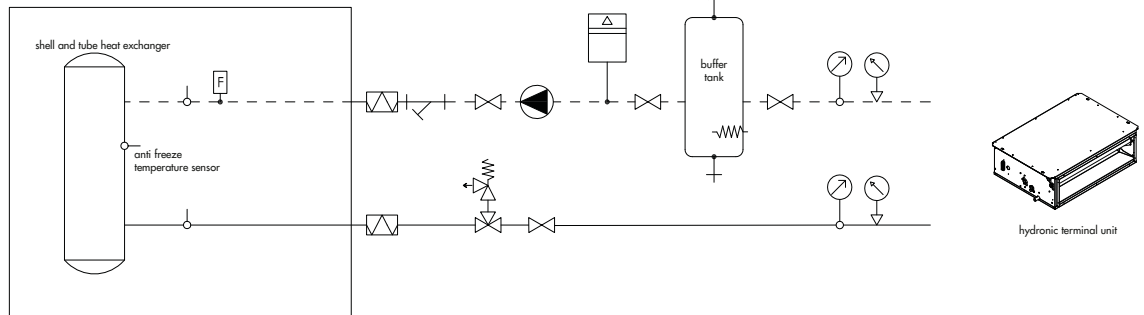


HYDRONIC UNITS INSTALLATION EXAMPLES

SOLUTION ONLY UNIT

LEGEND	
	shut-off valve
	vibration dumping joint
	Y-filter
	safety relief valve
	flow switch
	dial thermostat
	check valve
	dial manometer
	temperature sensor
	drain valve
	air relief valve
	electrical heater

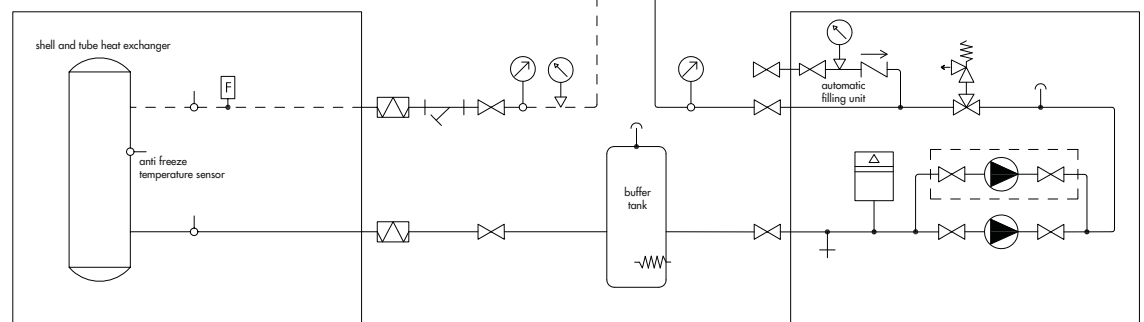
REVERSIBLE MODULAR CHILLER



SOLUTION UNIT AND PUMP GROUP

LEGEND	
	shut-off valve
	vibration dumping joint
	Y-filter
	safety relief valve
	flow switch
	dial thermostat
	check valve
	dial manometer
	temperature sensor
	drain valve
	air relief valve
	electrical heater

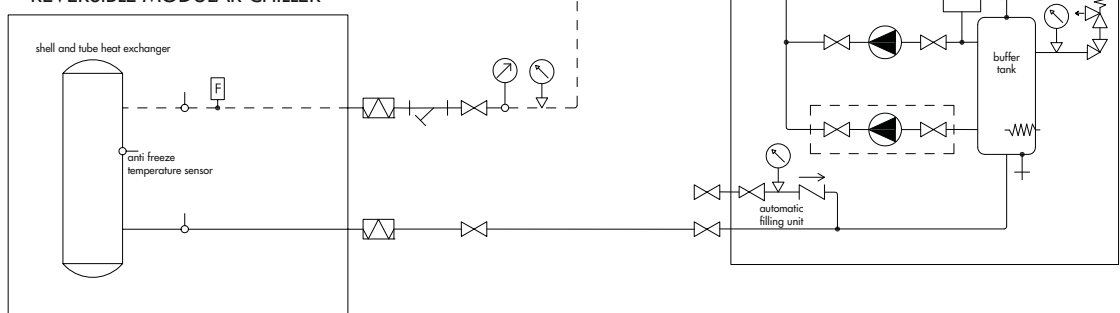
REVERSIBLE MODULAR CHILLER



SOLUTION UNIT AND PUMP GROUP WITH BUFFER TANK

LEGEND	
	shut-off valve
	vibration dumping joint
	Y-filter
	safety relief valve
	flow switch
	dial thermostat
	check valve
	dial manometer
	temperature sensor
	drain valve
	air relief valve
	electrical heater

REVERSIBLE MODULAR CHILLER





X3 DOMESTIC HOT WATER HEAT PUMPS

X3 DHW HEAT PUMPS

MAIN FEATURES



Code	Model	Description
398600080	APHPDHW200	DHW Heat pump - 200 L
398600081	APHPDHW300S	DHW Heat pump with solar coil - 300 L
398600082	APHPDHW100	DHW Heat pump - 100 L

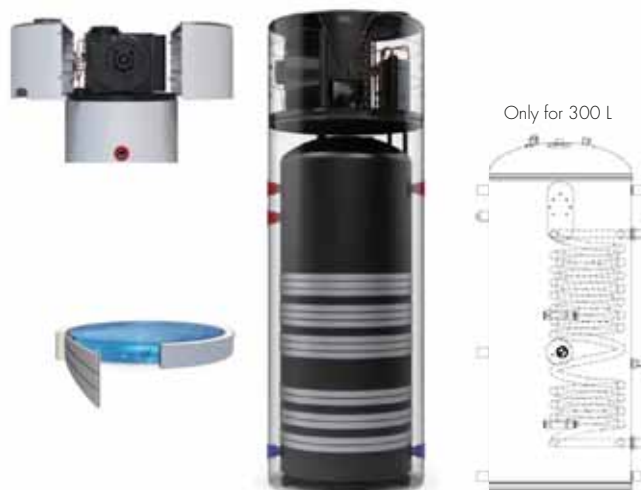
Latest generation compact heat pump system for the production of Domestic Hot Water using ecological R290 refrigerant. A high-performance solution, in A+ class, with a modern and attractive appearance, which is characterized by particularly silent operation, the sound pressure at 1 m distance is 43 dB(A); (37 dB(A) for the 100 liter model). The user-friendly control panel allows you to always have operating conditions under control and facilitates programming to optimize comfort and consumption based on every need. Three models are available, the 100 liter wall-mounted model and the 200 liter model are equipped with an additional electric resistance, while the 300 liter size additionally includes an internal heat exchanger for integration with solar thermal systems. Thanks to the use of R290 refrigerant and the inverter motor, these products stand out for their high performance. With high COPs, even higher than 3, the storage heating times and the related electricity consumption are reduced.

Material: carbon steel. Internal protective treatment: Food-grade inorganic glass-coating complying with DIN 4753-3.



OTHER FEATURES

- Micro-channel heat exchanger (heat pump)
- Spiroidal internal heat exchanger (solar, only for model APHPDHW300S)
- Simplified accessibility
- Installation flexibility
- PV contact



TECHNICAL DATA

Model		APHPDHW300S	APHPDHW200	APHPDHW100
Power supply	/	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz
Water-Dust Resistance	IPX	IPX1	IPX1	IPX1
Electrical Shockproof	I	I	I	I
Heating capacity	kW	1.5	1.5	0.9
Heating Power Input	kW	0.41	0.41	0.25
Heating Current Input	A	1.8	1.8	1.1
COP*		3.51	3.53	-
COP**		3.02	3.08	2.63
Heating time (Heat pump only)***	h	8.25	5.45	4.6
Auxiliary E-heater	kW	1.5	1.5	1.5
Max. Power Input	kW	2.2	2.2	1.9
Max. Current Input	A	9.3	9.3	8.3
Refrigerant/Quantity	g	R290/150 g	R290/150 g	R290/150 g
Unit dimensions (H./L./W.)	mm	Ø 640x1905	Ø 640x1600	Ø 560x1127
Net weight	kg	112	96	68
Rated Outlet Water Temperature	°C	55	55	55
Air Volume	m³/h	350	350	250
Air Pressure	Pa	40	40	20
Air Duct Diameter	mm	160	160	125
Water Inlet-Outlet Size	inch	3/4"	3/4"	1/2"
Compressor		Rotary	Rotary	Rotary
Solar coil heat exchange surface	m²	1.1	/	/
Solar coil pressure drop	mbar	see chart	/	/
Solar coil max. pressure	MPa	1.6	/	/
Solar coil max. temperature	°C	90	/	/

Measurement conditions:

*Ambient temperature 14 °C/13 °C, water inlet 15 °C, water outlet 55 °C (EN16147).

**Ambient temperature 7 °C/6 °C, water inlet 15 °C, water outlet 55 °C (EN16147).

***Ambient temperature 15 °C, water inlet 15 °C, water outlet 55 °C.

Work range:

(1) Ambient temperature is -5 °C~43 °C (Heat Pump).

(2) The max temperature of water tank is 60 °C.

Operating parameters:

The range of the operating water temperatures: 10~60 °C.

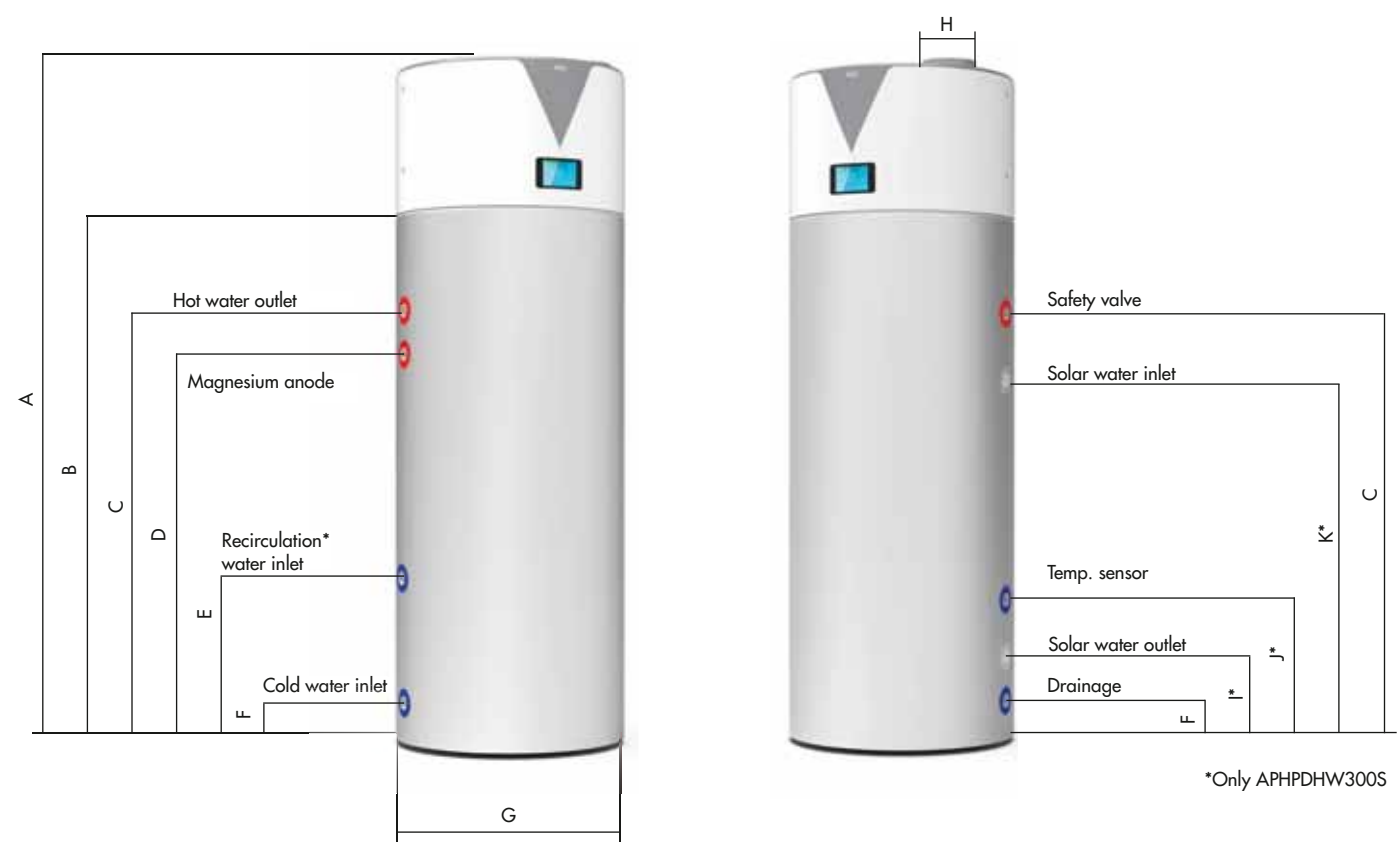
The range of the operating water pressures: 0.15~0.7 MPa.

INSTALLATION

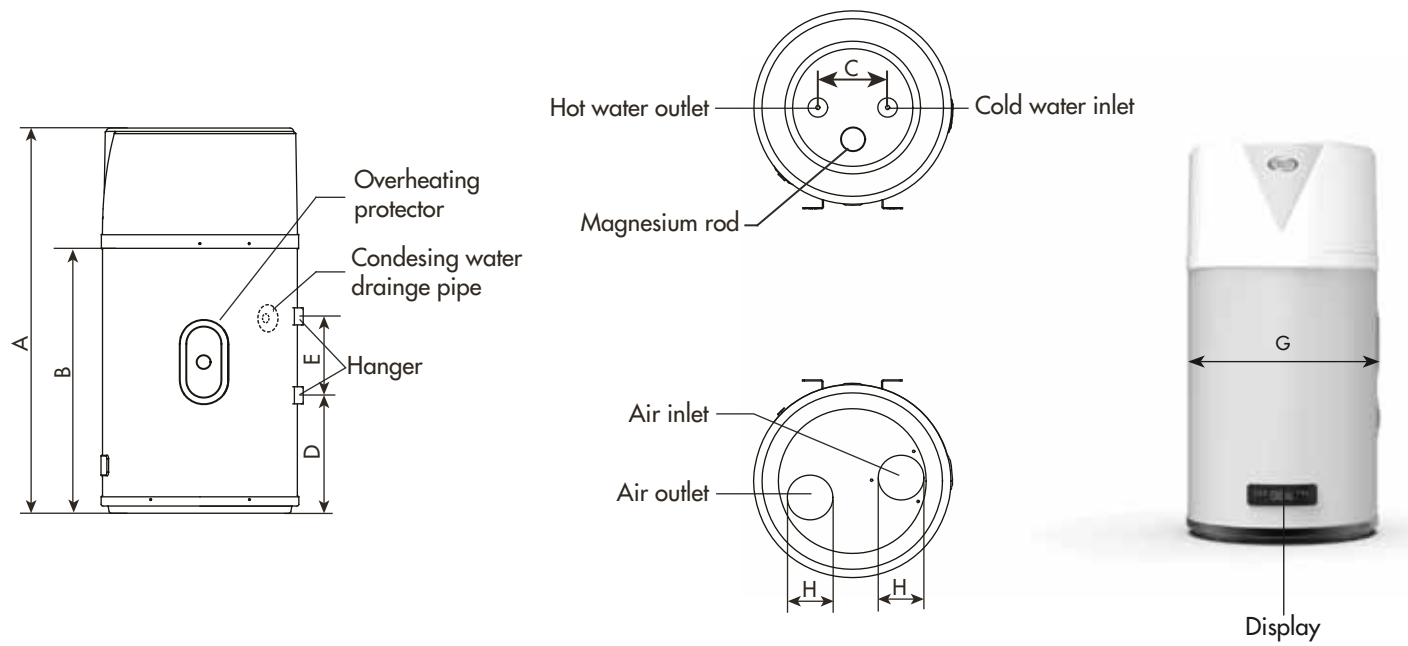
The unit must be installed indoors, preferably in spaces where the temperature is always > 5 °C (e.g. laundry, garage, technical room,...). Both the air intake and exhaust, or none, may be ducted to the outside. A 600 mm clearance must be left all around the unit for maintenance. The room must have a minimum surface of 7 m².



DIMENSIONS AND FITTINGS



		A	B	C	D	E	F	G	H	I	J	K
APHPDHW300S	[mm]	1905	1467	1208	1088	576	128	Ø 640	Ø 160	226	531	1026
APHPDHW200	[mm]	1600	1162	903	783	-	128	Ø 640	Ø 160	-	-	-
CONNECTIONS	[inch]	-	-	G3/4"	G3/4"	G3/4"	G3/4"	-	-	G3/4"	G3/4"	G3/4"



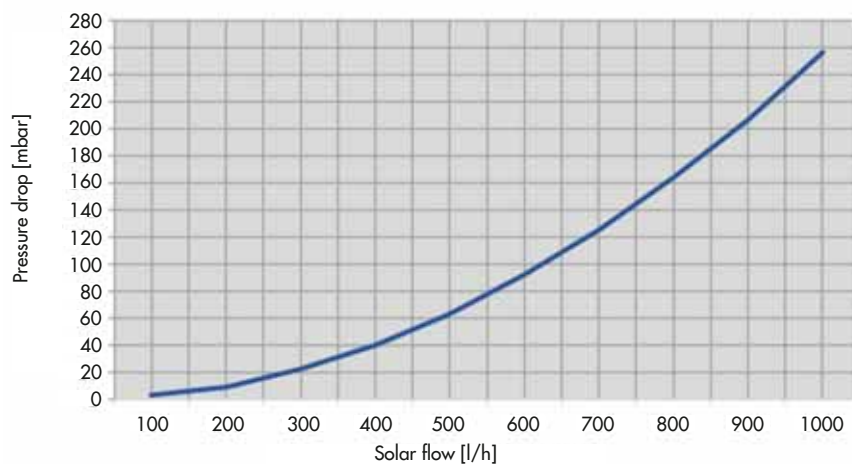
		A	B	C	D	E	G	H
APHPDHW100	[mm]	1117	765	200	355	240	Ø 560	Ø 125

OPERATION MODES

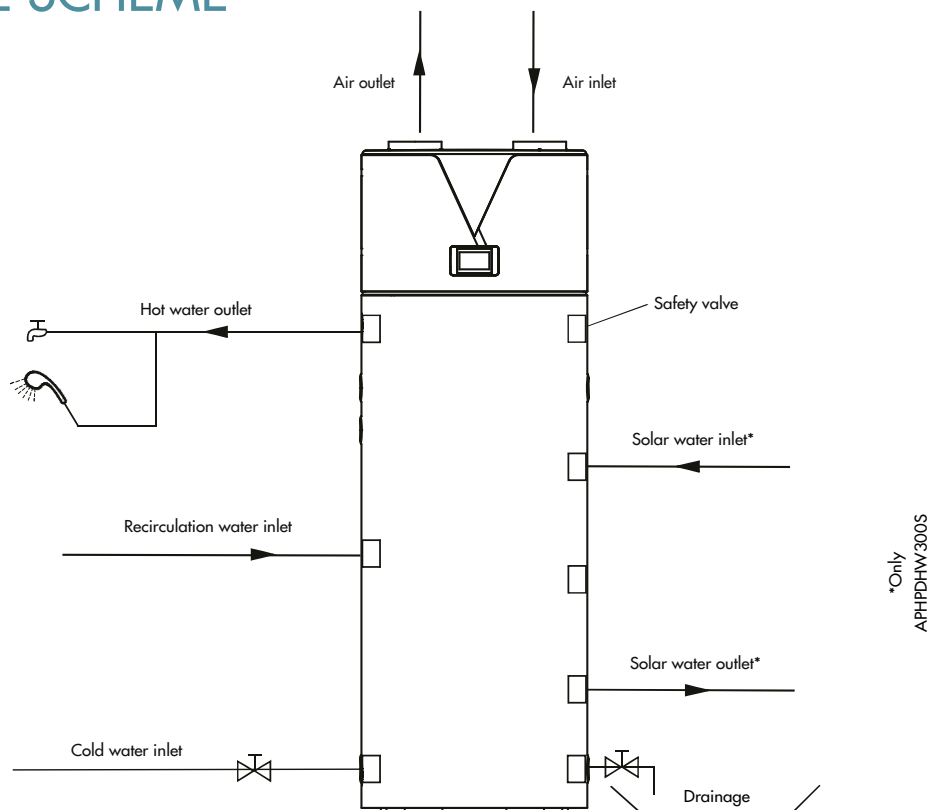
The unit can be set in 5 different operating modes. In Standard mode the heat pump starts based on the measured and the set temperatures. The electrical resistance does not turn on immediately, but only after a programmable time, if the set temperature has not yet been reached. In Eco mode only the heat pump can work and never the electrical resistance.

In High Demand mode, in addition to the heat pump, the electrical resistance is also activated immediately. In Intelligent mode, the operation mode of the unit is automatically switched according to the ambient temperature. Above a 'high' threshold the unit operates in Eco mode. Below a 'low' threshold it works in High Demand mode, while in the intermediate condition the mode is Standard. It is also possible to set a holiday mode (only for 200 and 300 liter models), choosing a 'holiday end' date so that the unit automatically starts working again at the desired time. It is possible to set the anti-legionella cycle, so that disinfection is periodically activated automatically (only for 200 and 300 liter models).

SOLAR HEAT EXCHANGER PRESSURE DROPS



EXAMPLE SCHEME





HEAT RECOVERY UNIT

REC CFA

HEAT RECOVERY UNIT WITH ENTHALPIC HEAT EXCHANGER



Code	Model
398000226	CFA50 WiFi
398000227	CFA80 WiFi
398000228	CFA100 WiFi
OPTIONAL	
398000229	CO ₂ sensor
398000230	Humidity sensor

MAIN FEATURES

CFA units are devices that integrate air filtration and energy recovery. They consist of heat exchangers, filters, plastic-encapsulated DC fans and a smart control system. They can effectively improve indoor air quality and increase oxygen content.

- Static enthalpic heat recovery unit with high thermal efficiency
- Self-supporting structure in galvanized sheet metal, internally insulated; accessibility through side door
- External-side pipe connections with optional 90° outlet.
- Air filtration with G3 filter
- Motorized by-pass system automatically managed to ensure the free cooling with outside air when convenient
- Electric fans with low consumption DC motor, high performance and silence; possibility of managing 10 speeds
- Built-in electrical panel with electronic board for controlling ventilation and free-cooling functions
- Touch screen wired control included
- WiFi module included
- Optional CO₂ probe
- Optional humidity probe

Practical and effective heat exchanger



The heat exchanger, used to effectively recover the energy of the exhaust air and exchange it with the supply air, is composed of a paper core and a resin frame that includes the filter and the guide for easy installation. The thinner membrane of the exchanger ensures better thermal conductivity and higher heat exchange efficiency.

Touch screen wired control included



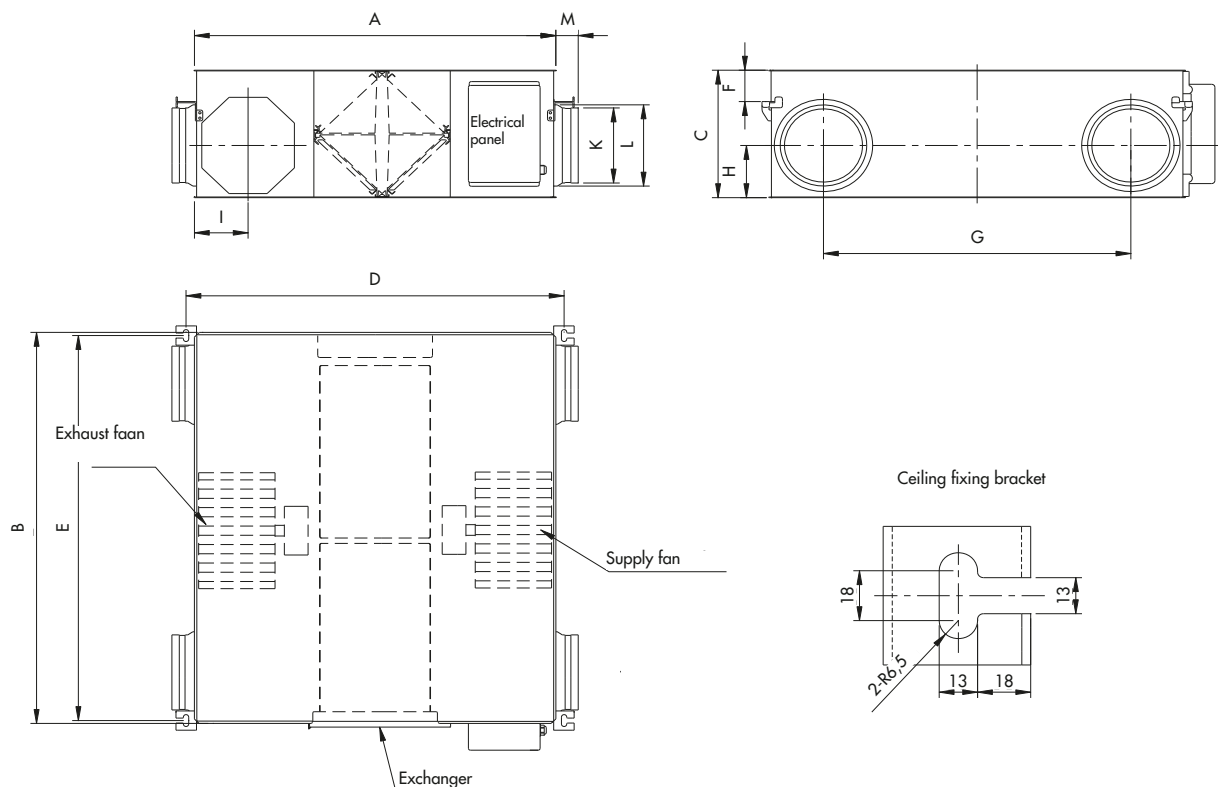
The wired control is necessary to manage all the settings and functions of the recuperator. It is equipped with a capacitive glass screen and has a blue backlight. The device supplied with the machine can be fixed to the wall. Integrated Modbus-RTU connectivity.

PERFORMANCES

Model		CFA 50	CFA 80	CFA 100
Nominal air flow rate	m³/h	500	800	1000
Nominal useful static pressure	Pa	120	150	170
Power supply	V/ph/Hz	230/1/50-60		
Total maximum absorbed current	A	1,15	1,82	2,50
FANS				
Engine type		DC	DC	DC
No. of speeds		10	10	10
Total nominal absorbed power	kW	0,165	0,335	0,420
Sound pressure level (1)	dB(A)	34	37	39
EXCHANGE EFFICIENCY				
Winter enthalpic efficiency (2)	%	67	70	71
Summer enthalpic efficiency (3)	%	69	71	73
Temperature transfer efficiency	%	78	79	80

- (1) Sound pressure level evaluated at 1.5 m from the casing
(2) Outdoor air 5 °C 58.5% RH; ambient air 21 °C 39.2% RH
(3) Outdoor air 35 °C 59.1% RH; ambient air 27 °C 49.8% RH

DIMENSIONAL DRAWING



	Dimensions			Ceiling suspension			Duct position			Duct connection			Nominal diameter	Weight kg
Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	K (mm)	L (mm)	M (mm)		
CFA 50	884	1016	331	922	1000	81	750	135	132	195	211	61	φ 200	33
CFA 80	1144	1004	404	1182	986	82	690	162	164	244	261	62	φ 250	48
CFA 100	1144	1231	404	1182	1213	82	917	162	164	244	261	62	φ 250	54



FAN COIL

Slim floor/ceiling

AC floor/ceiling

EC Brushless floor/ceiling

Cassette

Ducted

Accessories for integration with BMS system and sanification

High-Wall

UNIT RANGE

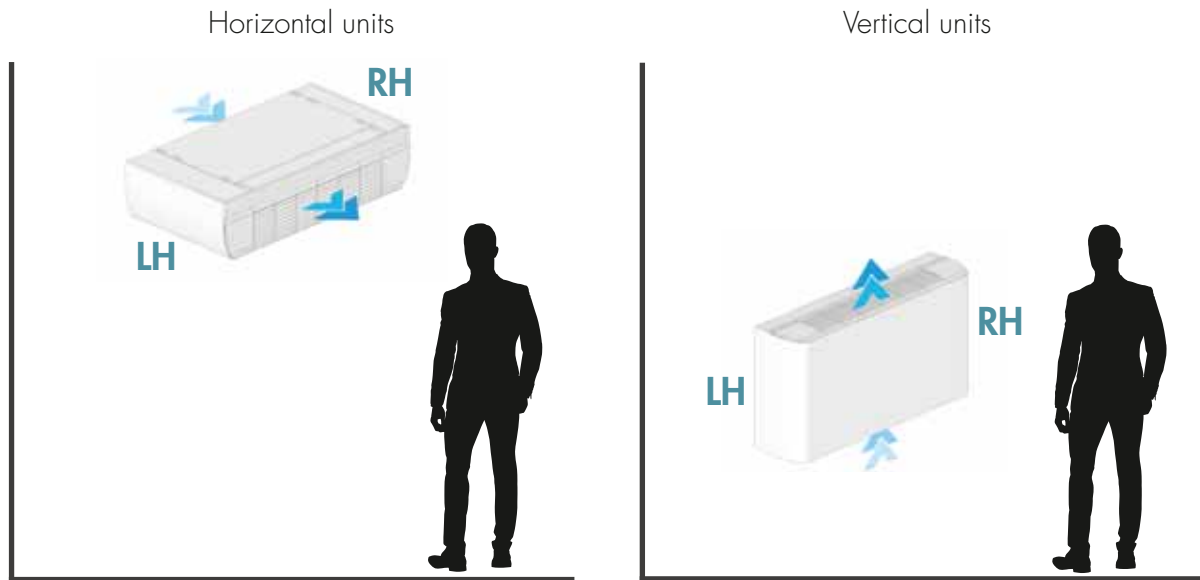
	Model	 2 pipes	 4 pipes	 3-speed	 Brushless	Cooling capacity range W (1)	Heating capacity range W (2)
	FCTS	●		●	●	830-3.800	1.090-8.300
	FCT-CV	●		●		1.500-6.420	3.740-13.300
	FCTE-CV	●			●		
	FCT-CA	●		●			
	FCTE-CA	●			●		
	FCT-CH	●		●			
	FCTE-CH	●			●		
	FCT-NV	●		●			
	FCTE-NV	●			●		
	FCT-NH	●		●		2.950-10.530	7.010-23.870
	FCTE-NH	●			●		
	FCC	●		●			
	FCCE	●			●	5.020-15.190	12.350-30.680
	FCCX		●	●		3.070-8.540	4.590-13.100
	DT-NH	●		●		6.820-17.800	15.200-37.200
	DTE-NH	●			●	6.976-17.993	15.569-37.629
	FCW	●		●		2.100-4.200	4.264-8.642

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C

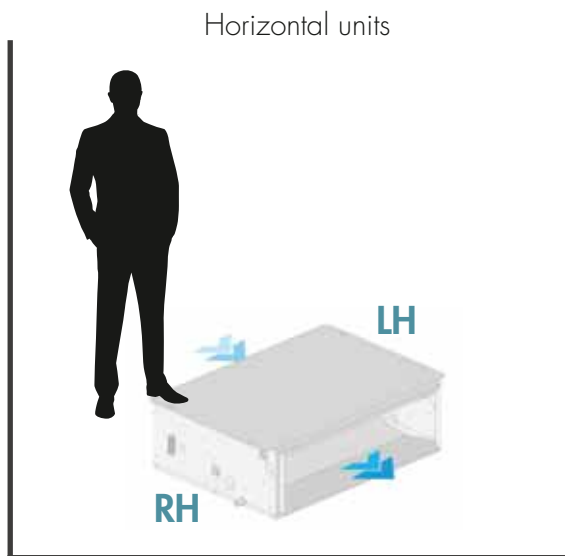
(2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C

FITTING CONVENTIONS

Battery fitting conventions for ffloat/ceiling-mounted fan coil units (FCT/FCTE)



Battery fitting conventions for ductable fan coil units (DT/DTE)



Our fan coil units have the fittings mounted on the left-hand side as a standard feature (unless expressly specified).



FLOOR | CEILING

Slim - Model: FCTS

FLOOR/CEILING SLIM FAN COILS

MAIN FEATURES FCTS RANGE

The slim fan coils can be installed on the floor or ceiling in any room thanks to its particularly small size and elegant design. They quickly reach the selected temperature and keep it constant in maximum silence, thanks to the fan in continuous modulation.

The exchange coil in copper-aluminum is suitable for operation with:

- high temperature water (boiler)
- low temperature water (condensing boiler, heat pump, etc.)
- water supplemented with glycol

RANGE

A range of 5 different capacities (with 2-pipe) is available to always find the perfect product for every need, in white RAL 9003 color.

THIN AND SILENT

With only 129 mm thickness, these fan coils can be installed in any ambient. Moreover, with the fan in continuous modulation that progressively reduces the speed as the room temperature approaches the set one, they guarantee maximum silence. When heating, the limits develop an effective natural convection motion, similar to that of a radiator. This greatly reduces the need for ventilation.

MODULATED AIRFLOW AND LOW CONSUMPTION

The fan is tangential with asymmetrical blades and the exchanger has a large frontal surface. In this way, efficient, silent and imperceptible air flows are obtained with low pressure drops. Moreover, the efficiency is very high with low energy consumption thanks to DC inverter technology.

CONTROLS

FCTS fan coils can be combined with a full range of electronic controls, PI modulating type and more traditional type with three or four fan speeds.

Both on-board controllers, recommended for vertical installations, and remote wired-controllers, recommended for ceiling-mounted installations, are available. It is always necessary to match one of the options to each unit.

VALVES

Both a 2-way valve assembly with electrothermal actuator and a 3-way diverting valve assembly with electrothermal actuator are available.

OTHER ACCESSORIES

To complete the installation, several accessories are available: aesthetic feet to hide the hydraulic connection pipes coming from the floor, aesthetic feet for floor fixing, condensate collection trays for horizontal ceiling installation and aesthetic back panels for installations with the rear part of the unit in sight.

FLOOR/CEILING SLIM FAN COILS

MODELS

FAN COIL SLIM MOD. FCTS

Vertical (floor) or horizontal (ceiling) installation.

Code	Model	Cooling capacity (W)* (1)	Heating capacity (W)* (2)
387030666	FCTS-CA 01 L	830	1.890
387030710	FCTS-CA 01 R		
387030667	FCTS-CA 02 L	1.760	3.990
387030711	FCTS-CA 02 R		
387030668	FCTS-CA 03 L	2.650	5.470
387030712	FCTS-CA 03 R		
387030669	FCTS-CA 04 L	3.340	6.980
387030713	FCTS-CA 04 R		
387030670	FCTS-CA 05 L	3.800	8.300
387030714	FCTS-CA 05 R		

*maximum fan speed

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) **Heating:** air temp. 20 °C dry bulb - input/output water temp. 70/60 °C



FCTS-CA	01	L
-	(1)	(2)

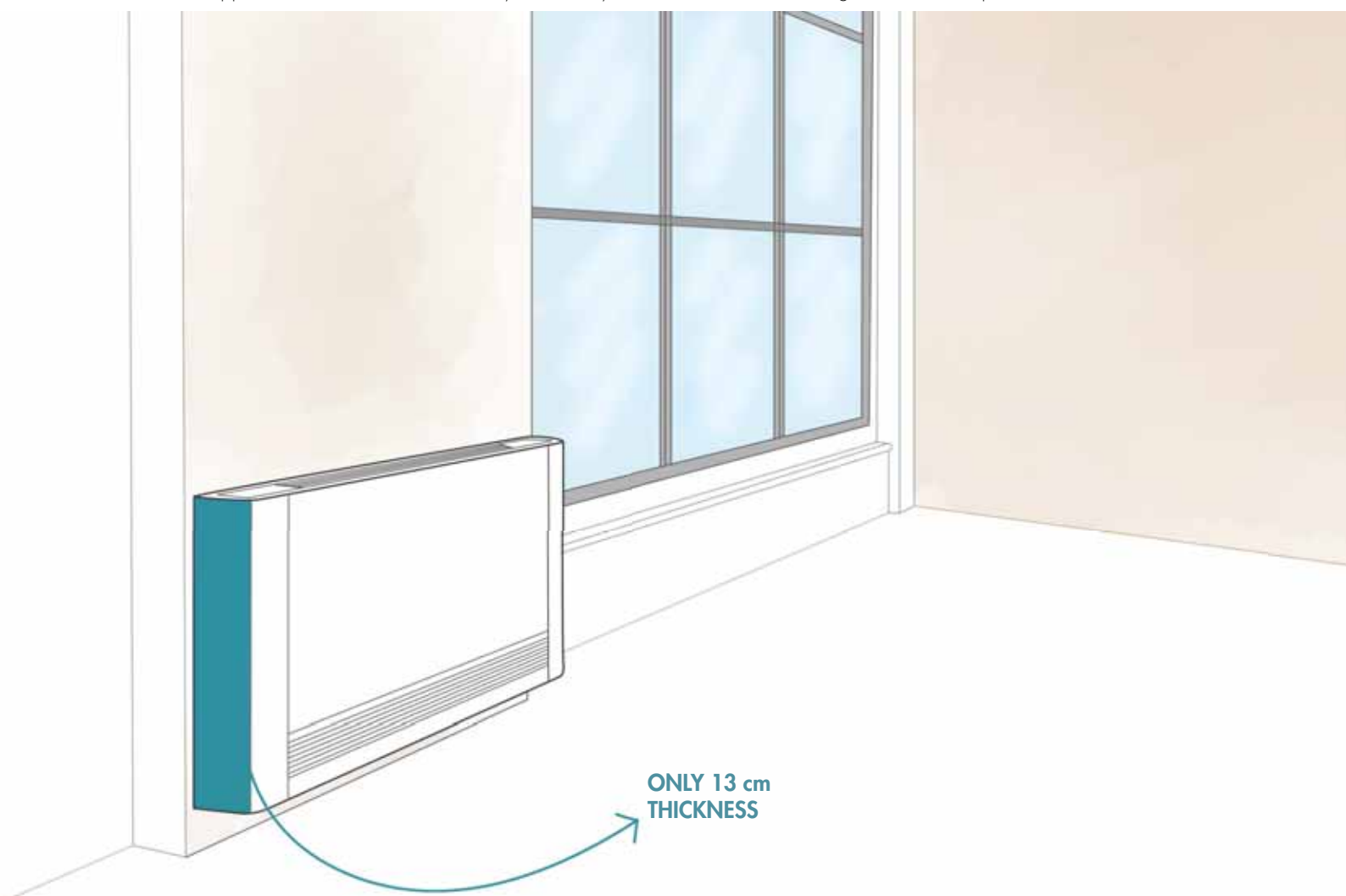
FCTS-CA = fan coil model

(1) Capacity = 01

(2) L = left coil connection/R = right coil connection

FANCOILS

NB: Units are supplied without controllers it's always necessary to select a controller among the available options to be matched with the units



RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

Model			01	02	03	04	05
Total cooling capacity (1)		W	830	1760	2650	3340	3800
Sensible cooling capacity (1)		W	620	1270	1960	2650	3010
Heating capacity (2a)		W	1090	2350	3190	4100	4860
Heating capacity (2b)		W	1890	3990	5470	6980	8300
Rated air flow		m³/h	162	320	461	576	648
Coil water content		l	0.47	0.8	1.13	1.46	1.8
Water flow rate (4)	Cooling	l/h	143	303	456	574	654
	Heating (2a)	l/h	143	303	456	574	654
	Heating (2b)	l/h	162	343	471	600	714
Pressure drops (5)	Cooling	kPa	7.2	8.4	22.5	18.6	24.9
	Heating (2a)	kPa	5.7	6.6	16.3	14	18.3
	Heating (2b)	kPa	6.7	7.6	16.1	14	19.8
Sound pressure (ls.-ms.-hs.) (3)		dB(A)	24.2-33.2-39.4	25.3-34.1-40.2	25.6-34.4-42.2	26.3-35.0-42.5	27.6-37.6-43.9
Motors/Fans		N/N	1/1				
Rated power input	W		11.9	17.6	19.8	26.5	29.7
	A		0.11	0.16	0.18	0.26	0.28
Electrical power supply		V/Hz	230/50				
Cold/hot coil rows		N	2				
Hydraulic fittings		DN	Eurokonus 3/4"				
Condensate drainage outlet		mm	16				
Net weight		kg	17	20	23	26	29

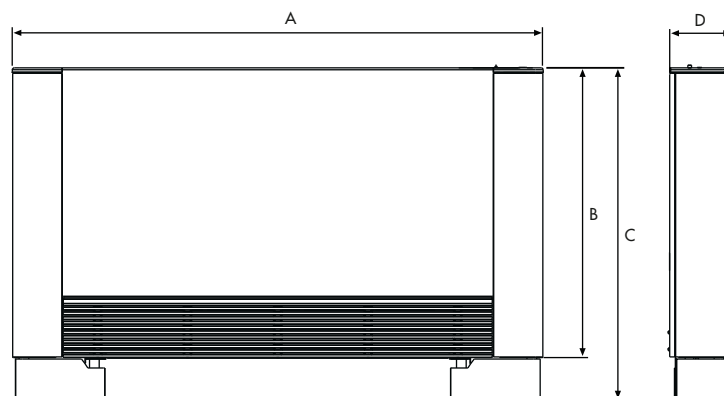
(1) Water temperature at coil inlet 7 °C, water temperature at coil outlet 12 °C, ambient air temperature 27 °C d.b. and 19 °C w.b. (UNI EN 1397 standard)

(2a) Coil inlet water temperature 50 °C, water flow rate as in cooling mode, ambient air temperature 20 °C (UNI EN 1397 standard)

(2b) Water temperature at coil inlet 70 °C, water temperature at coil outlet 60 °C, ambient air temperature 20 °C

(3) Sound pressure measured in a semi-anechoic chamber according to ISO 7779 standard

DIMENSIONAL DRAWINGS



MODEL FCTS		01	02	03	04	05
A	mm	735	935	1135	1335	1535
B	mm	579	579	579	579	579
C	mm	659	659	659	659	659
D	mm	129	129	129	129	129

MATCHABLE CONTROLLERS

OPTIONAL OR ACCESSORIES TO BE ORDERED SEPARATELY

ONLY PCB

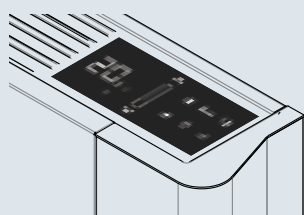


PCB

EIX03 for third-party 3-speed electromechanical wall thermostats

EIX04 for control from third party 0-10V analog output systems

ON-BOARD CONTROLLERS



OBC28 PCB included

OBC30 PCB included

REMOTE WIRED CONTROLLERS



PCB
EIX02

CONTROLLERS

SWC31

SWC33

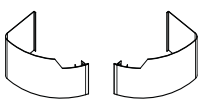
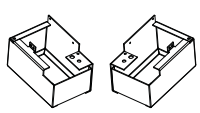
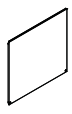
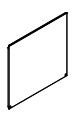
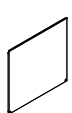
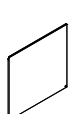
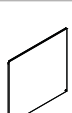
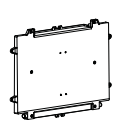
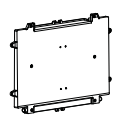
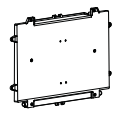
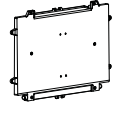
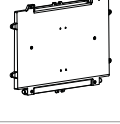
ACCESSORIES

CONTROLS

		Code	Model	Description	Applicability
ON BOARD CONTROLLERS		387030671	OBC28	Electronic controller SMART TOUCH LCD with continuous modulation thermostat	All
		387030673	OBC30	Electronic controller SMART TOUCH LCD e with 4 fixed speeds and thermostat	All
REMOTE WIRED CONTROLLERS		387030675	EIX02	PCB on the unit with continuous modulation for connection to wall controller SWC31 - SWC33	All, to be matched with a wall control
		387030676	SWC31	SMART TOUCH electronic wall controller panel with thermostat and ambient probe (to be coupled from 1 to max 30 EIX02), white color	All, to be matched with PCB EIX02
		387030678	SWC33	Wall electronic controller panel TOUCH LCD with thermostat and temperature probe, relative humidity and air quality in the room. White color	All, to be matched with PCB EIX02
		387030680	EMZS	MZS, Single Zone Module	All
ONLY PCB		387030681	EIX03	Electronic board on the unit or connection to 3-speed electromechanical wall thermostats (third party)	All
		387030682	EIX04	Electronic board on the unit for control from systems with 0-10V analog output (third party)	All

VALVES

Code	Model	Description	Applicability
387030684	2WV08	2-way valve group (inlet valve and lockshield) with thermoelectric motor	All
387030685	3WV08	3-way diverting valve unit with thermoelectric motor (complete with 3-way inlet valve and lockshield)	All

VARIOUS				
	Code	Model	Description	Applicability
	387030686	FE02	Feet for floor pipes hiding in white color	All
	387030687	FE03	Feet to anchor the unit to the floor, white color	All
	387030688	CPBS 01	Back cover in white color - Mod. 01	01
	387030689	CPBS 02	Back cover in white color - Mod. 02	02
	387030690	CPBS 03	Back cover in white color - Mod. 03	03
	387030691	CPBS 04	Back cover in white color - Mod. 04	04
	387030692	CPBS 05	Back cover in white color - Mod. 05	05
	387030694	HB03	Condensate collection tray for horizontal ceiling installation - Mod. 01	01
	387030695	HB04	Condensate collection tray for horizontal ceiling installation - Mod. 02	02
	387030696	HB05	Condensate collection tray for horizontal ceiling installation - Mod. 03	03
	387030697	HB06	Condensate for horizontal ceiling installation - Mod. 04	04
	387030798	HB07	Condensate for horizontal ceiling installation - Mod. 05	05



FLOOR | CEILING

AC - Model: FCT

AC FLOOR/CEILING

MAIN FEATURES MOD. FCT

COVERING CABINET

(only for the CV - CA - CH versions)

Standard white finish (RAL 9010). Made of high-thickness galvanised plate pre-coated with a polyvinyl chloride film, it can withstand rust, corrosion, chemicals, solvents, aliphatic compounds and alcohols. Internal thermo-acoustic insulation (Class M1). Compact dimensions: a mere 220 mm thickness. Air supply grid made of white ABS (RAL 9002), with openable side panels for accessing the control panel (accessory). The double row of manual flaps, each adjustable, allows for directing the air flow in any direction. The flaps can be adjusted in opposite directions to enhance the induction effect. The flow can be directed to graze the ceiling/wall to exploit the Coanda effect.

LOAD-BEARING STRUCTURE

Load-bearing structure made of high-thickness galvanised plate with holes (slots) for wall/ceiling mounting, made directly on the structure.

DRAIN PAN

Drain pan equipped with a drainage outlet and thermal insulation. A condensation drain funnel with Ø 20 mm fitting, made of plastic, is mounted only on vertical versions (standard on the same side of the water connections).

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion. Coil fittings equipped with anti-torsion system, manual air relief valves and manual water drainage valves. Fittings on the left as a standard feature; on request they can be mounted on the right and are easily reversible on-site. 1 coil for 2-pipe system; 2 coils for 4-pipe system.

Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler);
- low-temperature water (condensing boiler, heat pump, etc.);
- cold water (chiller and/or industrial processes)
- water supplemented with glycol.

VENTILATION UNIT

Ventilation unit consisting of 1, 2 or 3 double-intake centrifugal fans directly coupled with the electric motor with a useful static pressure of up to 75 Pa. Mounted on elastic and elastic supports and shock absorbers. Statically and dynamically balanced fan. Asynchronous electric motor equipped with thermal protection device (Klixon), run capacitor always engaged, IP42, Class B, power cables protected with double insulation. Built according to international standards, 230 VAC-1 Ph-50 Hz.

Standard unit with single-speed motor + 6-output auto-transformer ensuring up to 6 speeds (with performances ranging from max=100% to min=40-50%). Standard electrical pre-wiring in the factory of the 3 intermediate speeds nos. 2-3-5.

AIR FILTER

Easily removable air filter, built with a metal frame containing the filtration septum. Can be regenerated by washing it with water, blowing, vacuuming. Standard: filtering medium made of polyester acrylic fabric, high-efficiency, resin-coated and needle-punched. Recommended against dust and pollen. Class M1, filtration grade EU3 (EUROVENT 4/5).

AC FLOOR/CEILING

MODELS

AC FLOOR FAN COIL MOD. FCT-CV

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the bottom part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030239	FCT-CV 01 L	1.500	3.740
387030240	FCT-CV 01 R		
387030241	FCT-CV 02 L	2.000	4.910
387030242	FCT-CV 02 R		
387030243	FCT-CV 03 L	2.530	5.980
387030244	FCT-CV 03 R		
387030245	FCT-CV 04 L	3.020	6.710
387030246	FCT-CV 04 R		
387030247	FCT-CV 05 L	3.750	8.160
387030248	FCT-CV 05 R		
387030249	FCT-CV 06 L	4.250	9.440
387030250	FCT-CV 06 R		
387030251	FCT-CV 07 L	5.520	12.000
387030252	FCT-CV 07 R		
387030253	FCT-CV 08 L	6.420	13.300
387030254	FCT-CV 08 R		
387030255	FCT-CV 09 L	7.530	15.500
387030256	FCT-CV 09 R		



FCT-CV	01	L
-	(1)	(2)

FCT-CV = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09
(2) L = left coil connection/R = right coil connection

AC FLOOR FAN COIL MOD. FCT-CA

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030257	FCT-CA 01 L	1.500	3.740
387030258	FCT-CA 01 R		
387030259	FCT-CA 02 L	2.000	4.910
387030260	FCT-CA 02 R		
387030261	FCT-CA 03 L	2.530	5.980
387030262	FCT-CA 03 R		
387030263	FCT-CA 04 L	3.020	6.710
387030264	FCT-CA 04 R		
387030265	FCT-CA 05 L	3.750	8.160
387030266	FCT-CA 05 R		
387030267	FCT-CA 06 L	4.250	9.440
387030268	FCT-CA 06 R		
387030269	FCT-CA 07 L	5.520	12.000
387030270	FCT-CA 07 R		
387030271	FCT-CA 08 L	6.420	13.300
387030272	FCT-CA 08 R		
387030273	FCT-CA 09 L	7.530	15.500
387030274	FCT-CA 09 R		



FCT-CA	01	L
-	(1)	(2)

FCT-CA = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09
(2) L = left coil connection/R = right coil connection

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C

AC FLOOR/CEILING MODELS

AC CEILING FAN COIL MOD. FCT-CH

Visible ceiling-mounted horizontal installation, covering cabinet with air outflow from the front and intake from the bottom.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030275	FCT-CH 01 L	1.500	3.740
387030276	FCT-CH 01 R		
387030277	FCT-CH 02 L	2.000	4.910
387030278	FCT-CH 02 R		
387030279	FCT-CH 03 L	2.530	5.980
387030280	FCT-CH 03 R		
387030281	FCT-CH 04 L	3.020	6.710
387030282	FCT-CH 04 R		
387030283	FCT-CH 05 L	3.750	8.160
387030284	FCT-CH 05 R		
387030285	FCT-CH 06 L	4.250	9.440
387030286	FCT-CH 06 R		
387030287	FCT-CH 07 L	5.520	12.000
387030288	FCT-CH 07 R		
387030289	FCT-CH 08 L	6.420	13.300
387030290	FCT-CH 08 R		
387030291	FCT-CH 09 L	7.530	15.500
387030292	FCT-CH 09 R		



FCT-CH	01	L
-	(1)	(2)

FCT-CH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

AC VERTICAL CONCEALED FAN COIL MOD. FCT-NV

Concealed vertical installation, with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030293	FCT-NV 01 L	1.500	3.740
387030294	FCT-NV 01 R		
387030295	FCT-NV 02 L	2.000	4.910
387030296	FCT-NV 02 R		
387030297	FCT-NV 03 L	2.530	5.980
387030298	FCT-NV 03 R		
387030299	FCT-NV 04 L	3.020	6.710
387030300	FCT-NV 04 R		
387030301	FCT-NV 05 L	3.750	8.160
387030302	FCT-NV 05 R		
387030303	FCT-NV 06 L	4.250	9.440
387030304	FCT-NV 06 R		
387030305	FCT-NV 07 L	5.520	12.000
387030306	FCT-NV 07 R		
387030307	FCT-NV 08 L	6.420	13.300
387030308	FCT-NV 08 R		
387030309	FCT-NV 09 L	7.530	15.500
387030310	FCT-NV 09 R		



FCT-NV	01	L
-	(1)	(2)

FCT-NV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C

AC HORIZONTAL CONCEALED FAN COIL MOD. FCT-NH

Concealed horizontal installation, with horizontal air outflow and intake from the rear part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030311	FCT-NH 01 L	1.500	3.740
387030312	FCT-NH 01 R		
387030313	FCT-NH 02 L	2.000	4.910
387030314	FCT-NH 02 R		
387030315	FCT-NH 03 L	2.530	5.980
387030316	FCT-NH 03 R		
387030317	FCT-NH 04 L	3.020	6.710
387030318	FCT-NH 04 R		
387030319	FCT-NH 05 L	3.750	8.160
387030320	FCT-NH 05 R		
387030321	FCT-NH 06 L	4.250	9.440
387030322	FCT-NH 06 R		
387030323	FCT-NH 07 L	5.520	12.000
387030324	FCT-NH 07 R		
387030325	FCT-NH 08 L	6.420	13.300
387030326	FCT-NH 08 R		
387030327	FCT-NH 09 L	7.530	15.500
387030328	FCT-NH 09 R		

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C



FCT-NH	01	L
-	(1)	(2)

FCT-NH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

Models			01	02	03	04
Total cooling capacity (1)		W	1.500	2.000	2.530	3.020
Sensible cooling capacity (1)		W	1.290	1.620	2.070	2.310
Heating capacity (2a)		W	3.740	4.910	5.980	6.710
Heating capacity (2b)		W	1.870	2.455	2.990	3.355
Rated air flow (3)		m³/h	370	400	500	550
Water flow rate (4)	Cooling	l/h	258	344	436	520
	Heating	l/h	322	423	515	578
Water pressure drop (5)	Cooling	kPa	13.1	16.3	18.5	20.8
	Heating	kPa	15.9	19.2	20.1	20
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	24-31-38	25-31-38	30-38-44	31-38-45
Motors/Fans		N/N	1/1		1/1	
Rated power absorption (7)		W	55		85	
		A	0.25		0.40	
Electrical power supply			230 Vac - 1 Ph - 50 Hz			
Cold/hot coil rows		N	3R		3R	
Hydraulic fittings		DN	1/2" F		1/2" F	
Condensate drainage outlet		mm	20		20	

Models			05	06	07	08	09
Total cooling capacity (1)		W	3.750	4.250	5.520	6.420	7.530
Sensible cooling capacity (1)		W	2.870	3.230	4.330	4.800	5.670
Heating capacity (2a)		W	8.160	9.440	12.000	13.300	15.500
Heating capacity (2b)			4.080	4.720	6.000	6.650	7.750
Rated air flow (3)		m³/h	670	720	1.000	1.050	1.280
Water flow rate (4)	Cooling	l/h	645	731	950	1.105	1.296
	Heating	l/h	702	812	1.032	1.144	1.333
Water pressure drop (5)	Cooling	kPa	22.6	24.1	24.5	27.1	28.8
	Heating	kPa	20.9	23.2	22.6	22.7	23.8
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	26-33-37	27-34-37	34-41-43	35-41-45	39-46-48
Motors/Fans		N/N	1/2		1/2		1/2
Rated power absorption (7)		W	75		145		175
		A	0.35		0.65		0.77
Electrical power supply			230 Vac - 1 Ph - 50 Hz				
Cold/hot coil rows		N	3R		3R		3R
Hydraulic fittings		DN	1/2" F		1/2" F		1/2" F
Condensate drainage outlet		mm	20		20		20

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19°C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Jokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

REDUCTION OF THE COOLING/HEATING CAPACITY (IN RELATION TO THE AIR FLOW REDUCTION)

Air flow rate	1.00	0.95	0.90	0.85	0.80	0.75	0.70	0.65	0.60
Total cooling capacity	1.00	0.97	0.95	0.92	0.89	0.87	0.84	0.81	0.77
Sensible cooling capacity	1.00	0.97	0.93	0.90	0.86	0.83	0.79	0.76	0.72
Heating capacity	1.00	0.97	0.94	0.91	0.87	0.84	0.81	0.77	0.74

Air flow rate	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15
Total cooling capacity	0.74	0.71	0.67	0.63	0.59	0.55	0.50	0.45	0.39
Sensible cooling capacity	0.68	0.64	0.60	0.55	0.51	0.46	0.41	0.35	0.29
Heating capacity	0.70	0.66	0.62	0.58	0.53	0.49	0.44	0.38	0.32

TABLE OF NET WEIGHTS MOD. FCT (TWO-PIPE UNIT - ONE COIL) IN KG

Products/Models	01	02	03	04	05	06	07	08	09
FCT-CV	13.5	14.0	16.4	17.2	22.5	23.5	26.5	27.5	30.0
FCT-CA	13.8	14.3	16.9	17.7	23.2	24.2	26.9	28.4	31.1
FCT-CH	15.0	15.5	18.5	19.3	25.2	26.2	29.3	30.8	33.9
FCT-NV	10.6	11.1	13.4	14.2	19.4	20.4	22.7	24.2	26.6
FCT-NH	11.2	11.7	14.0	14.8	20.0	21.0	23.4	24.9	27.3

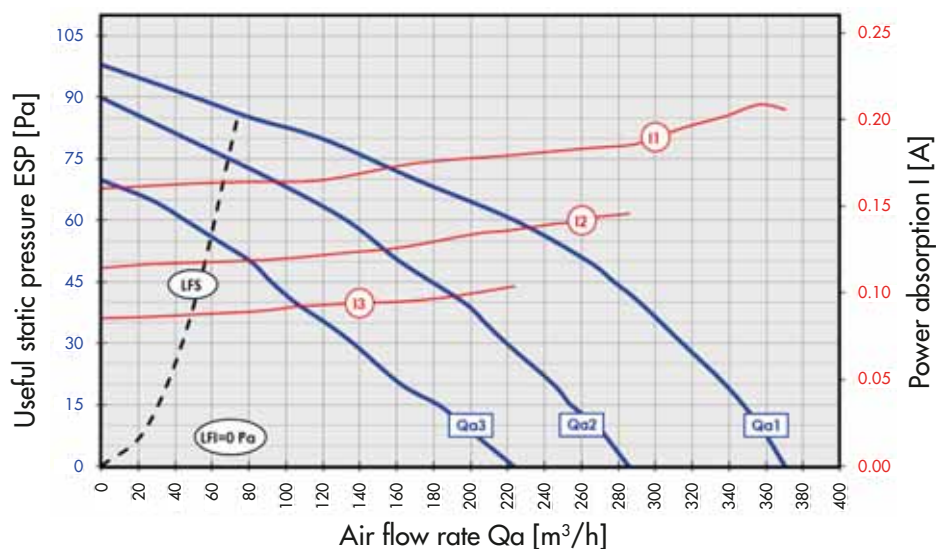
USEFUL STATIC PRESSURE/AIR FLOW RATE DIAGRAMS

Key

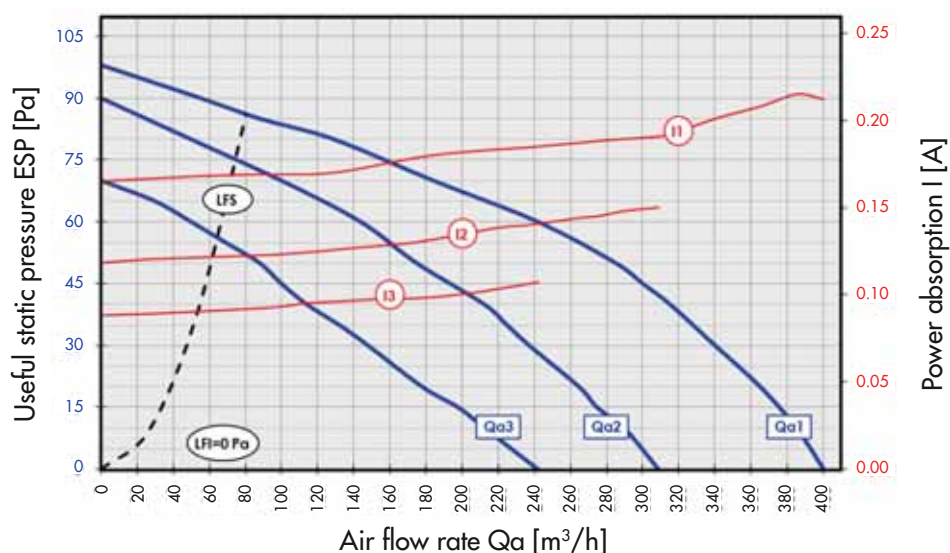
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

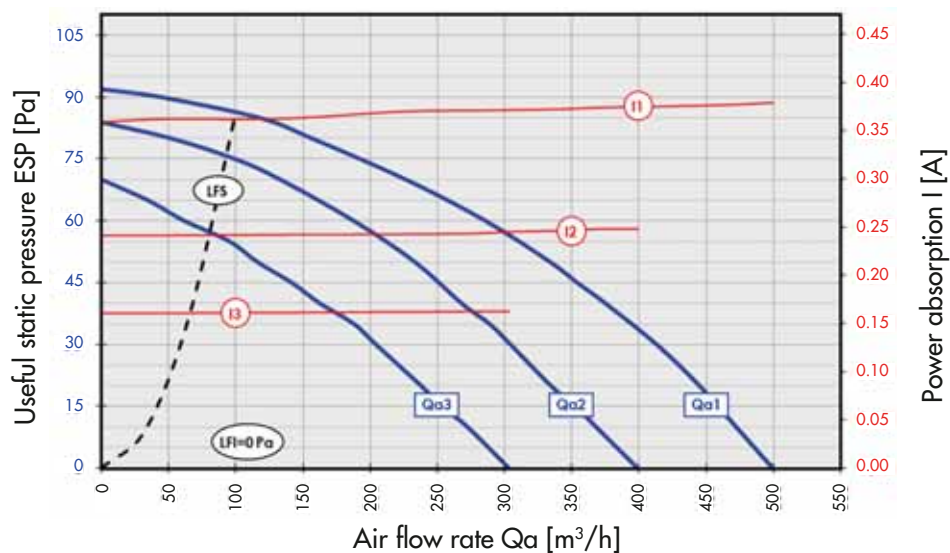
Model FCT 01



Model FCT 02



Model FCT 03

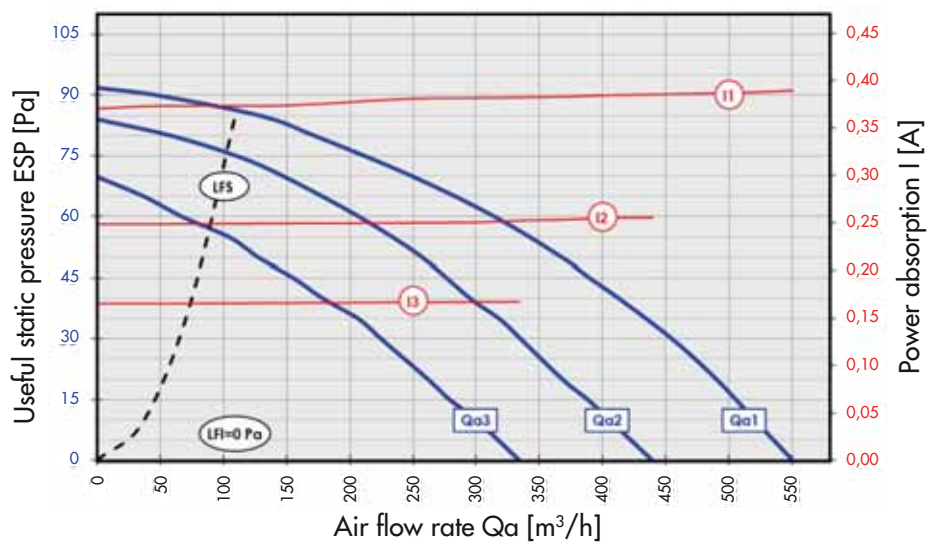


Key

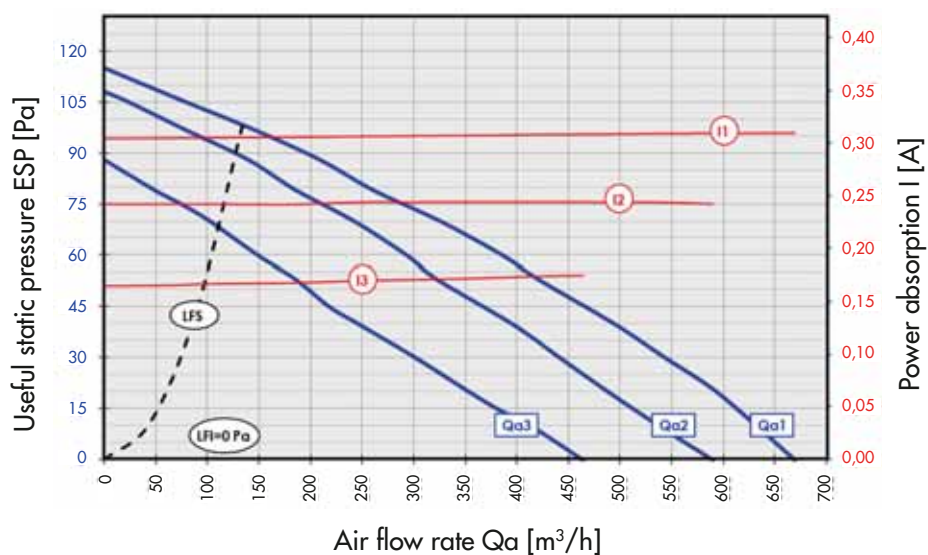
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

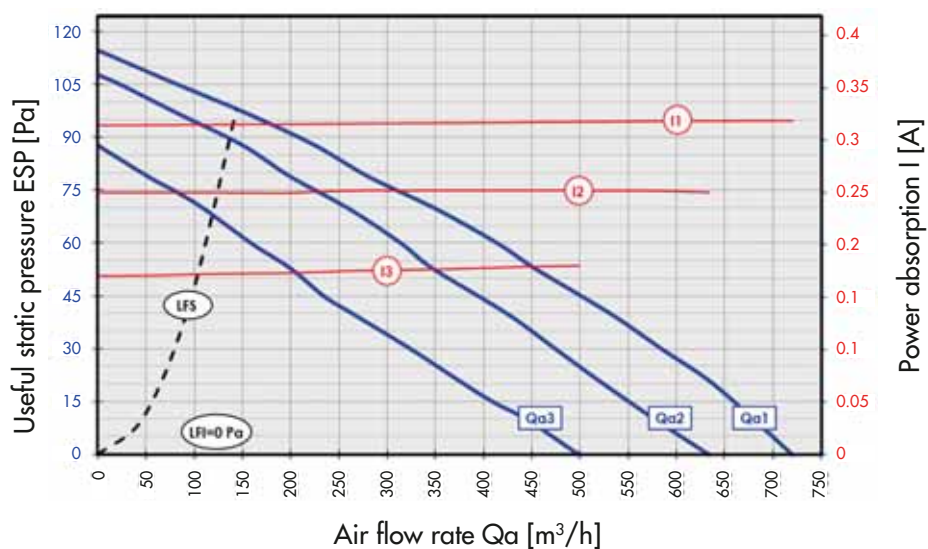
Model FCT 04



Model FCT 05



Model FCT 06



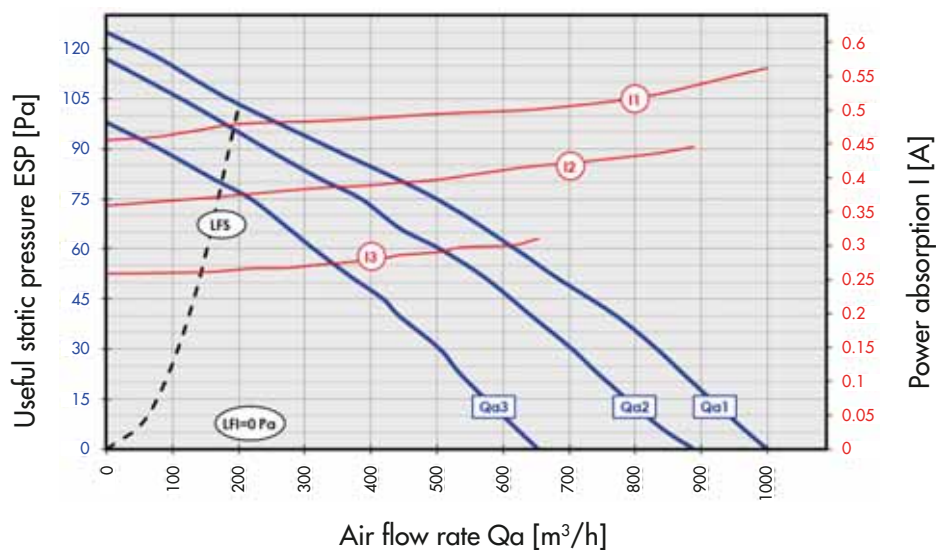
USEFUL STATIC PRESSURE/AIR FLOW RATE DIAGRAMS

Key

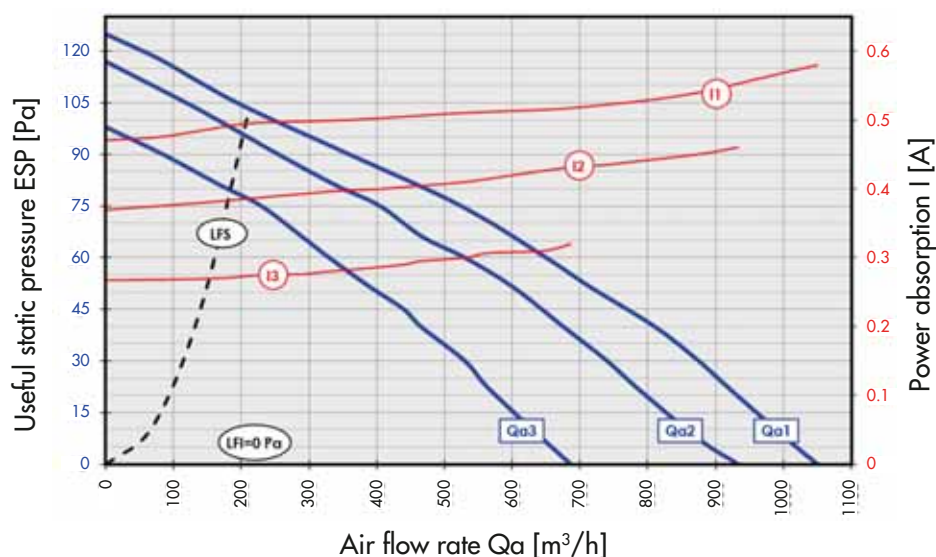
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

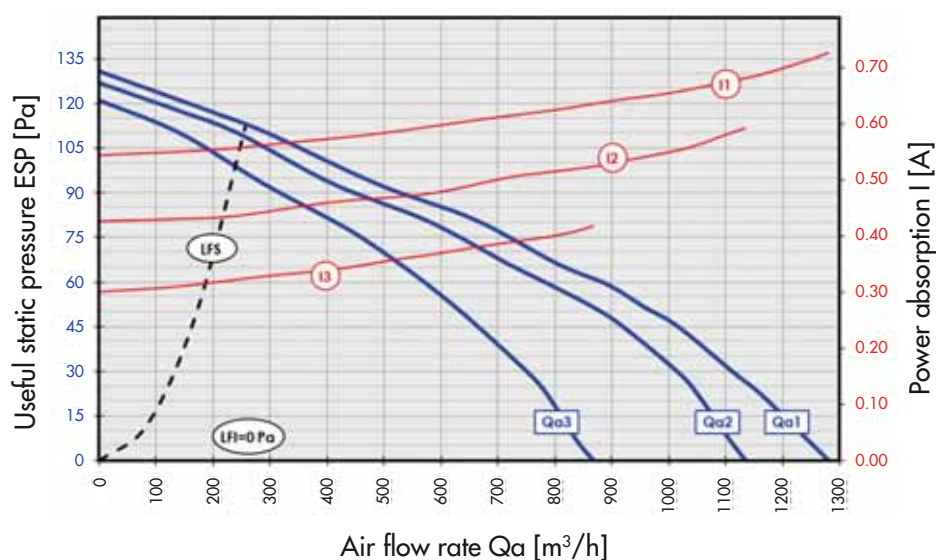
Model FCT 07



Model FCT 08

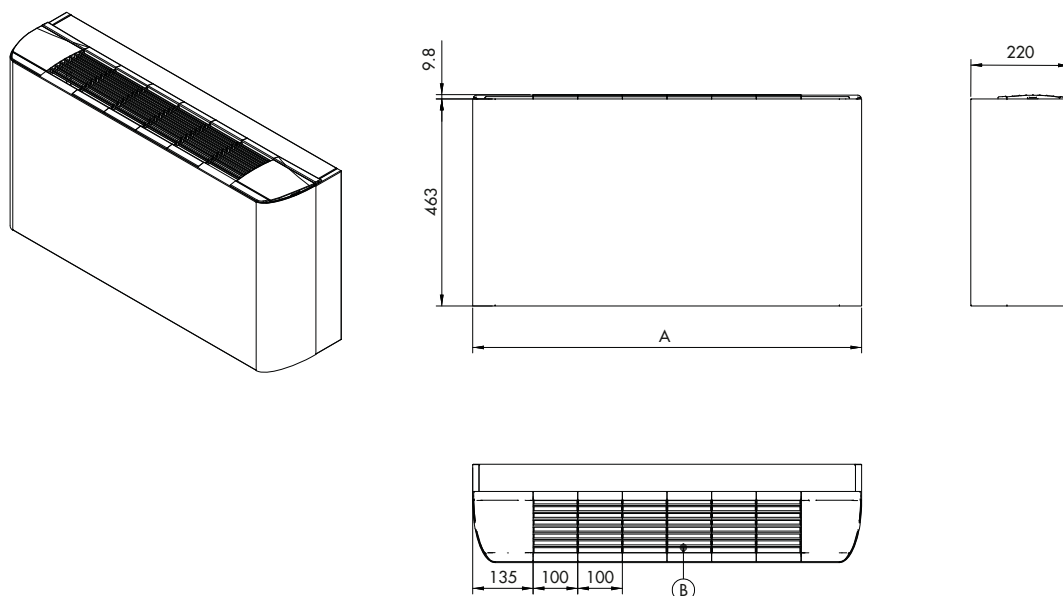


Model FCT 09



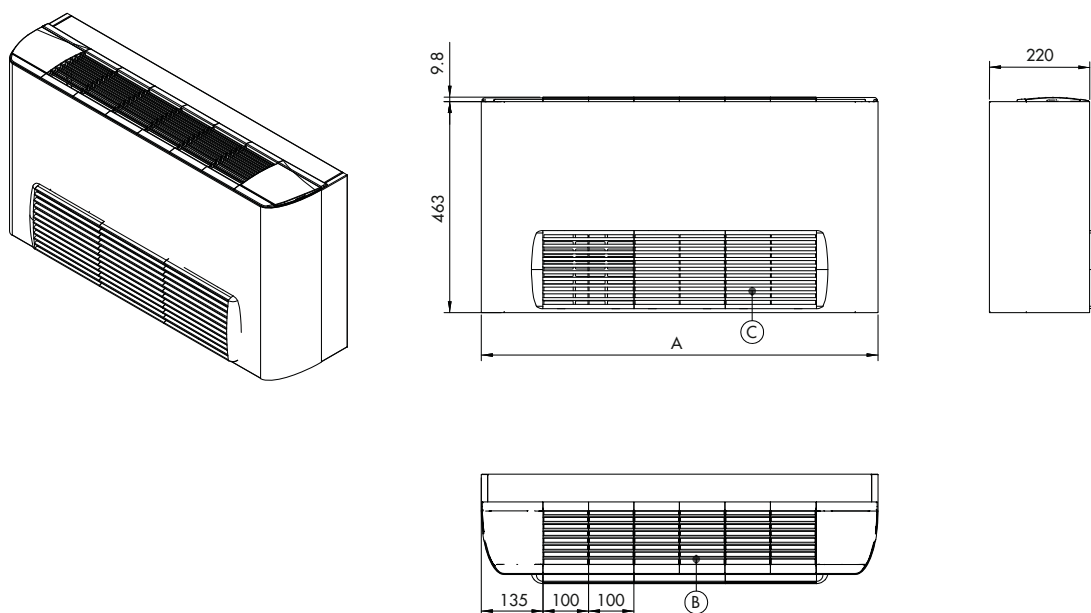
DIMENSIONAL DRAWINGS

Model FCT-CV



MODEL FCT-CV	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° of grids	4	4	6	6	8	8	10	10	12

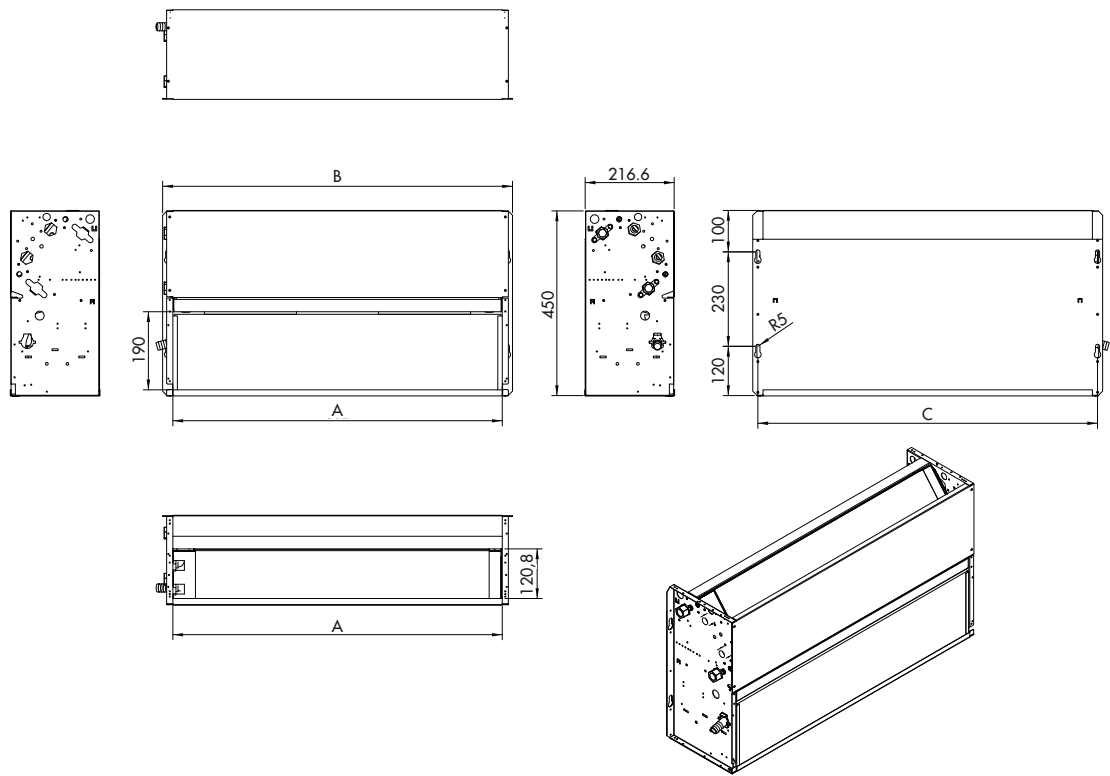
Model FCT-CA/FCT-CH



MODEL FCT-CA/FCT-CH	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° of grids	4	4	6	6	8	8	10	10	12
C = N° of grids	2	2	3	3	4	4	5	5	6

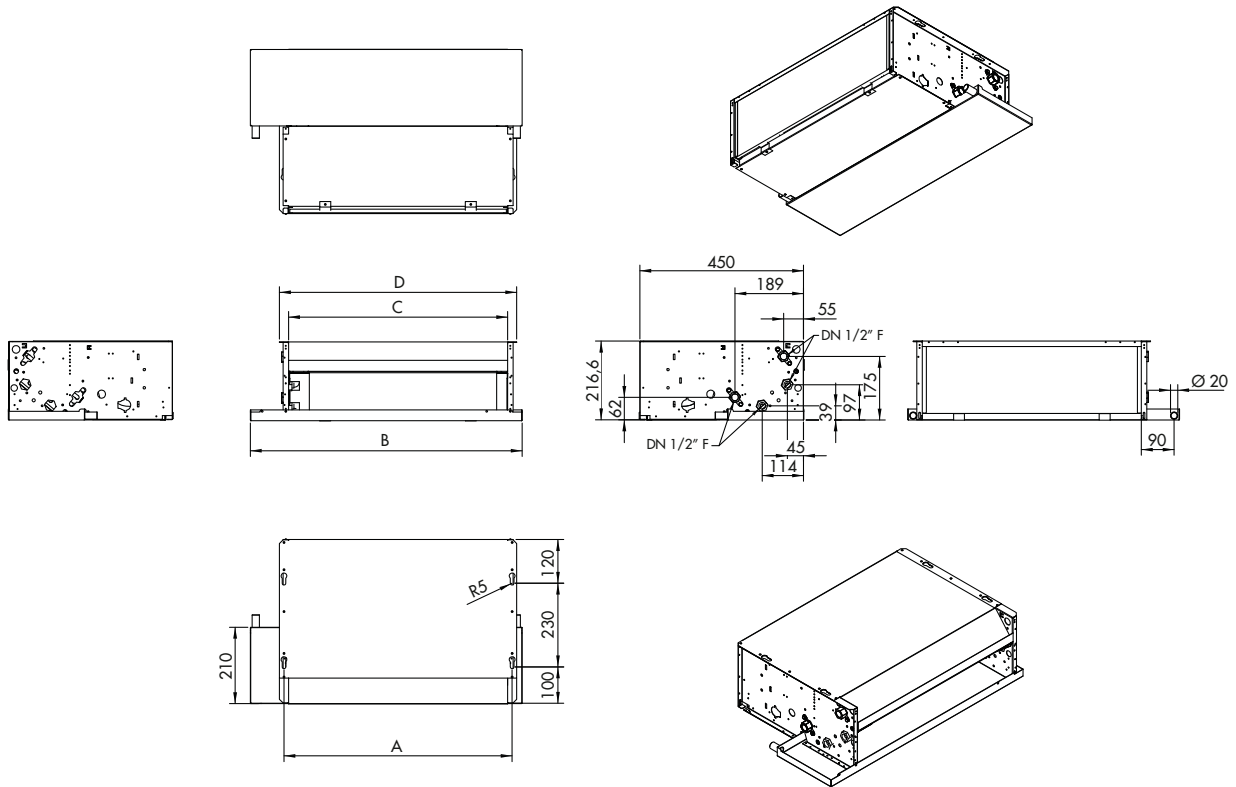
DIMENSIONAL DRAWINGS

Model FCT-NV



MODEL FCT-NV	01	02	03	04	05	06	07	08	09
A	402	402	602	602	802	802	1002	1002	1202
B	452	452	652	652	852	852	1052	1052	1252
C	427	427	627	627	827	827	1027	1027	1227

Model FCT-NH



MODEL FCT-NH	01	02	03	04	05	06	07	08	09
A	427	427	627	627	827	827	1027	1027	1227
B	547	547	747	747	947	947	1147	1147	1347
C	402	402	602	602	802	802	1002	1002	1202
D	452	452	652	652	852	852	1052	1052	1252

ACCESSORIES

CONTROL UNITS INSTALLED				
	Code	Model	Description	Applicability
	387030464	OBC22	Control unit mounted on the machine for units with 2/4 pipes, with ATS4 air sensor	FCT-CV FCT-CA
	387030465	OBC25	Control unit mounted on the machine for units with 2/4 pipes, with display and ATS4 air sensor	FCT-CV FCT-CA
	387030466	MTT32	Minimum hot water temperature thermostat (calibrated to 32 °C)	All
	387030467	WTS4	Water temperature sensor (type NTC 10 kOhm @25 °C with cable L=1 m)	For OBC25 control unit as an alternative to MTT32

WIRED CONTROL UNITS AND REMOTE CONTROLS				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (mandatory when installing wired control unit)	All
	387030469	SWC22	Simplified thermostat for 2/4-pipe fan coil units	All
	387030470	SWC25	Simplified thermostat for 2/4-pipe fan coil units with display and with advanced functions	All
	387030471	EIX01	Electronic interface for fan coil unit thermostats: enables a single thermostat to control up to 4 fan coil units. Housed in a 6-module container for DIN rail	All
	387030472	IRC01	IR remote control. Kit inclusive of motherboard, air sensor, water sensor and IR receiver	All

KIT CONTAINING VALVES, PANS, CONDENSATE DISCHARGE PUMPS AND FEET

	Code	Model	Description	Applicability
	387030473	3WV01	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030474	3WV02	Three-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030475	2WV01	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030476	2WV02	Two-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030477	VB01	Auxiliary drain pan made of plastic, for two-way or three-way valves	FCT-CV FCT-CA FCT-NV
	387030478	HB01	Auxiliary drain pan with thermal insulation, for two-way or three-way valves	FCT-CH FCT-NH
	387030479	CP01	Condensate discharge pump equipped with alarm contact	FCT-CV FCT-CA FCT-NV
	387030480	CP02	Condensate discharge pump equipped with alarm contact	FCT-CH FCT-NH
	387030481	FE01	Pair of pre-coated feet H=90 mm	FCT-CV

ACCESSORIES

PANELS				
Code		Model	Description	Applicability
387030482	01/02	CPB 01-02	Lower rear closing panel made of pre-painted plate	FCT-CV FCT-CA
387030483	03/04	CPB 03-04		
387030484	05/06	CPB 05-06		
387030485	01/02	CPC 01-02	Lower closing panel without grid made of pre-painted plate	FCT-CA FCT-CH
387030486	03/04	CPC 03-04		
387030487	05/06	CPC 05-06		
387030488	01/02	CPD 01-02	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCT-CV
387030489	03/04	CPD 03-04		
387030490	05/06	CPD 05-06		
387030491	01/02	RF 01-02	Frame for concealed wall-mounted installation	FCT-NV
387030492	03/04	RF 03-04		
387030493	05/06	RF 05-06		
387030494	01/02	FP 01-02	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCT-NV
387030495	03/04	FP 03-04		
387030496	05/06	FP 05-06		

PANELS				
Code		Model	Description	Applicability
387030497	07/08	CPB 07-08	Lower rear closing panel made of pre-painted plate	FCT-CV FCT-CA
387030498	09	CPB 09		
387030499	07/08	CPC 07-08	Lower closing panel without grid made of pre-painted plate	FCT-CA FCT-CH
387030500	09	CPC 09		
387030501	07/08	CPD 07-08	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCT-CV
387030502	09	CPD 09		
387030503	07/08	RF 07-08	Frame for concealed wall-mounted installation	FCT-NV
387030504	09	RF 09		
387030505	07/08	FP 07-08	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCT-NV
387030506	09	FP 09		



CPC



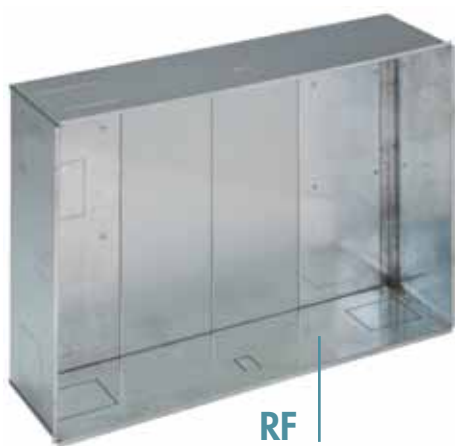
CPD



CPB



CPB



RF



P90M-C

CL01

FCT-NV

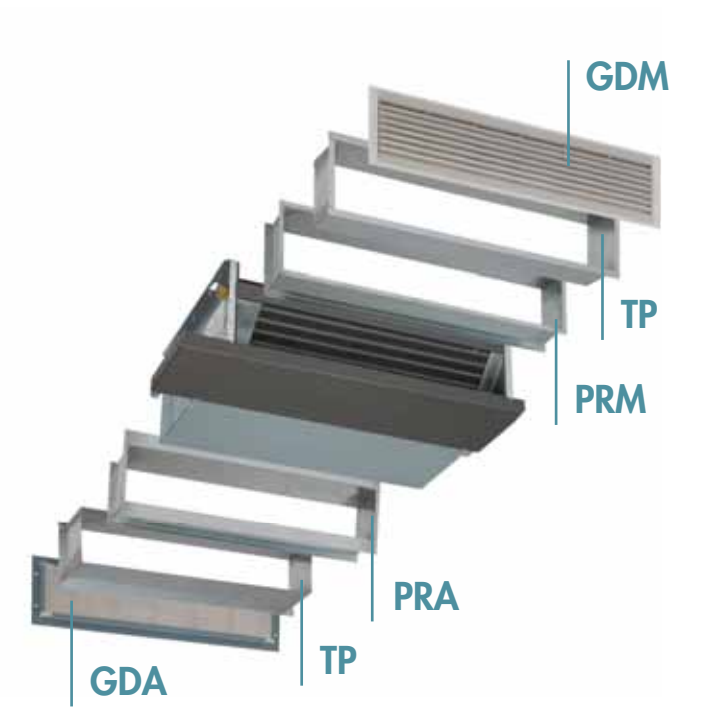
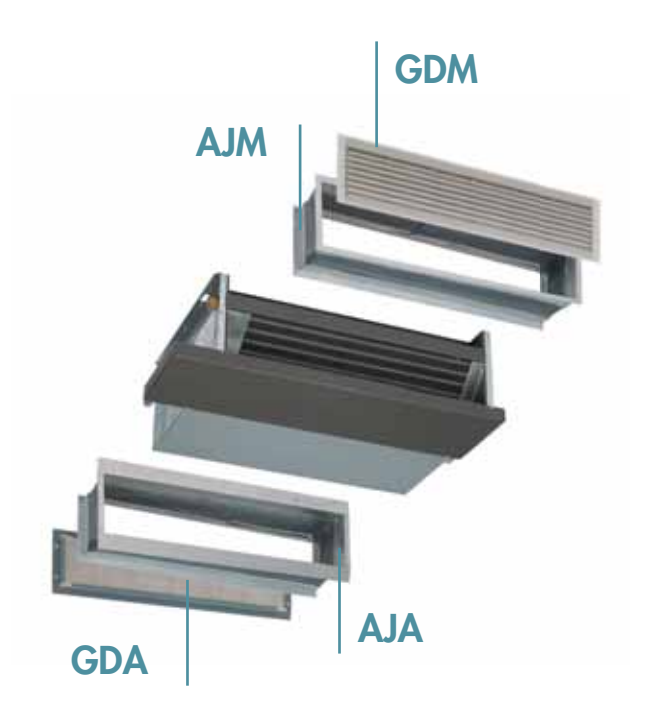
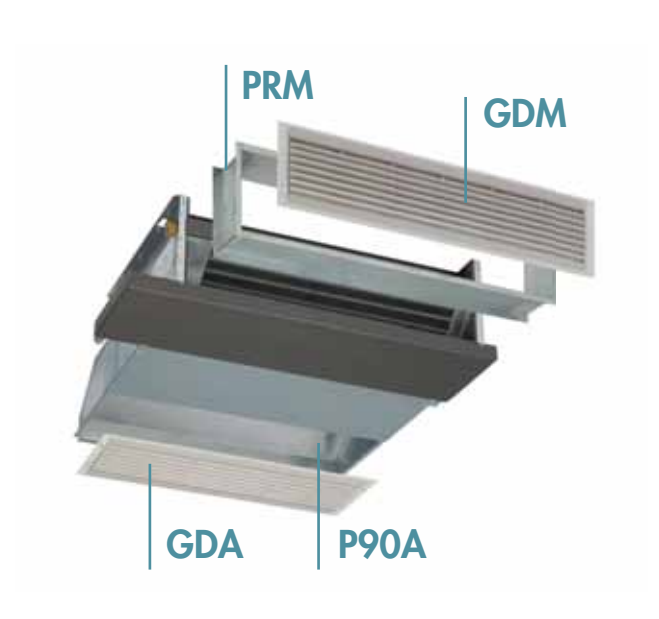
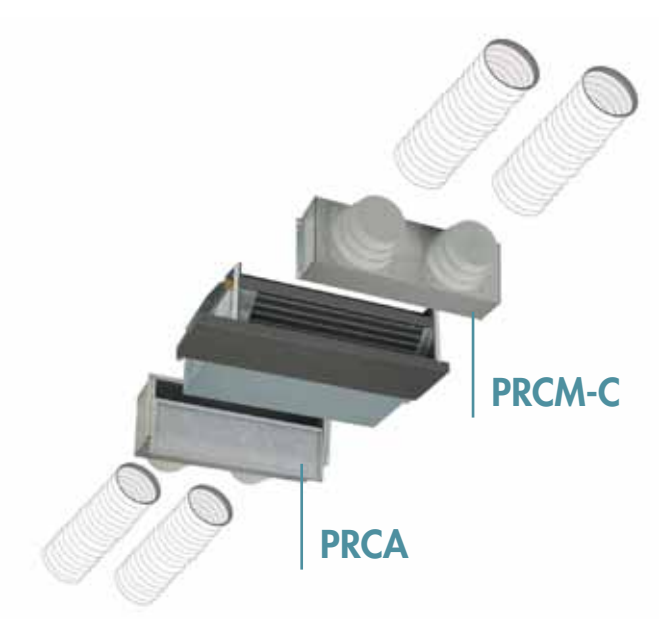
FP

ACCESSORIES

PLENUM				
Code		Model	Description	Applicability
387030507	01/02	AJA 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCT-NH
387030508	03/04	AJA 03-04		
387030509	05/06	AJA 05-06		
387030510	01/02	AJM 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCT-NH
387030511	03/04	AJM 03-04		
387030512	05/06	AJM 05-06		
387030513	01/02	GDA 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCT-NH
387030514	03/04	GDA 03-04		
387030515	05/06	GDA 05-06		
387030516	01/02	GDM 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCT-NH
387030517	03/04	GDM 03-04		
387030518	05/06	GDM 05-06		
387030519	01/02	P90A 01-02	90° plenum - Intake side	FCT-NH
387030520	03/04	P90A 03-04		
387030521	05/06	P90A 05-06		
387030522	01/02	P90M-C 01-02	90° plenum - Supply side	FCT-NV
387030523	03/04	P90M-C 03-04		
387030524	05/06	P90M-C 05-06		
387030525	01/02	PRM 01-02	Straight plenum L=100 mm - Supply side	FCT-NH
387030526	03/04	PRM 03-04		
387030527	05/06	PRM 05-06		
387030528	01/02	PRA 01-02	Straight plenum L=100 mm - Intake side	FCT-NH
387030529	03/04	PRA 03-04		
387030530	05/06	PRA 05-06		
387030531	01/02	TP 01-02	Telescopic extension L=0-100 mm, suitable for connection with PRA, PRM, P290A plenum	FCT-NH
387030532	03/04	TP 03-04		
387030533	05/06	TP 05-06		
387030534	01/02	PRCA 01-02	Air intake plenum with round fittings and filter	FCT-NH
387030535	03/04	PRCA 03-04		
387030536	05/06	PRCA 05-06		
387030537	01/02	PRCM 01-02	Air supply plenum with round fittings, insulated	FCT-NH
387030538	03/04	PRCM 03-04		
387030539	05/06	PRCM 05-06		

PLENUM				
Code		Model	Description	Applicability
387030540	07/08	AJA 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCT-NH
387030541	09	AJA 09		
387030542	07/08	AJM 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCT-NH
387030543	09	AJM 09		
387030544	07/08	GDA 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCT-NH
387030545	09	GDA 09		
387030546	07/08	GDM 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCT-NH
387030547	09	GDM 09		
387030548	07/08	P90A 07-08	90° plenum - Intake side	FCT-NH
387030549	09	P90A 09		
387030550	07/08	P90M-C 07-08	90° plenum - Supply side	FCT-NV
387030551	09	P90M-C 09		
387030552	07/08	PRM 07-08	Straight plenum L=100 mm - Supply side	FCT-NH
387030553	09	PRM 09		
387030554	07/08	PRA 07-08	Straight plenum L=100 mm - Intake side	FCT-NH
387030555	09	PRA 09		
387030556	07/08	TP 07-08	Telescopic extension L=0-100 mm, suitable for connection with PRA, PRM, P290A plenum	FCT-NH
387030557	09	TP 09		
387030558	07/08	PRCA 07-08	Air intake plenum with round fittings and filter	FCT-NH
387030559	09	PRCA 09		
387030560	07/08	PRCM-C 07-08	Air supply plenum with round fittings, insulated	FCT-NH
387030561	09	PRCM-C 09		

ACCESSORIES







FLOOR | CEILING

EC Brushless - Model: FCTE

EC BRUSHLESS FLOOR/CEILING

MAIN FEATURES MOD. FCTE

COVERING CABINET

(only for the CV - CA - CH versions)

Standard white finish (RAL 9010). Made of high-thickness galvanised plate prelined with a polyvinyl chloride film, it can withstand rust, corrosion, chemicals, solvents, aliphatic compounds and alcohols. Internal thermo-acoustic insulation (Class M1). Compact dimensions: a mere 220 mm thickness.

Air supply grid made of white ABS (RAL 9002), with openable side panels for accessing the control panel (accessory).

The double row of manual flaps, each adjustable, allows for directing the air flow in any direction. The flaps can be adjusted in opposite directions to enhance the induction effect. The flow can be directed to graze the ceiling/wall to exploit the Coanda effect.

LOAD-BEARING STRUCTURE

Load-bearing structure made of high-thickness galvanised plate with holes (slots) for wall/ceiling mounting, made directly on the structure.

DRAIN PAN

Drain pan equipped with a drainage outlet and thermal insulation. A condensation drain funnel with Ø 20 mm fitting, made of plastic, is mounted only on vertical versions (standard on the same side of the water connections).

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion. Coil fittings equipped with anti-torsion system, manual air relief valves and manual water drainage valves. Fittings on the left as a standard feature; on request they can be mounted on the right and are easily reversible on-site. 1 coil for 2-pipe system; 2 coils for 4-pipe system.

Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol.

VENTILATION UNIT

Ventilation unit consisting of 1 or 2 double-intake centrifugal fans directly coupled with the electric motor with a useful static pressure of up to 75 Pa. Mounted on elastic and elastic supports and shock absorbers. Statically and dynamically balanced fan. Large-diameter fans (high air volume and high static pressure) with low number of revolutions (low noise).

Latest generation EC brushless motor with permanent magnets, direct current, equipped with control electronics (inverter). IP 40, Class B, power cables protected with double insulation.

Built according to international standards, 230 VAC-1 Ph-50/60 Hz. Continuous adjustment 0-100% of the number of revolutions (and hence of the air volume and consequently the cooling/heating capacity) by means of a 0...10 VDC modulating control signal.

Inverter with dip-switches for setting the various types of motor control software programmes + dip-switches for redistributing the work range on a new more limited range (from 0...10 VDC up to 0...6.5 VDC).

AIR FILTER

Easily removable air filter, built with a metal frame containing the filtration septum. Can be regenerated by washing it with water, blowing, vacuuming. Standard: filtering medium made of polyester acrylic fabric, high-efficiency, resin-coated and needle-punched. Recommended against dust and pollen. Class M1, filtration grade EU3 (EUROVENT 4/5).

EC BRUSHLESS FLOOR/CEILING MODELS

EC BRUSHLESS FLOOR FAN COIL MOD. FCTE-CV

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the bottom part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030329	FCTE-CV 01 L	1.500	3.740
387030330	FCTE-CV 01 R		
387030331	FCTE-CV 02 L	2.000	4.910
387030332	FCTE-CV 02 R		
387030333	FCTE-CV 03 L	2.530	5.980
387030334	FCTE-CV 03 R		
387030335	FCTE-CV 04 L	3.020	6.710
387030336	FCTE-CV 04 R		
387030337	FCTE-CV 05 L	3.750	8.160
387030338	FCTE-CV 05 R		
387030339	FCTE-CV 06 L	4.250	9.440
387030340	FCTE-CV 06 R		
387030341	FCTE-CV 07 L	5.520	12.000
387030342	FCTE-CV 07 R		
387030343	FCTE-CV 08 L	6.420	13.300
387030344	FCTE-CV 08 R		
387030345	FCTE-CV 09 L	7.530	15.500
387030346	FCTE-CV 09 R		



FCTE-CV	01	L
-	(1)	(2)

FCTE-CV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

EC BRUSHLESS FLOOR FAN COIL MOD. FCTE-CA

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030347	FCTE-CA 01 L	1.500	3.740
387030348	FCTE-CA 01 R		
387030349	FCTE-CA 02 L	2.000	4.910
387030350	FCTE-CA 02 R		
387030351	FCTE-CA 03 L	2.530	5.980
387030352	FCTE-CA 03 R		
387030353	FCTE-CA 04 L	3.020	6.710
387030354	FCTE-CA 04 R		
387030355	FCTE-CA 05 L	3.750	8.160
387030356	FCTE-CA 05 R		
387030357	FCTE-CA 06 L	4.250	9.440
387030358	FCTE-CA 06 R		
387030359	FCTE-CA 07 L	5.520	12.000
387030360	FCTE-CA 07 R		
387030361	FCTE-CA 08 L	6.420	13.300
387030362	FCTE-CA 08 R		
387030363	FCTE-CA 09 L	7.530	15.500
387030364	FCTE-CA 09 R		



FCTE-CA	01	L
-	(1)	(2)

FCTE-CA = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C

EC BRUSHLESS FLOOR/CEILING MODELS

EC BRUSHLESS CEILING FAN COIL MOD. FCTE-CH

Visible ceiling-mounted horizontal installation, covering cabinet with air outflow from the front and intake from the bottom.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030365	FCTE-CH 01 L	1.500	3.740
387030366	FCTE-CH 01 R		
387030367	FCTE-CH 02 L	2.000	4.910
387030368	FCTE-CH 02 R		
387030369	FCTE-CH 03 L	2.530	5.980
387030370	FCTE-CH 03 R		
387030371	FCTE-CH 04 L	3.020	6.710
387030372	FCTE-CH 04 R		
387030373	FCTE-CH 05 L	3.750	8.160
387030374	FCTE-CH 05 R		
387030375	FCTE-CH 06 L	4.250	9.440
387030376	FCTE-CH 06 R		
387030377	FCTE-CH 07 L	5.520	12.000
387030378	FCTE-CH 07 R		
387030379	FCTE-CH 08 L	6.420	13.300
387030380	FCTE-CH 08 R		
387030381	FCTE-CH 09 L	7.530	15.500
387030382	FCTE-CH 09 R		



FCTE-CH	01	L
-	(1)	(2)

FCTE-CH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

EC BRUSHLESS VERTICAL CONCEALED FAN COIL MOD. FCTE-NV

Concealed vertical installation, with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030383	FCTE-NV 01 L	1.500	3.740
387030384	FCTE-NV 01 R		
387030385	FCTE-NV 02 L	2.000	4.910
387030386	FCTE-NV 02 R		
387030387	FCTE-NV 03 L	2.530	5.980
387030388	FCTE-NV 03 R		
387030389	FCTE-NV 04 L	3.020	6.710
387030390	FCTE-NV 04 R		
387030391	FCTE-NV 05 L	3.750	8.160
387030392	FCTE-NV 05 R		
387030393	FCTE-NV 06 L	4.250	9.440
387030394	FCTE-NV 06 R		
387030395	FCTE-NV 07 L	5.520	12.000
387030396	FCTE-NV 07 R		
387030397	FCTE-NV 08 L	6.420	13.300
387030398	FCTE-NV 08 R		
387030399	FCTE-NV 09 L	7.530	15.500
387030400	FCTE-NV 09 R		



FCTE-NV	01	L
-	(1)	(2)

FCTE-NV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left coil connection/R = right coil connection

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C

EC BRUSHLESS HORIZONTAL CONCEALED FAN COIL MOD. FCTE-NH

Concealed horizontal installation, with horizontal air outflow and intake from the rear part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030401	FCTE-NH 01 L	1.500	3.740
387030402	FCTE-NH 01 R		
387030403	FCTE-NH 02 L	2.000	4.910
387030404	FCTE-NH 02 R		
387030405	FCTE-NH 03 L	2.530	5.980
387030406	FCTE-NH 03 R		
387030407	FCTE-NH 04 L	3.020	6.710
387030408	FCTE-NH 04 R		
387030409	FCTE-NH 05 L	3.750	8.160
387030410	FCTE-NH 05 R		
387030411	FCTE-NH 06 L	4.250	9.440
387030412	FCTE-NH 06 R		
387030413	FCTE-NH 07 L	5.520	12.000
387030414	FCTE-NH 07 R		
387030415	FCTE-NH 08 L	6.420	13.300
387030416	FCTE-NH 08 R		
387030417	FCTE-NH 09 L	7.530	15.500
387030418	FCTE-NH 09 R		

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C



FCTE-NH	01	L
-	(1)	(2)

FCTE-NH = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09
(2) L = left coil connection/R = right coil connection

RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

MODELS			01	02	03	04
RATED		Rated performances (ref. Modulation signal guaranteeing “FCTE Brushless air flow rate = corresponding FCT air flow rate”)				
Total cooling capacity (1)		W	1.500	2.000	2.530	3.020
Sensible cooling capacity (1)		W	1.290	1.620	2.070	2.310
Heating capacity (2a)		W	3.740	4.910	5.980	6.710
Heating capacity (2b)		W	1.936	2.535	3.068	3.435
Rated air flow (3)		m³/h	370	400	500	550
Water flow rate (4)	Cooling	l/h	258	344	436	520
	Heating	l/h	322	423	515	578
Water pressure drop (5)	Cooling	kPa	13.1	16.3	18.5	20.8
	Heating	kPa	15.9	19.2	20.1	20
Sound pressure (6)		dB(A)	36	39	41	43
Rated power absorption (7)		W	19	25	27	34
		A	0.15	0.19	0.20	0.25
Reference control signal		Vdc	5.80	6.80	7.10	8.00
Electrical power supply		230 Vac - 1 Ph - 50 Hz/Signal 0...10 Vdc				
ECO (3 vdc)		Expected operating performances ("Unit performances=requested performances" balance)				
Air flow rate		m³/h	240		285	
Sound pressure		dB(A)	23		26	
Rated power absorption		W	9		9	
		A	0.09		0.10	
RANGE 10-1 vdc		MAX performances ref. 10 VDC signal; MIN ref. 1 VDC (for signals <1 VDC the unit remains off)				
Total cooling capacity range		W	1.810-880	2.320-1.130	2.830-1.400	3.220-1.600
Heating capacity range		W	4.680-1.970	5.860-2.470	6.840-2.940	7.250-3.120
Air flow rate range		m³/h	537-127		625-153	
Sound pressure range		dB(A)	45-10		47-10	
Rated power absorption		W	48-6		54-6	
		A	0.32-0.07		0.36-0.07	
Cold/hot coil rows		N	3R		3R	
Hydraulic fittings		DN	1/2" F		1/2" F	
Condensate drainage outlet		mm	20		20	
Motors/Fans		N/N	1/1		1/1	
Rated power absorption (7)		W	70		70	
		A	0.50		0.50	

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

MODELS				05	06	07	08	09
RATED			Rated performances (ref. Modulation signal guaranteeing “FCTE Brushless air flow rate = corresponding FCT air flow rate”)					
Total cooling capacity (1)			W	3.750	4.250	5.520	6.420	7.440
Sensible cooling capacity (1)			W	2.870	3.230	4.330	4.800	5.600
Heating capacity (2a)			W	8.160	9.440	12.000	13.300	15.300
Heating capacity (2b)			W	4.376	5.059	6.196	6.857	7.909
Rated air flow (3)			m³/h	670	720	1.000	1.050	1.255
Water flow rate (4)	Cooling	l/h	645	731	950	1.105	1.260	
	Heating	l/h	702	812	1.032	1.144	1.316	
Water pressure drop (5)	Cooling	kPa	22.6	24.1	24.5	27.1	28.1	
	Heating	kPa	20.9	23.2	22.6	22.7	23.2	
Sound pressure (6)			dB(A)	24	36	42	43	46
Rated power absorption (7)			W	23	26	46	53	73
			A	0.16	0.20	0.31	0.35	0.48
Reference control signal			Vdc	5.70	6.20	8.00	8.50	10.00
Electrical power supply			230 Vac - 1 Ph - 50 Hz/Signal 0...10 Vdc					
ECO (3 vdc)			Expected operating performances ("Unit performances=requested performances" balance)					
Air flow rate			m³/h	424		515		536
Sound pressure			dB(A)	22		24		25
Rated power absorption			W	10		11		11
			A	0.09		0.10		0.09
RANGE 10-1 vdc			MAX performances ref. 10 VDC signal; MIN ref. 1 VDC (for signals <1 VDC the unit remains off)					
Total cooling capacity range			W	4.630-2.130	5.070-2.330	6.010-3.060	6.820-3.470	7.440-3.780
Heating capacity range			W	10.510-4.130	11.650-4.580	13.280-5.900	14.300-6.350	15.300-6.780
Air flow rate range			m³/h	1.021-215		1.184-306		1.255-323
Sound pressure range			dB(A)	45-12		46-9		46-11
Rated power absorption			W	65-6		74-6		73-6
			A	0.44-0.07		0.49-0.08		0.48-0.07
Cold/hot coil rows			N	3R				
Hydraulic fittings			DN	1/2" F				
Condensate drainage outlet			mm	20				
Motors/Fans			N/N	1/2				
Rated power absorption (7)			W	75				
			A	0.60				

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

- (1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).
(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.
(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.
(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.
(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.
(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.
(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TECHNICAL DATA

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1.50	1.40	1.30	1.20	1.10	1.00	0.95	0.90	0.85	0.80	0.75
Total cooling capacity	1.22	1.18	1.14	1.10	1.05	1.00	0.97	0.95	0.92	0.89	0.87
Sensible cooling capacity	1.30	1.24	1.19	1.13	1.06	1.00	0.97	0.93	0.90	0.86	0.83
Heating capacity	1.28	1.22	1.17	1.12	1.06	1.00	0.97	0.94	0.91	0.87	0.84

Air flow rate	0.70	0.65	0.60	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20
Total cooling capacity	0.84	0.81	0.77	0.74	0.71	0.67	0.63	0.59	0.55	0.50	0.45
Sensible cooling capacity	0.79	0.76	0.72	0.68	0.64	0.60	0.55	0.51	0.46	0.41	0.35
Heating capacity	0.81	0.77	0.74	0.70	0.66	0.62	0.58	0.53	0.49	0.44	0.38

TABLE OF NET WEIGHTS MOD. FCTE (TWO-PIPE UNIT - ONE COIL) IN KG

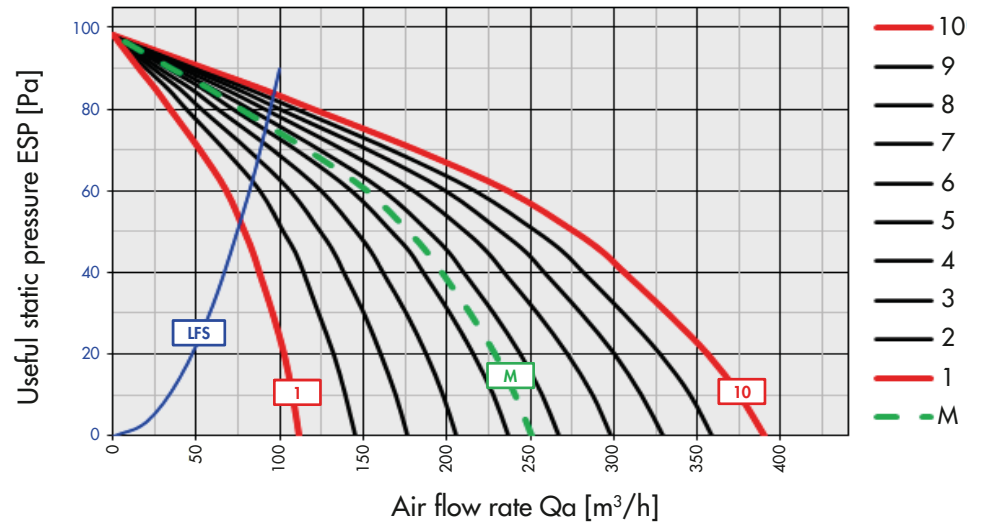
Products/Models	01	02	03	04	05	06	07	08	09
FCTE-CV	14.7	15.2	17.7	18.5	23.9	24.9	27.5	29.0	31.6
FCTE-CA	15.0	15.5	18.2	19.0	24.6	25.6	28.4	29.9	32.7
FCTE-CH	16.2	16.7	19.8	20.6	26.6	27.6	30.8	32.3	35.5
FCTE-IV	11.8	12.3	14.7	15.5	20.8	21.8	24.2	25.7	28.2
FCTE-NH	12.4	12.9	15.3	16.1	21.4	22.4	24.9	26.4	28.9

USEFUL STATIC PRESSURE/AIR FLOW RATE DIAGRAMS

KEY

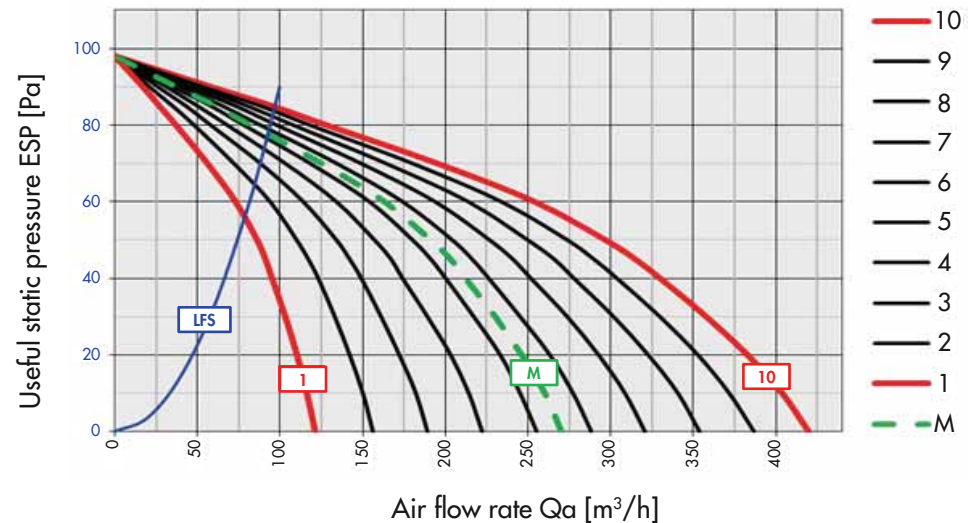
LFS: Upper operating limit
 10: EC unit curve with 10 VDC signal
 (maximum of the working range)
 1: Minimum curve of the EC unit's
 working range (1 VDC @0 Pa)
 M: Average curve of the EC unit's
 working range

Model FCTE 01

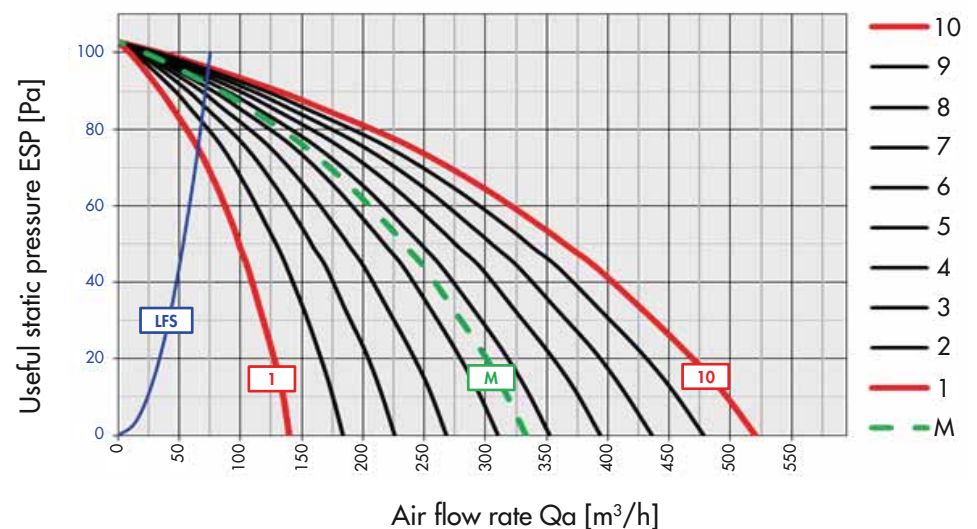


FANCOILS

Model FCTE 02



Model FCTE 03

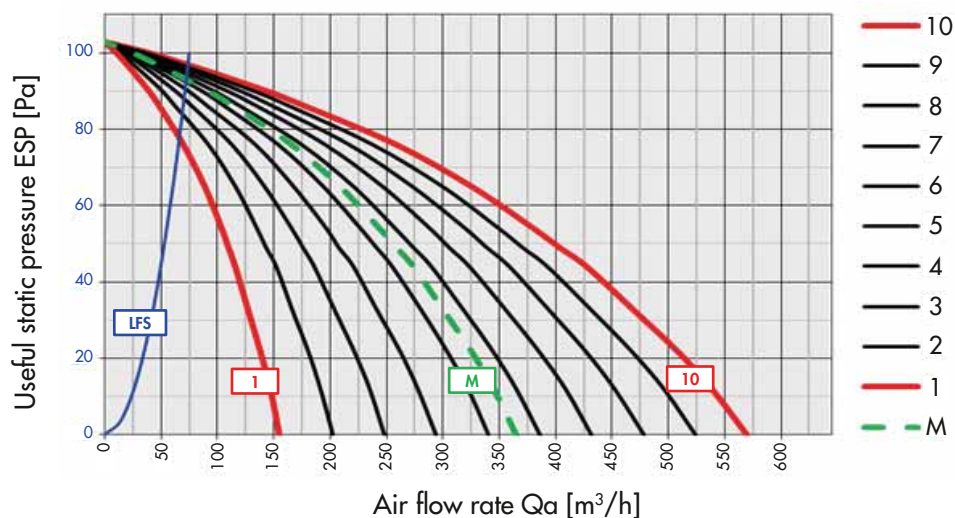


USEFUL STATIC PRESSURE/AIR FLOW RATE DIAGRAMS

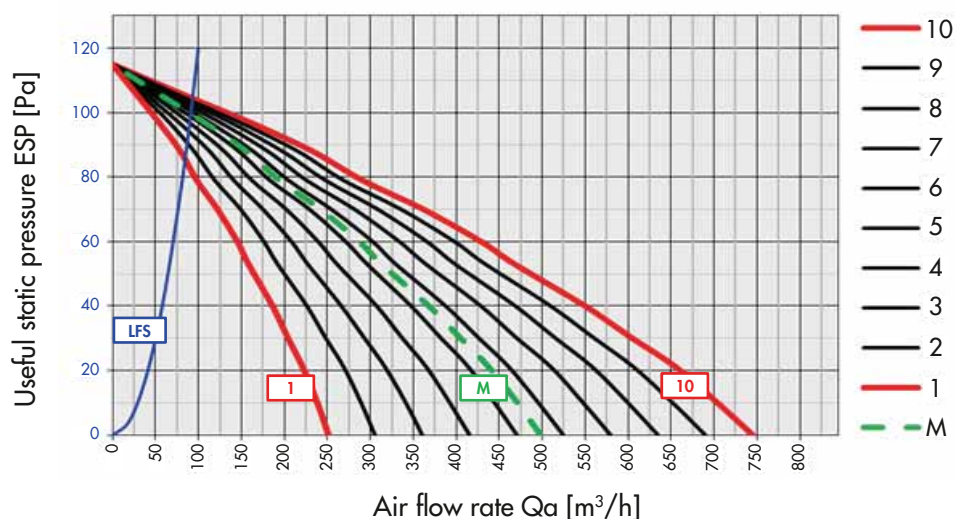
KEY

LFS: Upper operating limit
 10: EC unit curve with 10 VDC signal
 (maximum of the working range)
 1: Minimum curve of the EC unit's
 working range (1 VDC @0 Pa)
 M: Average curve of the EC unit's
 working range

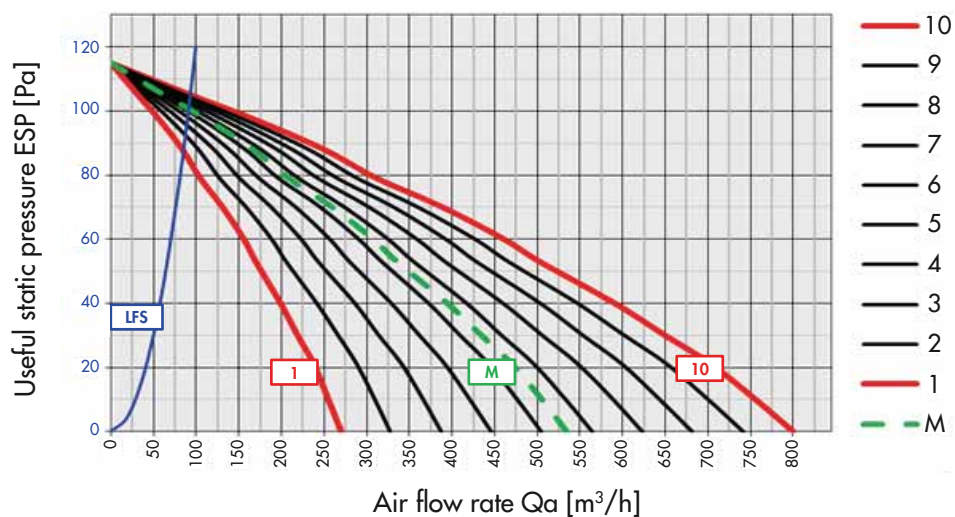
Model FCTE 04



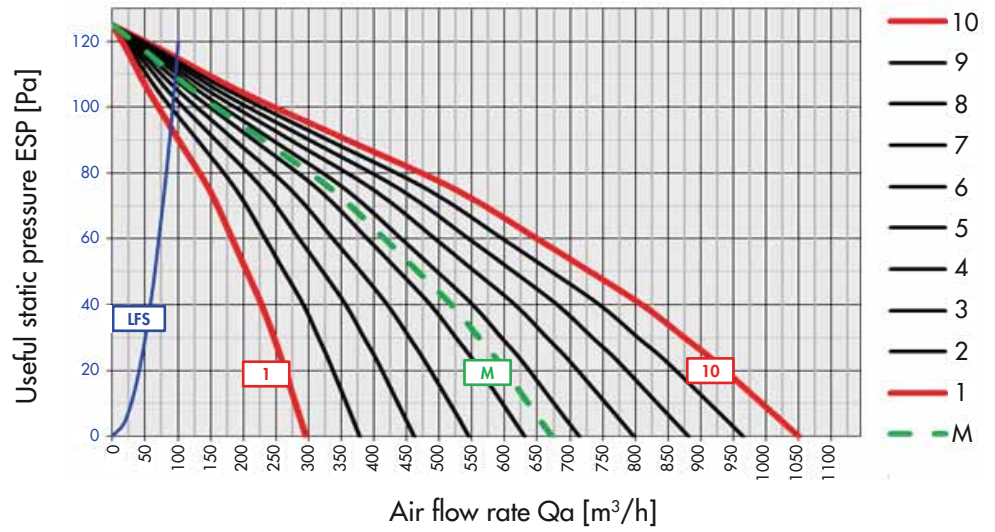
Model FCTE 05



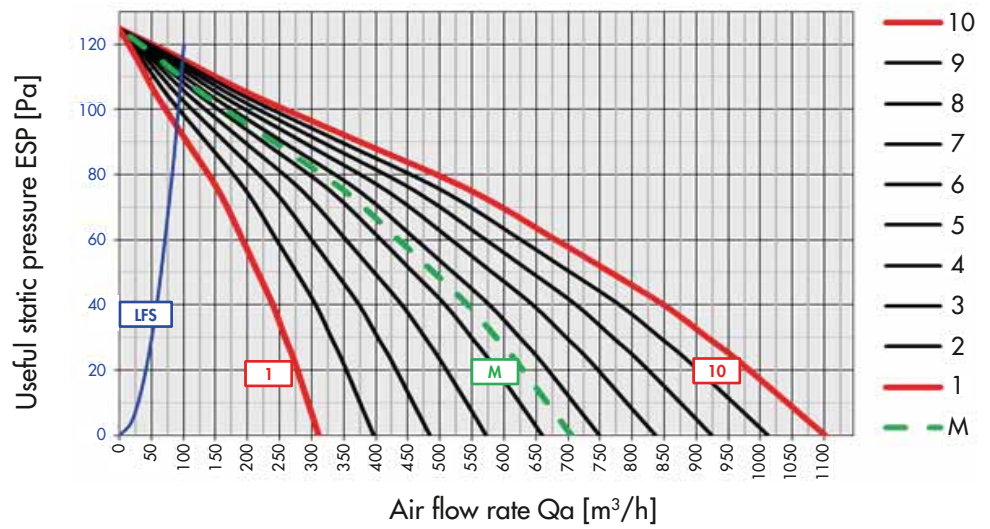
Model FCTE 06



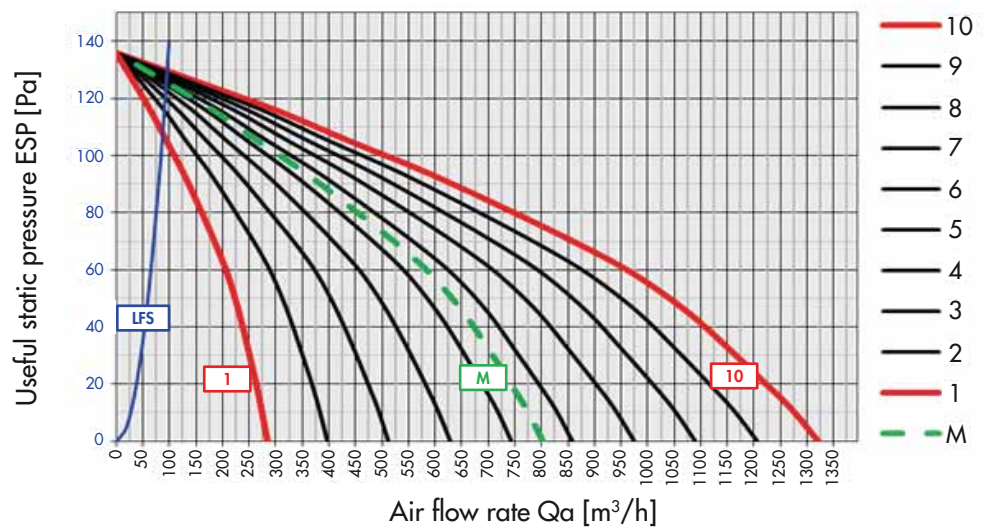
Model FCTE 07



Model FCTE 08

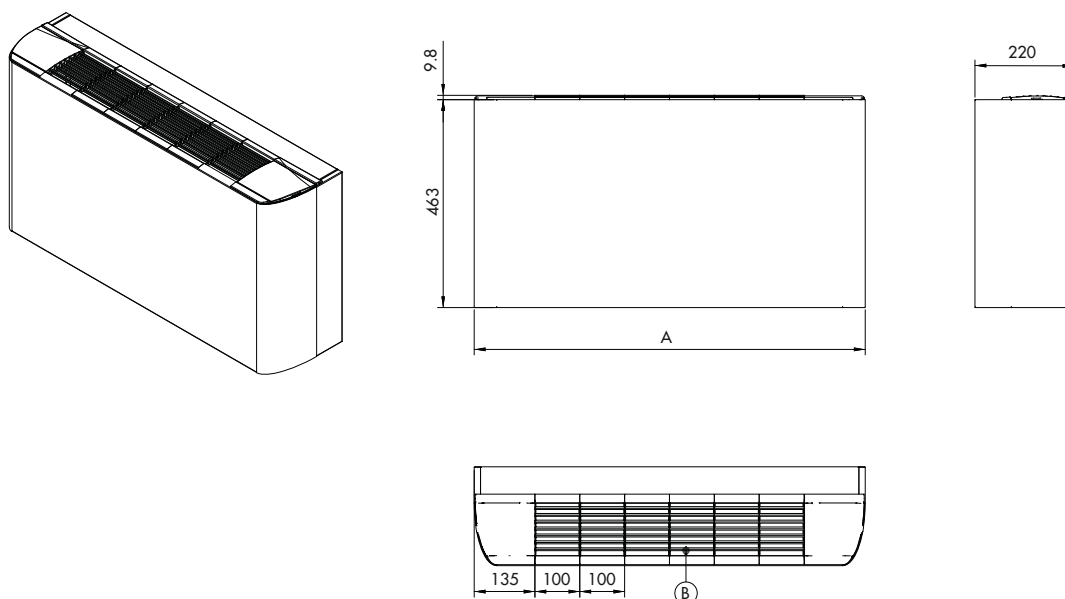


Model FCTE 09



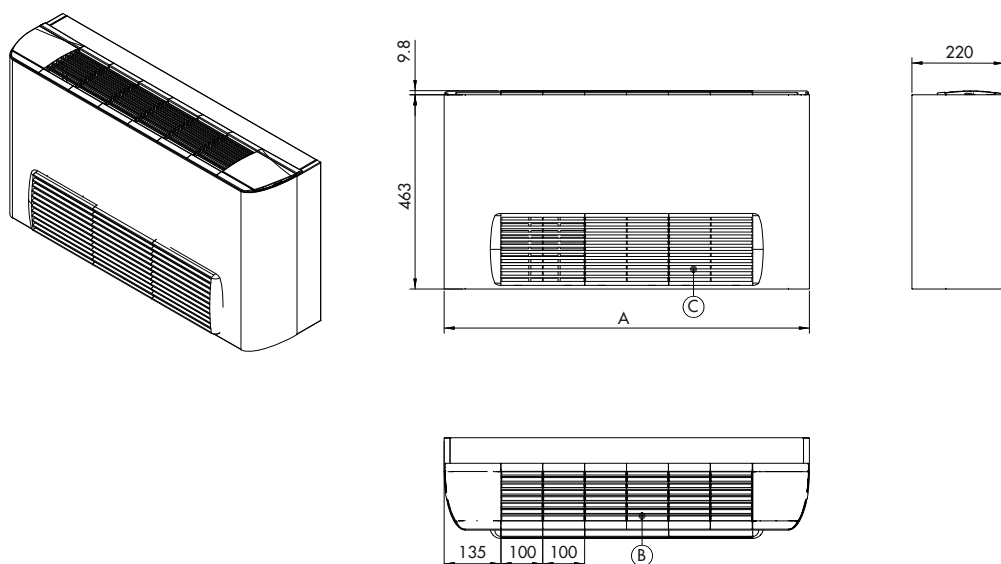
DIMENSIONAL DRAWING

Model FCTE-CV



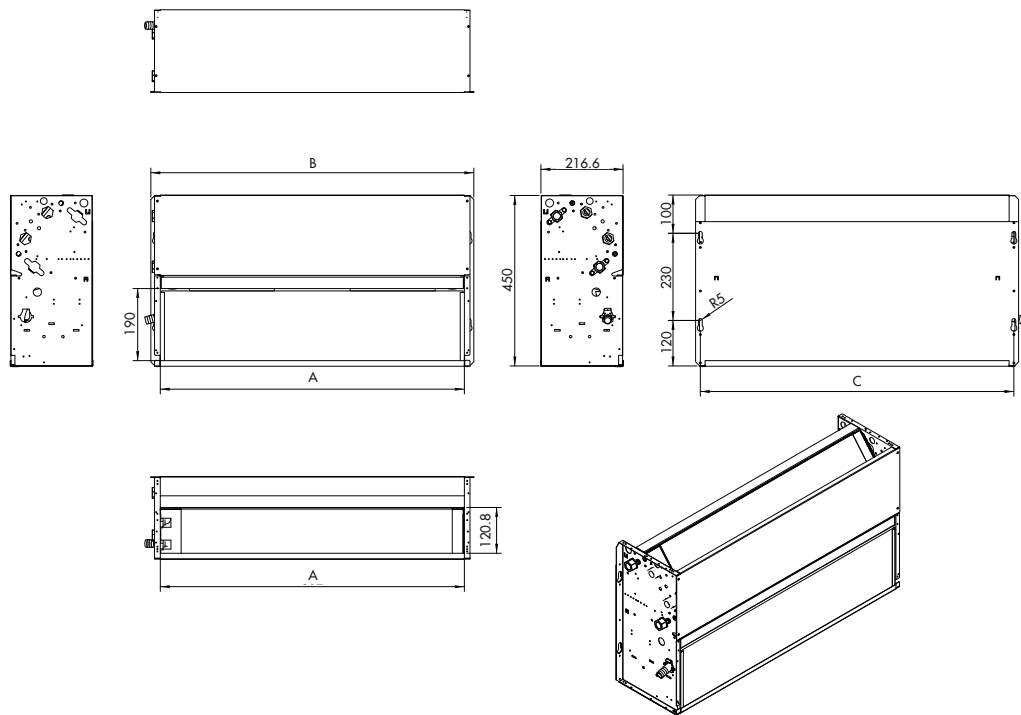
MODEL FCTE-CV	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° grids	4	4	6	6	8	8	10	10	12

Model FCTE-CA/FCTE-CH



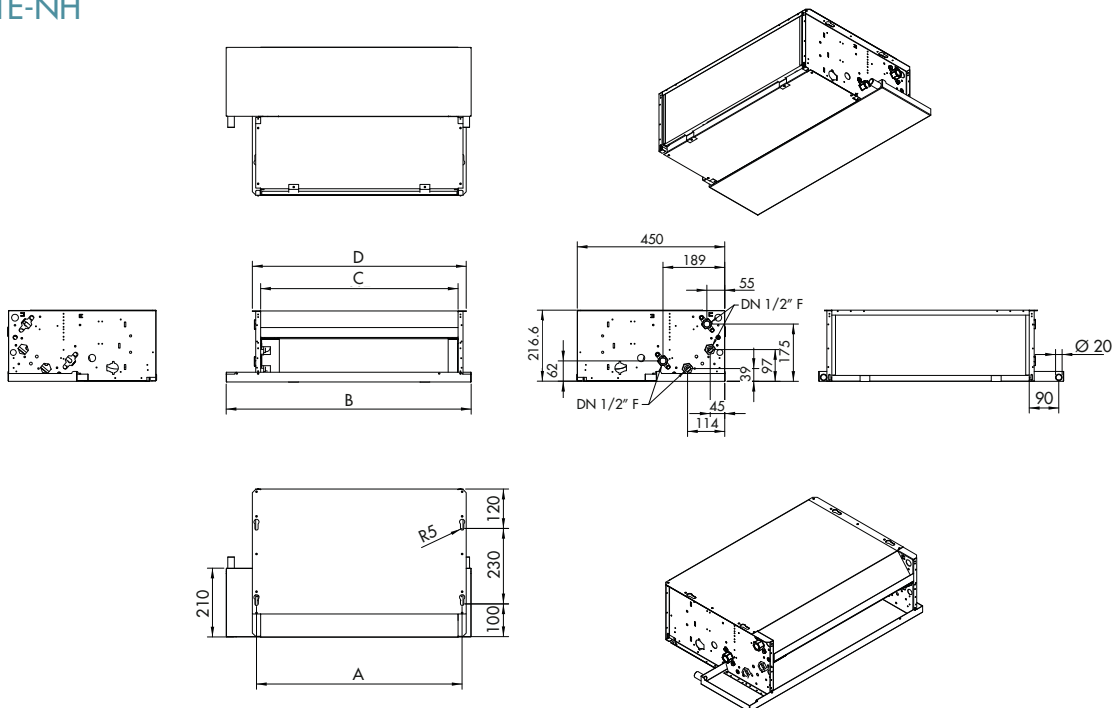
MODEL FCTE-CA/FCTE-CH	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° grids	4	4	6	6	8	8	10	10	12
C = N° grids	2	2	3	3	4	4	5	5	6

Model FCTE-NV



MODEL FCTE-NV	01	02	03	04	05	06	07	08	09
A	402	402	602	602	802	802	1002	1002	1202
B	452	452	652	652	852	852	1052	1052	1252
C	427	427	627	627	827	827	1027	1027	1227

Model FCTE-NH



MODEL FCTE-NH	01	02	03	04	05	06	07	08	09
A	427	427	627	627	827	827	1027	1027	1227
B	547	547	747	747	947	947	1147	1147	1347
C	402	402	602	602	802	802	1002	1002	1202
D	452	452	652	652	852	852	1052	1052	1252

ACCESSORIES

CONTROL UNITS INSTALLED				
	Code	Model	Description	Applicability
	387030562	OBC27	Control unit mounted on the machine for units with 2/4 pipes, simplified and with ATS4 air sensor	FCTE-CV FCTE-CA
	387030563	OBC26	Control unit mounted on the machine for units with 2/4 pipes, with display and ATS4 air sensor	FCTE-CV FCTE-CA
	387030466	MTT32	Thermostat of minimum hot water temperature (calibration 32 °C)	All
	387030467	WTS4	Water temperature sensor (type NTC 10 kOhm @25 °C ±2 with cable L=1 m)	For OBC26 control unit as an alternative to MTT32

WIRED CONTROL UNITS				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (only if a wired control unit is necessary)	All
	387030564	SWC26	Thermostat for 2/4-pipe fan coil units, programmable, with display and 0...10 VDC or three-speed output	All

KIT CONTAINING VALVES, PANS, CONDENSATE DISCHARGE PUMPS AND FEET

	Code	Model	Description	Applicability
	387030473	3WV01	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030474	3WV02	Three-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030475	2WV01	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030476	2WV02	Two-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030477	VB01	Auxiliary drain pan made of plastic, for two-way or three-way valves	FC TE-CV FC TE-CA FC TE-NV
	387030478	HB01	Auxiliary drain pan with thermal insulation, for two-way or three-way valves	FC TE-CH FC TE-NH
	387030479	CP01	Condensate discharge pump equipped with alarm contact	FC TE-CV FC TE-CA FC TE-NV
	387030480	CP02	Condensate discharge pump equipped with alarm contact	FC TE-CH FC TE-NH
	387030481	FE01	Pair of pre-coated feet H=90 mm	FC TE-CV

ACCESSORIES

PANELS				
Code		Model	Description	Applicability
387030482	01/02	CPB 01-02	Lower rear closing panel made of pre-painted plate	FCTE-CV FCTE-CA
387030483	03/04	CPB 03-04		
387030484	05/06	CPB 05-06		
387030485	01/02	CPC 01-02	Lower closing panel without grid made of pre-painted plate	FCTE-CA FCTE-CH
387030486	03/04	CPC 03-04		
387030487	05/06	CPC 05-06		
387030488	01/02	CPD 01-02	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCTE-CV
387030489	03/04	CPD 03-04		
387030490	05/06	CPD 05-06		
387030491	01/02	RF 01-02	Frame for concealed wall-mounted installation	FCTE-NV
387030492	03/04	RF 03-04		
387030493	05/06	RF 05-06		
387030494	01/02	FP 01-02	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCTE-NV
387030495	03/04	FP 03-04		
387030496	05/06	FP 05-06		

PANELS				
Code		Model	Description	Applicability
387030497	07/08	CPB 07-08	Lower rear closing panel made of pre-painted plate	FCTE-CV FCTE-CA
387030498	09	CPB 09		
387030499	07/08	CPC 07-08	Lower closing panel without grid made of pre-painted plate	FCTE-CA FCTE-CH
387030500	09	CPC 09		
387030501	07/08	CPD 07-08	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCTE-CV
387030502	09	CPD 09		
387030503	07/08	RF 07-08	Frame for concealed wall-mounted installation	FCTE-NV
387030504	09	RF 09		
387030505	07/08	FP 07-08	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCTE-NV
387030506	09	FP 09		



CPC



CPD



CPB



CPB



RF



P90M-C

CL01

FCTE-NV

FP

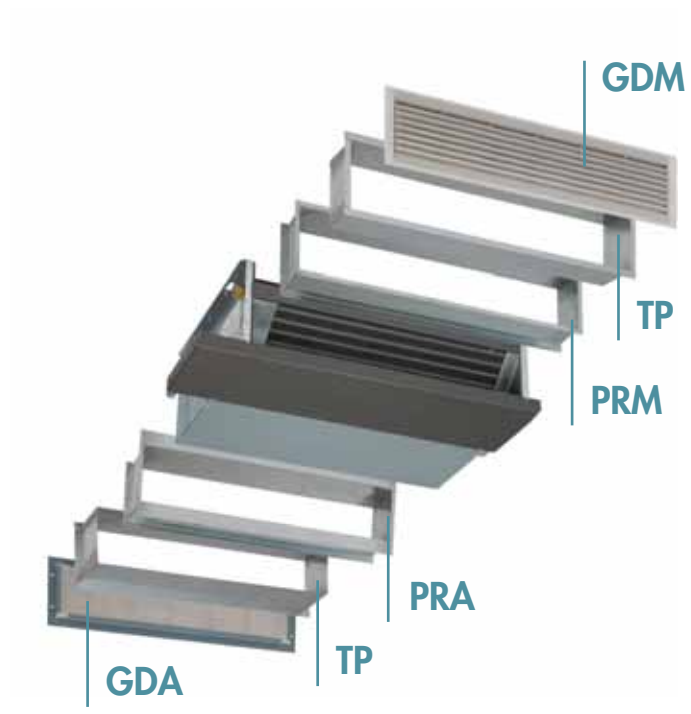
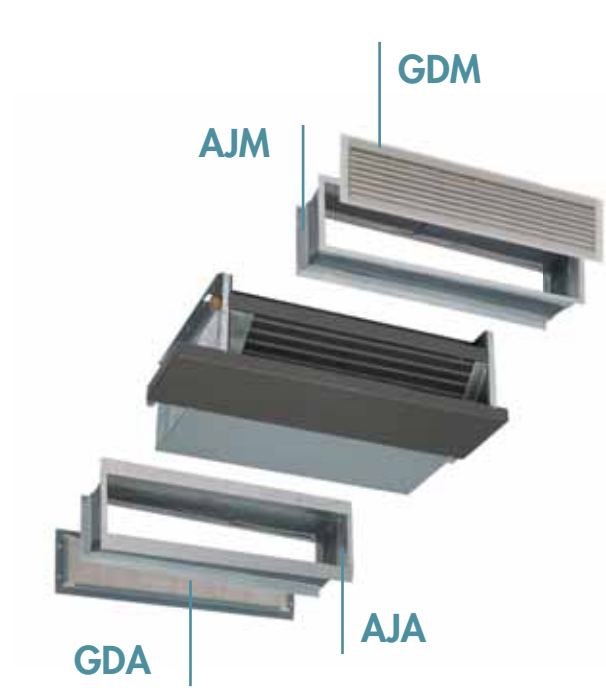
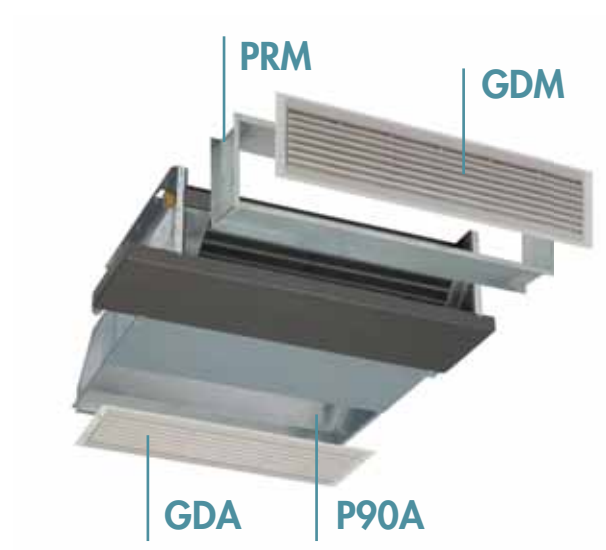
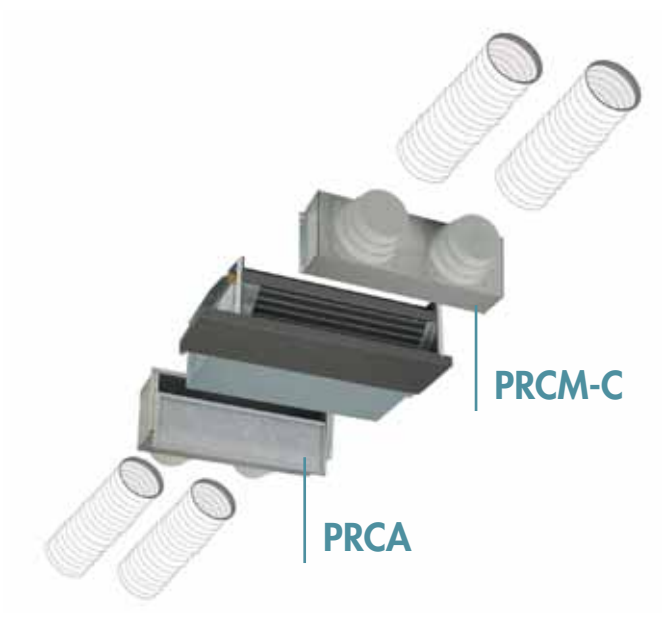
ACCESSORIES

PLENUM				
Code		Model	Description	Applicability
387030507	01/02	AJA 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCTE-NH
387030508	03/04	AJA 03-04		
387030509	05/06	AJA 05-06		
387030510	01/02	AJM 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCTE-NH
387030511	03/04	AJM 03-04		
387030512	05/06	AJM 05-06		
387030513	01/02	GDA 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCTE-NH
387030514	03/04	GDA 03-04		
387030515	05/06	GDA 05-06		
387030516	01/02	GDM 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCTE-NH
387030517	03/04	GDM 03-04		
387030518	05/06	GDM 05-06		
387030519	01/02	P90A 01-02	90° plenum - Intake side	FCTE-NH
387030520	03/04	P90A 03-04		
387030521	05/06	P90A 05-06		
387030522	01/02	P90M-C 01-02	90° plenum - Supply side	FCTE-NV
387030523	03/04	P90M-C 03-04		
387030524	05/06	P90M-C 05-06		
387030525	01/02	PRM 01-02	Straight plenum L=100 mm - Supply side	FCTE-NH
387030526	03/04	PRM 03-04		
387030527	05/06	PRM 05-06		
387030528	01/02	PRA 01-02	Straight plenum L=100 mm - Intake side	FCTE-NH
387030529	03/04	PRA 03-04		
387030530	05/06	PRA 05-06		
387030531	01/02	TP 01-02	Telescopic extension L=0-100 mm, suitable for connection with PRA, PRM, P290A plenum	FCTE-NH
387030532	03/04	TP 03-04		
387030533	05/06	TP 05-06		
387030534	01/02	PRCA 01-02	Air intake plenum with round fittings and filter	FCTE-NH
387030535	03/04	PRCA 03-04		
387030536	05/06	PRCA 05-06		
387030537	01/02	PRCM 01-02	Air supply plenum with round fittings, insulated	FCTE-NH
387030538	03/04	PRCM 03-04		
387030539	05/06	PRCM 05-06		

PLENUM

Code		Model	Description	Applicability
387030540	07/08	AJA 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCTE-NH
387030541	09	AJA 09		
387030542	07/08	AJM 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCTE-NH
387030543	09	AJM 09		
387030544	07/08	GDA 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCTE-NH
387030545	09	GDA 09		
387030546	07/08	GDM 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCTE-NH
387030547	09	GDM 09		
387030548	07/08	P90A 07-08	90° plenum - Intake side	FCTE-NH
387030549	09	P90A 09		
387030550	07/08	P90M-C 07-08	90° plenum - Supply side	FCTE-NV
387030551	09	P90M-C 09		
387030552	07/08	PRM 07-08	Straight plenum L=100 mm - Supply side	FCTE-NH
387030553	09	PRM 09		
387030554	07/08	PRA 07-08	Straight plenum L=100 mm - Intake side	FCTE-NH
387030555	09	PRA 09		
387030556	07/08	TP 07-08	Telescopic extension L=0-100 mm, suitable for connection with PRA, PRM, P290A plenum	FCTE-NH
387030557	09	TP 09		
387030558	07/08	PRCA 07-08	Air intake plenum with round fittings and filter	FCTE-NH
387030559	09	PRCA 09		
387030560	07/08	PRCM-C 07-08	Air supply plenum with round fittings, insulated	FCTE-NH
387030561	09	PRCM-C 09		

ACCESSORIES







CASSETTE

Models: FCC/FCCX/FCCE

CASSETTE

MAIN FEATURES MOD. FCC/FCCX/FCCE

COVERING PANEL WITH AIR RETURN GRID AND AIR SUPPLY DEFLECTORS (ABS)

Innovative design. Built with injected ABS, it can withstand rust, corrosion and atmospheric agents. White finish RAL 9003. The "Hook & Fix" attachment system facilitates installation, removal and maintenance operations, by eliminating positioning-related inconveniences typically associated with these systems (suspended units/components difficult to handle). The central intake grid and 4 manually adjustable side supply flaps guarantee optimal air diffusion in all 4 directions. Friction-snap flaps for stable and uniform positioning.

LOAD-BEARING STRUCTURE SUITABLE FOR USE ON 600x600 MM SUSPENDED CEILINGS

High-thickness galvanised plate load-bearing structure with Class M1 internal thermo-acoustic insulation, reinforced thickness for improved acoustic and thermal performances. Outer brackets on the 4 corners for easy fastening to the ceiling. A mere 250 mm height. Includes 1 hole with Ø 72 mm for possible external air intake through round conduit and 1 hole with Ø 155 mm for possible ducting of treated air supply to adjacent rooms.

- Models FCC 01...06, FCCX 01...06, FCCE 01...03: overall dimensions 570x570 mm, ideal for installation on 1 module size 600x600 mm in suspended ceilings.
- Models FCC 07...08, FCCX 07...08, FCCE 04...05: overall dimensions 570x1.160 mm, ideal for installation on 2 modules size 600x600 mm in suspended ceilings.

AIR CONVEYOR AND DRAIN PAN

Air conveyor and pan made of ABS through injection. High-thickness material for sturdiness and long-lasting operation. RoHS & REACH compliant. Conveyor with optimised profiles that faithfully replicate the aerodynamic profiles of the air flow. Drain pan obtained from a single piece equipped with an outlet and plug.

CONDENSATE DISCHARGE PUMP

Centrifugal condensate discharge pump, complete with non-return valve on the supply side to avoid continuous switching on/off, Ø 16 mm drainage fitting.

Float with 2 levels: the first for controlling the condensate level and the second for activating the alarm.

Head = 1.00 m from the unit's lower edge; 230 VAC-1 Ph-50/60 Hz.

HEAT EXCHANGE COIL

Heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion.

Square-shaped coil with rounded corners for guaranteeing a broader exchange surface, thus enhanced performances compared to traditional round coils. Hydrophilic aluminium flaps for improved condensate discharge, resulting in improved air conditioning performances. Coil fittings equipped with manual air relief valve.

For units with 2 pipes: 1 coil with 2 water connections (1 inlet + 1 outlet)

For units with 4 pipes: 1 coil with 4 water connections (2 inlets + 2 outlets)

Mixed circulation on a single coil guarantees improved performances for both heating and air conditioning. Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, solar panels, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol.

Min/max incoming water temperature limits: 3...75 °C.

AIR FILTER

Easily removable air filter, built with a metal frame containing the filtration septum. Can be regenerated by washing it with water, blowing, vacuuming. Made of NAN honeycomb polypropylene mesh, high efficiency. Recommended against dust and pollen. Class M1 ; grade EU3 filtration (EUROVENT 4/5), Group ISO COARSE ePM1=4%, ePM2.5=13%, ePM10=49% (EN ISO 16890:2016).

ELECTRICAL EQUIPMENT

Terminal block for connection to the remote control (the remote control is an accessory) installed in a corner of the galvanised plate structure.

VENTILATION UNIT

Radial fan with aerofoil blades and incorporated electric motor. Built according to international standards, mounted on elastic supports and shock absorbers. Statically and dynamically balanced fan. Ventilating unit removable with extreme ease (fastened with 4 screws only).

Several different motors available:

- Models FCC and FCCX: AC electric motor, asynchronous single-phase squirrel-cage version with 3 speeds, equipped with TH thermal protection device, run capacitor always engaged, 4 poles, IP44, Class B double insulation, 230 VAC-1 Ph-50/60 Hz.
- Models FCCE: motor with BLAC (Brushless Alternating Current) technology and permanent magnets, sensorless, 2 thermal protection devices (TP-thermal/Klixon + EP-electronic/SW), IP54, Class B double insulation, 230 VAC-1 Ph-50/60 Hz.

Modulating regulation with 0...10 VDC signal through our control units or independent regulation systems. The 0-100% modulation of the air flow (and hence of the heating and cooling capacities) allows for adapting the performances to the actual needs of the room to be climatized.

CASSETTE

MODELS

CASSETTE FAN COIL MOD. FCC

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030419	FCC 01	2.950	7.010
387030420	FCC 02	3.570	8.590
387030421	FCC 03	4.980	11.220
387030422	FCC 04	5.540	12.560
387030423	FCC 05	6.220	12.380
387030424	FCC 06	6.930	13.870
387030425	FCC 07	9.460	21.300
387030426	FCC 08	10.530	23.870

FCC	01
-	(1)

FCC = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08



SIZE 01-06



SIZE 07-08

CASSETTE FAN COIL MOD. FCCX

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030427	FCCX 01	3.070	4.590
387030428	FCCX 02	3.720	5.640
387030429	FCCX 03	4.040	6.160
387030430	FCCX 04	4.490	6.890
387030431	FCCX 05	5.150	6.100
387030432	FCCX 06	5.740	6.840
387030433	FCCX 07	7.670	11.690
387030434	FCCX 08	8.540	13.100

FCCX	01
-	(1)

FCCX = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08



SIZE 01-06



SIZE 07-08

CASSETTE FAN COIL MOD. FCCE

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030435	FCCE 01	5.020	12.350
387030436	FCCE 02	6.460	14.780
387030437	FCCE 03	8.010	16.170
387030438	FCCE 04	12.260	28.060
387030439	FCCE 05	15.190	30.680

FCCE	01
-	(1)

FCCE = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08



SIZE 01-03



SIZE 04-05

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C

GRID

Code	Model	Type
387030565	CC63	Single
387030566	CC64	Double





RATED TECHNICAL DATA MOD. FCC

TWO-PIPE UNIT - ONE COIL - THREE SPEEDS

MODELS				01	02	03	04
Dimension			mm	600x600			
Total cooling capacity (1)			W	2.950	3.570	4.980	5.540
Sensible cooling capacity (1)			W	2.390	2.980	3.800	4.300
Heating capacity (2a)			W	7.010	8.590	11.220	12.560
Heating capacity (2b)			W	3.505	4.295	5.610	6.280
Rated air flow (3)			m³/h	530	720	810	960
Water flow rate (4)	Cooling	l/h	507	614	857	953	
	Heating	l/h	603	739	965	1.080	
Water pressure drop (5)	Cooling	kPa	7,0	10,2	12,4	15,3	
	Heating	kPa	7,7	11,5	12,2	15,3	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	12-17-25	16-24-34	22-32-36	25-36-38
Ref. Fan-deck				1x R282x146-3 V 50 W-C1 [P=N1-2-3]	1x R282x146-3 V 50 W-C1,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		1/1	
Rated power absorption (7)			W	1x50 W		1x88 W	
			A	1x0.22 A		1x0.39 A	
Electrical power supply				230 Vac - 1 Ph - 50/60 Hz			
Cold/hot coil	Water content	l	0.95			1.5	
	Rows	N	2R			3R	
	Hydraulic fittings	DN	3/4" F			3/4" F	
	Condensate drainage outlet	mm	16			16	
Air flow reduction (8)	0 Pa	MAX	1.00	1.00	1.00	1.00	
		MED	0.7	0.71	0.84	0.84	
		MIN	0.49	0.49	0.56	0.55	

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1.00	0.95	0.90	0.85	0.80	0.75	0.70	0.65	0.60	0.55
Total cooling capacity	1.00	0.97	0.95	0.92	0.89	0.87	0.84	0.81	0.77	0.74
Cooling capacity	1.00	0.97	0.93	0.90	0.86	0.83	0.79	0.76	0.72	0.68
Heating capacity	1.00	0.97	0.94	0.91	0.87	0.84	0.81	0.77	0.74	0.70

Air flow rate	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.10
Total cooling capacity	0.71	0.67	0.63	0.59	0.55	0.50	0.45	0.39	0.32
Cooling capacity	0.64	0.60	0.55	0.51	0.46	0.41	0.35	0.29	0.22
Heating capacity	0.66	0.62	0.58	0.53	0.49	0.44	0.38	0.32	0.25

MODELS				05	06	07	08
Dimension			mm	600x600		600x1.200	
Total cooling capacity (1)			W	6.220	6.930	9.460	10.530
Sensible cooling capacity (1)			W	4.400	4.980	7.220	8.170
Heating capacity (2a)			W	12.380	13.870	21.300	23.870
Heating capacity (2b)			W	6.190	6.935	10.650	11.935
Rated air flow (3)			m³/h	800	950	1.540	1.830
Water flow rate (4)	Cooling	l/h	1.070	1.192	1.627	1.811	
	Heating	l/h	1.065	1.193	1.832	2.053	
Water pressure drop (5)	Cooling	kPa	16.1	20.0	16.2	18.8	
	Heating	kPa	12.4	15.6	16.0	18.9	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	22-32-36	25-36-38	25-35-39	28-39-41
Ref. Fan-deck				1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]	2x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	2x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		2/2	
Rated power absorption (7)			W	1x88 W		2x88 W	
			A	1x0.39 A		2x0.39 A	
Electrical power supply				230 Vac - 1 Ph - 50/60 Hz		230 Vac - 1 Ph - 50/60 Hz	
Cold/hot coil	Water content	l	2.1		3.1		
	Rows	N	4R		3R		
	Hydraulic fittings	DN	3/4°F		3/4°F		
	Condensate drainage outlet	mm	16		16		
Air flow reduction (8)	0 Pa	MAX	1	1	1	1	
		MED	0.84	0.84	0.84	0.84	
		MIN	0.55	0.56	0.55	0.55	

Technical data referred to the following conditions:

standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth [external static pressure ESP=0 Pa].

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig. 12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCC IN KG

Products/Models		01	02	03	04	05	06	07	08
FCC	Unit	17.2	17.2	18.0	18.0	18.9	18.9	35.0	35.0
	Grid	2.1	2.1	2.1	2.1	2.1	2.1	4.1	4.1

RATED TECHNICAL DATA MODELS FCCX

FOUR-PIPE UNIT - TWO COILS - THREE SPEEDS

MODELS				01	02	03	04
Dimension			mm	600x600			
Total cooling capacity (1)			W	3.070	3.720	4.040	4.490
Sensible cooling capacity (1)			W	2.350	2.940	3.230	3.650
Heating capacity (2a)			W	4.590	5.640	6.160	6.890
Heating capacity (2b)			W	2.295	2.820	3.080	3.445
Rated air flow (3)			m³/h	520	710	810	960
Water flow rate (4)	Cooling	l/h	528	640	695	772	
	Heating	l/h	395	485	530	593	
Water pressure drop (5)	Cooling	kPa	7.5	11.1	13.1	16.1	
	Heating	kPa	12.2	18.5	22.1	27.6	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	12-17-25	16-24-34	22-32-36	25-36-38
Ref. Fan-deck				1x R282x146-3 V 50 W-C1 [P=N1-2-3]	1x R282x146-3 V 50 W-C1,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		1/1	
Rated power absorption (7)			W	1x50 W		1x88 W	
			A	1x0.22 A		1x0.39 A	
Electrical power supply				230 Vac - 1 Ph - 50/60 Hz			
Cold/hot coil	Water content	l	0.95		0.95		
	Rows	N	2R		2R		
	Hydraulic fittings	DN	3/4"F		3/4"F		
	Condensate drainage outlet	mm	16		16		
Hot coil	Water content	l	0.60		0.60		
	Rows	N	1R		1R		
	Hydraulic fittings	DN	3/4"F		3/4"F		
	Condensate drainage outlet	mm	16		16		
Air flow reduction (8)	0 Pa	MAX	1.00	1.00	1.00	1.00	
		MED	0.71	0.70	0.84	0.84	
		MIN	0.50	0.49	0.56	0.55	

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1.00	0.95	0.90	0.85	0.80	0.75	0.70	0.65	0.60	0.55
Total cooling capacity	1.00	0.97	0.95	0.92	0.89	0.87	0.84	0.81	0.77	0.74
Cooling capacity	1.00	0.97	0.93	0.90	0.86	0.83	0.79	0.76	0.72	0.68
Heating capacity	1.00	0.97	0.94	0.91	0.87	0.84	0.81	0.77	0.74	0.70

Air flow rate	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.10
Total cooling capacity	0.71	0.67	0.63	0.59	0.55	0.50	0.45	0.39	0.32
Cooling capacity	0.64	0.60	0.55	0.51	0.46	0.41	0.35	0.29	0.22
Heating capacity	0.66	0.62	0.58	0.53	0.49	0.44	0.38	0.32	0.25

MODELS				05	06	07	08
Dimension			mm	600x600		600x1.200	
Total cooling capacity (1)			W	5.150	5.740	7.670	8.540
Sensible cooling capacity (1)			W	3.930	4.450	6.130	6.940
Heating capacity (2a)			W	6.100	6.840	11.690	13.100
Heating capacity (2b)			W	3.050	3.420	5.845	6.550
Rated air flow (3)			m³/h	800	950	1.540	1.830
Water flow rate (4)	Cooling	l/h	886	987	1.319	1.469	
	Heating	l/h	525	588	1.005	1.127	
Water pressure drop (5)	Cooling	kPa	13.2	16.4	16.8	19.6	
	Heating	kPa	12.3	15.5	24.9	29.9	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	22-32-36	25-36-38	25-35-39	28-39-41
Ref. Fan-deck				1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]	2x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	2x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		2/2	
Rated power absorption (7)			W	1x88 W		2x88 W	
			A	1x0.39 A		2x0.39 A	
Electrical power supply				230 Vac - 1 Ph - 50/60 Hz		230 Vac - 1 Ph - 50/60 Hz	
Cold/hot coil	Water content	l	1.50		2.00		
	Rows	N	3R		2R		
	Hydraulic fittings	DN	3/4°F		3/4°F		
	Condensate drainage outlet	mm	16		16		
Hot coil	Water content	l	0.65		1.30		
	Rows	N	1R		1R		
	Hydraulic fittings	DN	3/4°F		3/4°F		
	Condensate drainage outlet	mm	16		16		
Air flow reduction (8)	0 Pa	MAX	1.00	1.00	1.00	1.00	
		MED	0.84	0.84	0.84	0.84	
		MIN	0.55	0.56	0.55	0.55	

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating:** air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating:** air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure:** rated values measured with casing ref. AMCA210-74 standard Fig. 12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure:** sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data:** values measured with Jokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCCX IN KG

Products/Models		01	02	03	04	05	06	07	08
FCCX	Unit	18.3	18.3	18.4	18.4	19.3	19.3	36.0	36.0
	Grid	2.1	2.1	2.1	2.1	2.1	2.1	4.1	4.1

RATED TECHNICAL DATA MODELS FCCE

TWO-PIPE UNIT - ONE COIL - EC BRUSHLESS

MODELS				01	02	03
Dimension			mm	600x600		
Total cooling capacity (1)			W	5.020	6.460	8.010
Sensible cooling capacity (1)			W	4.420	5.130	5.880
Heating capacity (2a)			W	12.350	14.780	16.170
Heating capacity (2b)			W	6.178	7.394	8.089
Rated air flow (3)			m³/h	1.250	1.230	1.200
Water flow rate (4)	Cooling	l/h	863	1.111	1.378	
	Heating	l/h	1.062	1.271	1.391	
Water pressure drop (5)	Cooling	kPa	20.2	20.8	26.7	
	Heating	kPa	23.8	21.2	21.2	
Sound pressure (1 V-M-10 V) (6)			dB(A)	<10-32-43	<10-32-43	<10-31-42
Ref. Fan-deck				1x R282x146, 74 V [SWP=N/ FIX.1/10]	1x R282x146, 74 V [SWP=N/ FIX.1/10]	1x R282x146, 74 V [SWP=N/ FIX.1/10]
Motors/Fans			N/N	1/1	1/1	1/1
Rated power absorption (7)			W	1x74 W	1x74 W	1x74 W
			A	1x0.64 A	1x0.64 A	1x0.64 A
Electrical power supply				230 Vac - 1 Ph - 50/60 Hz		
Cold/hot coil	Water content	l	0.95	1.50	2.10	
	Rows	N	2R	3R	4R	
	Hydraulic fittings	DN	3/4"F	3/4"F	3/4"F	
	Condensate drainage outlet	mm	16	16	16	
Air flow reduction (8)	0 Pa	10 V (MAX)	1.00	1.00	1.00	
		5.5 V (MED)	0.55	0.55	0.55	
		1 V (MIN)	0.10	0.10	0.10	

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1.00	0.95	0.90	0.85	0.80	0.75	0.70	0.65	0.60	0.55
Total cooling capacity	1.00	0.97	0.95	0.92	0.89	0.87	0.84	0.81	0.77	0.74
Cooling capacity	1.00	0.97	0.93	0.90	0.86	0.83	0.79	0.76	0.72	0.68
Heating capacity	1.00	0.97	0.94	0.91	0.87	0.84	0.81	0.77	0.74	0.70

Air flow rate	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.10
Total cooling capacity	0.71	0.67	0.63	0.59	0.55	0.50	0.45	0.39	0.32
Cooling capacity	0.64	0.60	0.55	0.51	0.46	0.41	0.35	0.29	0.22
Heating capacity	0.66	0.62	0.58	0.53	0.49	0.44	0.38	0.32	0.25

MODELS			04	05
Dimension		mm	600x1.200	
Total cooling capacity (1)		W	12.260	15.190
Sensible cooling capacity (1)		W	9.740	11.170
Heating capacity (2a)		W	28.060	30.680
Heating capacity (2b)		W	14.034	15.346
Rated air flow (3)		m ³ /h	2.340	2.280
Water flow rate (4)	Cooling	l/h	2.109	2.613
	Heating	l/h	2.413	2.639
Water pressure drop (5)	Cooling	kPa	25.5	30.7
	Heating	kPa	26.1	24.4
Sound pressure (1 V-M-10 V) (6)		dB(A)	<10-35-46	<10-34-45
Ref. Fan-deck			1x R282x146, 74 V [SWP=N/ FIX.1/10]	1x R282x146, 74 V [SWP=N/ FIX.1/10]
Motors/Fans		N/N	2/2	2/2
Rated power absorption (7)		W	2x74 W	2x74 W
		A	2x0.64 A	2x0.64 A
Electrical power supply			230 Vac - 1 Ph - 50/60 Hz	
Cold/hot coil	Water content	l	3.10	4.30
	Rows	N	3R	4R
	Hydraulic fittings	DN	3/4"F	3/4"F
	Condensate drainage outlet	mm	16	16
Air flow reduction (8)	0 Pa	10 V (MAX)	1.00	1.00
		5.5 V (MED)	0.55	0.55
		1 V (MIN)	0.10	0.10

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

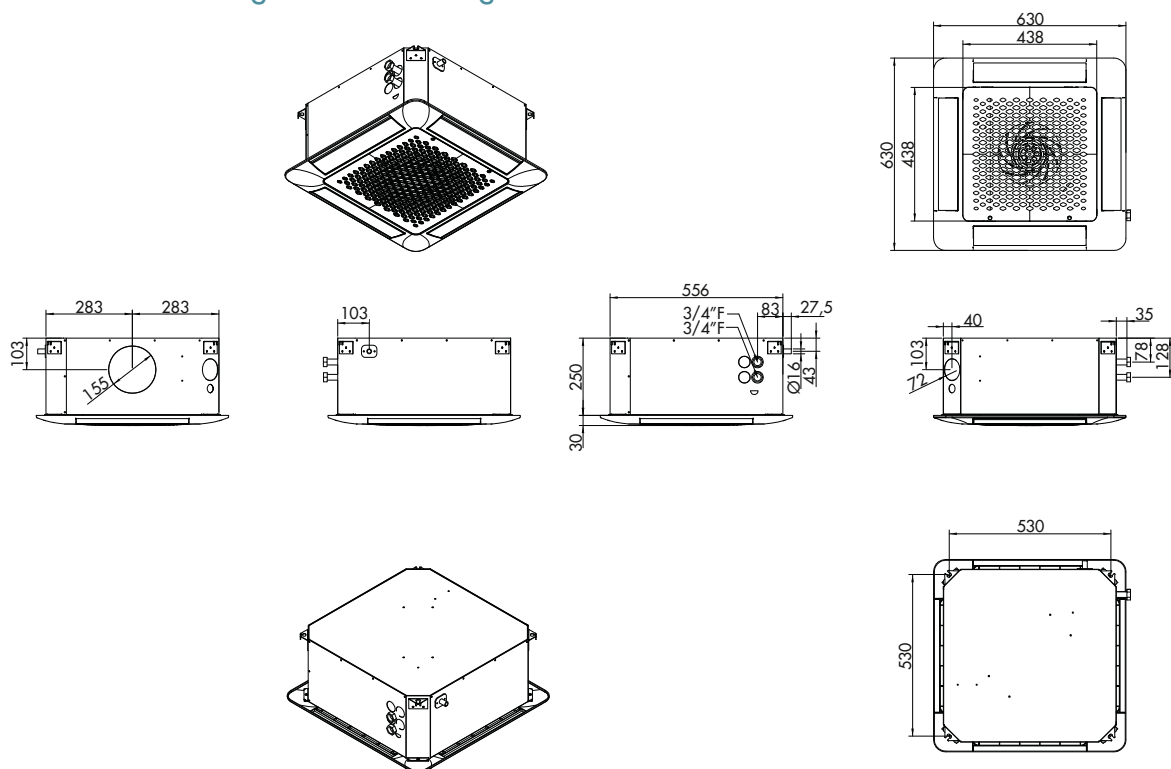
(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCCE IN KG

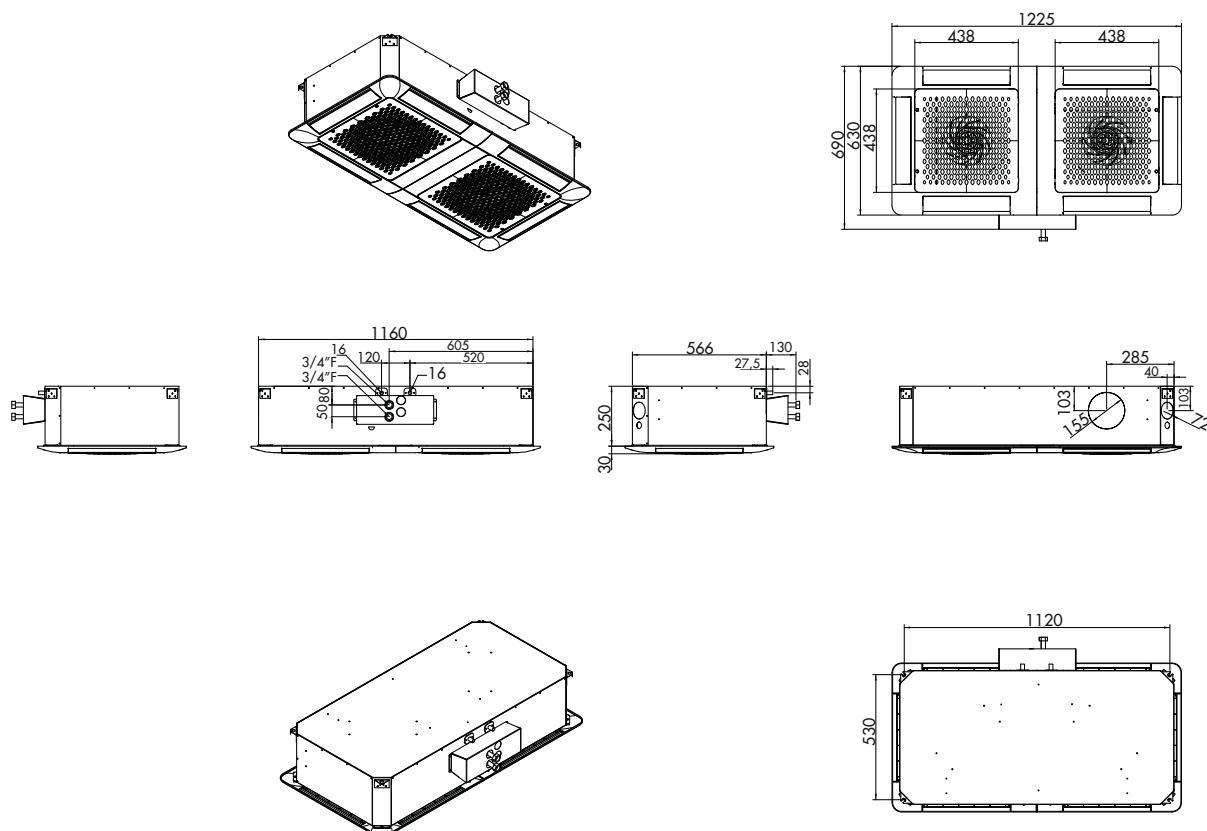
Products/Models		01	02	03	04	05
FCCE	Unit	17.3	18.1	19.0	35.2	37.0
	Grid	2.1	2.1	2.1	4.1	4.1

DIMENSIONAL DRAWINGS

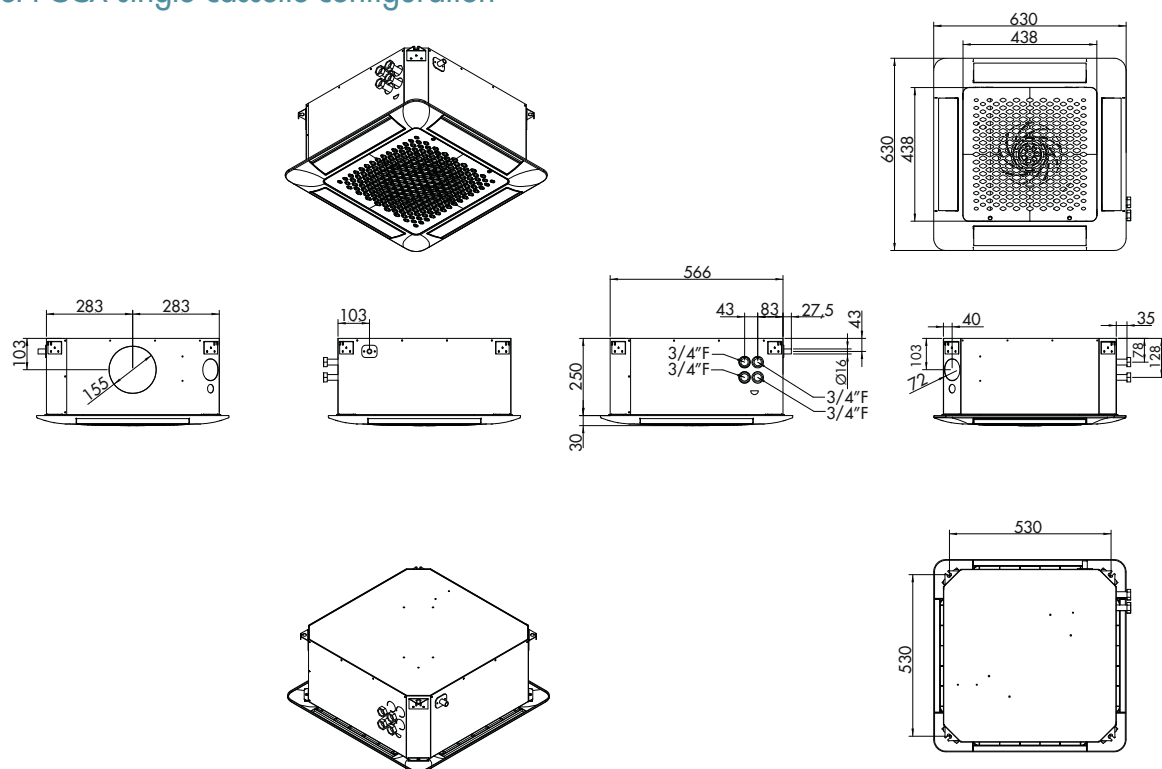
Model FCC e FCCE single-cassette configuration



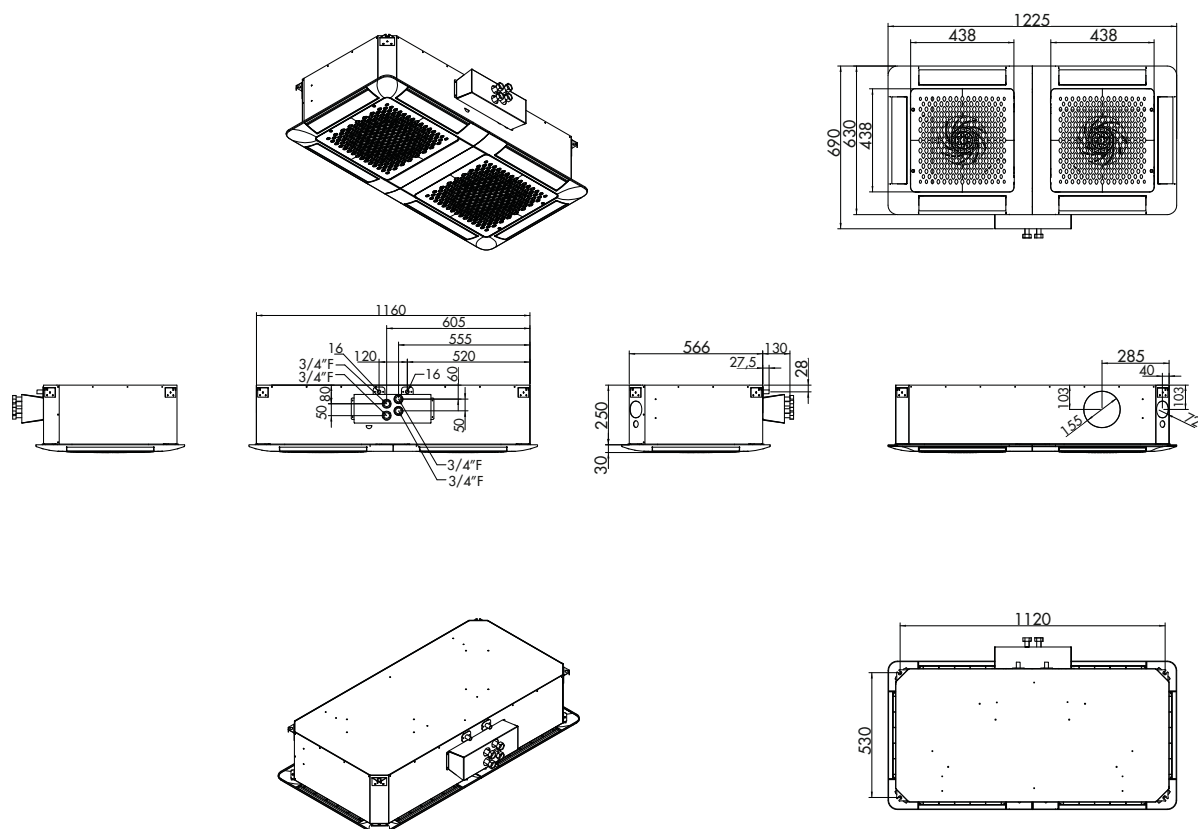
Model FCC e FCCE double-cassette configuration



Model FCCX single-cassette configuration



Model FCCX double-cassette configuration



ACCESSORIES

CONTROLS UNITS INSTALLED				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (only if a wired control unit is necessary) - INCLUDED	All
	387030469	SWC22	Simplified thermostat for 2/4-pipe fan coil units	FCC FCCX
	387030470	SWC25	Programmable thermostat for 2/4-pipe fan coil units with display and with advanced functions	FCC FCCX
	387030564	SWC26	Thermostat for 2/4-pipe fan coil units, programmable, with display and 0...10 VDC output	FCCE
	387030602	IRC02	IR remote control. Kit inclusive of motherboard, air sensor, water sensor and IR receiver	FCC FCCX
	387030471	EIX01	Electronic interface for fan coil unit thermostats: enables a single thermostat to control up to 4 fan coil units. Housed in a 6-module container for DIN rail	FCC FCCX
	387030466	MTT32	Minimum hot water temperature thermostat (calibrated to 32 °C)	All
	387030467	WTS4	Water temperature sensor (type NTC 10 kOhm @25 °C ±2 with cable L=1 m)	SWC25 SWC26

VARIOUS				
	Code	Model	Description	Applicability
	387030565	CC63	Covering panel with air return grid and air supply deflectors, air filter. Dimensions 630x630 mm	Single boxes
	387030566	CC64	Covering panel with air return grid and air supply deflectors, air filter. Dimensions 630x1225 mm	Double boxes
	387030567	VB63	Auxiliary drain pan made of plastic, for two-way or three-way valves	Single boxes
	387030568	VB64	Auxiliary drain pan made of plastic, for two-way or three-way valves	Double boxes
	387030569	REA01	Galvanised plate ring for outdoor air intake Ø=72 mm L=100 mm	All
	387030570	RIA01	Galvanised plate ring for air entry into adjacent room Ø=155 mm L=100 mm	All

VALVE KIT				
	Code	Model	Description	Applicability
	387030571	3WV03	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	FCC FCCE
	387030572	2WV03	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	FCC FCCE
	387030573	3WV03-C	2x3/4" M three-way valves with PWM-ON/OFF actuator, 230 V (4 pipes)	FCCX
	387030574	2WV03-C	2x3/4" M two-way valves with PWM-ON/OFF actuator, 230 V (4 pipes)	FCCX



DUCTED

Model: DT/DTE

DUCTED

MAIN FEATURES MOD. DT/DTE

COVERING BOX

Covering box (load-bearing structure) made of high-thickness plate resistant to rust, corrosion, chemicals, solvents, aliphatic compounds, alcohols. Pre-cut pieces and holes for configuring the unit as requested, for installing the relevant accessories, for the left-hand or right-hand arrangement of the water connection outlets, for the unit's reversibility on the installation site. Assembled using self-tapping screws for quick, thorough and easy inspection/maintenance. Compact dimensions, optimised overall dimensions. Covering boxes with galvanised plate panel and internal thermo-acoustic insulation (Class M1) of the parts in contact with the coil.

DRAIN PAN (WITH DOUBLE INCLINATION)

Drain pan with double inclination for optimal condensate discharge, equipped with outlet (standard on the same side of the water connections) + outer thermal insulation.

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion.

Coil fittings equipped with anti-torsion system, manual air relief valves and manual water drainage valves. Fittings on the left as a standard feature; on request they can be mounted on the right and are easily reversible on-site. 1 coil for 2-pipe system; 2 coils for 4-pipe system. Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol

Sizes with 3-row (3R) coil, normally used for cooling with treatment of all the internal recirculation air.

Sizes with 4-row (4R) coil, normally used for cooling with treatment of all (or part) of the outdoor renewal air, whenever a high dehumidification action is required.

VENTILATION UNIT (3-SPEED CENTRIFUGAL FAN) - DT

Ventilation unit consisting of 1, 2 or 3 double-intake centrifugal fans with aluminium fans (with forward-curved blades) directly coupled with the electric motor with a useful static pressure of up to 150 Pa.

Mounted on elastic and elastic supports and shock absorbers. Statically and dynamically balanced fan. Large-diameter fans (with high air volume and high static pressure) with low number of revolutions (=low noise). Electric motor with at least 3 speeds, equipped with thermal protection device (Klixon), run capacitor always engaged, IP42, Class B, power cables protected with double insulation.

VENTILATION UNIT (BRUSHLESS CENTRIFUGAL FAN) - DTE

Motor technology BLAC (Brushless Alternating Current) permanent magnets, brushless, sensor less, 2 protectors (TP-thermal/Klixon + EP-electronic/SW), IP20, Class B, double insulation, Inverter with dry contact alarm, 230vac-1ph-50/60hz.

High Energy Efficiency motor (HEE) with high energy savings (over 50%) and consequential CO₂ reduction (environmentally friendly).

Modulating regulation with 0...10 Vdc signal through our controls or through independent (customer's) control systems: modulation of 0-100% of the air flow (and consequently of the thermal and cooling power), allows to adjust the performance, instant by instant, to the actual needs of the room, ensuring total comfort and noise reduction.

ELECTRICAL EQUIPMENT (TERMINAL BLOCK WITH MINIMUM 7 PINS)

"Mammut"-type terminal block IP20 (minimum 7 pins: 1 earth + 3 speeds + 1 common + 2 with jumper) mounted outside of the unit (for horizontal units, on the same side of the water connections; for vertical units, on the opposite side).

AIR FILTER

The standard unit is supplied without air filter. In this way the customer can choose whether to use an air filter section among those available as accessories, or adopt an air recovery grid with air filter, or insert an air filter along the intake ducting.

AIR INTAKES AND SUPPLY OUTLETS

All standard versions are supplied with free air intake and supply outlets, without any grid/protection.

WARNING: it is forbidden to start the machine unless both the unit's intake and outlet have been ducted or protected with grids or a safety mesh (the following items are available as accessories on request: grids, panels, plenums, etc.).

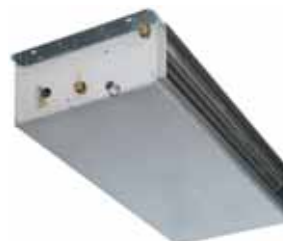
DUCTED

MODELS

DUCTED FAN COIL MOD. DT-NH

Concealed horizontal installation, with horizontal air outflow and intake from the rear part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030440	DT-NH 01 L	6.820	15.200
387030441	DT-NH 01 R		
387030442	DT-NH 02 L	8.650	18.900
387030443	DT-NH 02 R		
387030444	DT-NH 03 L	10.100	20.000
387030445	DT-NH 03 R		
387030446	DT-NH 04 L	12.000	28.400
387030447	DT-NH 04 R		
387030448	DT-NH 05 L	15.200	35.200
387030449	DT-NH 05 R		
387030450	DT-NH 06 L	17.800	37.200
387030451	DT-NH 06 R		



DT-NH	01	L
-	(1)	(2)

DT-NH = fan coil model
 (1) Capacity = 01, 02, 03, 04, 05, 06
 (2) L = left coil connection/R = right coil connection

DUCTED FAN COIL MOD. DTE-NH

Concealed vertical installation, with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030715	DTE-NH 01 L	6.976	15.569
387030716	DTE-NH 01 R		
387030717	DTE-NH 02 L	8.828	19.313
387030718	DTE-NH 02 R		
387030719	DTE-NH 03 L	10.315	20.452
387030720	DTE-NH 03 R		
387030721	DTE-NH 04 L	12.135	28.739
387030722	DTE-NH 04 R		
387030723	DTE-NH 05 L	15.357	35.586
387030724	DTE-NH 05 R		
387030725	DTE-NH 06 L	17.993	37.629
387030726	DTE-NH 06 R		



DTE-NH	01	L
-	(1)	(2)

DTE-NH = fan coil model
 (1) Capacity = 01, 02, 03, 04, 05, 06
 (2) L = left coil connection/R = right coil connection

(1) Cooling: air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
 (2) Heating: air temp. 20 °C - input/output water temp. 70/60 °C



RATED TECHNICAL DATA - DT

TWO-PIPE UNIT - ONE COIL

MODELS			01	02	03
Total cooling capacity (1)		W	6.820	8.650	10.100
Sensible cooling capacity (1)		W	5.300	6.580	7.380
Heating capacity (2a)		W	15.200	18.900	20.000
Heating capacity (2b)		W	7.600	9.450	10.000
Rated air flow (3)		m ³ /h	1.350	1.500	1.450
Water flow rate (4)	Cooling	l/h	1.173	1.488	1.737
	Heating	l/h	1.307	1.625	1.720
Water pressure drop (5)	Cooling	kPa	35,7	39,4	38,4
	Heating	kPa	34,6	36,6	29,4
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	34-43-49	35-44-50	35-44-50
Motors/Fans		N/N	1/1		
Rated power absorption (7)		W	290		
		A	1,3		
Electrical power supply			230 Vac - 1 Ph - 50 Hz		
Cold/hot coil rows		N	3R	4R	
Hydraulic fittings		DN	3/4" F	3/4" F	
Condensate drainage outlet		mm	20	20	

MODELS			04	05	06
Total cooling capacity (1)		W	12.000	15.200	17.800
Sensible cooling capacity (1)		W	9.780	12.100	13.500
Heating capacity (2a)		W	28.400	35.200	37.200
Heating capacity (2b)		W	14.200	17.600	18.600
Rated air flow (3)		m ³ /h	2.750	3.000	2.850
Water flow rate (4)	Cooling	l/h	2.064	2.614	3.062
	Heating	l/h	2.442	3.027	3.199
Water pressure drop (5)	Cooling	kPa	28,0	38,3	30,6
	Heating	kPa	30,6	40,0	26,1
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	37-48-51	38-49-52	38-49-52
Motors/Fans		N/N	1/2		
Rated power absorption (7)		W	560		
		A	2,6		
Electrical power supply			230 Vac - 1 Ph - 50 Hz		
Cold/hot coil rows		N	3R	3R	4R
Hydraulic fittings		DN	3/4" F		
Condensate drainage outlet		mm	20		

Technical data referred to the following conditions:

standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) (8) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

RATED TECHNICAL DATA - DTE

TWO-PIPE UNIT - ONE COIL

MODELS				01	02	03
Total cooling capacity (1)			W	6.976	8.828	10.315
Sensible cooling capacity (1)			W	5.440	6.736	7.561
Heating capacity (2a)			W	15.569	19.313	20.452
Heating capacity (2b)			W	7.784	9.656	10.226
Rated air flow (3)			m³/h	1.400	1.550	1.500
Water flow rate (4)		Cooling	l/h	1.200	1.518	1.774
		Heating	l/h	1.339	1.661	1.759
Water pressure drop (5)		Cooling	kPa	37.4	41.1	40.1
		Heating	kPa	36.3	38.3	30.7
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	16-37-51	17-39-51	17-39-51
Engine reference			Ref	1xD180x240, SAM [SWP/FIX.1/10], [SWN/FIX.1/10] 8P, IP42, Cl.B, EP+TP, BR, INV180W/Cl.1		
Motors/Fans			N/N	1/1		
Rated power absorption (7)			W	180		
			A	1.40		
Electrical power supply				230 Vac - 1 Ph - 50 Hz/Signal 0...10 Vdc		
Cold/hot coil rows			N	3R		4R
Hydraulic fittings			DN	3/4" F		
Water content			L	1.95	1.96	2.60
Condensate drainage outlet			mm	20	20	20
Lower operating limit	ESP = 0 Pa		MAX	1.00	1.00	1.00
			MED	0.63	0.63	0.63
			MIN	0.26	0.26	0.26
REDUCED AIR FLOW RATE Multiplicative coefficients for the definition of "Air Flow/Static Pressure" curves (at 3 speeds MAX-MED-MIN with MAX=10 V, MIN= 1 V) (8)	Ref. Nominal air flow (3)	25 Pa	MAX	0.97	0.97	0.97
			MED	0.61	0.61	0.61
			MIN	0.26	0.26	0.26
		50 Pa	MAX	0.94	0.93	0.94
			MED	0.59	0.59	0.59
			MIN	0.25	0.25	0.25
		75 Pa	MAX	0.90	0.90	0.90
			MED	0.57	0.57	0.57
			MIN	0.24	0.24	0.24
		100 Pa	MAX	0.86	0.85	0.86
			MED	0.54	0.54	0.54
			MIN	0.23	0.23	0.23
		125 Pa	MAX	0.81	0.81	0.81
			MED	0.51	0.51	0.51
			MIN	0.22	0.21	0.21
		150 Pa	MAX	0.76	0.76	0.76
			MED	0.48	0.48	0.48
			MIN	0.20	0.20	0.20
Upper operating limit	ESP (Pa)		MAX	288	288	288
	Qa (x m³/h)			x0.15	x0.15	x0.15
	ESP (Pa)		MED	268	268	268
	Qa (x m³/h)			x0.14	x0.14	x0.14
	ESP (Pa)		MIN	219	219	219
	Qa (x m³/h)			x0.13	x0.13	x0.13

Technical data referred to the following conditions:

standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(1) (2) (9) **Cooling and Heating capacity**: Data calculated by SW and measurements made in calorimetric room ref. UNI 7940 part 1°2°, UNI-EN 1397/2001 standards.

(3) (8) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

RATED TECHNICAL DATA - DTE

TWO-PIPE UNIT - ONE COIL

MODELS				04	05	06
Total cooling capacity (1)			W	12.135	15.357	17.993
Sensible cooling capacity (1)			W	9.907	12.244	13.669
Heating capacity (2a)			W	28.739	35.586	37.629
Heating capacity (2b)			W	14.370	17.793	18.814
Rated air flow (3)			m³/h	2.800	3.050	2.900
Water flow rate (4)	Cooling		l/h	2.087	2.641	3.095
	Heating		l/h	2.472	3.060	3.236
Water pressure drop (5)	Cooling		kPa	28.7	39.2	31.3
	Heating		kPa	31.3	40.9	26.7
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	18-41-52	19-42-53	19-42-53
Engine reference			Ref	2xD180x240, CYP75% [SWP/FIX.1/10], [SWN/FIX.1/10] 8P, IP20, Cl.B, EP+TP, BR, INV550W/Cl.1		
Motors/Fans			N/N	1/2		
Rated power absorption (7)			W	400		
			A	1.80		
Electrical power supply				230 Vac - 1 Ph - 50 Hz/Signal 0...10 Vdc		
Cold/hot coil rows			N	3R		4R
Hydraulic fittings			DN	3/4" F		
Water content			L	2.86	2.87	3.82
Condensate drainage outlet			mm	20		20
Lower operating limit	ESP = 0 Pa		MAX	1.00	1.00	1.00
			MED	0.62	0.62	0.62
			MIN	0.23	0.23	0.23
REDUCED AIR FLOW RATE Multiplicative coefficients for the definition of "Air Flow/Static Pressure" curves (at 3 speeds MAX-MED-MIN with MAX=10 V, MIN= 1 V) (8)	Ref. Nominal air flow (3)	25 Pa	MAX	0.95	0.95	0.95
			MED	0.59	0.59	0.59
			MIN	0.22	0.22	0.22
		50 Pa	MAX	0.91	0.91	0.91
			MED	0.56	0.56	0.56
			MIN	0.21	0.21	0.21
		75 Pa	MAX	0.86	0.86	0.86
			MED	0.53	0.53	0.53
			MIN	0.20	0.20	0.20
		100 Pa	MAX	0.81	0.81	0.81
			MED	0.50	0.50	0.50
			MIN	0.19	0.19	0.19
		125 Pa	MAX	0.75	0.75	0.75
			MED	0.46	0.46	0.46
			MIN	0.18	0.18	0.18
		150 Pa	MAX	0.68	0.68	0.68
			MED	0.42	0.42	0.42
			MIN	0.16	0.16	0.16
Upper operating limit	ESP (Pa)		MAX	221	221	221
	Qa (x m³/h)			x0.13	x0.13	x0.13
	ESP (Pa)		MED	206	206	206
	Qa (x m³/h)			x0.13	x0.13	x0.13
	ESP (Pa)		MIN	181	181	181
	Qa (x m³/h)			x0.12	x0.12	x0.12

Technical data referred to the following conditions:

standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(1) (2) (9) **Cooling and Heating capacity**: Data calculated by SW and measurements made in calorimetric room ref. UNI 7940 part 1°-2°, UNI-EN 1397/2001 standards.

(3) (8) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate (q)	1.00	0.95	0.90	0.85	0.80	0.75	0.70	0.65
Total cooling capacity	1.00	0.97	0.95	0.92	0.89	0.87	0.84	0.81
Sensible cooling capacity	1.00	0.97	0.93	0.90	0.86	0.83	0.79	0.76
Heating capacity	1.00	0.97	0.94	0.91	0.87	0.84	0.81	0.77

Air flow rate (q)	0.60	0.55	0.50	0.45	0.40	0.35	0.30	0.25
Total cooling capacity	0.77	0.74	0.71	0.67	0.63	0.59	0.55	0.50
Sensible cooling capacity	0.72	0.68	0.64	0.60	0.55	0.51	0.46	0.41
Heating capacity	0.74	0.70	0.66	0.62	0.58	0.53	0.49	0.44

TABLE OF NET WEIGHTS MOD. DT/DTE (TWO-PIPE UNIT - ONE COIL) IN KG

Products/Models	01	02	03	04	05	06
DT-NH	37.0	38.0	40.0	52.0	54.0	57.0
DTE-NH	37.0	38.0	40.0	52.0	54.0	57.0

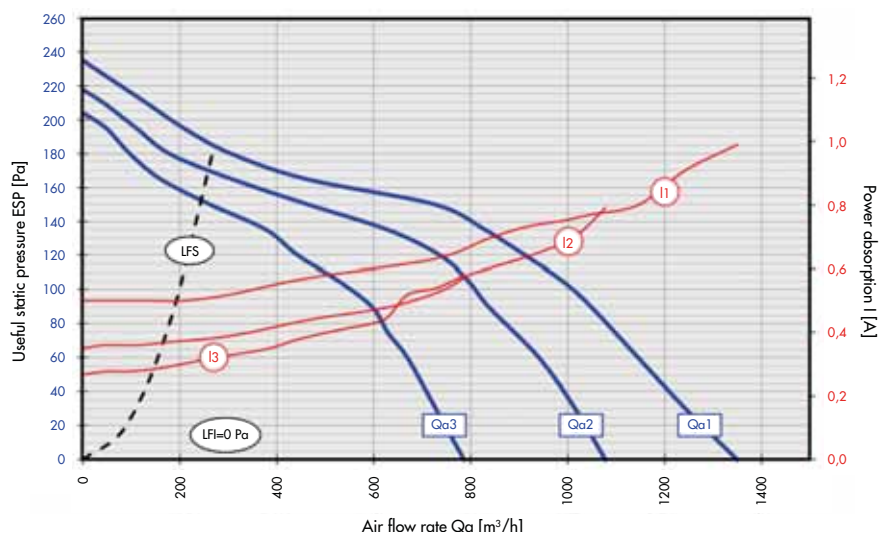
USEFUL STATIC PRESSURE/AIR FLOW RATE DIAGRAMS

Key

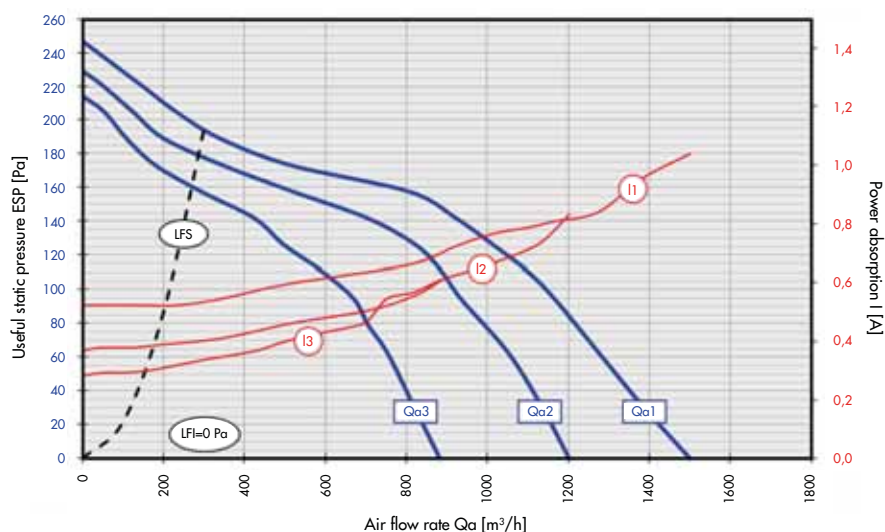
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

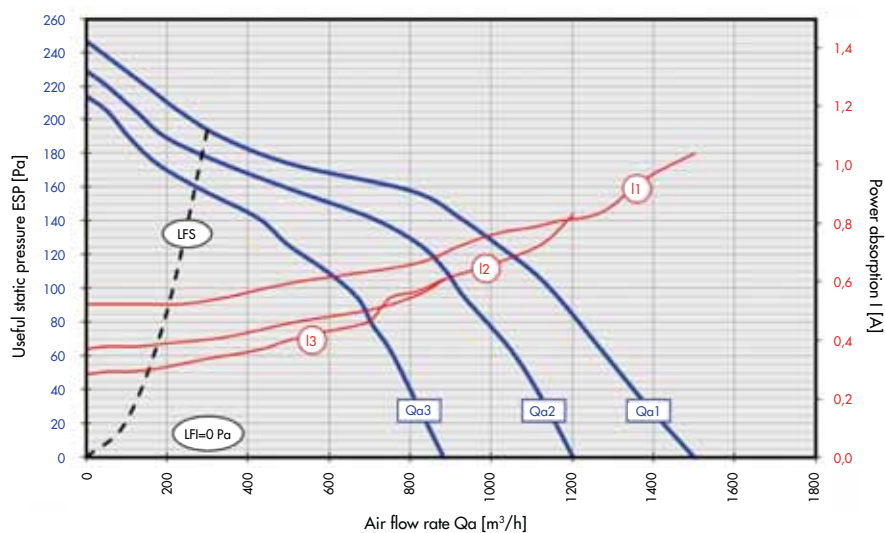
Model DT 01



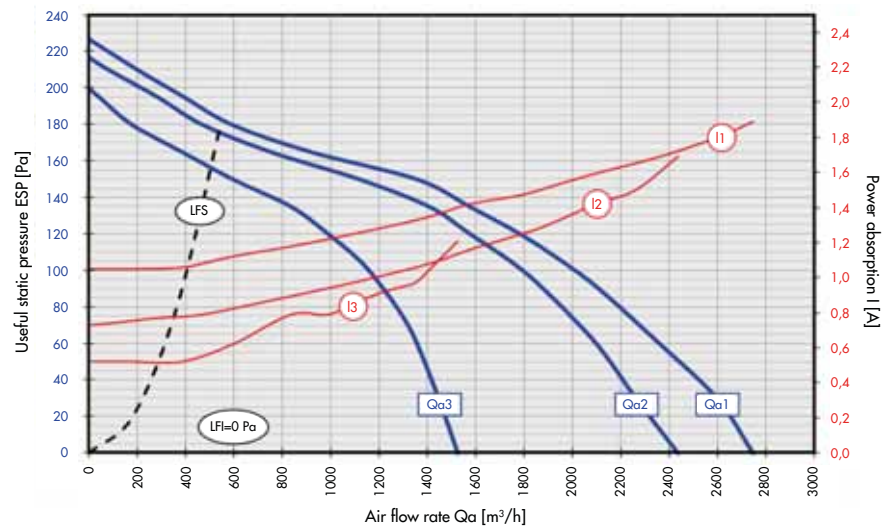
Model DT 02



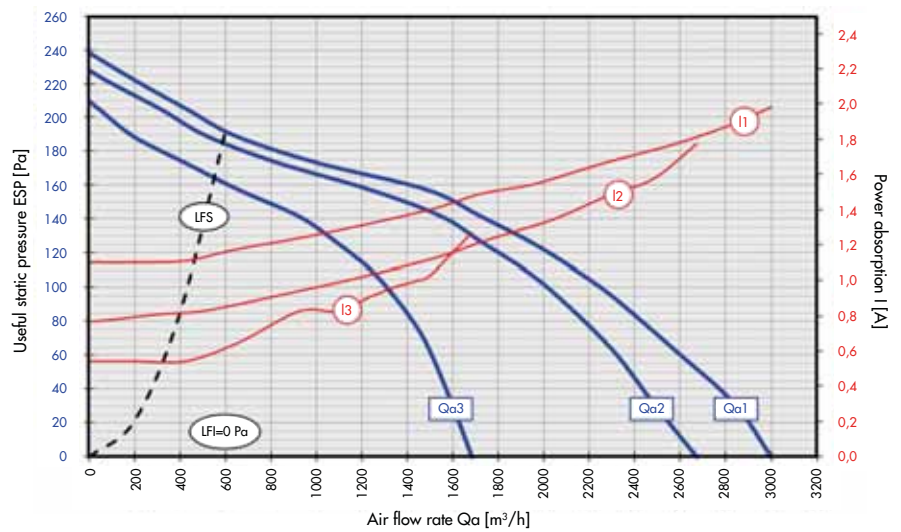
Model DT 03



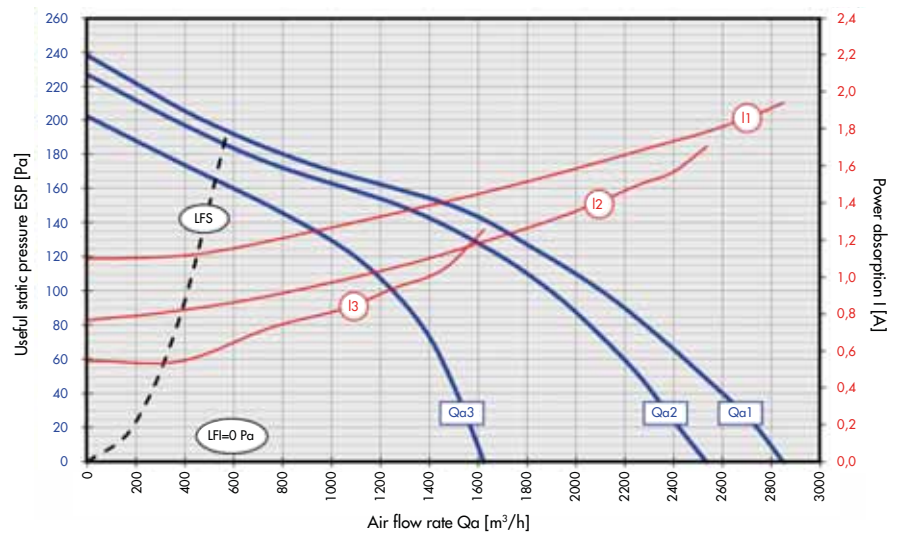
Model DT 04



Model DT 05



Model DT 06

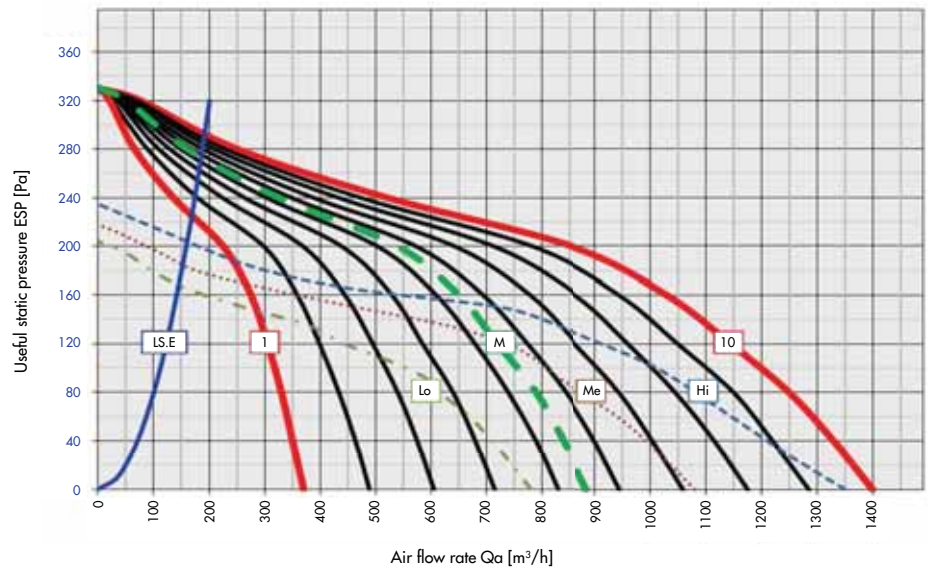


USEFUL STATIC PRESSURE/AIR FLOW RATE DIAGRAMS

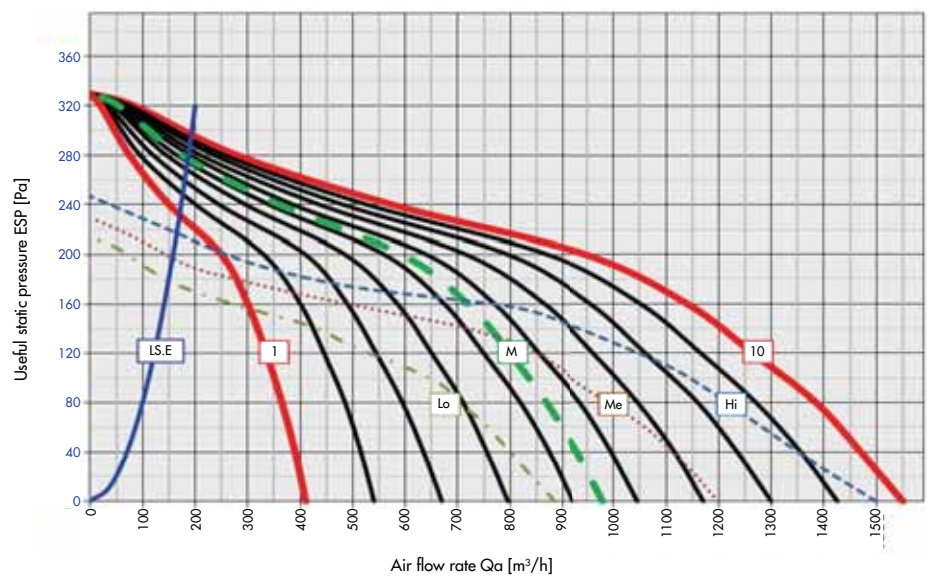
KEY

LS,E	Upper operating limit
Hi	AC unit curve at maximum speed
Me	AC unit curve at average speed
Lo	AC unit curve at minimum speed
10	EC unit curve with 10 Vdc signal (maximum speed)
1	EC unit curve with 1 Vdc signal (maximum speed)
M	EC unit curve at average speed

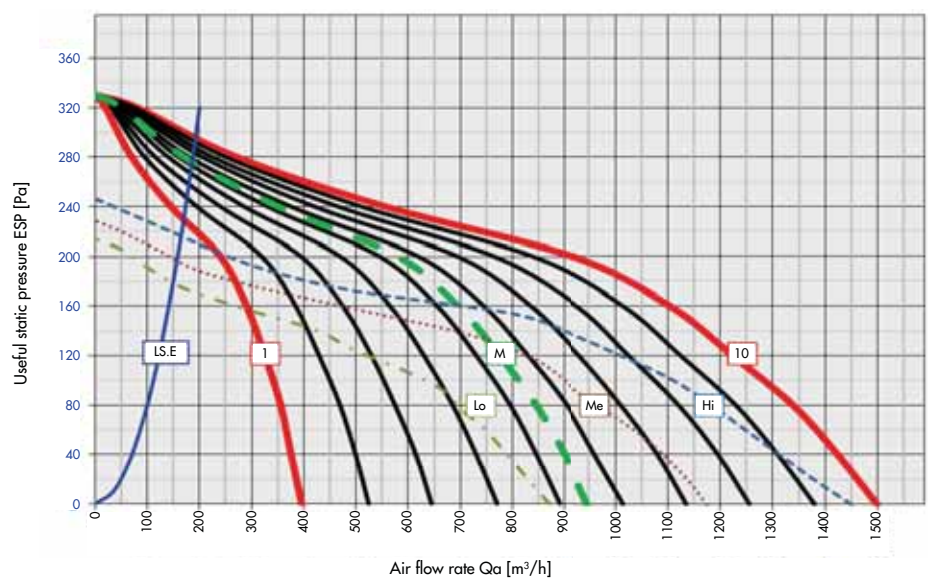
Model DTE 01



Model DTE 02



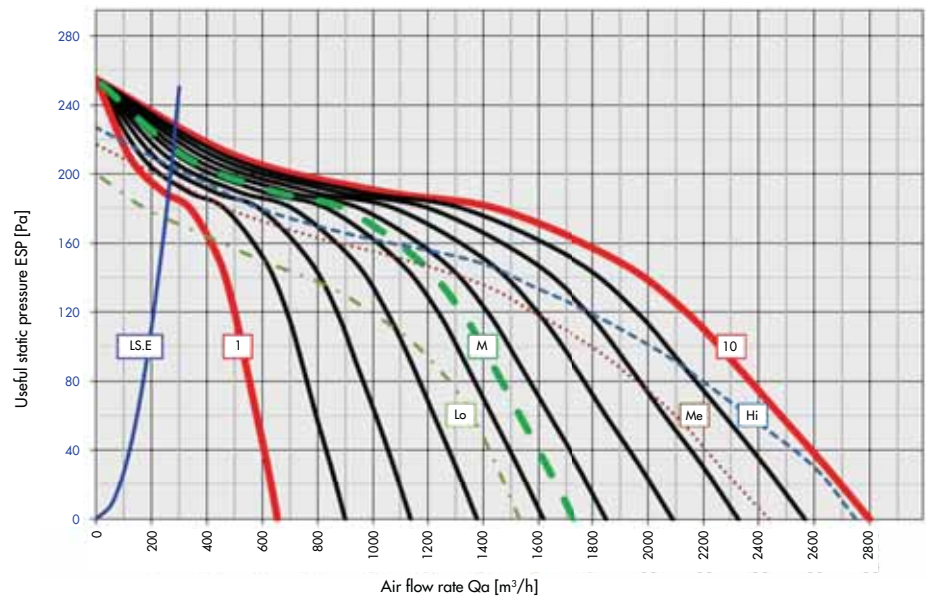
Model DTE 03



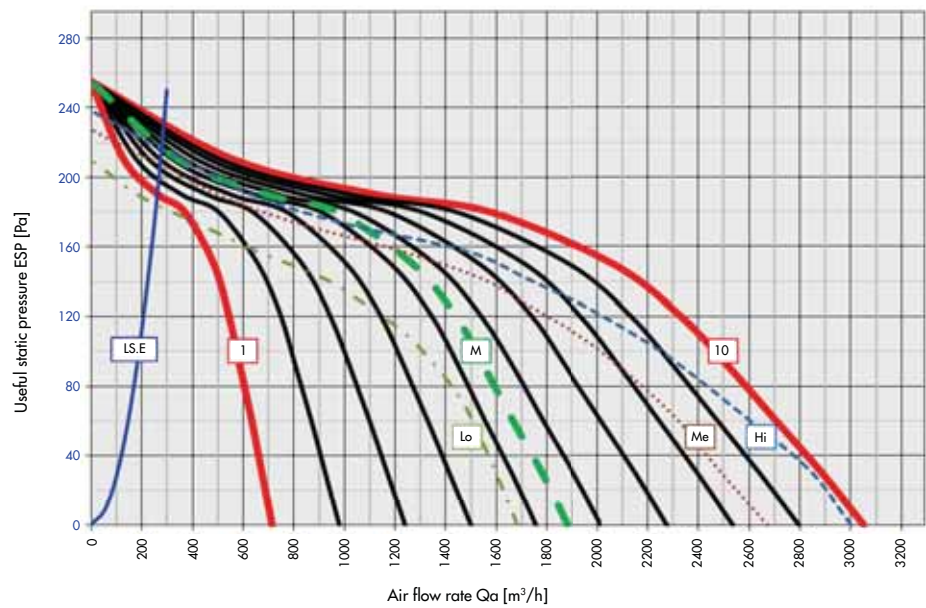
KEY

LS.E	Upper operating limit
Hi	AC unit curve at maximum speed
Me	AC unit curve at average speed
Lo	AC unit curve at minimum speed
10	EC unit curve with 10 Vdc signal (maximum speed)
1	EC unit curve with 1 Vdc signal (maximum speed)
M	EC unit curve at average speed

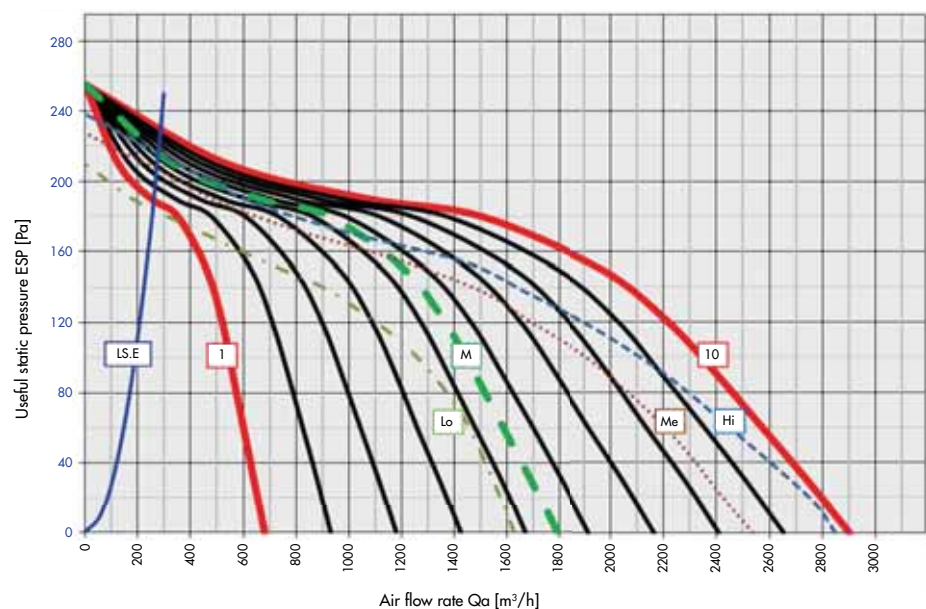
Model DTE 04



Model DTE 05

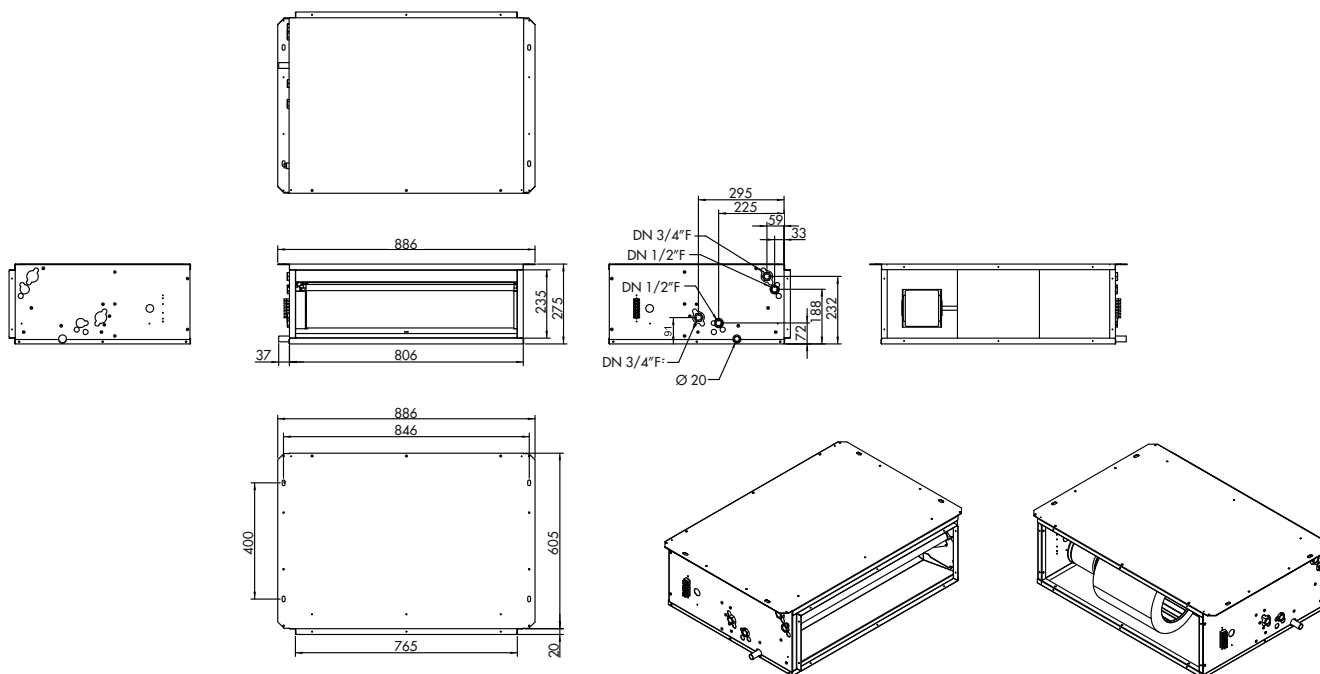


Model DTE 06

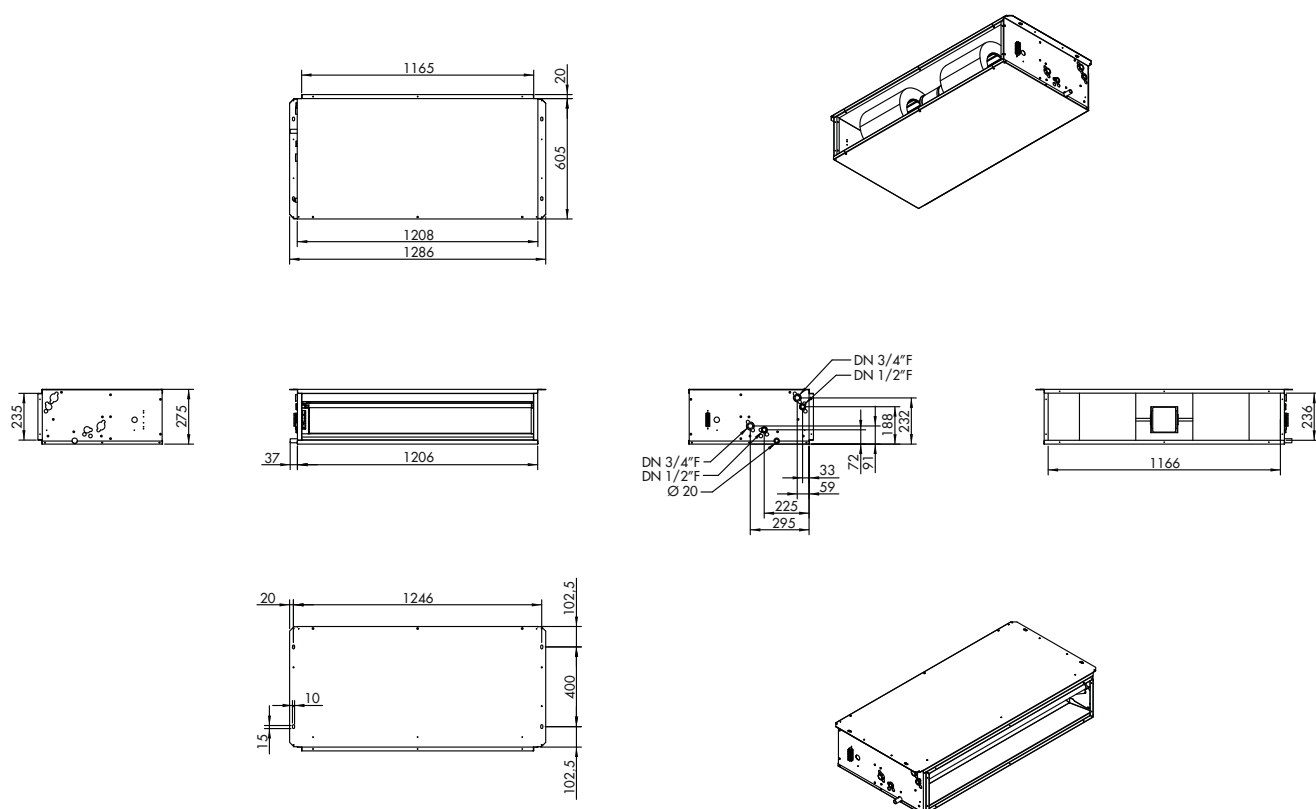


DIMENSIONAL DRAWINGS

Models DT-NH 01...03/DTE-NH 01...03



Models DT-NH 04...06/DTE-NH 04...06



ACCESSORIES

WIRED CONTROL UNITS AND REMOTE CONTROLS				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (only if a wired control unit is necessary) - INCLUDED	All
	387030469	SWC22	Simplified thermostat for 2/4-pipe fan coil units	DT
	387030470	SWC25	Programmable thermostat for 2/4-pipe fan coil units with display and with advanced functions	DT
	387030564	SWC26	Thermostat for 2/4-pipe fan coil units, programmable, with display and 0...10 VDC output	All
	387030471	EIX01	Electronic interface for fan coil unit thermostats: enables a single thermostat to control up to 4 fan coil units. Housed in a 6-module container for DIN rail	DT
	387030472	IRC01	IR remote control. Kit inclusive of motherboard, air sensor, water sensor and IR receiver	DT
	387030466	MTT32	Minimum hot water temperature thermostat (calibrated to 32 °C)	All
	387030467	WTS4	Water temperature sensor (type NTC 10 kOhm @25 °C ±2 with cable L=1 m)	SWC25 SWC26

ACCESSORIES

ADDITIONAL SECTIONS				
	Code	Model	Description	Applicability
	387030575	FSC-Z1	Ductable air filter section with flat air filter and frame in 4 parts, removable from all directions - grade EU3 filtration (Eurovent)	DT-NH 01...03 DTE-NH 01...03
	387030576	FSC-Z2		DT-NH 04...06 DTE-NH 04...06
	387030577	FSD-Z1	Ductable air filter section with high-efficiency undulated air filter and frame in 4 parts, removable from all directions - grade EU5 filtration (Eurovent)	DT-NH 01...03 DTE-NH 01...03
	387030578	FSD-Z2		DT-NH 04...06 DTE-NH 04...06
	387030579	FSM-Z1	Outdoor/indoor air mixing section (outdoor air 0-33% - indoor air 100-67% or inversely). Shutters paired with manual controls and configured for being operated with a motor	DT-NH 01...03 DTE-NH 01...03
	387030580	FSM-Z2		DT-NH 04...06 DTE-NH 04...06
	387030581	SM01	ON/OFF 230 V servo motor for shutter	All
	387030582	JS-Z1-M	Vibration damping joint, without flanges	DT-NH 01...03 DTE-NH 01...03
	387030583	JS-Z2-M		DT-NH 04...06 DTE-NH 04...06
	387030584	FSM-Z1-M	Plenum with round conduits 3x200/180/160 mm	DT-NH 01...03 DTE-NH 01...03
	387030585	FSM-Z2-M	Plenum with round conduits 5x200/180/160 mm	DT-NH 04...06 DTE-NH 04...06

VARIOUS				
	Code	Model	Description	Applicability
	387030586	3WV05	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	DT-NH 01...03 DTE-NH 01...03
	387030587	3WV06		DT-NH 04...06 DTE-NH 04...06
	387030588	KCP-05	Kit with 90° copper pipes, 3/4" F ball valve and 3/4" F retainer, solution for three-way valves	All
	387030589	2WV05	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	DT-NH 01...03 DTE-NH 01...03
	387030590	2WV06		DT-NH 04...06 DTE-NH 04...06
	387030591	KCP-08	Kit with 90° copper pipes, 3/4" F ball valve and 3/4" F retainer, solution for two-way valves	All
	387030592	HB02	Auxiliary drain pan with thermal insulation, made of galvanised plate	All
	387030594	CP05	Condensate discharge pump with alarm contact	All

ACCESSORIES FOR INTEGRATION WITH BMS SYSTEMS E SANITISATION DEVICE

Components for BMS			
	Code	Model	Description
	387030596	PCB-U1.V	Universal circuit board for AC units (asincrona 230 Vasynchronous - 3 speeds) or ECMs (electronic/ brushless 230 VAC 0-10 VDC signal). MODBUS+TCP-IP/WEB/03 communication protocol. Without air temperature sensor
	387030597	ATS2	Air temperature sensor (mandatory)
	387030598	WTS2	Water temperature sensor for SUMMER/WINTER changeover (only for two-pipe units)
	387030599	WTS3	Water temperature sensor for measuring minimum hot water temperature
	387030600	SWC06	Simplified wall-mounted digital control unit for exteriors

Accessories for BMS system should not be used with FCW models where the Modbus communication port is already positioned inside the optional wired control.

BIOXIGEN® SANITISATION DEVICE				
	Code	Model	Description	Applicability
	387030601	KSB	Bioxigen® kit equipped with plastic box, power cable, external electrode, 3 self-tapping screws 3.9x13.3 "Mammut" terminals with 2 self-tapping screws 3.5x19 + L/N/PE label. Supplied installed on the unit.	All

NOTES



HIGH-WALL

Model FCW

HIGH-WALL

MAIN FEATURES MOD. FCW



IRC03

Infrared remote control supplied with the unit



WiFi

Optional

COVERING BOX

Covering boxes with new and visually appealing design, equipped with LCD. Automatic distribution of the air diversified into cooling and heating for the utmost comfort. The shape of the fan ensures a highly efficient, low-noise air flow.

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion.

One coil for 2-pipe system. Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 1.5 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol

Blue hydrophilic flaps and copper pipes equipped with special ridges that increase the fluid's turbulence and sensibly increase the heat exchange.

CONTROL UNITS AND CONTROLS

Remote control supplied as a standard feature with the unit. Wired control unit available as an optional accessory and equipped with MODBUS protocol for communication with the BMS. Programming of the unit switching on and off. A single wired control unit can manage up to 10 fan coil units. Equipped with a sensor for pairing with a remote control.

VALVES

Two-way or three-way valves are available as accessories, NOT for enclosed installation.

HIGH-WALL FAN COIL MOD. FCW

Code	Model	Cooling capacity (W) (1)	Heating capacity (W) (2)
387030228	FCW 01	2.100	4.264
387030229	FCW 02	2.600	5.914
387030230	FCW 03	3.500	7.807
387030231	FCW 04	4.200	8.642

FCW	01
-	(1)

FCW = fan coil model
(1) Capacity = 01, 02, 03, 04

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2) **Heating:** air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

RATED TECHNICAL DATA MOD. FCW

TWO-PIPE UNIT - ONE COIL

MODELS			01	02	03	04
Total cooling capacity (1)		W	2.100	2.600	3.500	4.200
Sensible cooling capacity (1)		W	1.600	2.000	2.400	3.000
Heating capacity (2a)		W	4.264	5.914	7.807	8.642
Heating capacity (2b)		W	2.132	2.957	3.903	4.321
Rated air flow (3)		m³/h	340	510	680	850
Water flow rate (4)	Cooling	l/h	360	432	612	720
	Heating	l/h	360	504	684	756
Water pressure drop (5)	Cooling	kPa	18.0	26.0	38.0	46.0
	Heating	kPa	5.0	9.0	16.0	13.0
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	21-22-27-31	21-28-35-36	26-34-42-43	30-39-46-48
Motors/Fans		N/N	1/1	1/1	1/1	1/1
Rated power absorption (7)		W	10	20	30	40
		A	0.052	0.078	0.126	0.187
Electrical power supply			230 Vac - 1 Ph - 50 Hz			
Cold/hot coil rows		N	2	2	2	2
Hydraulic fittings		DN	1/2"	1/2"	1/2"	1/2"
Condensate drainage outlet		mm	15.6			

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) (8) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

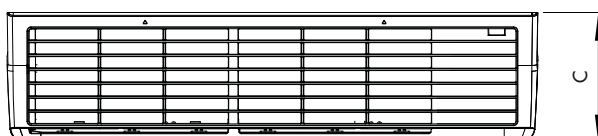
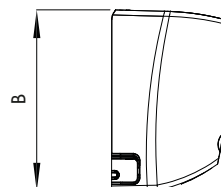
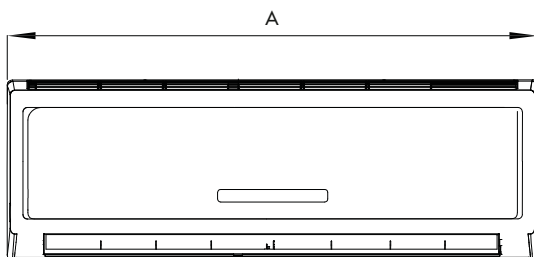
(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741-ISO 3742 standards.

(7) **Electrical data**: values measured with Jokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCW (TWO-PIPE UNIT - ONE COIL) IN KG

Products/Models	01	02	03	04
FCW	10.5	10.5	10.5	12.5

DIMENSIONAL DRAWING MOD. FCW 01-02-03 AND MOD. FCW 04



MODEL FCW	01	02	03	04
A		845		970
B		289		360
C		209		280

ACCESSORIES

WIRED CONTROL UNIT				
	Code	Model	Description	Applicability
	387030232	SWC17	Wired control unit for wall-mounted fan coil units	All
	387030235	EIX07	WiFi kit	All

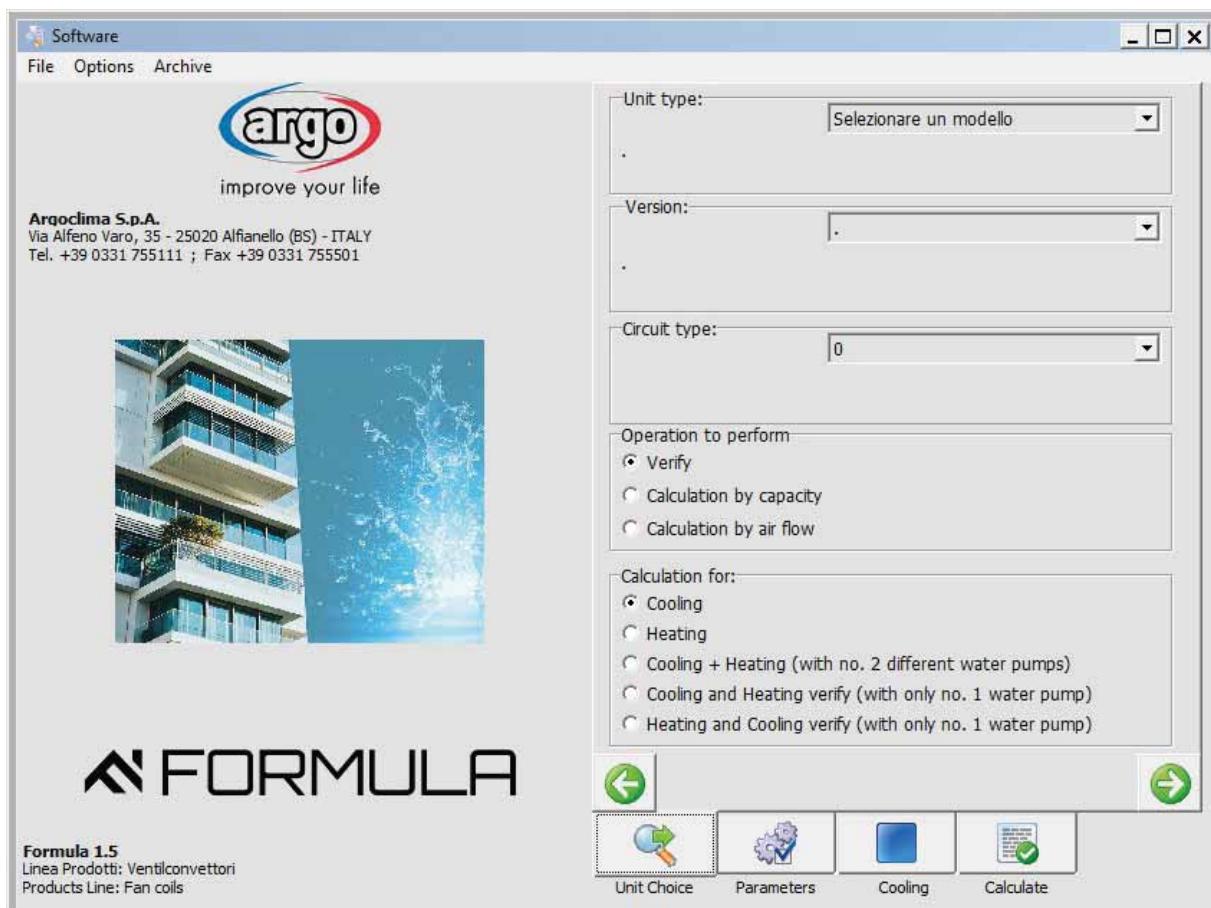
VALVE KIT				
	Code	Model	Description	Applicability*
	387030233	KIT VALV 4V: VTX13+ MVX22R+ 54304-04	VTX13 = four-way valves 1/2" M, Kvs=1.6 (2 pipes) MVX22R = electro-thermal ON/OFF actuator, 230 V, 140 N 54304-04 = casing for VTX13	All
	387030234	KIT VALV 2V: VSX13+ MVX22R+ 54304-01	VSX13 = two-way valves 1/2" M, Kvs=1.6 (2 pipes) MVX22R = electro-thermal ON/OFF actuator, 230 V, 140 N 54304-01 = casing for VSX13	All

*Not for installation inside the unit.



SELECTION SOFTWARE:

 The FORMULA software programme helps to select the most suitable hydronic terminal units for the various types of systems (residential, tertiary, etc.).



 It enables subjects operating in the thermotechnical and plant engineering sector to verify the operating conditions of a specific model or search for the most functional units on the basis of personalised parameters.





The results can then be easily exported and shared.

 Argoclima S.p.A. Via Alfeno Varo, 35 - 25020 Alfianello (BS) - ITALY Tel. +39 0331 755111 ; Fax +39 0331 755501									
 Formula 1.5 Linea Prodotti: Ventilconvettori Products Line: Fan coils									
Type: FCT	Centrifugal Fan-Coils							Circuit type: 2 Pipes	
Model	FCT 01	FCT 02	FCT 03	FCT 04	FCT 05	FCT 06	FCT 07	FCT 08	FCT 09
Fan Speed	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
Cooling									
Air temperature with D.B.	°C	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
Air temperature with W.B.	°C	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
Relative humidity	%	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
Input Water Temp.	°C	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Output Water Temp.	°C	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Water flow	l/h	259	344	435	519	645	731	949	1.104
Water pressure drop	kPa	13.1	16.3	18.5	20.8	22.6	24.1	24.5	27.1
Total cooling capacity	W	1.500	2.000	2.530	3.020	3.750	4.250	5.520	6.420
	Frig./h	1.290	1.720	2.176	2.597	3.225	3.655	4.747	5.521
Sensible cooling capacity	W	1.290	1.620	2.070	2.310	2.870	3.230	4.330	4.800
	Frig./h	1.109	1.393	1.780	1.987	2.468	2.778	3.724	4.128
General characteristics									
Glycol in weight	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Altitude a.s.l.	m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air flow	m³/h	370	400	500	550	670	720	1.000	1.050
Air pressure drops	Pa	0	0	0	0	0	0	0	0
	dBA	38	38	44	45	37	37	43	45
Sound levels	NC	32	33	38	38	32	33	38	38
	NR	33	34	40	40	32	34	40	44
Max input power	W	55	55	80	80	80	80	145	145
Max input current	A	0.25	0.25	0.35	0.35	0.35	0.35	0.65	0.65
Version	General Report (versions / dimensions / weights not indicated)								
Length	mm	0	0	0	0	0	0	0	0
Width	mm	0	0	0	0	0	0	0	0
Depth	mm	0	0	0	0	0	0	0	0
Weight	Kg	0	0	0	0	0	0	0	0



The software programme is available in several languages to further facilitate its use.





X3 AIR CONDITIONING

X3 SPLIT: residential single and multisplit air conditioners - DC Inverter R32

X3 PACKAGE: commercial single split air conditioners - DC Inverter R32

X3 high-capacity ducted: air conditioners with high external static pressure - R410A

X3 FS: floor standing air conditioners - DC Inverter R32

HIGH WALL - single split air conditioners

MAIN FEATURES



IRC1FB9W
(Standard)

Infrared remote
controller X3



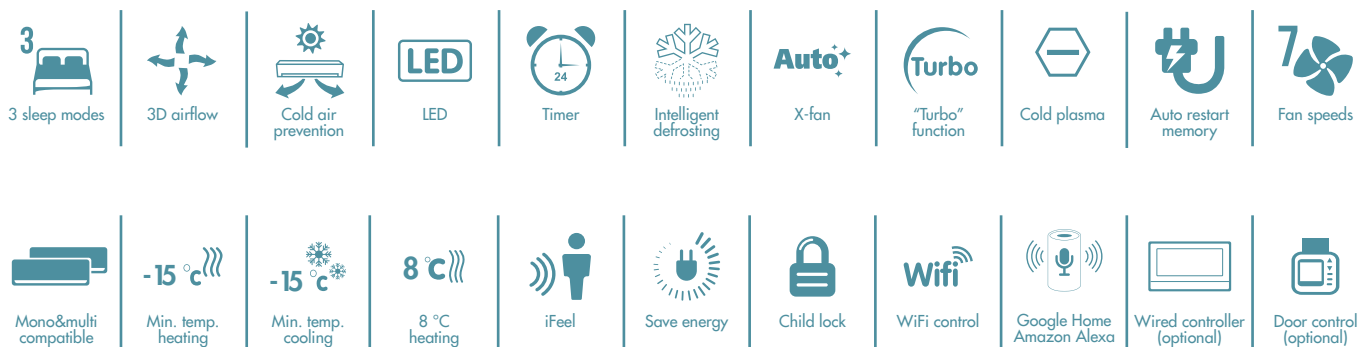
SWC76S (Optional)
398100674

Wired controller
with weekly timer



SWC52V (Optional)
398800104

Centralized controller
up to 36 units
(it requires wired
controller)



A⁺⁺ Cooling

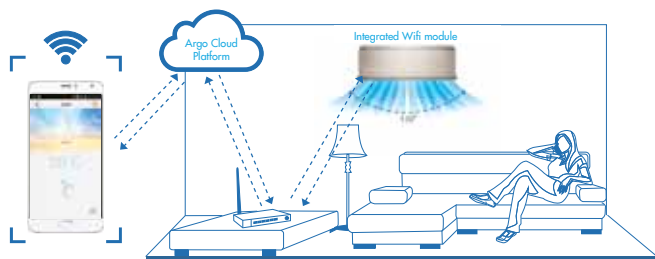
A⁺ Heating (average season)

A⁺⁺⁺ Heating (warmer season)

Model		Code	Nominal* (min.-max.) cooling capacity (kW)	Nominal* (min.-max.) heating capacity (kW)
Indoor unit model	X3I ECO PLUS 27 HL WF	398000817	2.70 (0.80-3.80)	3.00 (0.90-4.25)
Outdoor unit model	X3I ECO PLUS 27 SH	398000818		
Indoor unit model	X3I ECO PLUS 35 HL WF	398000819	3.51 (0.90-4.40)	3.81 (0.90-4.70)
Outdoor unit model	X3I ECO PLUS 35 SH	398000820		
Indoor unit model	X3I ECO PLUS 52 HL WF	398000821	5.20 (1.00-6.10)	5.60 (1.10-6.60)
Outdoor unit model	X3I ECO PLUS 52 SH	398000822		
Indoor unit model	X3I ECO PLUS 70 HL WF	398000823	7.10 (2.00-8.85)	7.80 (1.80-9.45)
Outdoor unit model	X3I ECO PLUS 70 SH	398000824		

*EN14511:
Cooling: outdoor temperature 35 °C D.B./24 °C W.B. - indoor temperature 27 °C D.B./19 °C W.B.
Heating: outdoor temperature 7 °C D.B./6 °C W.B. - indoor temperature 20 °C D.B./12 °C W.B.

LONG DISTANCE WiFi



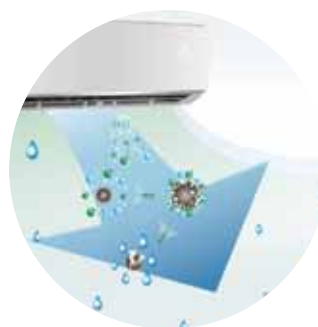
Thanks to the integrated remote WiFi module it is possible to control the units operation via the APP on your smartphone, switch on/off the unit, select the desired mode and temperature, to program your comfort at any time, even when you aren't at home.

iFEEL FUNCTION



The sensor inside the remote controller perceives the temperature in the environment and transmits the signal to the indoor unit. Thus the indoor unit can adjust air flow volume and temperature to grant the comfort exactly where the remote control is placed.

AIR PURIFICATION SYSTEM



It grants effective sterilization of air removing over 90% of bacteria. It removes odors. The air quality is improved thanks to the emission of many negative oxygen ions.

INTELLIGENT AUTO RESTART



After power failure, the unit automatically restarts keeping last function settings. (Memory function)

SOFT START



The startup energy consumption is reduced to lower not to interfere with the use of the other appliances.

TECHNICAL DATA

MODEL		X3I ECO PLUS 27		X3I ECO PLUS 35	
Indoor unit model		X3I ECO PLUS 27 HL WF		X3I ECO PLUS 35 HL WF	
Outdoor unit model		X3I ECO PLUS 27 SH		X3I ECO PLUS 35 SH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	2.70 (0.80-3.80)	3.00 (0.90-4.25)	3.51 (0.90-4.40)	3.81 (0.90-4.70)
	BTU/h	9200	10240	12000	1300
EER/COP (EN14511)		3.88	4.29	3.65	4.00
Design Load [Pdesign c/Pdesign h (Average/Warmer/Colder)] (EN14825)*	kW	2.7	2.7/3.0/4.0	3.5	3.2/3.3/4.5
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		7.5	4.2/5.3/3.4	7.1	4.1/5.2/3.1
Energy efficiency class*		A++	A+/A+++/A	A++	A+/A+++/B
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	126	900/792/2471	173	1093/888/3048
Air flow rate indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	m³/h	610-570-540-470-440-420-390		700-650-600-540-480-420-360	
Dehumidification	l/h	0.8		1.4	
Fan speeds (Indoor/Outdoor)	n°	7/2		7/2	
Sound pressure Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	38-36-34-31-29-27-25		42-38-35-32-29-26-25	
Sound pressure Outdoor (h.)	dB(A)	50		52	
Sound power Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	54-48-46-43-41-39-37		57-50-47-44-41-38-37	
Sound power Outdoor (h.)	dB(A)	61		63	
Power supply	V/Ph/Hz	220-240V~/1/50		220-240V~/1/50	
Power input nominal (min.-max)	kW	0.695 (0.10-1.30)	0.700 (0.15-1.40)	0.962 (0.22-1.40)	0.953 (0.22-1.55)
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type		R32		R32	
Refrigerant charge	kg/T.CO ₂ eq.	0.53/0.357		0.57/0.384	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Min.-max. pipe lenght with gas standard charge	m	3-5		3-5	
Max. pipe lenght	m	15		15	
Additional refrigerant charge	g/m	16		16	
Max. height between units (outdoor on top)	m	10		10	
Max. height between units (indoor on top)	m	10		10	
Net dimension Indoor (H./W./D.)	mm	289/845/209		289/845/209	
Net dimension Outdoor (H./W./D.)	mm	555/732/330		555/732/330	
Net weight Indoor/Outdoor	kg	10.5/24.5		11/24.5	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +50 °C

Heating mode: from -15 °C to +30 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

MODEL		X3I ECO PLUS 52		X3I ECO PLUS 70	
Indoor unit model		X3I ECO PLUS 52 HL WF		X3I ECO PLUS 70 HL WF	
Outdoor unit model		X3I ECO PLUS 52 SH		X3I ECO PLUS 70 SH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	5.20 (1.00-6.10)	5.60 (1.10-6.60)	7.10 (2.00-8.85)	7.80 (1.80-9.45)
	BTU/h	17800	19100	24200	26600
EER/COP (EN14511)		3.30	3.90	3.50	3.90
Design Load [Pdesign c/Pdesign h (Average/Warmer/Colder)] (EN14825)*	kW	5.2	4.2/4.3/5.0	7.1	5.6/5.7/6.3
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		7.1	4.2/5.7/3.4	7.0	4.2/5.4/3.4
Energy efficiency class*		A++	A+/A+++/A	A++	A+/A+++/A
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	256	1400/1056/3088	355	1867/1478/3891
Air flow rate indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	m³/h	850-750-680-610-570-520-460		1250-1100-1000-950-900-850-800	
Dehumidification	l/h	1.9		2.4	
Fan speeds (Indoor/Outdoor)	n°	7/2		7/2	
Sound pressure Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	44-43-41-38-36-34-30		48-44-41-40-38-36-33	
Sound pressure Outdoor (h.)	dB(A)	56		59	
Sound power Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	60-56-54-51-49-47-43		64-59-56-55-53-51-48	
Sound power Outdoor (h.)	dB(A)	65		70	
Power supply	V/Ph/Hz	220-240V~0/1/50		220-240V~/1/50	
Power input nominal (min.-max)	kW	1.576 (0.10-2.35)	1.436 (0.18-2.40)	2.030 (0.45-2.90)	2.000 (0.35-3.00)
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.82/0.553		1.5/1.0125	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	12.7 (1/2")		15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	3-5		3-5	
Max. pipe lenght	m	25		25	
Additional refrigerant charge	g/m	16		40	
Max. height between units (outdoor on top)	m	10		10	
Max. height between units (indoor on top)	m	10		10	
Net dimension Indoor (H./W./D.)	mm	300/970/224		325/1078/246	
Net dimension Outdoor (H./W./D.)	mm	555/802/350		660/958/402	
Net weight Indoor/Outdoor	kg	13/30.5		16/41.5	

OPERATING RANGE: outdoor temperature
Cooling mode: from -15 °C to +50 °C
Heating mode: from -15 °C to +30 °C
RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

CONSOLE -22 °C - single split air conditioners

MAIN FEATURES



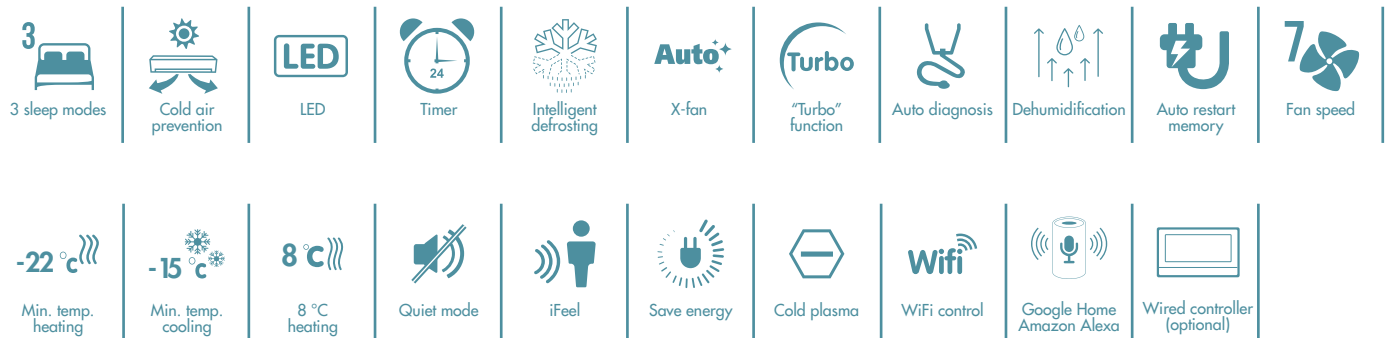
IRC1FB8C
(Standard)
Infrared remote
controller console



SWC76S (Optional)
398100674
Wired controller
with weekly timer



SWC52V (Optional)
398800104
Centralized controller
up 36 units
(it requires wired
controller)



A⁺⁺ Cooling

A⁺ Heating (average season)

A⁺⁺⁺ Heating (warmer season)

Model		Code	Nominal* (min.-max.) cooling capacity (kW)	Nominal* (min.-max.) heating capacity (kW)
Indoor unit model	X3I ECO PLUS NEW AF27 HL	398000739	2.70 (0.50-3.40)	2.90 (0.60-3.50)
Outdoor unit model	X3I ECO PLUS NEW 27 SH LHB	398000740		
Indoor unit model	X3I ECO PLUS NEW AF35 HL	398000741	3.52 (0.80-4.40)	3.80 (1.05-4.40)
Outdoor unit model	X3I ECO PLUS NEW 35 SH LHB	398000742		
Indoor unit model	X3I ECO PLUS NEW AF52 HL	398000743	5.20 (1.26-6.20)	5.33 (1.10-6.20)
Outdoor unit model	X3I ECO PLUS NEW 52 SH LHB	398000744		

*EN14511:
Cooling: outdoor temperature 35 °C D.B./24 °C W.B. - indoor temperature 27 °C D.B./19 °C W.B.
Heating: outdoor temperature 7 °C D.B./6 °C W.B. - indoor temperature 20 °C D.B./12 °C W.B.

LONG DISTANCE WiFi



Thanks to the integrated WiFi module it is possible to control the units operation via APP on your smartphone, switch on/off the unit, select the desired mode and temperature, to program your comfort at any time, even when you aren't at home.

iFEEL FUNCTION



The sensor incorporated into the remote controller perceives the surrounding temperature and transmits the signal to the indoor unit. Thus, the indoor unit can adjust the volume and temperature of the air flow to ensure maximum comfort at the exact point where the remote control is located, not where the unit is located..

AIR PURIFICATION SYSTEM



It releases ions able to neutralize bacteria, fungus, viruses, pollen, acarus and in general pollutants present in the air, making the environment healthy and the air light. It ensures effective air sterilization, killing over 90% of bacteria. It removes over 400 types of odors and improves the air quality, enriching it with negative ions.

SLIM AND ELEGANT DESIGN



The console integrates perfectly in any type of furniture, thanks to its clean, slim and elegant design.

HEATING OPERATION DOWN TO VERY LOW OUTDOOR TEMPERATURES



The console range can work in heating down to very low outdoor temperatures, -22 °C, thus it is suitable for harsh climate conditions. This is possible thanks to assessments that regulate and optimize the defrosting process and thanks to the heating element on the bottom of the outdoor unit.

TECHNICAL DATA

Indoor unit model		X3I ECO PLUS NEW AF27 HL		X3I ECO PLUS NEW AF35 HL	
Outdoor unit model		X3I ECO PLUS 27 NEW SH LHB		X3I ECO PLUS NEW 35 SH LHB	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	2.70 (0.50-3.40)	2.90 (0.60-3.50)	3.52 (0.80-4.40)	3.80 (1.05-4.40)
	BTU/h	9200	10000	12000	13000
EER/COP (EN14511)		3.86	3.97	3.80	3.96
Design Load [Pdesign c/Pdesign h (Average/Warmer/Colder)] (EN14825)*	kW	2.7	2.6/2.6/-	3.5	3.2/3.4/-
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		7.8	4.2/5.4/-	7.2	4.1/5.3/-
Energy efficiency class*		A++	A+/A+++/-	A++	A+/A+++/-
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	121	867/674/-	170	1093/898/-
Air flow rate indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	m³/h	500-430-410-370-330-280-250		600-520-480-440-400-360-280	
Dehumidification	l/h	0.8		1.2	
Fan speeds (Indoor/Outdoor)	n°	7/2		7/2	
Sound pressure Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	39-36-34-32-29-26-23		44-40-38-36-33-29-25	
Sound pressure Outdoor (h.)	dB(A)	51		53	
Sound power Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	52-48-46-44-41-38-35		55-51-49-47-44-40-36	
Sound power Outdoor (h.)	dB(A)	61		63	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Power input nominal (min.-max)	kW	0.70 (0.15-1.10)	0.73 (0.16-1.20)	1.00 (0.16-1.50)	0.960 (0.165-1.50)
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.51/0.34		0.75/0.51	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Min.-max. pipe lenght with gas standard charge	m	3-5		3-5	
Max. pipe lenght with additional gas charge	m	15		20	
Additional refrigerant charge	g/m	16		16	
Max. height between units (outdoor on top)	m	10		10	
Max. height between units (indoor on top)	m	10		10	
Net dimension Indoor (H./W./D.)	mm	600/700/215		600/700/215	
Net dimension Outdoor (H./W./D.)	mm	555/732/330		555/802/350	
Net weight Indoor/Outdoor	kg	15.5/24		16/27.5	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +43 °C

Heating mode: from -22 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

Indoor unit model		X3I ECO PLUS NEW AF52 HL	
Outdoor unit model		X3I ECO PLUS NEW 52 SH LHB	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	5.20 (1.26-6.20)	5.33 (1.10-6.20)
	BTU/h	17800	18000
EER/COP (EN14511)		3.60	3.45
Design Load [P _{design c} /P _{design h} (Average/Warmer/Colder)] (EN14825)*	kW	5.2	4.8/5.0/-
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		7.2	4.0/5.1/-
Energy efficiency class*		A++	A+/A+++/-
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	253	1680/1373/-
Air flow rate indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	m ³ /h	750-670-600-520-470-430-350	
Dehumidification	l/h	1.8	
Fan speeds (Indoor/Outdoor)	n°	7/2	
Sound pressure Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	49-47-45-42-40-37-32	
Sound pressure Outdoor (h.)	dB(A)	57	
Sound power Indoor (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	60-58-56-53-51-48-43	
Sound power Outdoor (h.)	dB(A)	65	
Power supply	V/Ph/Hz	220-240~/1/50/60	
Power input nominal (min.-max)	kW	1.445 (0.10-2.25)	1.545 (0.20-2.40)
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	1.0/0.675	
Liquid pipe diameter	mm (inch)	6.35 (1/4")	
Gas pipe diameter	mm (inch)	12.7 (1/2")	
Min.-max. pipe lenght with gas standard charge	m	3-5	
Max. pipe lenght with additional gas charge	m	25	
Additional refrigerant charge	g/m	16	
Max. height between units (outdoor on top)	m	10	
Max. height between units (indoor on top)	m	10	
Net dimension Indoor (H./W./D.)	mm	600/700/215	
Net dimension Outdoor (H./W./D.)	mm	660/958/402	
Net weight Indoor/Outdoor	kg	16/41	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +43 °C

Heating mode: from -22 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C

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MULTISPLIT AIR CONDITIONERS

MAIN FEATURES



ARGO DUAL 14 DCI R32
ARGO DUAL 18 DCI R32
ARGO TRIAL 21 DCI R32
ARGO TRIAL 24 DCI R32
ARGO QUADRI 28 DCI R32



ARGO QUADRI 36 DCI R32
ARGO PENTA 42 DCI R32

Possibility of choice among different types of indoor units and many capacity matchings.



HIGH-WALL



8-WAY CASSETTE

*Wifi through wired controller



DUCTED

*Wifi through wired controller



FLOOR/CEILING

*Wifi through wired controller



CONSOLE



Compact design



Cold air prevention



EASY
Easy maintenance



Timer



Intelligent defrosting



"Turbo" function



Auto diagnosis



High efficiency



Auto restart memory



Child lock



Low voltage start-up



Full protection



Wide voltage range



Wide operating range



Central control



Long-distance monitoring



Wired controller (optional)



DC Inverter technology

A++ Cooling

A+ Heating

LOW AMBIENT COOLING AND HEATING

The ability to work down to -15 °C of outdoor temperature, in both cooling and heating modes, ensures a high product reliability: when the outside temperature changes, the compressor frequency and fan speed adjust accordingly.



OUTDOOR UNITS

Model	Code	Nominal (max.-min.) cooling capacity (kW)	Nominal (max.-min.) heating capacity (kW)
ARGO DUAL 14 DCI R32	398000791	4.10 (2.05-5.00)	4.40 (2.49-5.40)
ARGO DUAL 18 DCI R32	398000792	5.30 (2.14-5.80)	5.65 (2.58-6.50)
ARGO TRIAL 21 DCI R32	398000793	6.10 (2.20-8.30)	6.50 (3.60-8.50)
ARGO TRIAL 24 DCI R32	398000794	7.10 (2.30-9.20)	8.60 (3.65-9.20)
ARGO QUADRI 28 DCI R32	398000795	8.00 (2.30-11.00)	9.50 (3.65-10.25)
ARGO QUADRI 36 DCI R32	398000796	10.60 (2.60-12.00)	12.00 (3.00-14.00)
ARGO PENTA 42 DCI R32	398000797	12.10 (2.60-15.20)	13.00 (3.00-15.50)

INDOOR UNITS

Model	Code
HIGH-WALL	X3I ECO PLUS 27 HL WF 398000817
	X3I ECO PLUS 35 HL WF 398000819
	X3I ECO PLUS 52 HL WF 398000821
	X3I ECO PLUS 70 HL WF 398000823
8-WAY CASSETTE	X3I ECO AS 28 HL 398000860
	X3I ECO AS 35 HL 398000861
	X3I ECO AS 50 HL 398000862
	GRID CASSETTE COMPACT 398100688
	X3I ECO AS 70 HL 398000863
	GRID BIG CASSETTE 398100677

Model	Code
SLIM DUCTED	X3I ECO SD 27 HL 398000856
	X3I ECO SD 35 HL 398000857
	X3I ECO SD 50 HL 398000858
	X3I ECO SD 70 HL 398000859
FLOOR/ CEILING	X3I ECO FC 26 HL 398000666
	X3I ECO FC 35 HL 398000667
	X3I ECO FC 45 HL 398000668
CONSOLE	X3I ECO PLUS NEW AF27 HL 398000969
	X3I ECO PLUS NEW AF35 HL 398000971
	X3I ECO PLUS NEW AF52 HL 398000973

OUTDOOR UNITS TECHNICAL DATA

Outdoor unit model - DUAL SPLIT		ARGO DUAL 14 DCI R32		ARGO DUAL 18 DCI R32	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	4.10 (2.05-5.00)	4.40 (2.49-5.40)	5.30 (2.14-5.80)	5.65 (2.58-6.50)
	BTU/h	14000	15000	18000	19300
EER/COP (EN14511)		3.72	4.54	3.58	4.53
Design Load [Pdesign c/Pdesign h (Average/Warmer/Colder)] (EN14825)*	kW	4.1	3.8	5.3	4.3
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		6.5	4.0	6.6	4.0
Energy efficiency class*		A++	A+	A++	A+
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	220	1330	281	1505
Min.-max. number of connectable indoor units		2		2	
Air flow rate (h.)	m ³ /h	2300		2300	
Fan speeds Outdoor	n°	2		2	
Sound pressure Outdoor (h.)	dB(A)	50	52	50	54
Sound power Outdoor (h.)	dB(A)	62		64	
Power supply	V/Ph/Hz	220-240~/1/50		220-240~/1/50	
Power input nominal (min.-max)	kW	1.10 (0.55-1.40)	0.97 (0.60-1.78)	1.48 (0.56-1.56)	1.25 (0.78-1.78)
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.75/0.506		0.90/0.608	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Min.-max. pipe lenght with gas standard charge	m	3-10		3-10	
Max. pipe lenght with additional charge	m	40		40	
Max. pipe lenght for unit	m	20		20	
Additional refrigerant charge	g/m	20		20	
Max. height between indoor units	m	15		15	
Net dimension Outdoor (H./W./D.)	mm	550/745/300		550/745/300	
Net weight Outdoor	kg	30		32	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +43 °C

Heating mode: from -15 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTAMENT: from 16 to 30 °C

*Data declared in compliance with EU Regulation no. 206/2012, as regards to ECO-design requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners and tested according to EN14825:2012.

Outdoor unit model - TRIAL SPLIT		ARGO TRIAL 21 DCI R32		ARGO TRIAL 24 DCI R32	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	6.10 (2.20-8.30)	6.50 (3.60-8.50)	7.10 (2.30-9.20)	8.60 (3.65-9.20)
	BTU/h	20800	22200	24200	29300
EER/COP (EN14511)		4.12	4.56	3.77	3.86
Design Load [Pdesign c/Pdesign h (Average/Warmer/Colder)] (EN14825)*	kW	6.1	6.1	7.1	6.1
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		6.1	4.0	6.1	4.0
Energy efficiency class*		A++	A+	A++	A+
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	350	2135	407	2189
Min.-max. number of connectable indoor units		2-3		2-3	
Air flow rate (h.)	m ³ /h	3800		3800	
Fan speeds Outdoor	n°	2		2	
Sound pressure Outdoor (h.)	dB(A)	57	58	57	58
Sound power Outdoor (h.)	dB(A)	68		68	
Power supply	V/Ph/Hz	220-240~/1/50		220-240~/1/50	
Power input nominal (min.-max)	kW	1.48 (0.95-2.39)	1.43 (0.78-2.87)	1.88 (1.10-2.87)	2.23 (0.98-2.87)
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	1.6/1.080		1.7/1.148	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Min.-max. pipe lenght with gas standard charge	m	3-30		3-30	
Max. pipe lenght with additional charge	m	60		60	
Max. pipe lenght for unit	m	20		20	
Additional refrigerant charge	g/m	20		20	
Max. height between indoor units	m	15		15	
Net dimension Outdoor (H./W./D.)	mm	660/964/402		660/964/402	
Net weight Outdoor	kg	47.5		47.5	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +43 °C

Heating mode: from -15 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTAMENT: from 16 to 30 °C

*Data declared in compliance with EU Regulation no. 206/2012, as regards to ECO-design requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners and tested according to EN14825:2012.

REDUCTION JOINTS FOR THE OUTDOOR UNITS

For indoor units with a gas pipe diameter different from 9.52 mm (5/8"), reduction joints must be used for the outdoor units, as shown in the table below:

Model	Standard Liquid pipe		Standard gas pipe		Joints supplied in the packaging of the outdoor units					
	Size	Qty	Size	Qty	Size	Qty	Size	Qty	Size	Qty
ARGO TRIAL 21000 UE	φ6.35	3	φ9.52	3	φ6.35(1/4")→φ9.52(3/8")	0	φ9.52(3/8")→φ12.7(1/2")	1	φ9.52(3/8")→φ15.9(5/8")	0
ARGO TRIAL 24000 UE	φ6.35	3	φ9.52	3	φ6.35(1/4")→φ9.52(3/8")	0	φ9.52(3/8")→φ12.7(1/2")	2	φ9.52(3/8")→φ15.9(5/8")	0

OUTDOOR UNITS TECHNICAL DATA

Outdoor unit model - QUADRI SPLIT		ARGO QUADRI 28 DCI R32		ARGO QUADRI 36 DCI R32	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	8.00 (2.30-11.0)	9.50 (3.65-10.25)	10.60 (2.60-12.00)	12.00 (3.00-14.00)
	BTU/h	28000	31730	36200	40900
EER/COP (EN14511)		3.77	4.31	3.53	3.95
Design Load [Pdesign c/Pdesign h (Average/Warmer/Colder)] (EN14825)*	kW	8.0	7.2	10.6	10.5
Seasonal efficiency ratio [SEER/SCOP (Average/Warmer/Colder)] (EN14825)*		6.1	4.0	7.2	4.0
Energy efficiency class*		A++	A+	A++	A+
Annual energy consumption [C/H (Average/Warmer/Colder)]*	kWh/annum	459	2520	515	3675
Min.-max. number of connectable indoor units		2-4		2-4	
Air flow rate (h.)	m³/h	3800		5800	
Fan speeds Outdoor	n°	2		2	
Sound pressure Outdoor (h.)	dB(A)	58		60	
Sound power Outdoor (h.)	dB(A)	68		70	
Power supply	V/Ph/Hz	220-240~/1/50		220-240~/1/50	
Power input nominal (min.-max)	kW	2.12 (1.30-3.58)	2.20 (1.00-2.87)	3.00	3.04
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	1.8/1.215		2.40/1.62	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Min.-max. pipe lenght with gas standard charge	m	3-40		3-40	
Max. pipe lenght with additional charge	m	70		80	
Max. pipe lenght for unit	m	20		25	
Additional refrigerant charge	g/m	20		20	
Max. height between indoor units	m	15		25	
Net dimension Outdoor (H./W./D.)	mm	660/964/402		826/1020/427	
Net weight Outdoor	kg	51		72	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +43 °C

Heating mode: from -15 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTAMENT: from 16 to 30 °C

*Data declared in compliance with EU Regulation no. 206/2012, as regards to ECO-design requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners and tested according to EN14825:2012.

REDUCTION JOINTS FOR THE OUTDOOR UNITS

For indoor units with a gas pipe diameter different from 9.52 mm (5/8"), reduction joints must be used for the outdoor units, as shown in the table below:

Model	Standard Liquid pipe		Standard gas pipe		Joints supplied in the packaging of the outdoor units					
Units	Size	Qty	Size	Qty	Size	Qty	Size	Qty	Size	Qty
ARGO QUADRI 28000 UE	φ6.35	4	φ9.52	4	φ6.35(1/4")→φ9.52(3/8")	0	φ9.52(3/8")→φ12.7(1/2")	2	φ9.52(3/8")→φ15.9(5/8")	0
ARGO QUADRI 36000 UE	φ6.35	4	φ9.52	4	φ6.35(1/4")→φ9.52(3/8")	2	φ9.52(3/8")→φ12.7(1/2")	3	φ9.52(3/8")→φ15.9(5/8")	2

Outdoor unit mode - PENTA SPLIT		ARGO PENTA 42 DCI R32	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	12.10 (2.60-15.20)	13.00 (3.00-15.50)
	BTU/h	41300	44400
EER/COP (EN14511)		3.56	4.08
Rated capacity (Prated,c/Prated,h)*	kW	12.10	13.00
Seasonal space energy efficiency (ηs,c/ηs,h)*	%	289.0	165.0
Min.-max. number of connectable indoor units		2-5	
Air flow rate (h.)	m ³ /h	5800	
Fan speeds Outdoor	n°	2	
Sound pressure Outdoor (h.)	dB(A)	60	
Sound power Outdoor (h.)	dB(A)	72	74
Power supply	V/Ph/Hz	220-240~/1/50	
Power input nominal (min.-max)	kW	3.40	3.19
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.40/1.62	
Liquid pipe diameter	mm (inch)	6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")	
Min.-max. pipe lenght with gas standard charge	m	3-50	
Max. pipe lenght with additional charge	m	100	
Max. pipe lenght for unit	m	25	
Additional refrigerant charge	g/m	20	
Max. height between units (outdoor on top)	m	25	
Max. height between units (Indoor on top)	m	25	
Net dimension Outdoor (H./W./D.)	mm	826/1020/427	
Net weight Outdoor	kg	73	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +43 °C

Heating mode: from -15 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTAMENT: from 16 to 30 °C

*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

REDUCTION JOINTS FOR THE OUTDOOR UNITS

For indoor units with a gas pipe diameter different from 9.52 mm (5/8"), reduction joints must be used for the outdoor units, as shown in the table below:

Model	Standard Liquid pipe		Standard gas pipe		Joints supplied in the packaging of the outdoor units					
Units	Size	Qty	Size	Qty	Size	Qty	Size	Qty	Size	Qty
ARGO PENTA 42000 UE	φ6.35	5	φ9.52	5	φ6.35(1/4")→φ9.52(3/8")	2	φ9.52(3/8")→φ12.7(1/2")	3	φ9.52(3/8")→φ15.9(5/8")	3

INDOOR UNITS MATCHINGS: COOLING MODE

ARGO DUAL 14 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.05	2.05				2.05	4.10	5.00	0.40	1.10	2.20	1.77	4.88	9.76	3.73	6.50	A++
9k+12k	1.76	2.34				2.05	4.10	5.00	0.40	1.10	2.20	1.77	4.88	9.76	3.73	6.50	A++

ARGO DUAL 18 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.65	2.65				2.15	5.30	5.80	0.40	1.48	2.50	1.77	6.57	11.09	3.58	6.60	A++
9k+12k	2.30	3.00				2.15	5.30	5.80	0.50	1.48	2.50	2.22	6.57	11.09	3.58	6.60	A++
12k+12k	2.65	2.65				2.15	5.30	5.80	0.50	1.48	2.50	2.22	6.57	11.09	3.58	6.60	A++

ARGO TRIAL 21 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.65	2.65				2.20	5.30	6.00	0.40	1.20	2.60	1.77	5.32	11.54	4.42	6.10	A++
9k+12k	2.60	3.50				2.20	6.10	7.20	0.50	1.48	2.90	2.22	6.57	12.87	4.12	6.10	A++
9k+18k	2.03	4.07				2.20	6.10	8.30	0.60	1.48	2.90	2.66	6.57	12.87	4.12	6.10	A++
12k+12k	3.05	3.05				2.20	6.10	8.30	0.60	1.48	2.90	2.66	6.57	12.87	4.12	6.10	A++
12k+18k	2.44	3.66				2.20	6.10	8.30	0.60	1.48	2.90	2.66	6.57	12.87	4.12	6.10	A++
9k+9k+9k	2.03	2.03	2.03			2.20	6.10	8.30	0.60	1.48	2.90	2.66	6.57	12.87	4.12	6.50	A++
9k+9k+12k	1.83	1.83	2.44			2.20	6.10	8.30	0.60	1.48	2.90	2.66	6.57	12.87	4.12	6.50	A++

ARGO TRIAL 24 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.65	2.65				2.30	5.30	6.30	0.80	1.40	3.00	3.55	6.21	13.31	3.79	6.10	A++
9k+12k	2.60	3.50				2.30	6.10	7.30	1.00	1.65	3.20	4.44	7.30	14.20	3.71	6.10	A++
9k+18k	2.37	4.73				2.30	7.10	8.50	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.10	A++
12k+12k	3.55	3.55				2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.10	A++
12k+18k	2.84	4.26				2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.10	A++
18k+18k	3.55	3.55				2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.10	A++
9k+9k+9k	2.37	2.37	2.37			2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.50	A++
9k+9k+12k	2.13	2.13	2.84			2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.50	A++
9k+9k+18k	1.78	1.78	3.55			2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.50	A++
9k+12k+12k	1.94	2.58	2.58			2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.50	A++
12k+12k+12k	2.37	2.37	2.37			2.30	7.10	9.20	1.10	1.88	3.40	4.88	8.34	15.08	3.78	6.50	A++

ARGO QUADRI 28 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.65	2.65				2.30	5.30	6.30	0.80	1.40	2.60	3.55	6.21	11.54	3.79	6.10	A++
9k+12k	2.60	3.50				2.30	6.10	7.30	0.80	1.60	2.80	3.55	7.10	12.42	3.81	6.10	A++
9k+18k	2.60	5.00				2.30	7.60	8.50	1.20	2.00	2.80	5.32	8.87	12.42	3.80	6.10	A++
12k+12k	3.50	3.50				2.30	7.00	9.20	1.20	1.80	2.80	5.32	7.99	12.42	3.89	6.10	A++
12k+18k	3.20	4.80				2.30	8.00	10.00	1.20	2.12	3.40	5.32	9.41	15.08	3.77	6.10	A++
18k+18k	4.00	4.00				2.30	8.00	11.00	1.20	2.12	3.60	5.32	9.41	15.97	3.77	6.10	A++
9k+9k+9k	2.67	2.67	2.67			2.30	8.00	10.00	1.30	2.00	3.40	5.77	8.87	15.08	4.00	6.30	A++
9k+9k+12k	2.40	2.40	3.20			2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.30	A++
9k+9k+18k	2.00	2.00	4.00			2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.30	A++
9k+12k+12k	2.18	2.91	2.91			2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.30	A++
9k+12k+18k	1.85	2.46	3.69			2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.30	A++
12k+12k+12k	2.67	2.67	2.67			2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.30	A++
12k+12k+18k	2.29	2.29	3.43			2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.30	A++
9k+9k+9k+9k	2.00	2.00	2.00	2.00		2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.60	A++
9k+9k+9k+12k	1.85	1.85	1.85	2.46		2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.60	A++
9k+9k+12k+12k	1.71	1.71	2.29	2.29		2.30	8.00	11.00	1.30	2.12	3.60	5.77	9.41	15.97	3.77	6.60	A++

ARGO QUADRI 36 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.65	2.65				2.60	5.30	6.50	1.60	1.90	3.50	7.10	10.64	15.52	2.79	6.10	A++
9k+12k	2.60	3.50				2.60	6.10	7.50	1.60	2.30	3.50	7.10	10.64	15.52	2.65	6.10	A++
9k+18k	2.60	5.00				2.60	7.60	9.00	1.60	2.40	3.50	7.10	10.60	15.50	3.17	6.10	A++
9k+24k	2.60	7.20				2.60	9.80	11.00	1.60	2.60	3.60	7.10	11.50	16.00	3.77	6.10	A++
12k+12k	3.50	3.50				2.60	7.00	9.20	1.60	2.40	3.50	7.10	10.64	15.52	2.92	6.10	A++
12k+18k	3.50	5.00				2.60	8.50	10.00	1.60	2.40	3.50	7.10	10.64	15.52	3.54	6.10	A++
12k+24k	3.50	7.10				2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
18k+18k	5.30	5.30				2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
18k+24k	4.55	6.05				2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
24k+24k	5.30	5.30				2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+9k+9k	2.67	2.67	2.67			2.60	8.00	10.00	1.60	2.40	3.50	7.10	10.64	15.52	3.33	6.10	A++
9k+9k+12k	2.60	2.60	4.20			2.60	9.40	11.00	1.60	2.60	3.60	7.10	11.53	15.97	3.62	6.10	A++
9k+9k+18k	2.65	2.65	5.30			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+9k+24k	2.27	2.27	6.06			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+12k+12k	2.60	3.50	3.50			2.60	9.60	11.00	1.60	3.00	4.60	7.10	13.30	20.41	3.20	6.10	A++
9k+12k+18k	2.45	3.26	4.89			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+12k+24k	2.12	2.83	5.65			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+18k+18k	2.12	4.24	4.24			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+18k+24k	1.87	3.74	4.99			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
12k+12k+12k	3.53	3.53	3.53			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
12k+12k+18k	3.03	3.03	4.54			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
12k+12k+24k	2.65	2.65	5.30			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
12k+18k+18k	2.65	3.98	3.98			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
12k+18k+24k	2.36	3.53	4.71			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
18k+18k+18k	3.53	3.53	3.53			2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	6.10	A++
9k+9k+9k+9k	2.65	2.65	2.65	2.65		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+9k+12k	2.45	2.45	2.45	3.26		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+9k+18k	2.12	2.12	2.12	4.24		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+9k+24k	1.87	1.87	1.87	4.99		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+12k+12k	2.27	2.27	3.03	3.03		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+12k+18k	1.99	1.99	2.65	3.98		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+12k+24k	1.77	1.77	2.36	4.71		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+9k+18k+18k	1.77	1.77	3.53	3.53		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+12k+12k+12k	2.12	2.83	2.83	2.83		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
9k+12k+12k+18k	1.87	2.49	2.49	3.74		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
12k+12k+12k+12k	2.65	2.65	2.65	2.65		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++
12k+12k+12k+18k	2.36	2.36	2.36	3.53		2.60	10.60	12.00	1.60	3.00	4.60	7.10	13.30	20.41	3.53	7.20	A++

INDOOR UNITS MATCHINGS: COOLING MODE

ARGO PENTA 42 DCI R32	Nominal Cooling capacity (kW)					Total Cooling capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			EER (W/W)	SEER (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+12k	2.60	3.50				2.60	6.10	7.50	1.60	2.30	4.60	11.54	15.08	20.41	2.65	6.10	A++
9k+18k	2.60	5.00				2.60	7.60	9.00	1.60	2.60	4.60	11.54	15.08	20.41	2.92	6.10	A++
9k+24k	2.60	7.20				2.60	9.80	11.00	1.60	3.40	4.60	11.54	15.08	20.41	2.88	6.10	A++
12k+12k	3.50	3.50				2.60	7.00	9.20	1.60	2.40	4.60	11.54	15.08	20.41	2.92	6.10	A++
12k+18k	3.50	5.00				2.60	8.50	10.00	1.60	3.00	4.60	11.54	15.08	20.41	2.83	6.10	A++
12k+24k	3.50	7.10				2.60	10.60	12.00	1.60	3.40	4.60	11.54	15.08	20.41	3.12	6.10	A++
18k+18k	5.30	5.30				2.60	10.60	12.00	1.60	3.40	4.60	11.54	15.08	20.41	3.12	6.10	A++
18k+24k	4.55	6.05				2.60	10.60	12.00	1.60	3.40	4.60	11.54	15.08	20.41	3.12	6.10	A++
24k+24k	5.30	5.30				2.60	10.60	12.00	1.60	3.40	4.60	11.54	15.08	20.41	3.12	6.10	A++
9k+9k+9k	2.67	2.67	2.67			2.60	8.00	10.00	1.60	2.80	4.60	11.54	15.08	20.41	2.86	6.10	A++
9k+9k+12k	2.60	2.60	4.20			2.60	9.40	11.00	1.60	3.40	4.60	11.54	15.08	20.41	2.76	6.10	A++
9k+9k+18k	2.60	2.60	5.00			2.60	10.20	13.02	1.60	3.00	4.60	11.54	13.30	20.41	3.40	6.10	A++
9k+9k+24k	2.60	2.60	6.90			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+12k	2.60	3.50	3.50			2.60	9.60	11.94	1.60	3.00	4.60	11.54	13.30	20.41	3.20	6.10	A++
9k+12k+18k	2.60	3.50	5.00			2.60	11.10	14.11	1.60	3.40	4.60	11.54	15.08	20.41	3.26	6.10	A++
9k+12k+24k	2.40	3.20	6.50			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+18k+18k	2.50	4.80	4.80			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+18k+24k	2.10	4.30	5.70			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+24k+24k	1.90	5.10	5.10			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+12k	3.50	3.50	3.50			2.60	10.50	13.02	1.60	3.00	4.60	11.54	13.30	20.41	3.50	6.10	A++
12k+12k+18k	3.50	3.50	5.10			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+24k	3.00	3.00	6.10			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+18k+18k	3.10	4.50	4.50			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+18k+24k	2.70	4.00	5.40			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+24k+24k	2.50	4.80	4.80			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
18k+18k+18k	4.03	4.03	4.03			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
18k+18k+24k	3.60	3.60	4.90			2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+9k	2.60	2.60	2.60	2.60		2.60	10.40	13.02	1.60	3.40	4.60	11.54	15.08	20.41	3.06	6.10	A++
9k+9k+9k+12k	2.60	2.60	2.60	3.50		2.60	11.30	14.11	1.60	3.40	4.60	11.54	15.08	20.41	3.32	6.10	A++
9k+9k+9k+18k	2.42	2.42	2.42	4.84		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+24k	2.14	2.14	2.14	5.69		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+12k+12k	2.59	2.59	3.46	3.46		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+12k+18k	2.27	2.27	3.03	4.54		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+12k+24k	2.02	2.02	2.69	5.38		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+18k+18k	2.02	2.02	4.03	4.03		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+18k+24k	1.82	1.82	3.63	4.84		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+12k+12k	2.42	3.23	3.23	3.23		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+12k+18k	2.14	2.85	2.85	4.27		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+12k+24k	1.91	2.55	2.55	5.09		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+18k+24k	1.91	2.55	3.82	3.82		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+18k+18k	1.73	2.30	3.46	4.61		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+18k+18k+18k	1.73	3.46	3.46	3.46		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+12k+12k	3.03	3.03	3.03	3.03		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+12k+18k	2.69	2.69	2.69	4.03		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+12k+24k	2.42	2.42	2.42	4.84		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+18k+18k	2.42	2.42	3.63	3.63		2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+9k+9k	2.42	2.42	2.42	2.42	2.42	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+9k+12k	2.27	2.27	2.27	2.27	3.03	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+9k+18k	2.02	2.02	2.02	2.02	4.03	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+9k+24k	1.82	1.82	1.82	1.82	4.84	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+12k+12k	2.14	2.14	2.14	2.85	2.85	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+12k+18k	1.91	1.91	1.91	2.55	3.82	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+12k+24k	1.73	1.73	1.73	2.30	4.61	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+9k+18k+18k	1.73	1.73	1.73	3.46	3.46	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+12k+12k+12k	2.02	2.02	2.69	2.69	2.69	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+9k+12k+12k+18k	1.82	1.82	2.42	2.42	3.63	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+12k+12k+12k	1.91	2.55	2.55	2.55	2.55	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
9k+12k+12k+12k+18k	1.73	2.30	2.30	2.30	3.46	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++
12k+12k+12k+12k+12k	2.42	2.42	2.42	2.42	2.42	2.60	12.10	15.20	1.60	3.40	4.60	11.54	15.08	20.41	3.56	6.10	A++

INDOOR UNITS MATCHINGS: HEATING MODE

ARGO DUAL 14 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.20	2.20				2.50	4.40	5.40	0.60	0.97	2.25	2.66	4.30	9.98	4.54	4.00	A+
9k+12k	1.89	2.51				2.50	4.40	5.40	0.60	0.97	2.25	2.66	4.30	9.98	4.54	4.00	A+

ARGO DUAL 18 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.83	2.83				2.58	5.65	6.50	0.70	1.25	2.50	3.11	5.55	11.09	4.52	4.00	A+
9k+12k	2.42	3.23				2.58	5.65	6.50	0.70	1.25	2.50	3.11	5.55	11.09	4.52	4.00	A+
12k+12k	2.83	2.83				2.58	5.65	6.50	0.70	1.25	2.50	3.11	5.55	11.09	4.52	4.00	A+

ARGO TRIAL 21 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.80	2.80				2.70	5.60	8.50	0.60	1.23	2.50	2.66	5.44	11.09	4.57	4.00	A+
9k+12k	2.70	3.80				2.70	6.50	8.50	0.80	1.43	2.90	3.55	6.34	12.87	4.55	4.00	A+
9k+18k	2.17	4.33				2.70	6.50	8.50	0.80	1.43	2.90	3.55	6.34	12.87	4.55	4.00	A+
12k+12k	3.25	3.25				2.70	6.50	8.50	0.80	1.43	2.90	3.55	6.34	12.87	4.55	4.00	A+
12k+18k	2.60	3.90				2.70	6.50	8.50	0.80	1.43	2.90	3.55	6.34	12.87	4.55	4.00	A+
9k+9k+9k	2.17	2.17	2.17			2.70	6.50	8.50	0.80	1.43	2.90	3.55	6.34	12.87	4.55	3.80	A
9k+9k+12k	1.95	1.95	2.60			2.70	6.50	8.50	0.80	1.43	2.90	3.55	6.34	12.87	4.55	3.80	A

ARGO TRIAL 24 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	3.20	3.20				2.80	6.40	8.80	0.60	1.67	2.40	2.66	7.42	10.65	3.83	3.80	A
9k+12k	3.20	4.30				2.80	7.50	8.80	0.60	1.95	2.60	2.66	8.66	11.54	3.84	3.80	A
9k+18k	2.87	5.73				2.80	8.60	8.80	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.80	A
12k+12k	4.30	4.30				2.80	8.60	8.80	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.80	A
12k+18k	3.44	5.16				2.80	8.60	8.80	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.80	A
18k+18k	4.30	4.30				2.80	8.60	8.80	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.80	A
9k+9k+9k	2.87	2.87	2.87			2.80	8.60	9.20	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.90	A
9k+9k+12k	2.58	2.58	3.44			2.80	8.60	9.20	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.90	A
9k+9k+18k	2.15	2.15	4.30			2.80	8.60	9.20	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.90	A
9k+12k+12k	2.35	3.13	3.13			2.80	8.60	9.20	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.90	A
12k+12k+12k	2.87	2.87	2.87			2.80	8.60	9.20	0.80	2.23	3.00	3.55	9.89	13.31	3.86	3.90	A

ARGO QUADRI 28 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.80	2.80				2.80	5.60	10.00	0.70	1.41	2.50	3.11	6.27	11.09	3.96	4.00	A+
9k+12k	2.80	5.43				2.80	8.23	10.25	0.70	1.65	2.60	3.11	7.32	11.54	4.99	4.00	A+
9k+18k	2.80	3.80				2.80	6.60	10.25	1.00	2.12	3.40	4.44	9.41	15.08	3.11	4.00	A+
12k+12k	3.80	3.80				2.80	7.60	10.25	0.90	1.89	2.80	3.99	8.37	12.42	4.03	4.00	A+
12k+18k	3.80	5.60				2.80	9.40	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.27	4.00	A+
18k+18k	4.75	4.75				2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+9k+9k	3.17	3.17	3.17			2.80	9.50	10.25	1.00	2.12	3.40	4.44	9.41	15.08	4.48	4.00	A+
9k+9k+12k	2.85	2.85	3.80			2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+9k+18k	2.38	2.38	4.75			2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+12k+12k	2.59	3.45	3.45			2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+12k+18k	2.19	2.92	4.38			2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
12k+12k+12k	3.17	3.17	3.17			2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
12k+12k+18k	2.71	2.71	4.07			2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+9k+9k+9k	2.38	2.38	2.38	2.38		2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+9k+9k+12k	2.19	2.19	2.19	2.92		2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+
9k+9k+12k+12k	2.04	2.04	2.71	2.71		2.80	9.50	10.25	1.00	2.20	3.60	4.44	9.76	15.97	4.32	4.00	A+

INDOOR UNITS MATCHINGS: HEATING MODE

ARGO QUADRI 36 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+9k	2.80	2.80				3.00	5.60	7.00	1.61	1.90	3.60	7.13	14.20	17.75	2.95	4.00	A+
9k+12k	2.80	3.80				3.00	6.60	8.16	1.61	2.30	3.80	7.13	14.20	17.75	2.87	4.00	A+
9k+18k	2.80	5.60				3.00	8.40	10.50	1.61	2.80	4.20	7.13	14.20	17.75	3.00	4.00	A+
9k+24k	2.80	8.50				3.00	11.30	12.83	1.61	3.04	5.00	7.13	14.20	17.75	3.72	4.00	A+
12k+12k	3.80	3.80				3.00	7.60	9.33	1.61	2.60	4.00	7.13	14.20	17.75	2.92	4.00	A+
12k+18k	3.80	5.60				3.00	9.40	11.66	1.61	2.90	4.80	7.13	14.20	17.75	3.24	4.00	A+
12k+24k	3.80	8.20				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
18k+18k	6.00	6.00				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
18k+24k	5.14	6.86				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
24k+24k	6.00	6.00				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+9k	2.80	2.80				3.00	5.60	7.00	1.61	1.90	3.60	7.13	14.20	17.75	2.95	4.00	A+
9k+9k+12k	2.80	3.80				3.00	6.60	8.16	1.61	2.30	3.80	7.13	14.20	17.75	2.87	4.00	A+
9k+9k+18k	2.80	5.60				3.00	8.40	10.50	1.61	2.80	4.20	7.13	14.20	17.75	3.00	4.00	A+
9k+9k+24k	2.80	8.50				3.00	11.30	12.83	1.61	3.04	5.00	7.13	14.20	17.75	3.72	4.00	A+
9k+12k+12k	3.80	3.80				3.00	7.60	9.33	1.61	2.60	4.00	7.13	14.20	17.75	2.92	4.00	A+
9k+12k+18k	3.80	5.60				3.00	9.40	11.66	1.61	2.90	4.80	7.13	14.20	17.75	3.24	4.00	A+
9k+12k+24k	3.80	8.20				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+18k+18k	6.00	6.00				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+18k+24k	5.14	6.86				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+12k+12k	6.00	6.00				3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+12k+18k	3.43	3.43	5.14			3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+12k+24k	3.00	3.00	6.00			3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+18k+18k	3.00	4.50	4.50			3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+18k+24k	2.67	4.00	5.33			3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
18k+18k+18k	4.00	4.00	4.00			3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+9k+9k	3.00	3.00	3.00	3.00		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+9k+12k	2.77	2.77	2.77	3.69		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+9k+18k	2.40	2.40	2.40	4.80		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+9k+24k	2.12	2.12	2.12	5.65		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+12k+12k	2.57	2.57	3.43	3.43		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+12k+18k	2.25	2.25	3.00	4.50		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+12k+24k	2.00	2.00	2.67	5.33		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+9k+18k+18k	2.00	2.00	4.00	4.00		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+12k+12k+12k	2.40	3.20	3.20	3.20		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
9k+12k+12k+18k	2.12	2.82	2.82	4.24		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+12k+12k+12k	3.00	3.00	3.00	3.00		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+
12k+12k+12k+18k	2.67	2.67	2.67	4.00		3.00	12.00	14.00	1.61	3.04	5.00	7.13	14.20	17.75	3.95	4.00	A+

ARGO PENTA 42 DCI R32	Nominal Heating capacity (kW)					Total Heating capacity (kW)			Total power input (kW)			Total current consumption (A) 230V			COP (W/W)	SCOP (W/W)	Energy efficiency class
	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	X3 ECO PLUS INDOOR UNIT		
9k+12k	2.80	3.80				3,00	6,60	7,75	1.61	2.30	4.20	7.13	14.20	17.75	2.87	4.00	A+
9k+18k	2.80	5.60				3,00	8,40	9,96	1.61	2.60	4.50	7.13	14.20	17.75	3.23	4.00	A+
9k+24k	2.80	8.50				3,00	11,30	12,17	1.61	2.80	4.50	7.13	14.20	17.75	4.04	4.00	A+
12k+12k	3.80	3.80				3,00	7,60	8,85	1.61	2.60	4.50	7.13	14.20	17.75	2.92	4.00	A+
12k+18k	3.80	5.60				3,00	9,40	11,07	1.61	2.80	4.50	7.13	14.20	17.75	3.36	4.00	A+
12k+24k	3.80	8.50				3,00	12,30	13,28	1.61	2.80	4.50	7.13	14.20	17.75	4.39	4.00	A+
18k+18k	5.60	5.60				3,00	11,20	13,28	1.61	2.80	4.50	7.13	14.20	17.75	4.00	4.00	A+
18k+24k	5.57	7.43				3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
24k+24k	6.50	6.50				3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k	2.80	2.80	2.80			3,00	8,40	9,96	1.61	2.60	4.50	7.13	14.20	17.75	3.23	4.00	A+
9k+9k+12k	2.80	2.80	3.80			3,00	9,40	11,07	1.61	2.80	4.50	7.13	14.20	17.75	3.36	4.00	A+
9k+9k+18k	2.80	2.80	5.60			3,00	11,20	13,28	1.61	2.80	4.50	7.13	14.20	17.75	4.00	4.00	A+
9k+9k+24k	2.79	2.79	7.43			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+12k	2.80	3.80	3.80			3,00	10,40	12,17	1.61	2.80	4.50	7.13	14.20	17.75	3.71	4.00	A+
9k+12k+18k	2.80	3.80	5.60			3,00	12,20	14,39	1.61	3.19	5.00	7.13	14.20	17.75	3.82	4.00	A+
9k+12k+24k	2.60	3.47	6.93			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+18k+18k	2.60	5.20	5.20			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+18k+24k	2.29	4.59	6.12			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+24k+24k	2.05	5.47	5.47			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+12k	4.33	4.33	4.33			3,00	13,00	13,28	1.61	2.80	4.50	7.13	14.20	17.75	4.64	4.00	A+
12k+12k+18k	3.71	3.71	5.57			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+24k	3.25	3.25	6.50			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+18k+18k	3.25	4.88	4.88			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+18k+24k	2.89	4.33	5.78			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+24k+24k	2.60	5.20	5.20			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
18k+18k+18k	4.33	4.33	4.33			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
18k+18k+24k	3.90	3.90	5.20			3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+9k	3.25	3.25	3.25	3.25		3,00	13,00	14,00	1.61	3.00	4.80	7.13	14.20	17.75	4.33	4.00	A+
9k+9k+9k+12k	3.00	3.00	3.00	4.00		3,00	13,00	14,39	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+18k	2.60	2.60	2.60	5.20		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+24k	2.29	2.29	2.29	6.12		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+12k+12k	2.79	2.79	3.71	3.71		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+12k+18k	2.44	2.44	3.25	4.88		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+12k+24k	2.17	2.17	2.89	5.78		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+18k+18k	2.17	2.17	4.33	4.33		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+18k+24k	1.95	1.95	3.90	5.20		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+12k+12k	2.60	3.47	3.47	3.47		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+12k+18k	2.29	3.06	3.06	4.59		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+12k+24k	2.05	2.74	2.74	5.47		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+18k+18k	2.05	2.74	4.11	4.11		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+18k+24k	1.86	2.48	3.71	4.95		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+18k+18k+18k	1.86	3.71	3.71	3.71		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+12k+12k	3.25	3.25	3.25	3.25		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+12k+18k	2.89	2.89	2.89	4.33		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+12k+24k	2.60	2.60	2.60	5.20		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+18k+18k	2.60	2.60	3.90	3.90		3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+9k+9k	2.60	2.60	2.60	2.60	2.60	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.20	A+
9k+9k+9k+9k+12k	2.44	2.44	2.44	2.44	3.25	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.20	A+
9k+9k+9k+9k+18k	2.17	2.17	2.17	2.17	4.33	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+9k+24k	1.95	1.95	1.95	1.95	5.20	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+12k+12k	2.29	2.29	2.29	3.06	3.06	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+12k+18k	2.05	2.05	2.05	2.74	4.11	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+12k+24k	1.86	1.86	1.86	2.48	4.95	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+9k+18k+18k	1.86	1.86	1.86	3.71	3.71	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+9k+12k+12k+12k	2.17	2.17	2.89	2.89	2.89	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+12k+12k+18k	1.95	1.95	2.60	2.60	3.90	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
9k+12k+12k+12k+24k	2.05	2.74	2.74	2.74	2.74	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.20	A+
9k+12k+12k+12k+18k	1.86	2.48	2.48	2.48	3.71	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.00	A+
12k+12k+12k+12k+12k	2.60	2.60	2.60	2.60	2.60	3,00	13,00	15,50	1.61	3.19	5.00	7.13	14.20	17.75	4.08	4.20	A+

HIGH-WALL

MULTISPLIT INDOOR UNITS



IRC1FB9W
(Standard)

Infrared remote
controller X3



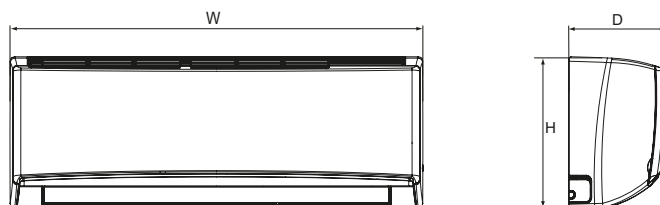
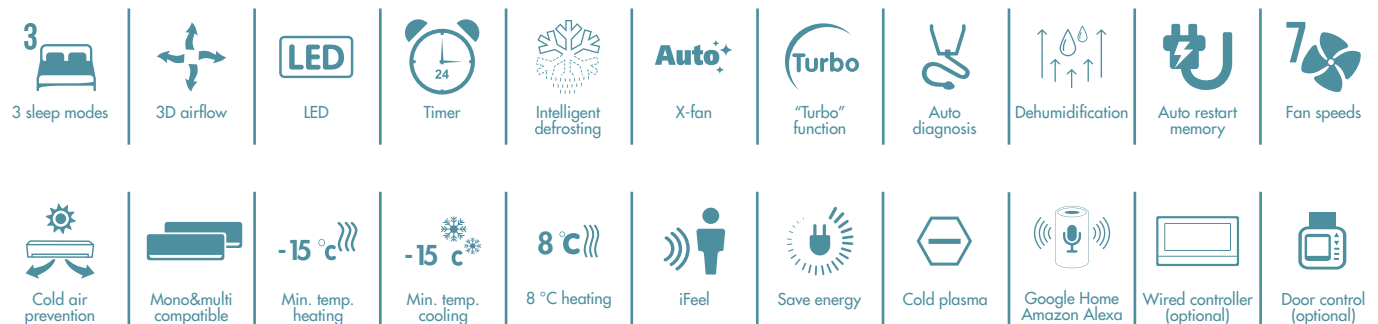
SWC76S (Optional)
398100674

Wired controller
with weekly timer



SWC52V (Optional)
398800104

Centralized controller
up to 36 units
(it requires wired
controller)



High-wall indoor units		X3I ECO PLUS 27 HL WF		X3I ECO PLUS 35 HL WF		X3I ECO PLUS 52 HL WF		X3I ECO PLUS 70 HL WF	
	Units	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.70	2.80	3.50	3.67	5.20	5.30	7.00	7.40
Air flow rate (sh.-h.-mh.-m.-ml.-l.-sl.)	m ³ /h	560-490-460-430-380-330-290		680-620-560-490-450-420-390		800-720-650-610-570-520-470		1250-1100-1000-950-900-850-750	
Dehumidification	l/h	0.8		1.4		1.8		2.4	
Fan speeds	n°	7		7		7		7	
Sound pressure (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	41-37-35-32-29-26-24		42-38-36-34-32-29-26		45-43-41-38-35-34-31		48-45-42-39-37-36-33	
Sound power (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	55-48-46-44-40-37-35		57-50-48-46-44-41-38		59-57-55-52-49-48-45		63-60-57-54-52-51-48	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")		6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")		12.7 (1/2")*		15.88 (1/2")*	
Net dimension (H/W/D)	mm	275/790/200		289/845/209		300/970/224		325/1078/246	
Net weight Indoor/Outdoor	kg	9		10.5		13.5		16.5	

8-WAY CASSETTES

MULTISPLIT INDOOR UNITS



IRC1F7C
(Standard)
Infrared remote
controller 8-WV
cassette



SWC73S (Optional)
398100775
Wired controller
with WiFi



SWC76S (Optional)
398100674
Wired controller
with weekly timer



SWC52V (Optional)
398800104
Centralized controller
up 36 units
(it requires wired
controller)

3  3 sleep modes	 24 Timer	 Intelligent defrosting	 X-fan	 "Turbo" function	 Auto diagnosis	 Dehumidification	 Auto restart memory	7  Fan speeds	 Child lock	
 Only multisplit	-15 °C  Min. temp. heating	-15 °C  Min. temp. cooling	8 °C  8 °C heating	 Quiet mode	 iFeel	 Save energy	 Drain condensate pump integrated	 Google Home Amazon Alexa	 Wired controller (optional)	 Door control (optional)



8-WAY CASSETTES		X3I ECO AS28HL		X3I ECO AS35HL		X3I ECO AS50HL		X3I ECO AS70HL	
	Units	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Nominal capacity	kW	2.80	2.90	3.50	4.00	5.00	5.50	7.00	8.00
Air flow rate (sh.-h.-mh.-m.-ml.-l.-sl.)	m ³ /h	560-540-490-450-420-380-350		560-540-490-450-420-380-350		650-540-490-450-420-380-350		1100-1050-950-910-870-830-800	
Dehumidification	l/h	1.4		1.8		1.8		2.5	
Fan speed	n°	7+auto		7+auto		7+auto		7+auto	
Sound pressure (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	41-39-36-34-32-30-28		41-39-36-34-32-30-28		43-39-36-34-32-30-28		46-45-44-43-42-41-39	
Sound power U.I. (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	57-55-52-50-48-46-44		57-55-52-50-48-46-44		59-55-52-50-48-46-44		62-61-60-59-58-57-55	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")		6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")		12.7 (1/2")*		15.88 (5/8")*	
Indoor net dimension without grid (H./W./D.)	mm	265/570/570		265/570/570		265/570/570		240/840/840	
Indoor net dimension with grid (H./W./D.)	mm	312.5/620/620		312.5/620/620		312.5/620/620		292/950/950	
Net dimension grid (H./W./D.)	mm	47.5/620/620		47.5/620/620		47.5/620/620		52/950/950	
Indoor unit weight without grid	kg	17		17		17		29	
Panel net weight	kg	3		3		3		6	

*It requires the adaptor kit (supplied with the outdoor units)

SLIM DUCTED

NEW MULTISPLIT INDOOR UNITS



SWC73S (Standard)
398100775

Wired controller
with WiFi



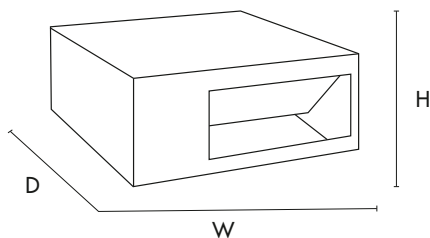
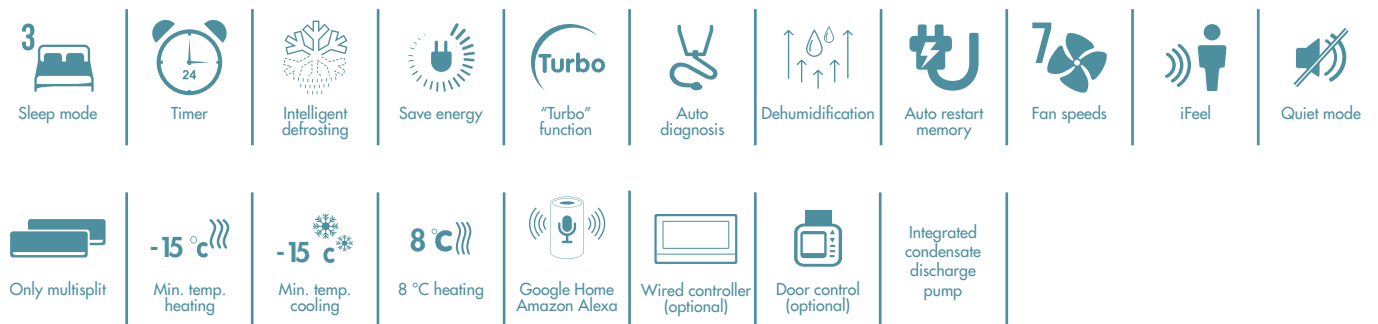
SWC76S (Optional)
398100674

Wired controller
with weekly timer



SWC52V (Optional)
398800104

Centralized controller
up 36 units
(it requires wired
controller)



Ducted indoor units with adjustable external static pressure		X3I ECO SD27HL		X3I ECO SD35HL		X3I ECO SD50HL		X3I ECO SD70HL	
	Units	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65	2.80	3.50	3.85	5.00	5.50	7.00	8.00
Air flow rate (sh.-h.-mh.-m.-ml.-l.-sl.)	m ³ /h	650-560-520-480-450-410-380		700-670-640-610-580-550-520		880-840-810-790-770-750-730		1500-1200-1200-1000-1000-900-900	
Min.-max. external static pressure	Pa	25-60		25-60		25-60		25-125	
Dehumidification	l/h	0.8		1.4		1.8		2.5	
Fan speed	n°	7 + auto		7 + auto		7 + auto		7 + auto	
Sound pressure (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	39-37-36-35-34-33-32		41-39-38-37-36-35-34		41-39-39-38-38-37-34		45-40-40-38-38-36-36	
Sound power (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	55-53-52-51-50-49-48		57-55-54-53-52-51-50		57-55-55-54-54-53-50		62-57-57-55-55-53-53	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")		6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")		12.7 (1/2")*		15.88 (1/2")*	
Net dimension (H./W./D.)	mm	200/710/450		200/710/450		200/1010/450		260/900/655	
Net weight	kg	18,5		19		25		31	

*It requires the adaptor kit (supplied with the outdoor units)

FLOOR/CEILING

MULTISPLIT INDOOR UNITS



IRCFFC
(Standard)
Infrared remote
controller
floor/ceiling



SWC735 (Optional)
398100775
Wired controller
with WiFi



SWC76S (Optional)
398100674
Wired controller
with weekly timer



SWC52V (Optional)
398800104
Centralized controller
up 36 units
(it requires wired
controller)



Sleep mode



LED



Timer



Intelligent
defrosting



Save energy



"Turbo"
function



Auto
diagnosis



Dehumidification



Auto restart
memory



Fan speeds



iFeel



Only multisplit



Min. temp.
heating



Min. temp.
cooling



8 °C heating



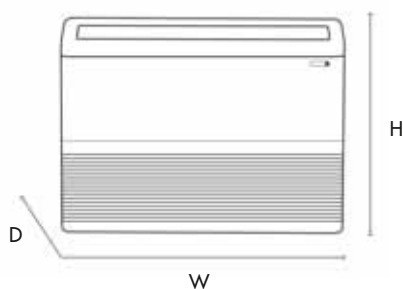
Google Home
Amazon Alexa



Wired controller
(optional)



Door control
(optional)



Floor/ceiling indoor units		X3I ECO FC26HL		X3I ECO FC35HL		X3I ECO FC45HL	
	Units	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.60	2.70	3.50	4.00	4.50	5.50
Air flow rate (sh.-h.-m.-l.)	m ³ /h	700-610-540-420		700-610-540-420		700-610-540-420	
Dehumidification	l/h	0.8		1.4		1.8	
Fan speeds	n°	7		7		7	
Sound pressure (sh.-h.-m.-l.)	dB(A)	38-35-30-26		38-35-30-26		38-35-30-26	
Sound power (sh.-h.-m.-l.)	dB(A)	52-49-44-40		52-49-44-40		52-49-44-40	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")		12.7 (1/2")*	
Net dimension Outdoor (H./W./D.)	mm	665/870/235		665/870/235		665/870/235	
Net weight Indoor/Outdoor	kg	25		25		25,5	

*It requires the adaptor kit (supplied with the outdoor units)

CONSOLE

MULTISPLIT INDOOR UNITS



IRC1FB8C
(Standard)

Infrared remote
controller console



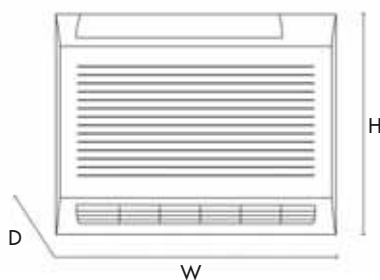
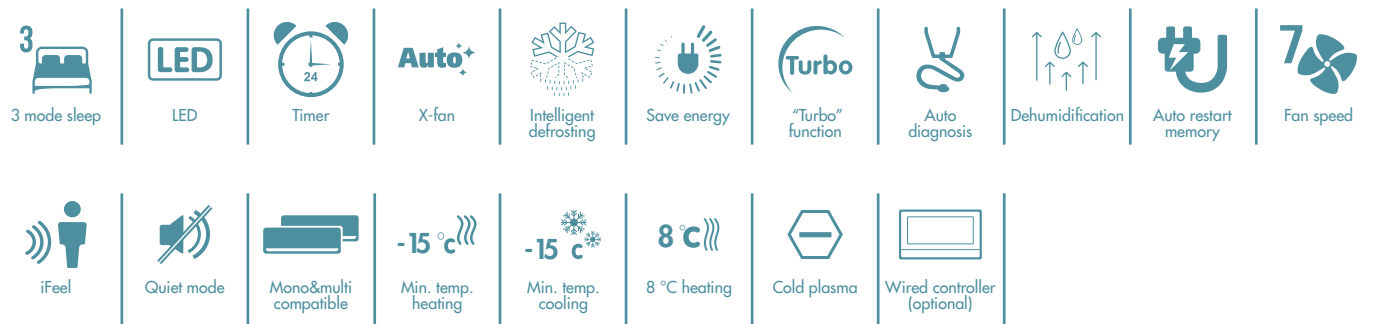
SWC76S (Optional)
398100674

Wired controller
with weekly timer



SWC52V (Optional)
398800104

Centralized controller
up 36 units
(it requires wired
controller)



Console indoor units		X3I ECO PLUS NEW AF27HL		X3I ECO PLUS NEW AF35HL		X3I ECO PLUS NEW AF52HL	
	Units	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.70	2.90	3.52	3.80	5.20	5.33
Air flow rate (sh.-h.-mh.-m.-ml.-l.-sl.)	m³/h	500-430-410-370-330-280-250		600-520-480-440-400-360-280		750-670-600-520-470-430-350	
Dehumidification	l/h	0.8		1.4		1.8	
Fan speeds	n°	7		7		7	
Sound pressure (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	39-36-34-32-29-26-23		44-40-38-36-33-29-25		49-47-45-42-40-37-32	
Sound power (sh.-h.-mh.-m.-ml.-l.-sl.)	dB(A)	52-48-46-44-41-38-35		55-51-49-47-44-40-36		60-58-56-53-51-48-43	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")		12.7 (1/2")*	
Net dimension Outdoor (H./W./D.)	mm	600/700/215		600/700/215		600/700/215	
Net weight Indoor/Outdoor	kg	15.5		16		16	

*It requires the adaptor kit (supplied with the outdoor units)

CONTROLS

SINGLE AND MULTISPLIT AIR CONDITIONERS

	Code	Model	High-wall	8-way Cassette	Ducted	Floor/ceiling	Console
WIRELESS							
	-	IRC1FB9W	●				
	-	IRC1F7C		●	●		
	-	IRCFFC				●	
	-	IRC1FB8C					●
WIRED							
	398100775	SWC73S Wired controller with WiFi		●	●	●	
	398100674	SWC76S Wired controller with weekly timer	●	●	●	●	●
	398800104	SWC52V* Centralized controller up to 36 units	●	●	●	●	●
DOOR CONTROL							
	398100673	DC010 Contact door control	●	●	●	●	

* It is required 1 wire controller for each indoor unit

● Standard controller supplied with the unit

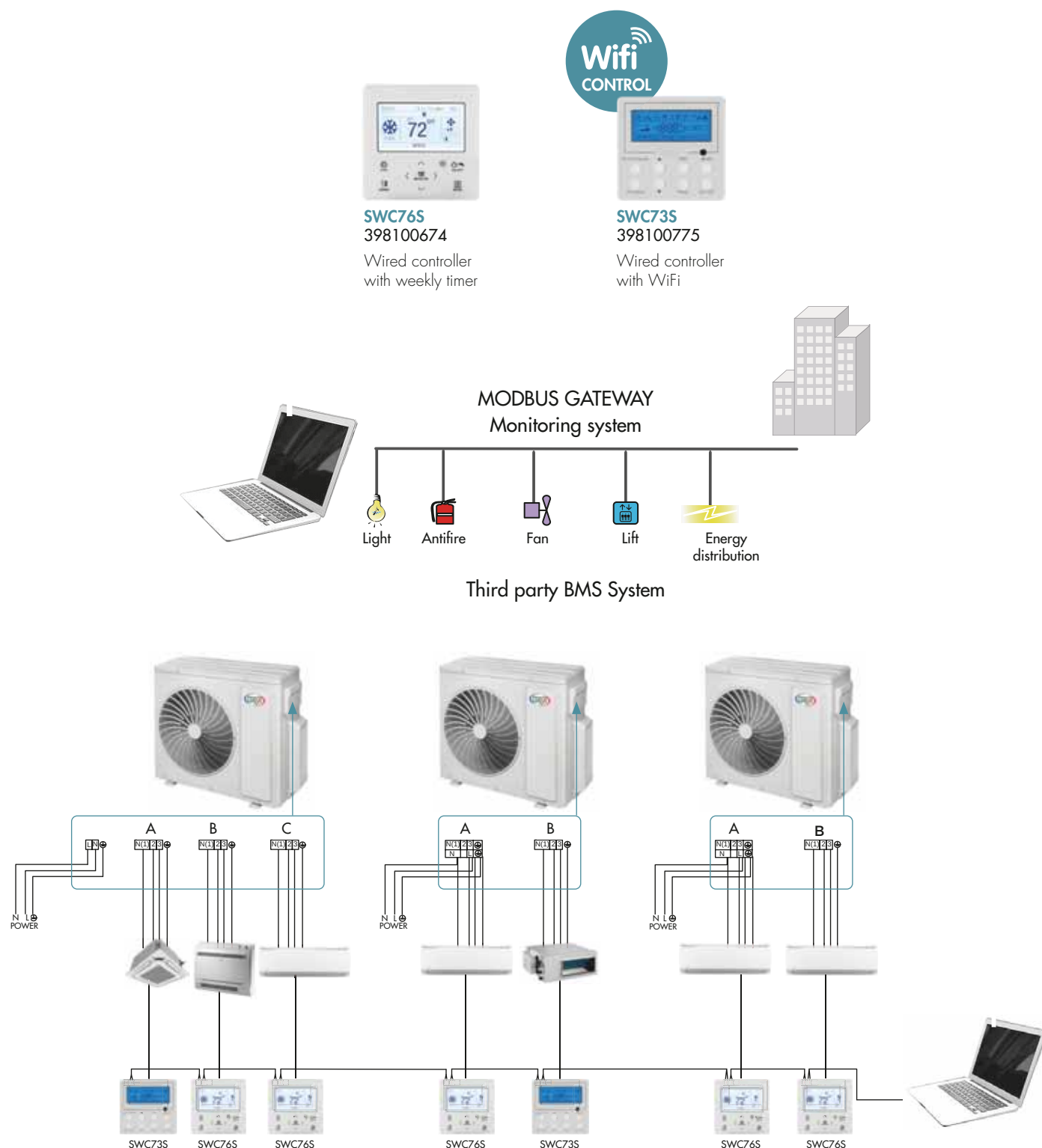
● Optional controller

CENTRALIZED CONTROL

SINGLE AND MULTISPLIT

1. BMS - PROTOCOLLO MODBUS - RS485

It is possible to connect directly to a third-party BMS system, MODBUS protocol, up to 255 residential units, each connected to its own wired control with weekly timer or wired control with WiFi, without having to add any accessories, as the wired control acts as a gateway.



2. CENTRALIZED CONTROL VIA SWC52V CONTROLLER

For centralized control of multiple Free Match single and multisplit units (up to 36), simply match each indoor unit with a wired controller with weekly timer or wired controller with WiFi and connect the system to just 1 centralized controller.



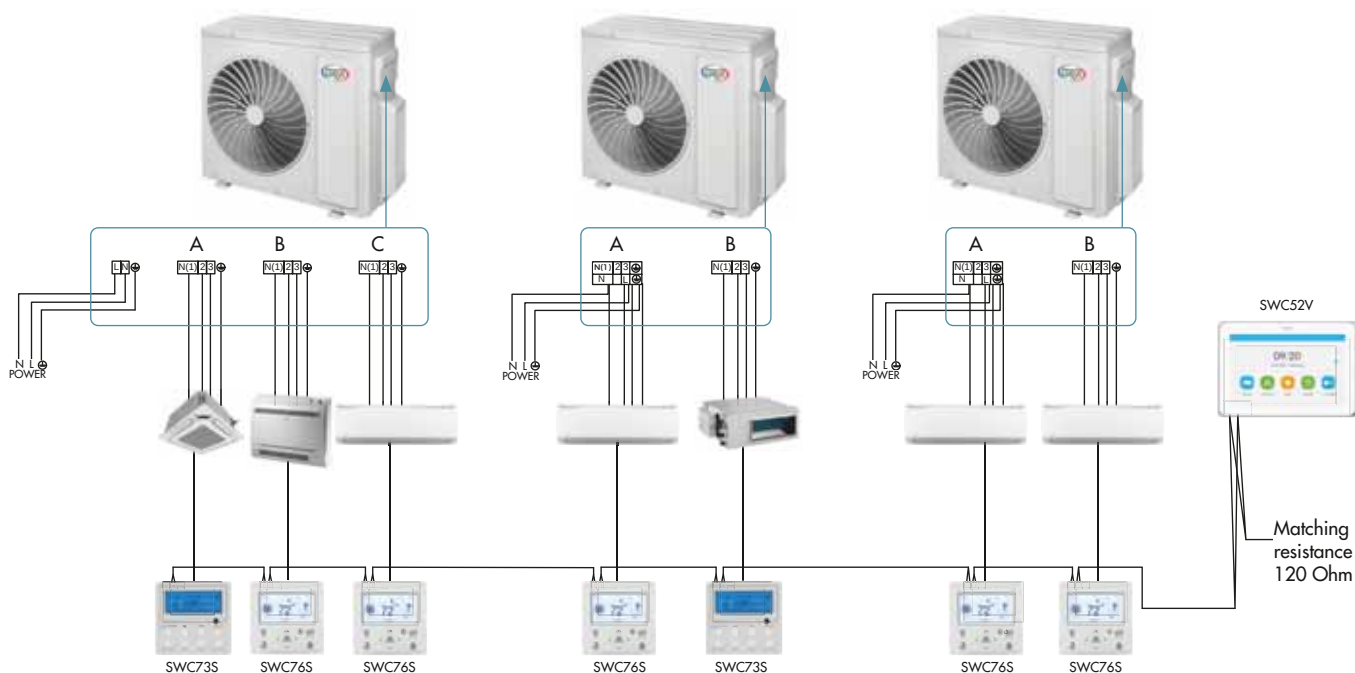
SWC76S
398100674
Wired controller
with weekly timer



SWC73S
398100775
Wired controller
with WiFi



SWC52V
398800104
Centralized controller
up to 36 units





X3 PACKAGE

Commercial single split air conditioners DC Inverter R32

Cassette

Ducted

Floor/ceiling

Control systems

LINE-UP

OUTDOOR UNITS

Energy efficiency class up to A++ in cooling mode and up to A+ in heating mode.

Intelligent adjustment of compressor frequency, accurate temperature control.

Reliable cooling and heating operation down to -20 °C outdoor temperature, up to +52 °C (cooling).

Maximum length of pipe connections 75 m; height difference between units up to 30 m.

Minimization of the sound level thanks to the axial fan.

Fast achievement of comfort conditions: the unit allows rapid cooling and heating and is able to quickly reach the temperature set by the user.

Intelligent defrosting technology: the unit is able to correctly evaluate the presence of frost on the outdoor unit through a temperature sensor. The goal is to "defrost only when needed", optimizing the heating effect for high environmental comfort.



AEG ECO PLUS 35PIH (1PH)



AEG ECO PLUS 50PIH (1PH)
AEG ECO PLUS 71PIH (1PH)
AEG ECO PLUS 85PIH (1PH)



AEG ECO PLUS 100PIH (1PH)
AEG ECO PLUS 100PIH3 (3PH)
AEG ECO PLUS 140PIH (1PH)
AEG ECO PLUS 140PIH3 (3PH)



AEG ECO PLUS 160PIH3 (3PH)

Code	Model	Nominal (max.-min.) heating capacity (kW)	Nominal (max.-min.) cooling capacity (kW)
398700009	AEG ECO PLUS 35PIH	3.50 (0.90-4.69)	4.00 (0.90-4.50)
398700010	AEG ECO PLUS 50PIH	5.00 (1.60-5.80)	5.50 (1.60-6.10)
398700011	AEG ECO PLUS 71PIH	7.00 (2.40-7.60)	8.00 (2.20-8.60)
398700012	AEG ECO PLUS 85PIH	8.50 (2.90-9.00)	8.80 (2.30-9.50)
398700013	AEG ECO PLUS 100PIH	10.50 (3.20-11.00)	11.50 (3.00-12.50)
398700015	AEG ECO PLUS 100PIH3	10.50 (3.20-11.00)	11.50 (3.00-12.50)
398700014	AEG ECO PLUS 140PIH	13.40 (4.00-14.20)	15.50 (3.90-16.00)
398700016	AEG ECO PLUS 140PIH3	13.40 (4.00-14.20)	15.50 (3.90-16.00)
398700017	AEG ECO PLUS 160PIH3	14.50 (6.80-16.80) Cassette-Floor/ceiling	17.00 (4.50-17.50) Cassette-Floor/ceiling
		16.00 (4.80-17.00) Ducted	17.00 (4.50-18.00) Ducted

A++ Cooling

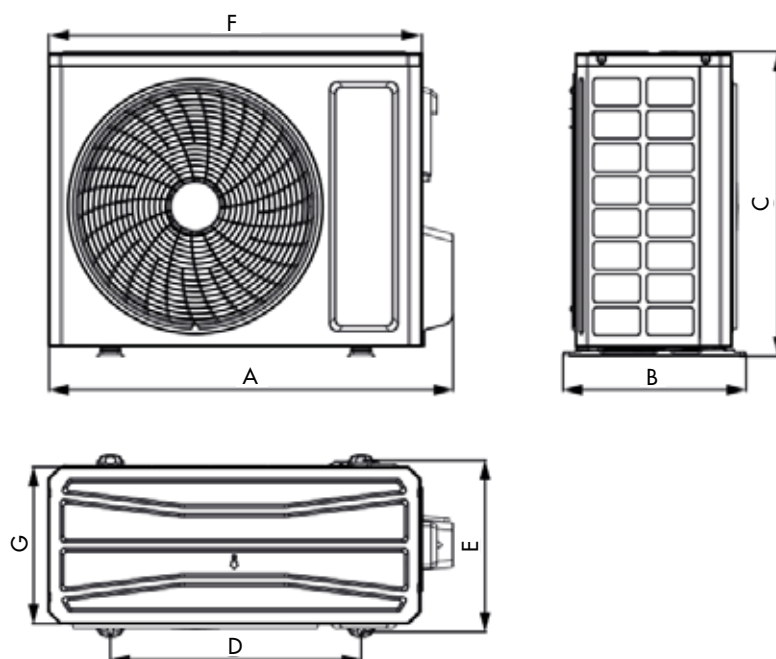
A+ Heating

LINE-UP

INDOOR UNITS

Code	Model	Features	
398700025	ASG ECO PLUS 35PH	- 8-way compact cassette with 360° air discharge - Integrated condensate drain pump - Ideal for installation in false ceiling	
398700047	ASG ECO PLUS 50PH 60X60		
398100688	GRID CASSETTE COMPACT	Grid for compact cassette (35)	
398700026	ASG ECO PLUS 50PH	- 8-way cassette with 360° air discharge - Wide range of flap swinging - Integrated condensate drain pump	
398700027	ASG ECO PLUS 71PH		
398700028	ASG ECO PLUS 85PH		
398700029	ASG ECO PLUS 100PH		
398700030	ASG ECO PLUS 140PH		
398700031	ASG ECO PLUS 160PH		
398100677	GRID BIG CASSETTE	Grid for big cassette (50-160)	
398700018	ADG ECO PLUS 35PH	- Low external static pressure slim ducted - Silence - Integrated condensate drain pump	
398700019	ADG ECO PLUS 50PH		
398700020	ADG ECO PLUS 71PH	- High external static pressure ducted - Silence - Integrated condensate drain pump	
398700021	ADG ECO PLUS 85PH		
398700022	ADG ECO PLUS 100PH		
398700023	ADG ECO PLUS 140PH		
398700024	ADG ECO PLUS 160PH		
398700032	ACG ECO PLUS 35PH	- Floor/ceiling units - Double flap - Wide range of flap swinging	
398700033	ACG ECO PLUS 50PH		
398700034	ACG ECO PLUS 71PH		
398700035	ACG ECO PLUS 85PH		
398700036	ACG ECO PLUS 100PH		
398700037	ACG ECO PLUS 140PH		
398700038	ACG ECO PLUS 160PH		

OUTDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 35PIH	732	330	553	455	310	675	285
AEG ECO PLUS 50PIH	802	350	555	512	331	745	300
AEG ECO PLUS 71PIH	958	402	660	570	371	889	340
AEG ECO PLUS 85PIH	958	402	660	570	371	889	340
AEG ECO PLUS 100PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 100PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 160PIH3	1020	427	960	755	396	990	370

MULTI APPLICATIONS - DISTRIBUTION JOINTS

It is possible to create applications with multiple indoor units combined with an outdoor unit thanks to the dedicated branch joints. The current wired controllers that can be combined with PACKAGE allow control of multiple indoor units with a single controller; for this reason it is possible to create dual, trial and quadri applications with the use of these joints, without the need to add any accessory kit. The branch joints are Y-type welded joints, similar to the branch joints of VRF.

Code	Description
EN01300330	JOINT KIT PACKAGE 1 X MULTIPLE APPLICATIONS
EN01300340	JOINT KIT PACKAGE 2 X MULTIPLE APPLICATIONS
EN01300350	JOINT KIT PACKAGE 3 X MULTIPLE APPLICATIONS



The possible applications are those reported in the tables below

DUAL APPLICATIONS

Outdoor unit capacity	Indoor units capacity combinations	Quantity and type of joints
71	50+50	J2*1
100	50+50	J2*1
140	71+71	J2*1
160	85+85	J2*1

TRIAL APPLICATIONS

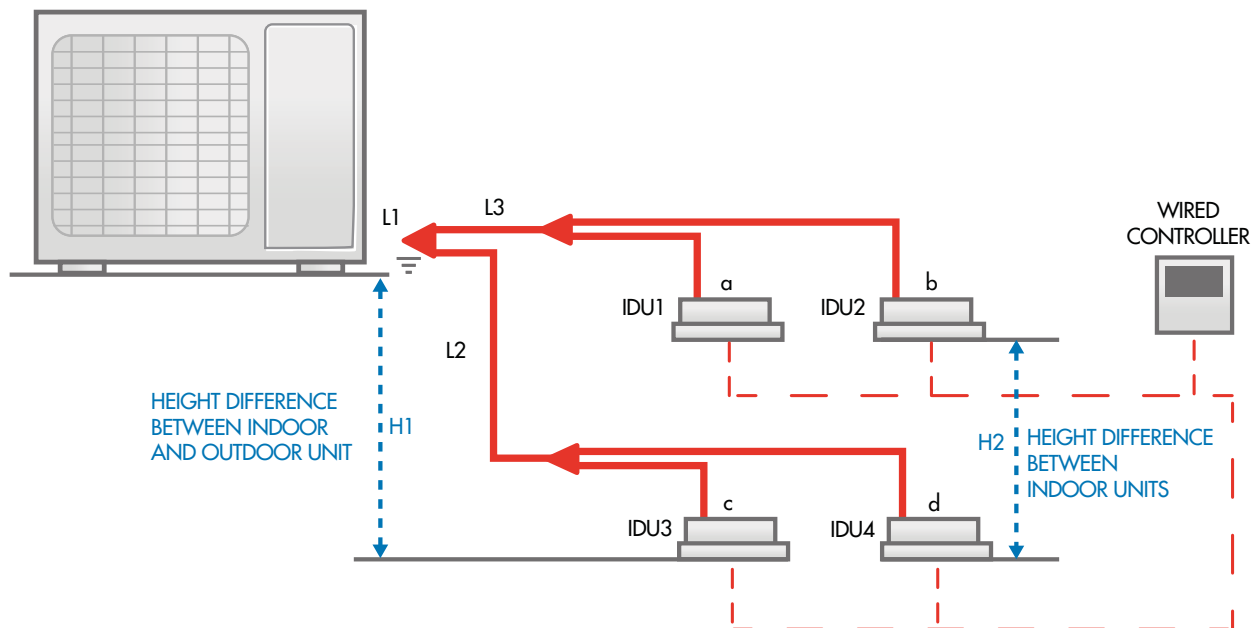
Outdoor unit capacity	Indoor units capacity combinations	Quantity and type of joints
100	35+35+35	J1*1 + J2*1
140	50+50+50	J2*2
160	71+71+71	J3*2

QUADRI APPLICATIONS

Outdoor unit capacity	Indoor units capacity combinations	Quantity and type of joints
140	35+35+35+35	J1*2 + J2*1
160	50+50+50+50	J2*3

Images for illustrative purposes only, may not correspond to the real ones.

PIPE LENGTHS AND DIFFERENCES IN HEIGHT



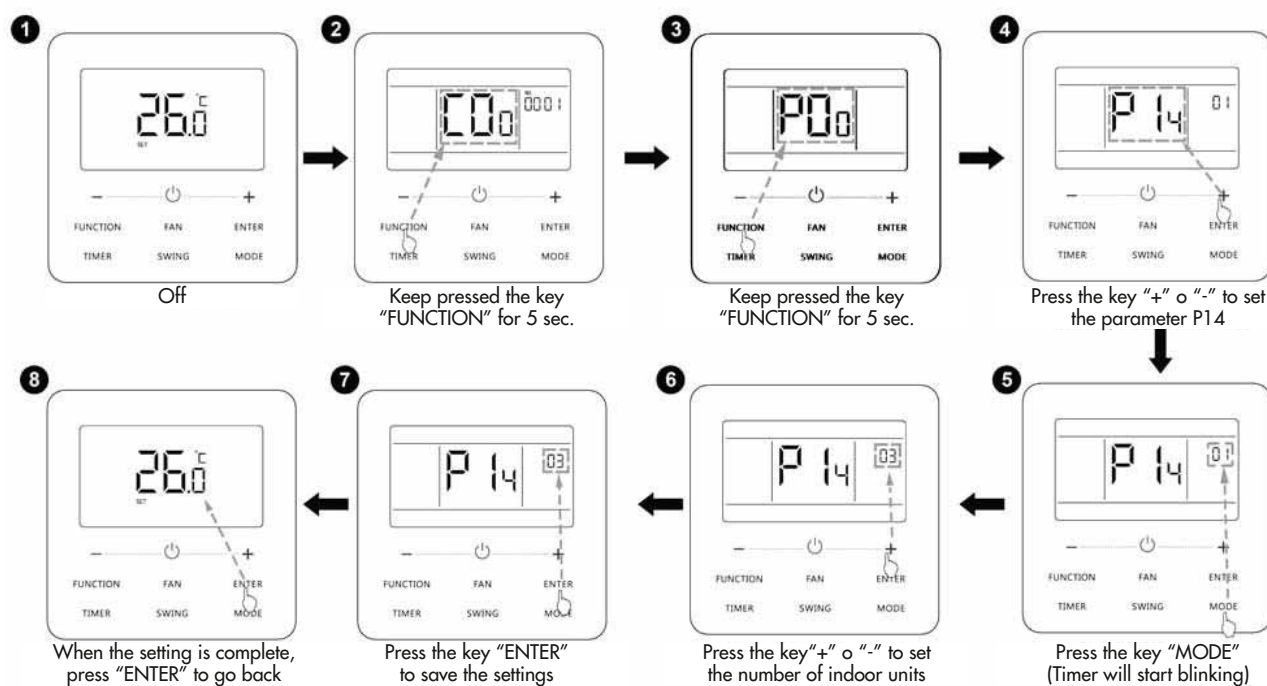
	Pipes	AEG ECO PLUS 35PIH	AEG ECO PLUS 50PIH	AEG ECO PLUS 71PIH	AEG ECO PLUS 85PIH
Max. total length of pipes with additional charge	$L1+L2+L3+A+B+C+D$	30	30	30	30
Max. total length of pipes with standard charge	$L1+L2+L3+a+b+c+d$	5	5	5	5
Max. height difference between IU and OU (OU above/below)	H1	15/15	20/20 *	20/20	25/25
Max. height difference between IU	H2	<0,5 m	<0,5 m	<0,5 m	<0,5 m
Difference in length of pipes behind the joint	$(L2+d)-(L3+a)$	<5 m	<5 m	<5 m	<5 m
Max. length of pipes per branch	$L3+a; L3+b; L2+c; L2+d$	<20 m	<20 m	<20 m	<20 m

	Pipes	AEG ECO PLUS 100PIH AEG ECO PLUS 100PIH3	AEG ECO PLUS 140PIH AEG ECO PLUS 140PIH3	AEG ECO PLUS 160PIH3
Max. total length of pipes with additional charge	$L1+L2+L3+A+B+C+D$	75	75	75
Max. total length of pipes with standard charge	$L1+L2+L3+a+b+c+d$	5	7,5	7,5
Max. height difference between IU and OU (OU above/below)	H1	30/30	30/30	30/30
Max. height difference between IU	H2	<0,5 m	<0,5 m	<0,5 m
Difference in length of pipes behind the joint	$(L2+d)-(L3+a)$	<5 m	<5 m	<5 m
Max. length of pipes per branch	$L3+a; L3+b; L2+c; L2+d$	<20 m	<20 m	<20 m

* Except for compact cassette (1.5)

WIRED CONTROLLER ADDRESSING DIAGRAM

In the case of MULTI application, it is possible to use a single wired controller to manage all the indoor units, which however can only operate simultaneously, with the same mode and with the same parameters. The Manual contains instructions for setting the wired controller to manage more indoor units at the same time.



SETTING THE NUMBER OF INDOOR UNITS MANAGED BY THE CONTROLLER

Setting of the number of indoor units	02:2 indoor units
	03:3 indoor units
	04:4 indoor units



CASSETTE

Compact cassette with 360° air discharge

Cassette with 360° air discharge

COMPACT CASSETTE

WITH 360° AIR DISCHARGE



IRC1F7C (Standard)
398100678
Infrared remote
controller



SWC7AV (Optional)
398700039
Wired controller
with WiFi



SWC52V (Optional)
398800104
Centralized controller
up 36 units
*it requires wired
controller

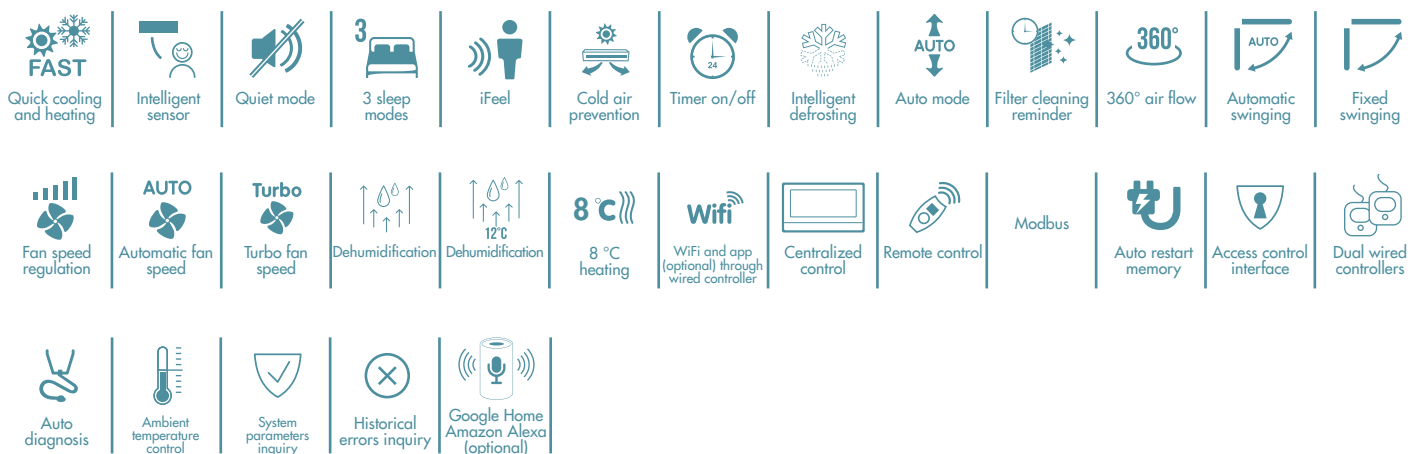


EIXEGP (Optional)
398100683
Gateway Modbus

- 8-way cassette units for light commercial/industrial applications.
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.
- Compact and attractive design.
- 360° air discharge, with range of flap oscillation between 45 and 80°, different according to the heating/cooling modes, for maximum comfort.
- The dimensions 570x570 mm are convenient for installation in false ceilings with standard modules 600x600 mm.
- Fan has optimized aerodynamic profiles for maximum silence.
- Condensate drain pump is integrated for a height difference up to 1000 mm.
- Double room temperature sensor for customizable comfort:

possibility of selecting the return air temperature sensor on the unit or the temperature sensor on the wired control.

- High energy efficiency, at all the capacities, both in cooling and heating modes (seasonal efficiency).
- The special closing system of the refrigerant valve prevents and avoids the risk of refrigerant leaks from inappropriate maintenance.
- The electrical box has a special design and is made of fireproof material, for maximum protection of the electronic board from the risks of fire.
- Optional WiFi, with wired controller, accessory that can be ordered separately.



A⁺⁺ Cooling

A⁺ Heating

TECHNICAL DATA - MATCHING WITH COMPACT CASSETTE WITH 360° AIR DISCHARGE

Indoor unit model		ASG ECO PLUS 35PH		ASG ECO PLUS 50PH 60x60	
Outdoor unit model		AEG ECO PLUS 35PIH		AEG ECO PLUS 50PIH	
	Units	Cooling	Heating	Raffreddamento	Riscaldamento
Nominal (min.-max.) capacity (EN14511)	kW	3.50 (0.90-4.00)	4.00 (0.90-4.50)	5.00	5.60
	BTU/h	12000	13600	17000	19000
EER/COP (EN14511)		3.80	4.00	3.40	3.50
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	3.5	3.1	5.0	3.9
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		7.1	4.2	6.6	4.0
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	173	1034	266	1365
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	600-550-500-400		720-650-600-500	
Dehumidification	l/h	1.0		1.8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/modulante	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	36-35-33-29		43-41-39-35	
Sound pressure Outdoor (h.)	dB(A)	48		52	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	47-45-42-39		51-46-43-40	
Sound power Outdoor (h.)	dB(A)	56		65	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Power input	kW	0.92	1.30	1.47	1.60
Maximum electrical power input	kW/A	1.30/6.00		TBD	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.57/0.39		0.85/0.57	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		12.70 (1/2")	
Pipe lenght with gas standard charge	m	5		5	
Max. pipe lenght with additional charge	m	30		30	
Additional refrigerant charge	g/m	16		16	
Max. height difference (Outdoor above)	m	15		20	
Max. height difference (Indoor above)	m	15		20	
Panel code to match		398100688		398100688	
Indoor net dimension without panel (H./W./D.)	mm	260/570/570		260/570/570	
Net dimension panel (H./W./D.)	mm	47.5/620/620		47.5/620/620	
Indoor net dimension with panel (H./W./D.)	mm	307.5/620/620		307.5/620/620	
Outdoor net dimension (H./W./D.)	mm	553/675/285		555/745/300	
Indoor unit without panel/Outdoor unit net weight	kg	16.5/24.5		16.5/30.5	
Panel net weight	kg	3		3	

OPERATING RANGE: outdoor temperature

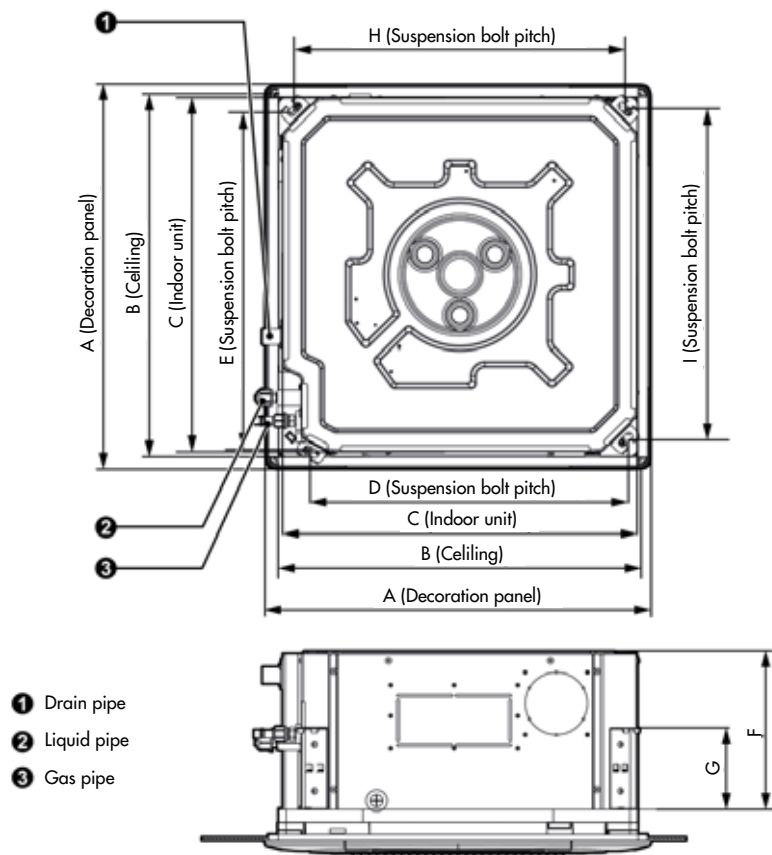
Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

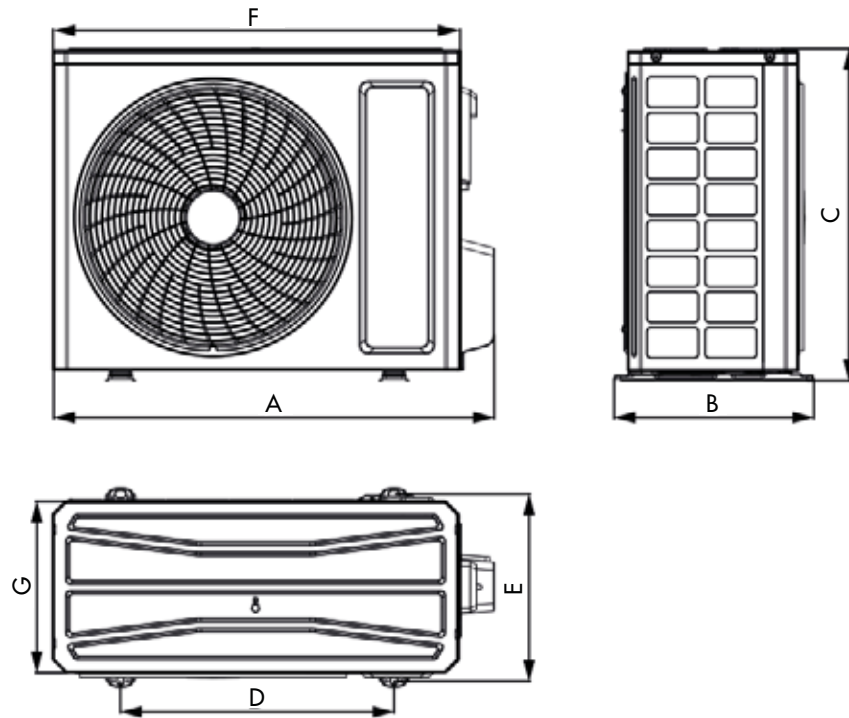
*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

INDOOR UNIT DIMENSIONAL DRAWING

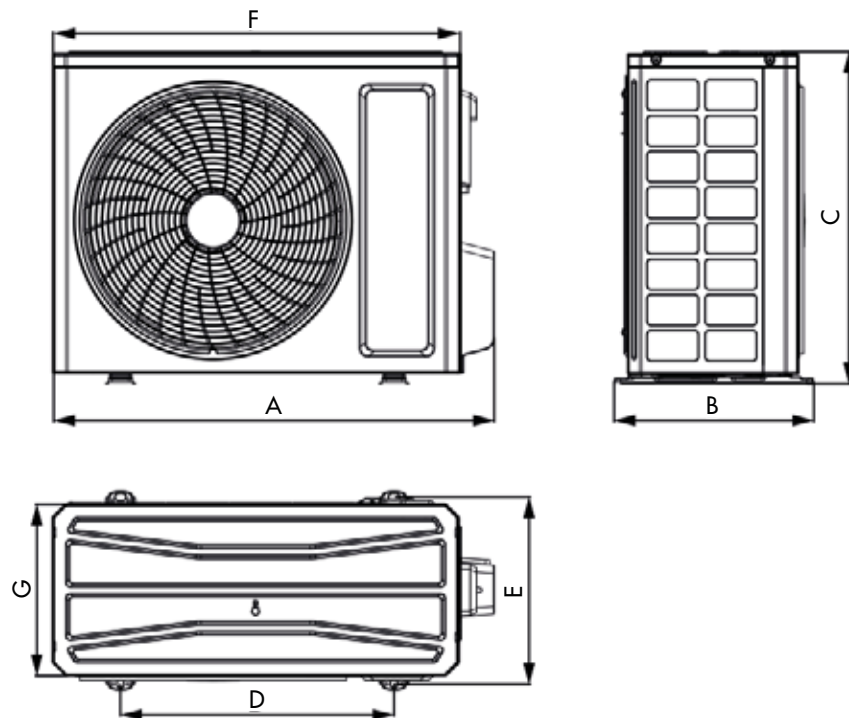


MODEL	DIMENSIONS (mm)								
	A	B	C	D	E	F	G	H	I
ASG ECO PLUS 35PH	620	580	570	505	550	260	140	530	530
ASG ECO PLUS 50PH 60x60									

OUTDOOR UNIT DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 35PIH	732	330	553	455	310	675	285



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 50PIH	802	350	555	512	331	745	300

CASSETTE

WITH 360° AIR DISCHARGE



IRC1F7C (Standard)
398100678
Infrared remote
controller



SWC7AV (Optional)
398700039
Wired controller
with WiFi



SWC52V (Optional)
398800104
Centralized controller
up 36 units
(it requires wired
controller)

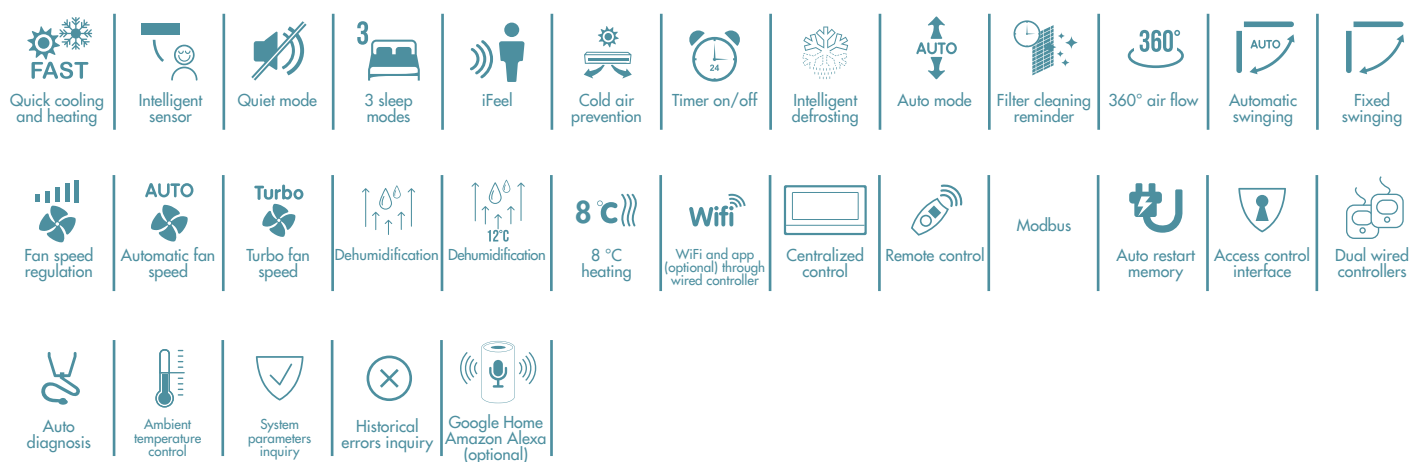


EIXEGP (Optional)
398100683
Gateway Modbus

- 8-way cassette units for light commercial/industrial applications.
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.
- Attractive design.
- 360° air discharge, with range of flap oscillation between 45 and 80°, different according to the heating/cooling modes, for maximum comfort.
- Fan has optimized aerodynamic profiles for maximum silence.
- Condensate drain pump is integrated for a height difference up to 1000 mm.
- Double room temperature sensor for customizable comfort: possibility of selecting the return air temperature sensor on the

unit or the temperature sensor on the wired control.

- High energy efficiency, at all the capacities, both in cooling and heating modes (seasonal efficiency).
- The special closing system of the refrigerant valve prevents and avoids the risk of refrigerant leaks from inappropriate maintenance.
- The electrical box has a special design and is made of fireproof material, for maximum protection of the electronic board from the risks of fire.
- Optional WiFi, with wired controller, accessory that can be ordered separately.



A++ Cooling

A+ Heating

TECHNICAL DATA-MATCHING WITH CASSETTE WITH 360° AIR DISCHARGE

Indoor unit model		ASG ECO PLUS 50PH	
Outdoor unit model		AEG ECO PLUS 50PIH	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	5.30 (1.60-5.80)	5.80 (1.60-6.10)
	BTU/h	17000	19790
EER/COP (EN14511)		3.45	3.95
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	5.3	3.9
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		7.2	4.3
Energy efficiency class*		A++	A+
Seasonal energy consumption*	kWh/annum	258	1270
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	900-800-700-600	
Dehumidification	l/h	1.8	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	36-35-33-31	
Sound pressure Outdoor (h.)	dB(A)	52	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	51-46-43-40	
Sound power Outdoor (h.)	dB(A)	65	
Power supply	V/Ph/Hz	220-240~/1/50/60	
Power input	kW	1.54	1.47
Maximum electrical power input	kW/A	1.90/9.50	
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.85/0.57	
Liquid pipe diameter	mm (inch)	6.35 (1/4")	
Gas pipe diameter	mm (inch)	12.70 (1/2")	
Pipe lenght with gas standard charge	m	5	
Max. pipe lenght with additional charge	m	30	
Additional refrigerant charge	g/m	16	
Max. height difference (Outdoor above)	m	15	
Max. height difference (Indoor above)	m	15	
Panel code to match		398100677	
Indoor net dimension without panel (H./W./D.)	mm	200/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	252/950/950	
Outdoor net dimension (H./W./D.)	mm	555/745/300	
Indoor unit without panel/Outdoor unit net weight	kg	21/30.5	
Panel net weight	kg	6	

OPERATING RANGE: outdoor temperature
Cooling mode: from -20 °C to +52 °C
Heating mode: from -20 °C to +24 °C
RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

TECHNICAL DATA

Indoor unit model		ASG ECO PLUS 71PH		ASG ECO PLUS 85PH	
Outdoor unit model		AEG ECO PLUS 71PIH		AEG ECO PLUS 85PIH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	7.10 (2.40-7.60)	8.00 (2.20-8.60)	8.50 (2.90-9.00)	8.80 (2.50-9.50)
	BTU/h	24200	27200	29000	30000
EER/COP (EN14511)		3.70	4.00	3.40	3.90
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	7.1	5.0	8.5	6.0
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		6.7	4.3	6.9	4.3
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	371	1628	432	1954
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	1100-1000-900-800		1400-1300-1200-1100	
Dehumidification	l/h	2.4		2.8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	39-38-36-34		47-46-42-38	
Sound pressure Outdoor (h.)	dB(A)	58		65	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	51-50-48-47		59-51-48-46	
Sound power Outdoor (h.)	dB(A)	69		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Power input	kW	2.03	2.80	2.50	2.25
Maximum electrical power input	kW/A	2.80/14.00		3.30/15.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	1.5/1.01		1.5/1.01	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Pipe lenght with gas standard charge	m	5		5	
Max. pipe lenght with additional charge	m	50		50	
Additional refrigerant charge	g/m	20		20	
Max. height difference (Outdoor above)	m	25		25	
Max. height difference (Indoor above)	m	25		25	
Panel code to match		398100677		398100677	
Indoor net dimension without panel (H./W./D.)	mm	200/840/840		200/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950		52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	252/950/950		252/950/950	
Outdoor net dimension (H./W./D.)	mm	660/889/340		660/889/340	
Indoor unit without panel/Outdoor unit net weight	kg	21/41.5		21/46	
Panel net weight	kg	6		6	

OPERATING RANGE: outdoor temperature
Cooling mode: from -20 °C to +52 °C
Heating mode: from -20 °C to +24 °C
RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

Indoor unit model		ASG ECO PLUS 100PH		ASG ECO PLUS 100PH	
Outdoor unit model		AEG ECO PLUS 100PIH		AEG ECO PLUS 100PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	10.50 (3.20-11.00)	11.50 (3.00-12.50)	10.50 (3.20-11.00)	11.50 (3.00-12.50)
	BTU/h	35800	39200	35800	39200
EER/COP (EN14511)		3.50	4.10	3.50	4.10
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	10.5	7.0	10.5	7.0
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		6.6	4.4	6.6	4.4
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	557	2227	557	2227
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	1500-1400-1200-1000		1500-1400-1200-1000	
Dehumidification	l/h	3.3		3.3	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	43-41-39-38		43-41-39-38	
Sound pressure Outdoor (h.)	dB(A)	57		57	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	56-54-52-48		56-54-52-48	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		380-415~/3/50-60	
Power input	kW	3.10	2.95	3.10	3.95
Maximum electrical power input	kW/A	4.70/21.00		4.40/7.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.1/1.42		2.1/1.42	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Pipe lenght with gas standard charge	m	5		5	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	20		20	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Panel code to match		398100677		398100677	
Indoor net dimension without panel (H./W./D.)	mm	240/840/840		240/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950		52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	292/950/950		292/950/950	
Outdoor net dimension (H./W./D.)	mm	820/940/370		820/940/370	
Indoor unit without panel/Outdoor unit net weight	kg	23/65		23/75	
Panel net weight	kg	6		6	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

TECHNICAL DATA

Indoor unit model		ASG ECO PLUS 140PH		ASG ECO PLUS 140PH	
Outdoor unit model		AEG ECO PLUS 140PIH		AEG ECO PLUS 140PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	13.40 (4.00-14.20)	15.50 (3.90-16.00)	13.40 (4.00-14.20)	15.50 (3.90-16.00)
	BTU/h	45700	52800	45700	52800
EER/COP (EN14511)		2.91	3.30	2.91	3.30
Rated capacity (Prated,c/Prated,h)*	kW	13.40	15.50	13.40	15.50
Seasonal space energy efficiency (ηs,c/ηs,h)*	%	257.8	158.2	257.8	158.2
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	2000-1800-1600-1400		2000-1800-1600-1400	
Dehumidification	l/h	3.9		3.9	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	50-48-45-41		50-48-45-41	
Sound pressure Outdoor (h.)	dB(A)	59		59	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	64-63-60-57		64-63-60-57	
Sound power Outdoor (h.)	dB(A)	75		75	
Power supply	V/Ph/Hz	220-240~/1/50/60		380-415~/3/50/60	
Power input	kW	4.60	4.70	4.60	4.70
Maximum electrical power input	kW/A	5.60/25.00		5.60/11.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.80/1.89		2.80/1.89	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Pipe lenght with gas standard charge	m	7.5		7.5	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	35		35	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Panel code to match		398100677		398100677	
Indoor net dimension without panel (H./W./D.)	mm	290/840/840		290/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950		52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	342/950/950		342/950/950	
Outdoor net dimension (H./W./D.)	mm	820/940/370		820/940/370	
Indoor unit without panel/Outdoor unit net weight	kg	25/73		25/81	
Panel net weight	kg	6		6	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

Indoor unit model		ASG ECO PLUS 160PH	
Outdoor unit model		AEG ECO PLUS 160PIH3	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	14.50 (4.80-15.00)	17.00 (4.50-17.50)
	BTU/h	49400	58000
EER/COP (EN14511)		2.74	2.98
Rated capacity (Prated,c/Prated,h)*	kW	14.50	17.0
Seasonal space energy efficiency (ηs,c/ηs,h)*	%	239	151.6
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	2300-2100-1900-1600	
Dehumidification	l/h	4.8	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	50-48-46-44	
Sound pressure Outdoor (h.)	dB(A)	60	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	65-63-61-60	
Sound power Outdoor (h.)	dB(A)	75	
Power supply	V/Ph/Hz	380-415~/3/50/60	
Power input	kW	5.30	5.70
Maximum electrical power input	kW/A	6.80/12.00	
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	3.50/2.363	
Liquid pipe diameter	mm (inch)	9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")	
Pipe lenght with gas standard charge	m	7.5	
Max. pipe lenght with additional charge	m	75	
Additional refrigerant charge	g/m	35	
Max. height difference (Outdoor above)	m	30	
Max. height difference (Indoor above)	m	30	
Panel code to match		398100677	
Indoor net dimension without panel (H./W./D.)	mm	290/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	342/950/950	
Outdoor net dimension (H./W./D.)	mm	960/990/370	
Indoor unit without panel/Outdoor unit net weight	kg	26/94	
Panel net weight	kg	9.5	

OPERATING RANGE: outdoor temperature

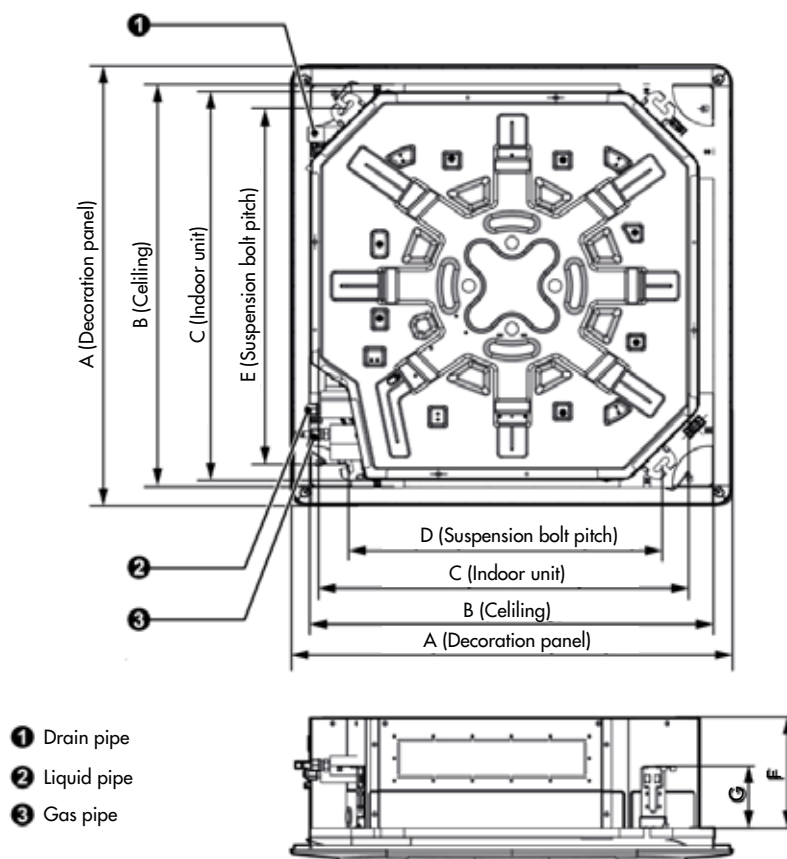
Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

INDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)								
	A	B	C	D	E	F	G	H	I
ASG ECO PLUS 50PH	950	890	840	680	780	200	135	-	-
ASG ECO PLUS 71PH	950	890	840	680	780	200	135	-	-
ASG ECO PLUS 85PH	950	890	840	680	780	200	135	-	-
ASG ECO PLUS 100PH	950	890	840	680	780	240	135	-	-
ASG ECO PLUS 140PH	950	890	840	680	780	290	135	-	-
ASG ECO PLUS 160PH	950	890	840	680	780	290	135	-	-

ACCESSORY FOR FRESH AIR INTAKE



Code	Model
398800101	Fresh air ASG

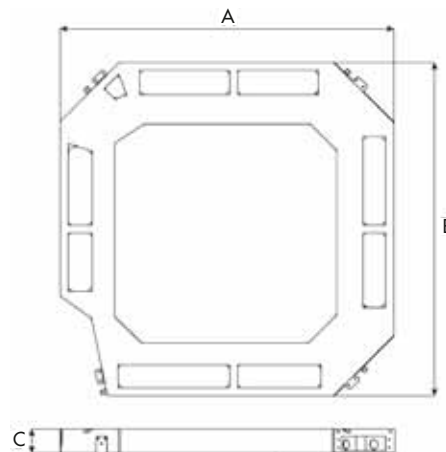
Thanks to this accessory, which can be combined with boxes that deliver air over 360°, it is possible to effectively introduce 8%-10% fresh air into the room.

Made of metal and ABS, it is lightweight and resistant, straightforward and easy to install; the double air intakes exploit the pressure difference principle and can automatically introduce fresh air, improving the air quality in the room.

Features	Unit	Value
Air intake volume	%	10
Net dimensions (WxDxH) without packaging	mm	834x834x60
Net dimensions (WxDxH) with packaging	mm	873x873x180
Connection dimensions	mm	150
	pieces	2
Net / gross weight	kg	2.7/7.7

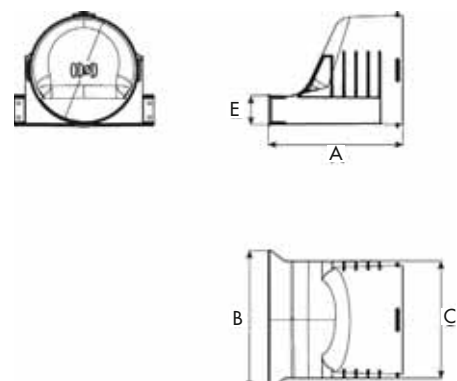
APPEARANCE AND DIMENSIONS OF THE OUTER MAIN BODY

Dimensional data (mm)		
A	B	C
834	834	60

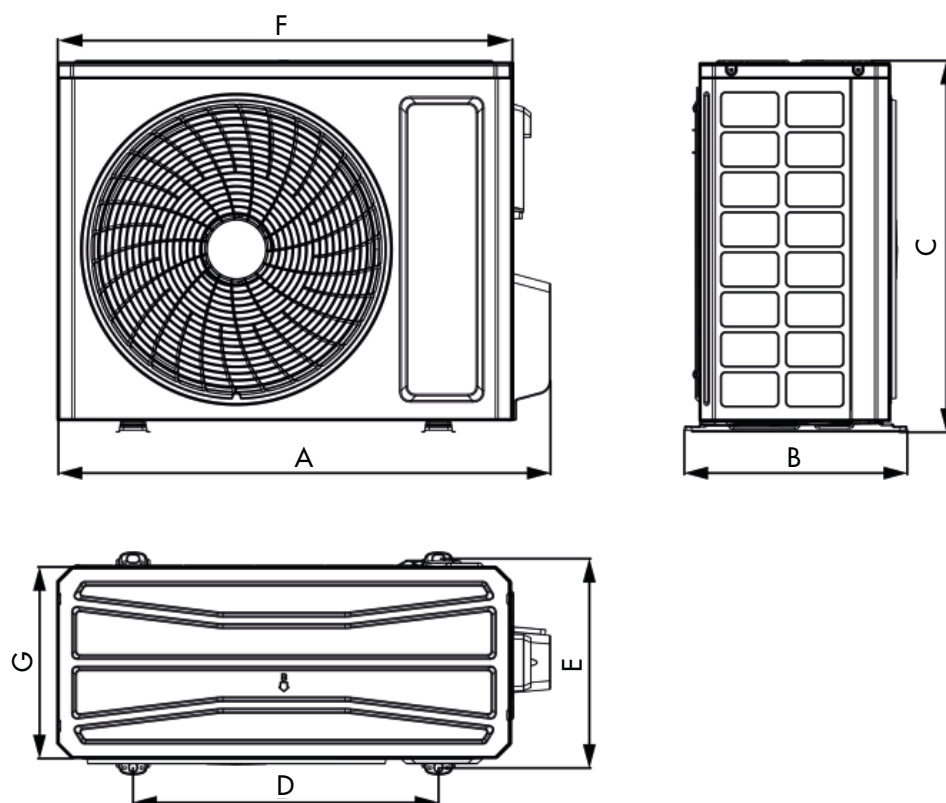


APPEARANCE AND DIMENSIONS OF THE FRESH AIR INTAKE

Dimensional data (mm)				
A	B	C	D	E
183	190	160	150	38



OUTDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 50PIH	802	350	555	512	331	745	300
AEG ECO PLUS 71PIH	958	402	660	570	371	889	340
AEG ECO PLUS 85PIH	958	402	660	570	371	889	340
AEG ECO PLUS 100PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 100PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 160PIH3	1020	427	960	755	396	990	370

NOTES



DUCTED

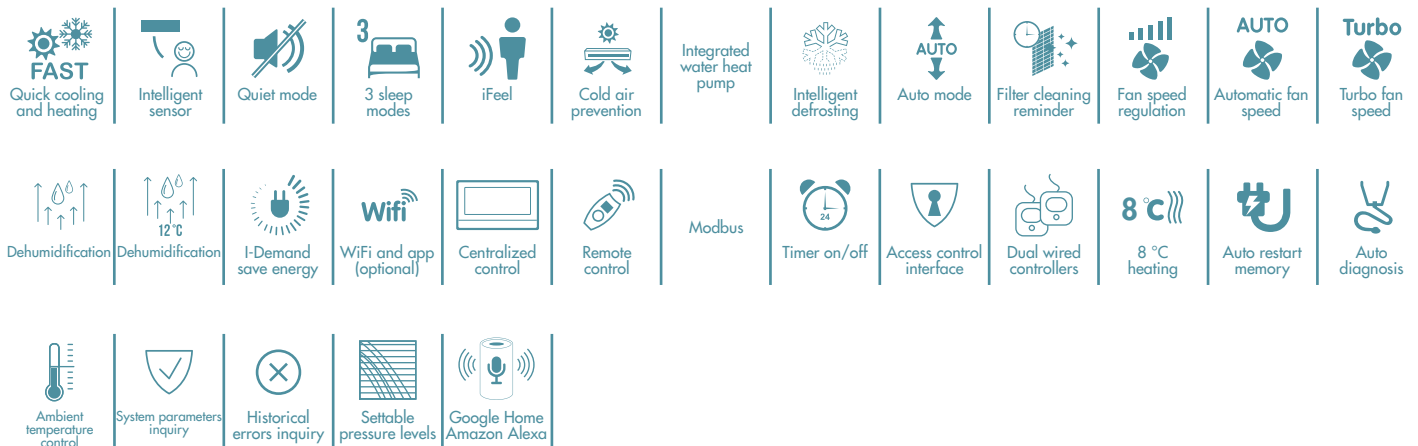
Slim ducted

High static pressure ducted

SLIM DUCTED



- Slim ducted units for light commercial/industrial applications.
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.
- Ultra-thin, these units are characterized by an air discharge design optimized to minimize the sound level and improve performance.
- The thickness is only 200 mm and the width 450 mm: these units are among the thinnest on the market.
- The special design of the evaporating coil (V-shape), covered by a patent, favors a more effective exchange of air.
- The centrifugal fan is also characterized by a patented design and allows higher air flow and greater silence.
- The external static pressure reaches 80 Pa, with 5 selectable levels, according to different needs, ensuring maximum adaptability to different types of installation.
- The combination with the wired control allows to optimize the external static pressure according to the different technical installation requirements.
- The condensate drain pump is integrated for a height difference up to 1000 mm.
- You can choose between rear or bottom air intake.
- The DC motor ensures energy saving and high efficiency.
- Double room temperature sensor for a customizable comfort: possibility to select the sensor of return air temperature on the unit or of the sensor of temperature on the wired control.
- Connection to fresh air intake from outdoors is possible.
- High energy efficiency, at all capacities, both in cooling and heating modes, especially with a view to operating 365 days a year (seasonal efficiency).
- The special closing system of the refrigerant valve prevents and avoids the risk of refrigerant leaks from inappropriate maintenance.
- Optional WiFi, with wired controller, accessory that can be ordered separately.



A++ Cooling

A+ Heating

TECHNICAL DATA-MATCHING WITH SLIM DUCTED UNITS

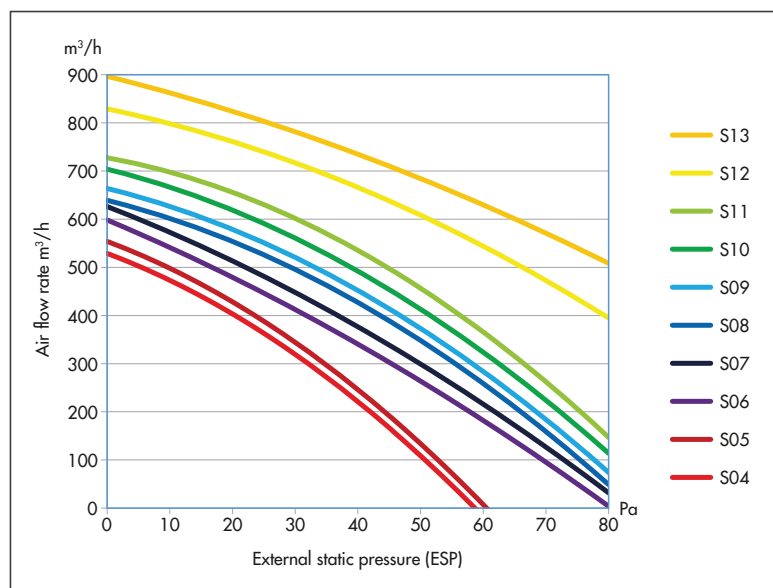
Indoor unit model		ADG ECO PLUS 35PH		ADG ECO PLUS 50PH	
Outdoor unit model		AEG ECO PLUS 35PIH		AEG ECO PLUS 50PIH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	3.50 (0.90-4.00)	4.00 (0.90-4.50)	5.30 (1.60-5.80)	5.60 (1.60-6.10)
	BTU/h	12000	13600	18000	19100
EER/COP (EN14511)		3.40	4.00	3.50	3.95
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	3.5	3.0	5.3	3.9
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		6.5	4.0	6.3	4.0
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	189	1050	294	1365
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	600-550-500-400		900-800-700-600	
Dehumidification	l/h	1.0		1.7	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	35-33-32-30		36-35-33-31	
Sound pressure Outdoor (h.)	dB(A)	56		59	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	48-45-43-41		52-51-48-45	
Sound power Outdoor (h.)	dB(A)	56		65	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Nominal rated external static pressure	Pa	25		25	
Rated external static pressure (range)	Pa	0-80		0-80	
Power input	kW	1.03	1.00	1.51	1.42
Maximum electrical power input	kW/A	1.30/6.00		1.90/9.50	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.57/0.39		0.85/0.57	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		12.70 (1/2")	
Pipe length with gas standard charge	m	5		5	
Max. pipe length with additional charge	m	30		30	
Additional refrigerant charge	g/m	16		16	
Max. height difference (Outdoor above)	m	15		20	
Max. height difference (Indoor above)	m	15		20	
Indoor net dimension (H./W./D.)	mm	200/700/450		200/1000/450	
Outdoor net dimension (H./W./D.)	mm	553/675/285		555/745/300	
Net weight Indoor/Outdoor	kg	18/24.5		24/30.5	

OPERATING RANGE: outdoor temperature
Cooling mode: from -20 °C to +52 °C
Heating mode: from -20 °C to +24 °C
RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

STATIC PRESSURE CURVES

ADG ECO PLUS 35PH - static pressure curves

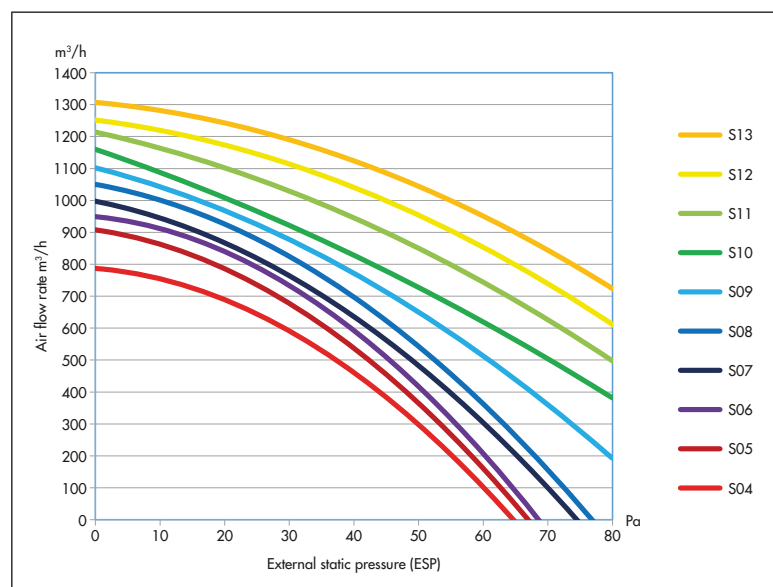


External static pressure	Turbo speed	High	Medium	Low
P03	S09	S08	S06	S04
P04	S10	S09	S07	S05
P05*	S11	S10	S08	S06
P06	S12	S11	S09	S07
P07	S13	S12	S10	S08

* Default static pressure level

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 5 are the adjustable external static pressure levels.

ADG ECO PLUS 50PH - static pressure curves

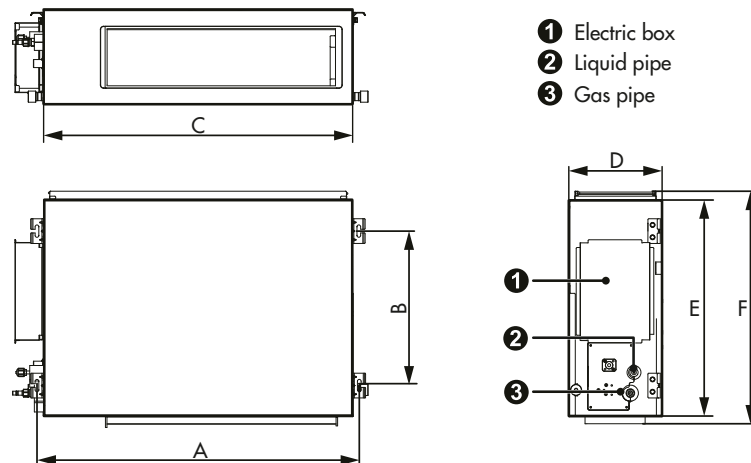


External static pressure	Turbo speed	High	Medium	Low
P03	S09	S08	S06	S04
P04	S10	S09	S07	S05
P05*	S11	S10	S08	S06
P06	S12	S11	S09	S07
P07	S13	S12	S10	S08

* Default static pressure level

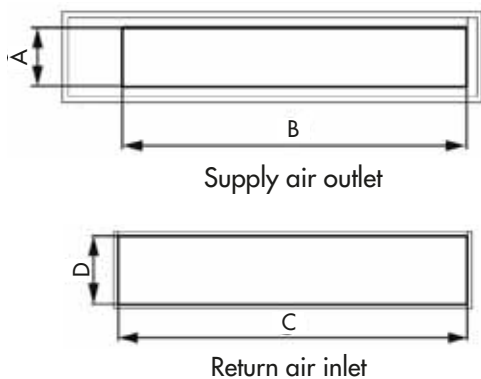
The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 5 are the adjustable external static pressure levels.

INDOOR UNITS DIMENSIONAL DRAWINGS



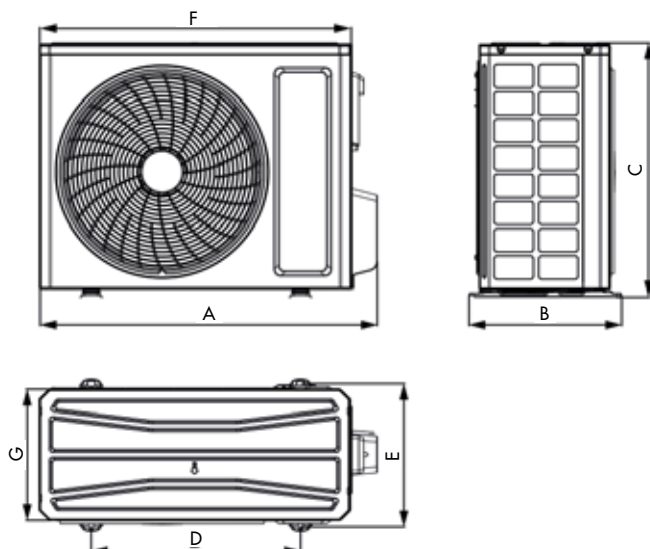
MODEL	DIMENSIONS (mm)					
	A	B	C	D	E	F
AEG ECO PLUS 35PIH	760	415	700	200	450	474
AEG ECO PLUS 50PIH	1060	415	1000	200	450	474

SUPPLY AIR OUTLET/RETURN AIR INLET DIMENSIONAL DRAWING



MODEL	SUPPLY AIR OUTLET		RETURN AIR INLET	
	A	B	C	D
ADG ECO PLUS 35PH	122	585	700	200
ADG ECO PLUS 50PH	122	885	1000	200

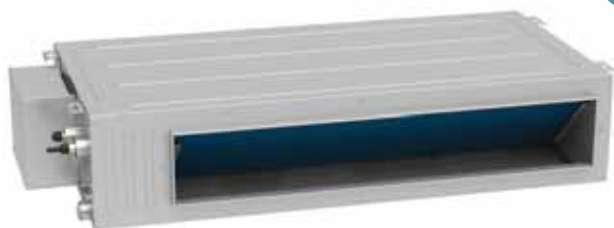
OUTDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 35PIH	732	330	553	455	310	675	285
AEG ECO PLUS 50PIH	802	350	555	512	331	745	300

DUCTED

HIGH STATIC PRESSURE



SWC7AV (Standard)
398700039
Wired controller
with WiFi



IRC1F7C (Optional)
398100678
Infrared remote
controller

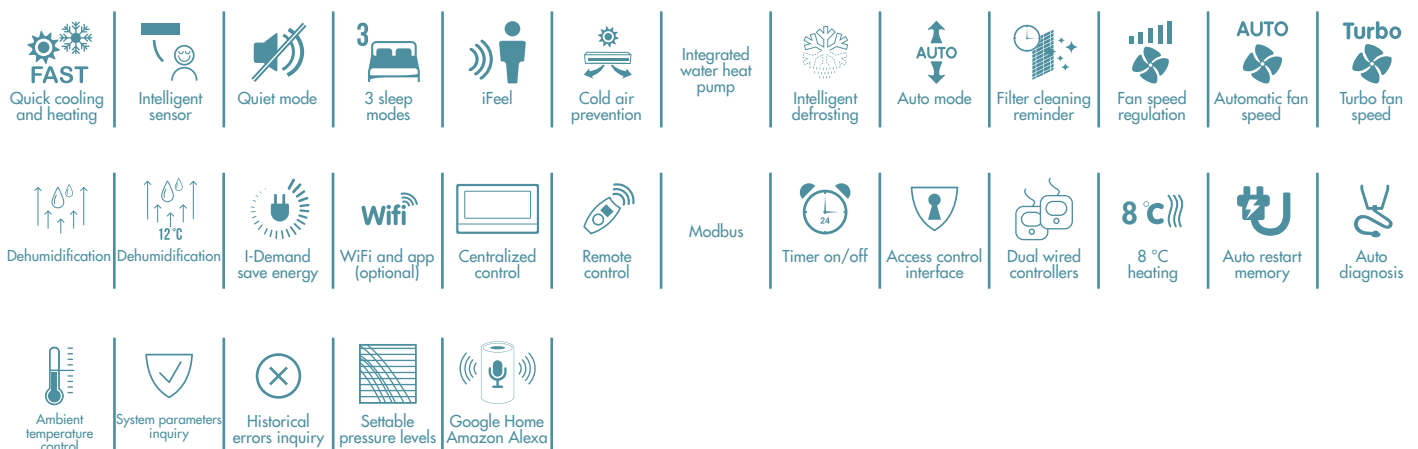


SWC52V (Optional)
398800104
Centralized controller
up 36 units
(it requires wired
controller)



EIXEGP (Optional)
398100683
Gateway Modbus

- High static pressure ducted units for light commercial/industrial applications.
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.
- Compact in design, these units have depths of only 260 mm; the 71 and 85 models have a width of only 900 mm, which makes them easy to integrate even in buildings with small ceilings.
- The special design of the evaporating coil (V-shape), covered by a patent, favors a more effective exchange of air.
- The centrifugal fan is also characterized by a patented design and allows higher air flow and greater silence.
- The external static pressure reaches 200 Pa, with 9 selectable levels (models 140-160), according to different needs, ensuring maximum adaptability to different types of installation.
- The combination with the wired controller allows to optimize the external static pressure according to the different technical installation requirements.
- The condensate drain pump is integrated for a height difference of up to 1000 mm.
- You can choose between rear or bottom air intake.
- The DC motor ensures energy saving and high efficiency.
- Double room temperature sensor for a customizable comfort: possibility to select the sensor of return air temperature on the unit or of the sensor of temperature on the wired control.
- Connection to a fresh air intake from outdoors is possible.
- High energy efficiency, at all capacities, both in cooling and heating modes, especially with a view to operating 365 days a year (seasonal efficiency).
- The special closing system of the refrigerant valve prevents and excludes the risk of gas leaks due to inappropriate maintenance.
- Optional WiFi, with wired controller, accessory that can be ordered separately.



A++ Cooling

A+ Heating

TECHNICAL DATA-MATCHING WITH SLIM DUCTED UNITS

Indoor unit model		ADG ECO PLUS 71PH		ADG ECO PLUS 85PH	
Outdoor unit model		AEG ECO PLUS 71PIH		AEG ECO PLUS 85PIH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	7.10 (2.40-7.60)	8.00 (2.20-8.60)	8.50 (2.90-9.00)	8.80 (2.50-9.50)
	BTU/h	24200	27200	29000	30000
EER/COP (EN14511)		3.70	4.00	3.40	3.90
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	7.1	4.7	8.5	6.0
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		6.6	4.1	6.4	4.1
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	377	1605	465	2049
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	1100-1000-900-800		1400-1300-1100-1000	
Dehumidification	l/h	2.4		2.8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	37-35-33-31		43-41-39-37	
Sound pressure Outdoor (h.)	dB(A)	58		65	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	55-54-53-52		57-54-52-50	
Sound power Outdoor (h.)	dB(A)	69		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Nominal rated external static pressure	Pa	25		37	
Rated external static pressure (range)	Pa	0-160		0-160	
Power input	kW	1.92	2.00	2.50	2.25
Maximum electrical power input	kW/A	2.80/14.00		3.30/15.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	1.5/1.01		1.5/1.01	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Pipe lenght with gas standard charge	m	5		5	
Max. pipe lenght with additional charge	m	50		50	
Additional refrigerant charge	g/m	20		20	
Max. height difference (Outdoor above)	m	25		25	
Max. height difference (Indoor above)	m	25		25	
Indoor net dimension (H./W./D.)	mm	260/900/655		260/900/655	
Outdoor net dimension (H./W./D.)	mm	660/889/340		660/889/340	
Net weight Indoor/Outdoor	kg	29.5/41.5		29.5/46	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

TECHNICAL DATA

Indoor unit model		ADG ECO PLUS 100PH		ADG ECO PLUS 100PH	
Outdoor unit model		AEG ECO PLUS 100PIH		AEG ECO PLUS 100PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	10.50 (3.20-11.00)	11.50 (3.00-12.50)	10.50 (3.20-11.00)	11.50 (3.00-12.50)
	BTU/h	35800	39200	35800	39200
EER/COP (EN14511)		3.50	4.10	3.50	4.10
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	10.5	7.0	10.5	7.0
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		6.4	4.2	6.4	4.2
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	574	2333	574	2333
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	1700-1600-1400-1200		1700-1600-1400-1200	
Dehumidification	l/h	3.3		3.3	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	39-38-37-36		39-38-37-36	
Sound pressure Outdoor (h.)	dB(A)	62		62	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	57-55-53-49		57-55-53-49	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		380-415~/3/50/60	
Nominal rated external static pressure	Pa	37		37	
Rated external static pressure (range)	Pa	0-160		0-160	
Power input	kW	3.00	2.80	3.00	2.80
Maximum electrical power input	kW/A	4.70/21.00		4.40/7.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.1/1.42		2.1/1.42	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Pipe lenght with gas standard charge	m	5		5	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	20		20	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Indoor net dimension (H./W./D.)	mm	260/1340/655		260/1340/655	
Outdoor net dimension (H./W./D.)	mm	820/940/370		820/940/370	
Net weight Indoor/Outdoor	kg	43/65		43/75	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

Indoor unit model		ADG ECO PLUS 140PH		ADG ECO PLUS 140PH	
Outdoor unit model		AEG ECO PLUS 140PIH		AEG ECO PLUS 140PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	13.40 (4.00-14.20)	15.50 (3.90-16.00)	13.40 (4.00-14.20)	15.50 (3.90-16.00)
	BTU/h	45700	52800	45700	52800
EER/COP (EN14511)		2.91	3.30	2.91	3.30
Rated capacity (Prated,c/Prated,h)*	kW	13.40	15.50	13.40	15.50
Seasonal space energy efficiency (ηs,c/ηs,h)*		250.4	158.8	250.4	158.8
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	2200-2000-1730-1490		2200-2000-1730-1490	
Dehumidification	l/h	3.9		3.9	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	43-42-40-38		43-42-40-38	
Sound pressure Outdoor (h.)	dB(A)	67		67	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	59-57-46-44		59-57-46-44	
Sound power Outdoor (h.)	dB(A)	75		75	
Power supply	V/Ph/Hz	220-240~/1/50/60		380-415~/3/50/60	
Nominal rated external static pressure	Pa	50		50	
Rated external static pressure (range)	Pa	0-160		0-160	
Power input	kW	4.60	4.70	4.60	4.70
Maximum electrical power input	kW/A	5.60/25.00		5.60/11.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.8/1.89		2.8/1.89	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Pipe lenght with gas standard charge	m	7.5		7.5	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	35		35	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Indoor net dimension (H./W./D.)	mm	300/1400/700		300/1400/700	
Outdoor net dimension (H./W./D.)	mm	820/940/370		820/940/370	
Net weight Indoor/Outdoor	kg	52/73		52/81	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

TECHNICAL DATA

Indoor unit model		ADG ECO PLUS 160PH	
Outdoor unit model		AEG ECO PLUS 160PIH3	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	16.00 (4.80-17.00)	17.00 (4.50-18.00)
	BTU/h	54500	58000
EER/COP (EN14511)		2.96	3.62
Rated capacity (Prated,c/Prated,h)*	kW	16.00	17.00
Seasonal space energy efficiency (ηs,c/ηs,h)*		234.4	151.0
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	2600-2300-2000-1700	
Dehumidification	l/h	4,6	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	44-42-41-40	
Sound pressure Outdoor (h.)	dB(A)	60	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	70-67-55-54	
Sound power Outdoor (h.)	dB(A)	75	
Power supply	V/Ph/Hz	380-415~/3/50/60	
Nominal rated external static pressure	Pa	50	
Rated external static pressure (range)	Pa	0-200	
Power input	kW	5.40	4.70
Maximum electrical power input	kW/A	6.80/12.00	
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	3.5/2.363	
Liquid pipe diameter	mm (inch)	9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")	
Pipe lenght with gas standard charge	m	7.5	
Max. pipe lenght with additional charge	m	75	
Additional refrigerant charge	g/m	35	
Max. height difference (Outdoor above)	m	30	
Max. height difference (Indoor above)	m	30	
Indoor net dimension (H./W./D.)	mm	300/1400/700	
Outdoor net dimension (H./W./D.)	mm	960/990/370	
Net weight Indoor/Outdoor	kg	55/94	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

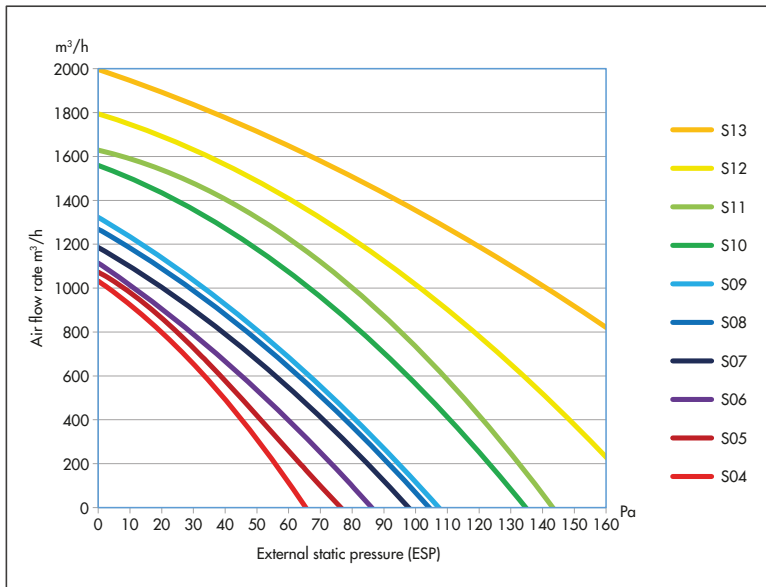
Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

STATIC PRESSURE CURVES

ADG ECO PLUS 71PH - static pressure curves



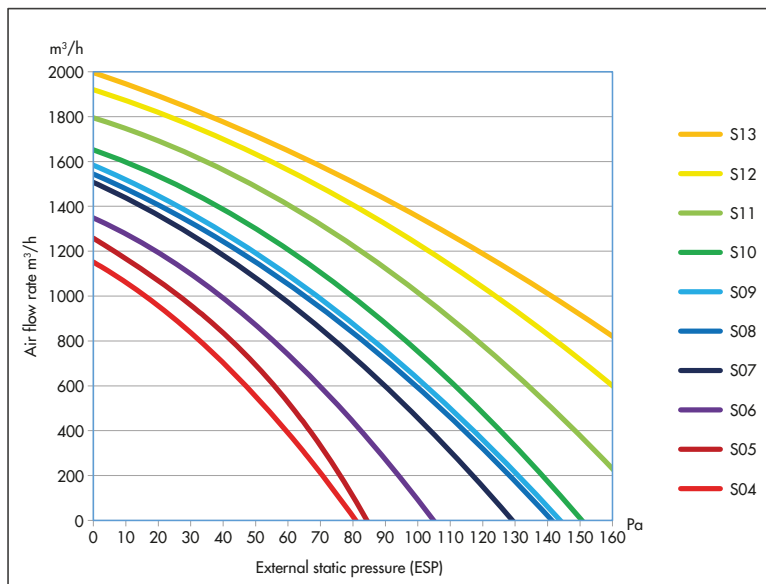
External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* Default static pressure level

AIR
CONDITIONERS

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 9 are the adjustable external static pressure levels.

ADG ECO PLUS 85PH - static pressure curves



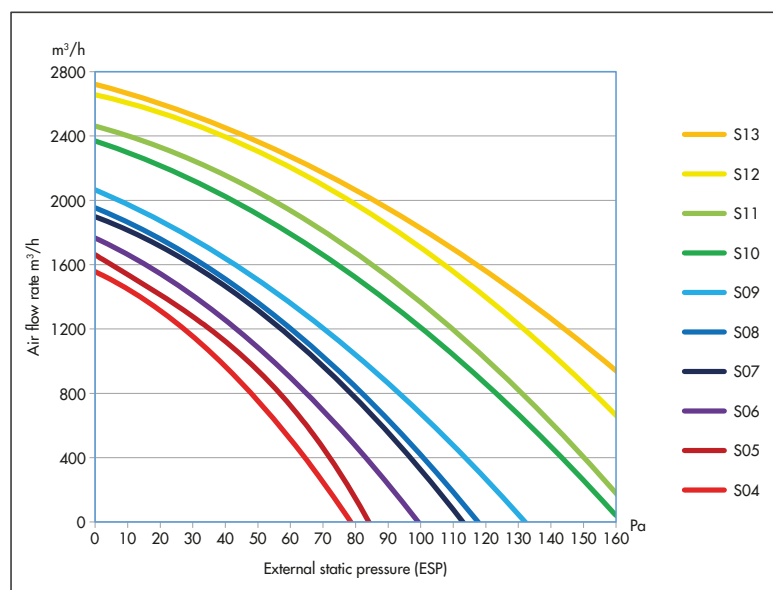
External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* Default static pressure level

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 9 are the adjustable external static pressure levels.

STATIC PRESSURE CURVES

ADG ECO PLUS 100PH - static pressure curves

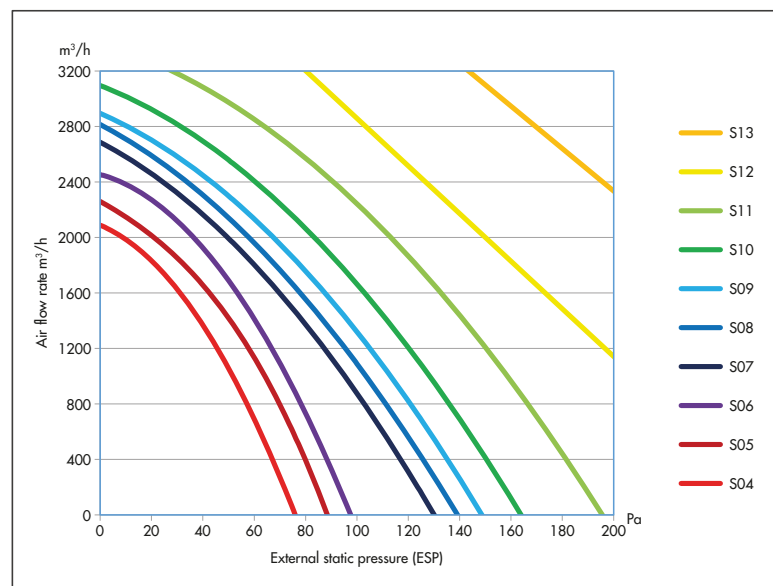


External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* Default static pressure level

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 9 are the adjustable external static pressure levels.

ADG ECO PLUS 140PH - static pressure curves

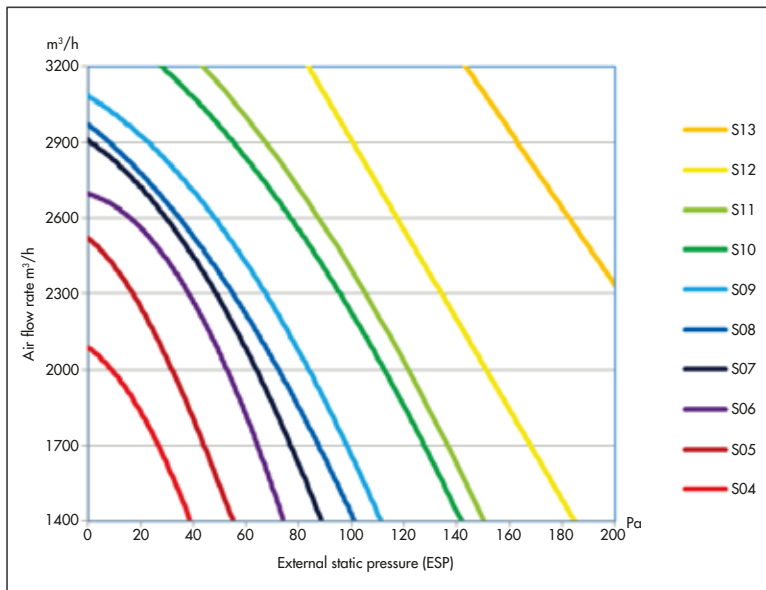


External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* Default static pressure level

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 9 are the adjustable external static pressure levels.

ADG ECO PLUS 160PH - static pressure curves

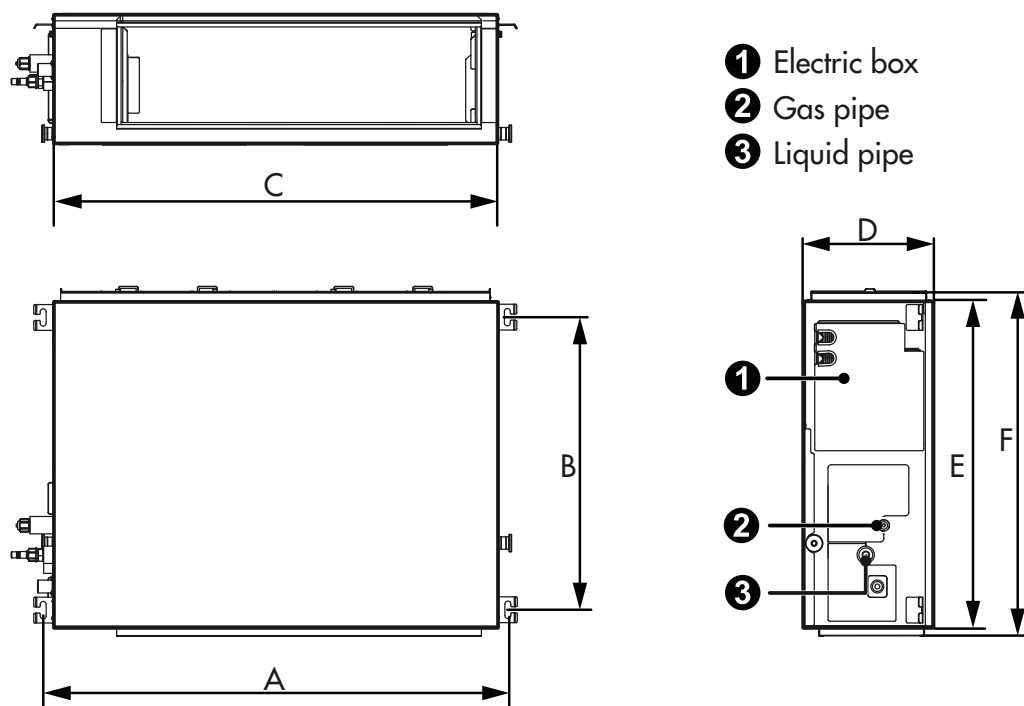


External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* Default static pressure level

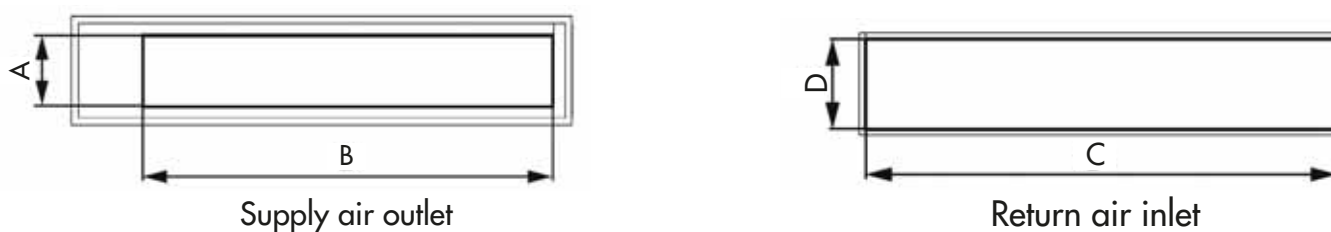
The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds. 9 are the adjustable external static pressure levels.

INDOOR UNITS DIMENSIONAL DRAWINGS



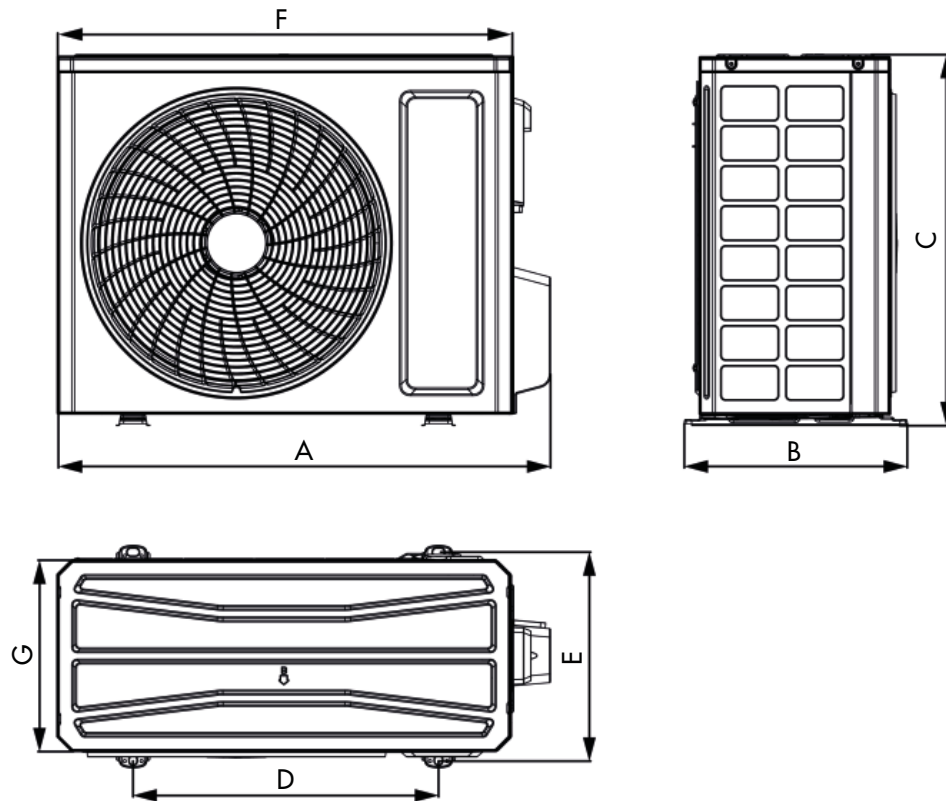
MODEL	DIMENSIONS (mm)					
	A	B	C	D	E	F
ADG ECO PLUS 71PH	942	590	900	260	655	692
ADG ECO PLUS 85PH						
ADG ECO PLUS 100PH	1381	585	1340	260	655	697
ADG ECO PLUS 140PH	1440	500	1400	300	700	754
ADG ECO PLUS 160PH						

SUPPLY AIR OUTLET/RETURN AIR INLET DIMENSIONAL DRAWING



MODEL	SUPPLY AIR OUTLET		RETURN AIR INLET	
	A	B	C	D
ADG ECO PLUS 71PH	215	740	871	234
ADG ECO PLUS 85PH	215	740	871	234
ADG ECO PLUS 100PH	215	1153	1188	220
ADG ECO PLUS 140PH	197	1151	1362	264
ADG ECO PLUS 160PH	197	1151	1362	264

OUTDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 71PIH	958	402	660	570	371	889	340
AEG ECO PLUS 85PIH	958	402	660	570	371	889	340
AEG ECO PLUS 100PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 100PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 160PIH3	1020	427	960	755	396	990	370



FLOOR/CEILING

FLOOR/CEILING



IRC1F7C (Standard)
398100678
Infrared remote
controller



SWC7AV (Optional)
398700039
Wired controller
with WiFi



SWC52V (Optional)
398800104
Centralized controller
up 36 units
(it requires wired
controller)

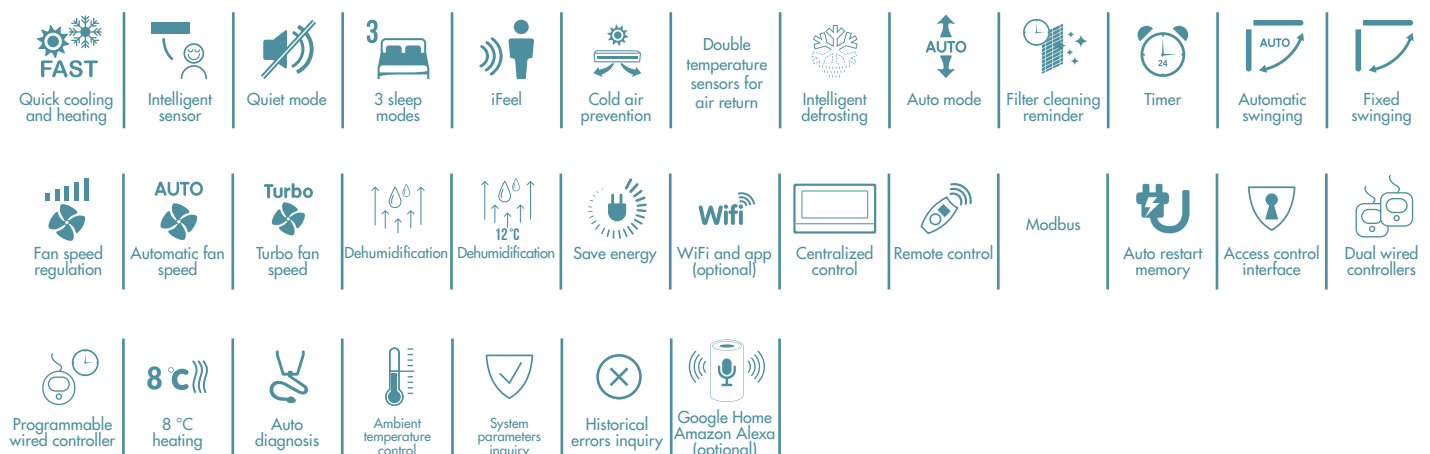


EIXEGP (Optional)
398100683
Gateway Modbus

- Floor or ceiling units for light commercial/industrial applications
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas
- Compact structure: only 235 mm of thickness
- Double flap: when the unit is turned off, the air supply can be completely closed in order to prevent the entry of dust
- The wide oscillation angle of the flap allows the flow of horizontal air delivery (ceiling application): this excludes direct air flows on people in the environment
- There are 3 exit options for the connecting pipes, to facilitate installation in any circumstances
- The design of the electrical box side does not affect the return of

air and facilitates maintenance

- They are equipped with a double room temperature sensor for customizable comfort: possibility of selecting the return air temperature sensor on the unit or the temperature sensor on the wired control
- High energy efficiency, at all powers expressed, both in cold and in heat, especially with a view to operating 365 days a year (seasonal efficiency)
- The special closing system of the refrigerant valve prevents and excludes the risk of gas leaks due to inappropriate maintenance.
- Optional WiFi, with wired control, accessory can be ordered separately.



A++ Cooling

A+ Heating

TECHNICAL DATA MATCHING WITH FLOOR CEILING UNITS

Indoor unit model		ACG ECO PLUS 35PH		ACG ECO PLUS 50PH	
Outdoor unit model		AEG ECO PLUS 35PIH		AEG ECO PLUS 50PIH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	3.50 (0.90-4.00)	4.00 (0.90-4.50)	5.30 (1.60-5.50)	5.60 (1.60-6.10)
	BTU/h	11900	13600	18000	19100
EER/COP (EN14511)		3.80	4.30	3.40	3.90
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	3.80	4.30	5.3	3.9
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		7.2	4.1	6.5	4.2
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	170	1059	285	1300
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	650-580-500-400		900-800-700-600	
Dehumidification	l/h	1.1		1.7	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	39-36-32-28		41-40-38-36	
Sound pressure Outdoor (h.)	dB(A)	48		59	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	49-46-42-38		59-57-54-51	
Sound power Outdoor (h.)	dB(A)	56		65	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Power input	kW	0.92	0.93	1.56	1.44
Maximum electrical power input	kW/A	1.30/6.00		1.90/9.50	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0.57/0.39		0.85/0.57	
Liquid pipe diameter	mm (inch)	6.35 (1/4")		6.35 (1/4")	
Gas pipe diameter	mm (inch)	9.52 (3/8")		12.70 (1/2")	
Min.max. pipe lenght with gas standard charge	m	3-5		3-5	
Max. pipe lenght with additional charge	m	30		30	
Additional refrigerant charge	g/m	16		16	
Max. height difference (Outdoor above)	m	15		20	
Max. height difference (Indoor above)	m	15		20	
Indoor net dimension (H./W./D.)	mm	665/870/235		665/870/235	
Outdoor net dimension (H./W./D.)	mm	553/675/285		555/745/300	
Net weight Indoor/Outdoor	kg	24/24.5		25/30.5	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

TECHNICAL DATA

Indoor unit model		ACG ECO PLUS 71PH		ACG ECO PLUS 85PH	
Outdoor unit model		AEG ECO PLUS 71PIH		AEG ECO PLUS 85PIH	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	7.10 (2.40-7.60)	7.70 (2.20-8.40)	8.50 (2.90-9.00)	8.80 (2.50-9.50)
	BTU/h	24200	26200	29000	30000
EER/COP (EN14511)		3.70	4.00	3.40	3.90
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	7.1	4.7	8.5	6.0
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		7.2	4.3	6.8	4.5
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	345	1530	438	1867
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	1250-1100-1000-900		1400-1300-1200-1000	
Dehumidification	l/h	2.4		2.8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	41-39-37-35		46-45-43-39	
Sound pressure Outdoor (h.)	dB(A)	55		57	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	54-53-50-47		62-60-56-52	
Sound power Outdoor (h.)	dB(A)	69		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		220-240~/1/50/60	
Power input	kW	2.03	1.95	2.50	2.25
Maximum electrical power input	kW/A	2.80/14.00		3.30/15.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	1.5/1.01		1.5/1.01	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	3-5		3-5	
Max. pipe lenght with additional charge	m	50		50	
Additional refrigerant charge	g/m	20		20	
Max. height difference (Outdoor above)	m	25		25	
Max. height difference (Indoor above)	m	25		25	
Indoor net dimension (H./W./D.)	mm	665/1200/235		665/1200/235	
Outdoor net dimension (H./W./D.)	mm	660/889/340		660/889/340	
Net weight Indoor/Outdoor	kg	31/41.5		32/46	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

Indoor unit model		ACG ECO PLUS 100PH		ACG ECO PLUS 100PH	
Outdoor unit model		AEG ECO PLUS 100PIH		AEG ECO PLUS 100PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	10.00 (3.20-11.00)	11.50 (3.00-12.50)	10.00 (3.20-11.00)	11.50 (3.00-12.50)
	BTU/h	34100	39200	34100	39200
EER/COP (EN14511)		3.40	3.90	3.40	3.90
Design Load [Pdesign c/Pdesign h (Average)] (EN14825)*	kW	10.0	7.0	10.0	7.0
Seasonal efficiency ratio [SEER/SCOP (Average)] (EN14825)*		6.3	4.2	6.3	4.2
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption*	kWh/annum	556	2333	556	2333
Air flow rate Indoor (sh.-h.-m.-l.)	m³/h	1600-1500-1400-1200		1600-1500-1400-1200	
Dehumidification	l/h	3.3		3.3	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	48-46-45-43		48-46-45-43	
Sound pressure Outdoor (h.)	dB(A)	55		55	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	65-63-61-59		65-63-61-59	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		380-415~/3/50/60	
Power input	kW	2.94	2.95	2.94	2.95
Maximum electrical power input	kW/A	4.70/21.00		4.40/7.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.10/1.42		2.1/1.42	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	5-7		5-7	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	20		20	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Indoor net dimension (H./W./D.)	mm	665/1200/235		665/1200/235	
Outdoor net dimension (H./W./D.)	mm	820/940/370		820/940/370	
Net weight Indoor/Outdoor	kg	32/65		32/75	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

TECHNICAL DATA

Indoor unit model		ACG ECO PLUS 140PH		ACG ECO PLUS 140PH	
Outdoor unit model		AEG ECO PLUS 140PIH		AEG ECO PLUS 140PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal capacity (min.-max.) (EN14511)	kW	13.40 (4.00-14.20)	15.50 (3.90-16.00)	13.40 (4.00-14.20)	15.50 (3.90-16.00)
	BTU/h	45700	52800	45700	52800
EER/COP (EN14511)		3.12	3.69	3.12	3.52
Rated capacity (Prated,c/Prated,h)*		13.40	15.50	13.40	15.50
Seasonal space energy efficiency ($\eta_{s,c}/\eta_{s,h}$)*	%	254.7	163.6	253.0	158.2
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	2300-2100-1800-1500		2300-2100-1800-1500	
Dehumidification	l/h	3.9		3.9	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	51-48-45-43		51-48-45-43	
Sound pressure Outdoor (h.)	dB(A)	59		59	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	67-65-63-59		67-65-63-59	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240~/1/50/60		380-415~/3/50/60	
Power input	kW	4.30	4.20	4.30	4.40
Maximum electrical power input	kW/A	5.60/25.00		5.60/11.00	
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.8/1.89		2.8/1.89	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")		15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	7.5-9.5		7.5-9.5	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	35		35	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Indoor net dimension (H./W./D.)	mm	665/1570/235		665/1570/235	
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460	
Net weight Indoor/Outdoor	kg	42/73		42/95	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

Indoor unit model		ACG ECO PLUS 160PH	
Outdoor unit model		AEG ECO PLUS 160PIH3	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	16.00 (4.80-17.00)	17.00 (4.50-18.00)
	BTU/h	54500	58000
EER/COP (EN14511)		3.02	3.54
Rated capacity (Prated,c/Prated,h)*		16.0	17.0
Seasonal space energy efficiency (ηs,c/ηs,h)*	%	235.5	153.9
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	2400-2200-1900-1600	
Dehumidification	l/h	4.8	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	54-49-48-44	
Sound pressure Outdoor (h.)	dB(A)	60	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	68-66-62-58	
Sound power Outdoor (h.)	dB(A)	75	
Power supply	V/Ph/Hz	380-415~/3/50/60	
Power input	kW	5.40	5.40
Maximum electrical power input	kW/A	6.80/12.00	
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	3.5/2.363	
Liquid pipe diameter	mm (inch)	9.52 (3/8")	
Gas pipe diameter	mm (inch)	15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	7.5-9.5	
Max. pipe lenght with additional charge	m	75	
Additional refrigerant charge	g/m	35	
Max. height difference (Outdoor above)	m	30	
Max. height difference (Indoor above)	m	30	
Indoor net dimension (H./W./D.)	mm	665/1570/235	
Outdoor net dimension (H./W./D.)	mm	960/990/370	
Net weight Indoor/Outdoor	kg	42/94	

OPERATING RANGE: outdoor temperature

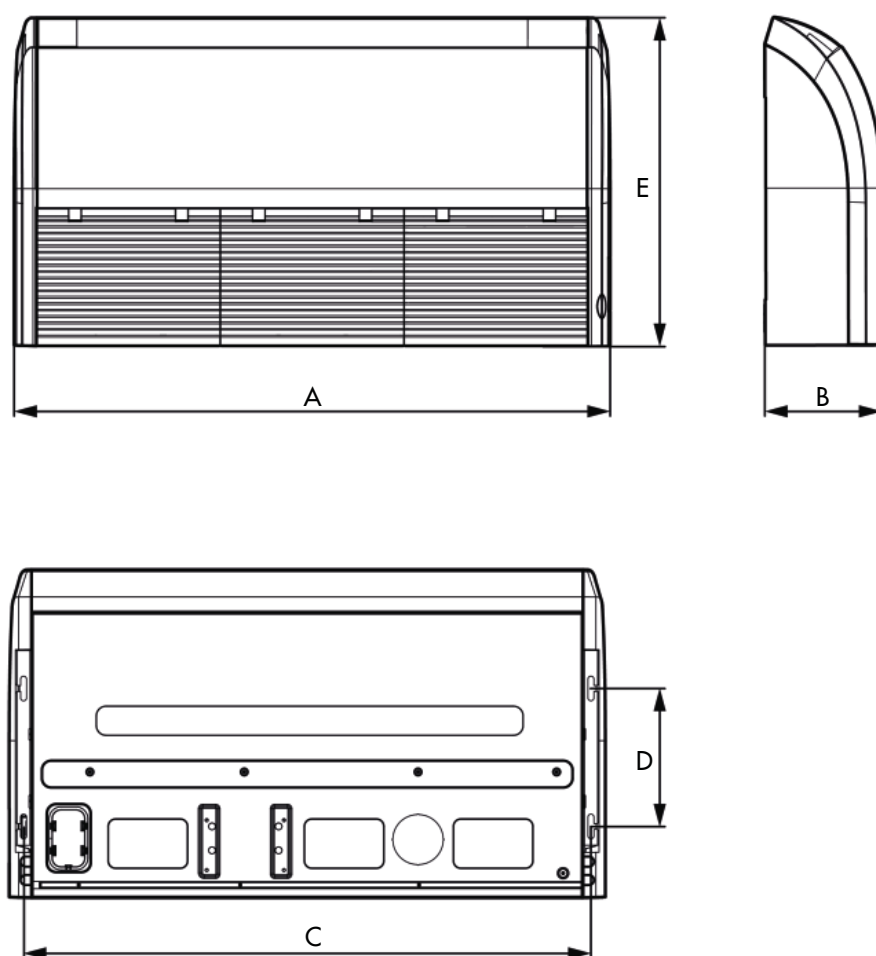
Cooling mode: from -20 °C to +52 °C

Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

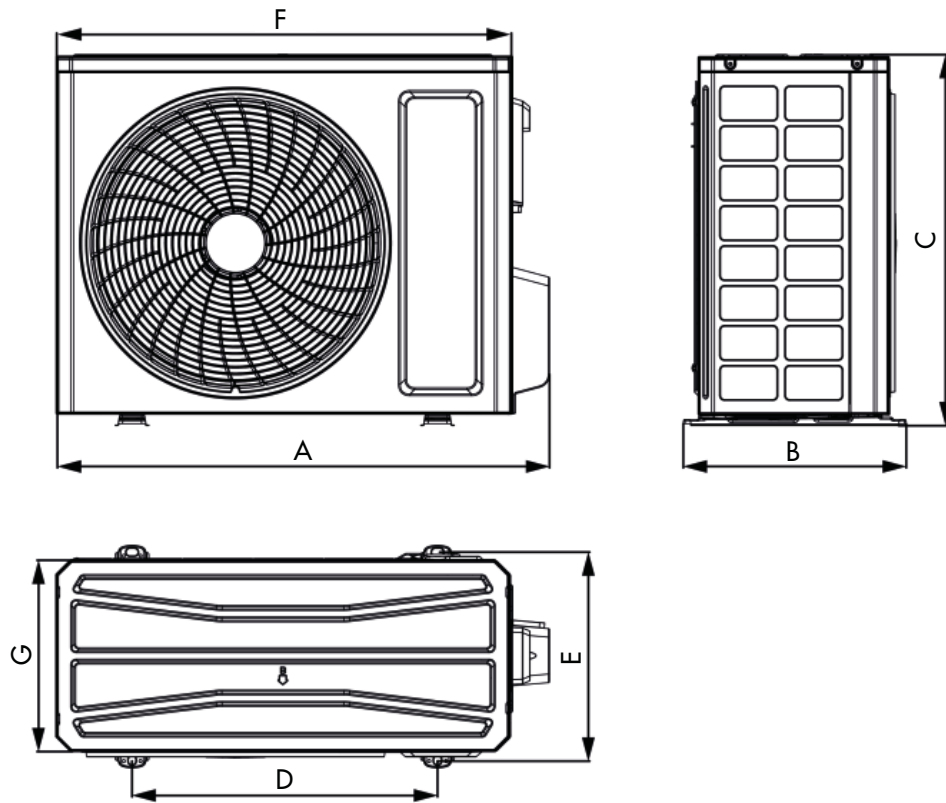
*Data declared in accordance with COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

INDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)				
	A	B	C	D	E
ACG ECO PLUS 35PH	870	235	812	280	665
ACG ECO PLUS 50PH	870	235	812	280	665
ACG ECO PLUS 71PH	1200	235	1142	280	665
ACG ECO PLUS 85PH	1200	235	1142	280	665
ACG ECO PLUS 100PH	1200	235	1142	280	665
ACG ECO PLUS 140PH	1570	235	1512	280	665
ACG ECO PLUS 160PH	1570	235	1512	280	665

OUTDOOR UNITS DIMENSIONAL DRAWING



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AEG ECO PLUS 35PIH	732	330	553	455	310	675	285
AEG ECO PLUS 50PIH	802	350	555	512	331	745	300
AEG ECO PLUS 71PIH	958	402	660	570	371	889	340
AEG ECO PLUS 85PIH	958	402	660	570	371	889	340
AEG ECO PLUS 100PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 100PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH	1020	427	820	635	396	940	370
AEG ECO PLUS 140PIH3	1020	427	820	635	396	940	370
AEG ECO PLUS 160PIH3	1020	427	960	755	396	990	370

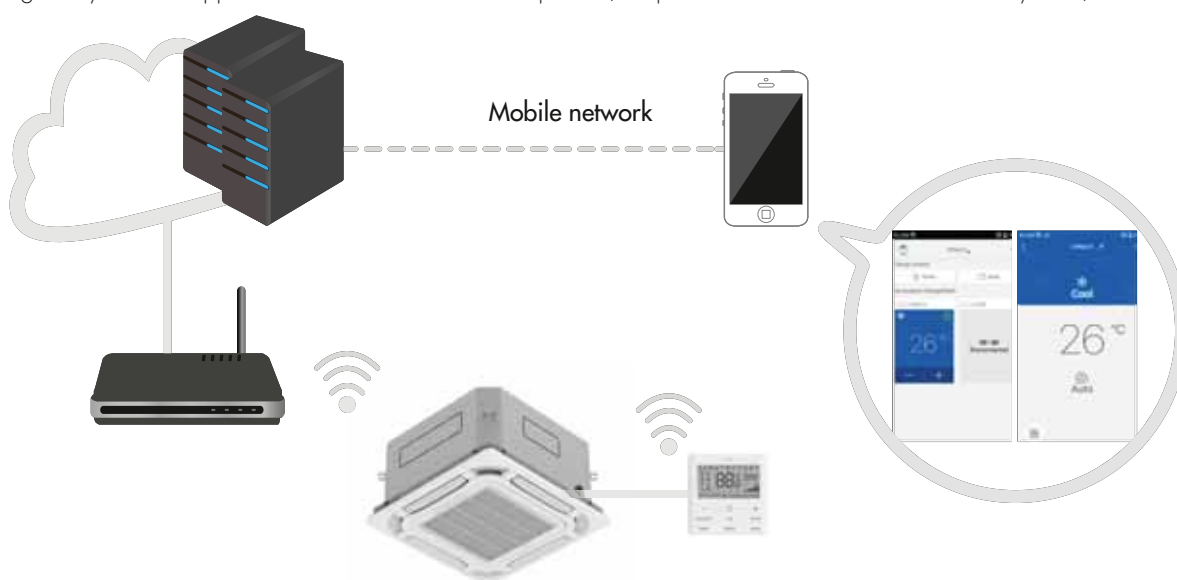


CONTROL SYSTEMS

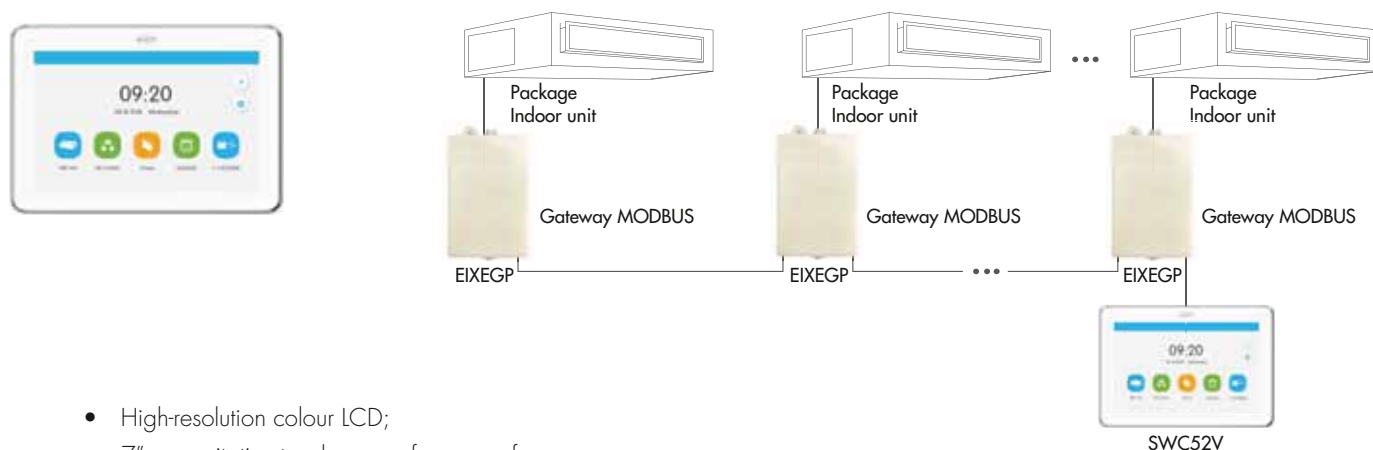
CONTROL SYSTEMS

1 398700040 - STANDARD WIRED CONTROLLER

Long distance WiFi control can be made through wired controller with WiFi. This controller must be purchased separately. The units thus equipped with this controller can be controlled remotely, through a dedicated APP (EWPE), easy to be downloaded from Google Play store or Apple store to be installed on smartphone (compatible with both Android and iOS systems).

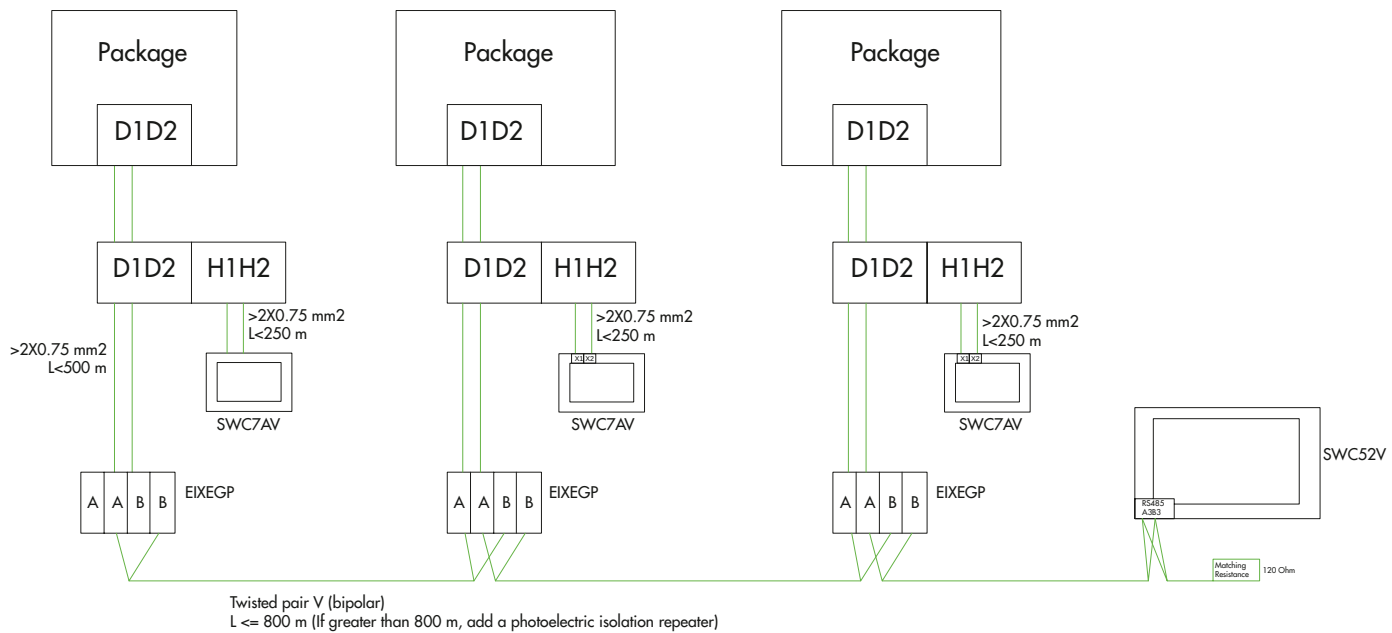


2 398800104 -SWC52V - CENTRALIZED CONTROLLER UP TO 36 UNITS



- High-resolution colour LCD;
- 7" capacitive touch screen for ease of use;
- Function: control and management of up to 36 connectable indoor units;
- Basic controls: on/off, mode, fan, heating, cooling, etc;
- All indoor units (max 36) must be equipped with MODBUS Gateway to allow communication with centralized control;
- Built-in wall-mounted installation with a mere 11 mm protrusion;
- Independent power supply in a broad range of voltages between 110 V and 240 V.
- Shielding function of the single unit, of a group and of all indoor units;
- Equipped with the parameter visualisation, fault recording and access management functions;
- Equipped with various functions: centralized control (controls all indoor units), group management (grouping of certain units), programming management (setting of various programmes) and control of the single unit;
- Dimensions (HxVxD): 128,2 mmx185,2 mmx54 mm

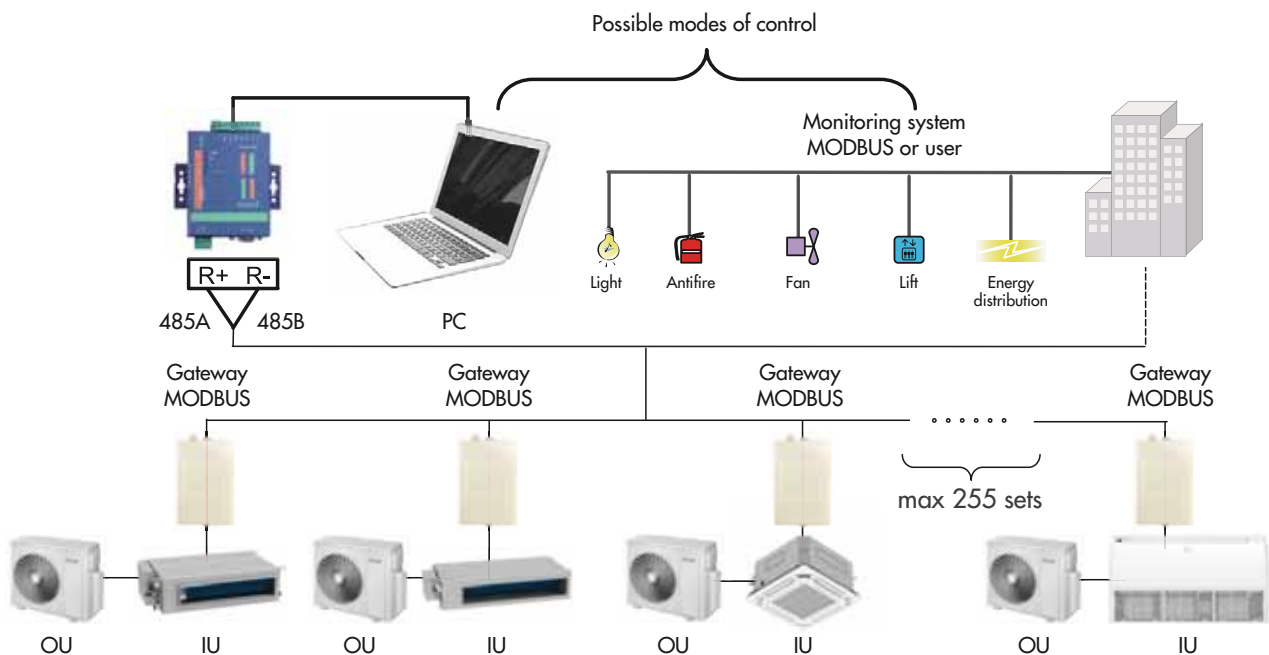
CENTRALIZATION SCHEME



AIR
CONDITIONERS

3 398100683 - EIXEGP - REMOTE CONTROL THROUGH MODBUS GATEWAY

All the indoor units must be equipped with MODBUS Gateway to connect the BMS. It's possible to connect up to 255 units to the same network.



CONTROL SYSTEMS

4 398100683 - EIXEGP - GATEWAY MODBUS

Dimensions (HxWxD): 54 mmx102 mmx20 mm

MODBUS Gateway interface module to connect indoor units to centralized control FCA or to a BMS.



5 DOUBLE WIRED CONTROL

The indoor unit can be controlled by two wired controllers to facilitate the management in specific applications.

Applicable to all types of indoor units.



6 398700041 - EIX60V - ACCESS CONTROL SYSTEM INTERFACE

This interface allows, among its different functionalities, control unit switch ON/OFF according to door opening/closing through a card.



7 398700042 - EIXH1V - DRY CONTACT GATEWAY

The unit will be easily controlled through the dry contact Gateway.

Input signal: on/off, operation mode (heating/cooling), force off signal in the unit;

Output signal: on status, operation mode (heating/cooling), error output; on/off cold plasma and on off ventilation;ventilazione;



CONTROLS

	Code	Model	Description	Cassette	Ducted	Floor ceiling
	398700040	-	Standard wired controller		●	
	398700039	SWC7AV	Wired controller with WiFi*	●	●	●
	398100678	IRC1F7C	Infrared remote controller	●	●	●
	398800104	SWC52V	Centralized controller up to 36 units	●	●	●
	398100683	EIXEGP	Gateway Modbus	●	●	●
	398700041	EIX60V	Access control system interface	●	●	●
	398700042	EIXH1V	Dry contact gateway	●	●	●

● Standard control

● Optional control

* Indoor units including this controller as standard are labeled as "WiFi"



HIGH-CAPACITY DUCTED

Air conditioners with high external static pressure -
R410A

HIGH-CAPACITY DUCTED

WITH HIGH EXTERNAL STATIC PRESSURE



R410A
REFRIGERANT
GAS



SWC46V (Standard)
398800086

Wired controller



SWC52V (Optional)
398800104

Centralized controller
up 36 units
(it requires wired
controller)



EIXE7BD (Optional)
398700048

Mini-Modbus
Gateway

Model	Code	Cooling capacity (kW)	Heating capacity (kW)
398700005	ABDGI 20 HW	20	22
398700006	ABDGI 20 SH3	20	22
398700001	ABDGI 25 HW	25	27,5
398700002	ABDGI 25 SH3	25	27,5
398700003	ABDGI 30 HW	30	33
398700004	ABDGI 30 SH3	30	33

- Ducted air conditioners with high external static pressure for the commercial/tertiary sector
- Suitable for shops, offices, meeting rooms, restaurants, clubs, gymnasiums and open-space areas
- High energy efficiency, in both cooling and heating mode, especially when used year-round (seasonal efficiency) thanks to the motors all of the DC inverter type, for maximum comfort and low consumption
- Advanced torque control technology: adopts the optimised control principle for generating the maximum torque delivered with minimum consumption and reducing the loss of the motor winding and the smart power module for improved energy efficiency
- High nominal external static pressure (120 Pa), adjustable to between 0 and 250 Pa, in manual or automatic mode: this is a very important feature for applications requiring a very long air launch
- 9 static pressure levels available, depending on the installation
- The combination with a wired controller allows for optimising the static pressure in relation to the various technical installation requirements
- 3 selectable fan speeds
- Equipped with a signalling system for filter cleaning: monitors changes in the motor's current draw along with the rotation speed to determine whether the filter needs servicing
- CAN Bus communication: the CAN communication protocol considerably improves the anti-interference capacity, controls the indoor unit precisely and improves the system's efficiency. The conventional communication wire can be used to increase the project's installation flexibility
- Considerable pipe length and large height difference between the units; the pipe connecting the indoor and outdoor units can be up to 70 m long and the height difference between the indoor and outdoor units can reach 30 m
- Broad operating range: the system can work constantly with outdoor temperatures between -7 °C~48 °C in cooling mode and between -15 °C~24 °C in heating mode



Auto restart
memory



Intelligent
defrosting



Auto
diagnosis



Child lock



Low-voltage
start-up



Full protection



Wide operating
range



Compact
design



Easy to
maintenance



"Turbo"
function



Sleep mode



Filter
cleaning
reminder



X-FAN



Save energy

TECHNICAL DATA

Indoor unit model		ABDGI 20 HW		ABDGI 25 HW	
Outdoor unit model		ABDGI 20 SH3		ABDGI 25 SH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal capacity* (EN14511)	kW	20	22	25	27.5
	BTU/h	68200	75100	85300	93800
EER/COP* (EN14511)		2.55	3.25	2.65	3.10
Rated capacity (Prated,c/Prated,h)*	kW	2.55	3.25	25	27.5
Seasonal space energy efficiency ($\eta_{s,c}/\eta_{s,h}$)*	%	191.1	133.6	181.2	141.4
I.U. air flow rate (H.)	m ³ /h	3700		4200	
Dehumidification	l/h	1.4		1.8	
Fan speed (I.U./O.U.)	No.	4/2		4/2	
Sound pressure I.U. (H.-M.-L.)	dB(A)	52-51-50		53-52-51	
Sound pressure O.U. (H.)	dB(A)	62		63	
Sound pressure I.U. (H.-M.-L.)	dB(A)	62-61-60		63-62-61	
Sound pressure O.U. (H.)	dB(A)	72		73	
Power supply	V/Ph/Hz	380-415/3/50-60		380-415/3/50-60	
Factory external static pressure (ESP)	Pa	120		120	
External static pressure (ESP) (adjustment range)	Pa	0-250		0-250	
Electrical power input	kW	7.8	7.0	9.4	8.9
Compressor type		Scroll Inverter		Scroll Inverter	
Refrigerant type		R410A		R410A	
Refrigerant charge	kg/T.CO ₂ eq.	6.4/13.36		8.0/16.70	
Liquid pipe diameter	mm (inch)	9.52 (3/8")		9.52 (3/8")	
Gas pipe diameter	mm (inch)	19.05 (3/4")		22 (7/8")	
Length of pipes with standard charge	m	7.5		7.5	
Maximum length of pipes with additional charge	m	70		70	
Additional charge	g/m	60		60	
Maximum height difference (outdoor unit above)	m	30		30	
Maximum height difference (indoor unit above)	m	30		30	
Net dimensions I.U. (H./W./D.)	mm	385/1315/760		450/1520/840	
Net dimensions O.U. (H./W./D.)	mm	1430/940/320		1615/940/460	
Net weight I.U./O.U.	kg	82/120		99/146	

OPERATING LIMITS (outdoor temperature)

Cooling: from -7 °C to +48 °C

Heating: from -15 °C to +24 °C

ROOM TEMPERATURE ADJUSTMENT RANGE: 16-30 °C.

*Nominal data tested according to EN14511 and certified by EUROVENT. Nominal cooling capacity test conditions: indoor unit 27 °C DB/19 °C WB, outdoor unit 35 °C DB; length of connecting pipe: 5 m, without height difference between the units - Nominal heat capacity test conditions: indoor unit 20 °C DB, outdoor unit 7 °C DB/6 °C WB; length of connecting pipe: 5 m, without height difference between the units - The sum of capacities of the indoor units connected must fall within the interval (50%~135%) of the capacity of the outdoor units. The pertinent parameters can be corrected by referring to correction table of the units' capacity. - The parameters shown above are tested on the basis of the standard length of the connecting pipe. In the actual project, the parameters must be corrected by referring to the correction of the capacities for the long connecting pipe of the units.

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TECHNICAL DATA

Indoor unit model		ABDGI 30 HW	
Outdoor unit model		ABDGI 30 SH3	
	Units	Cooling	Heating
Nominal capacity* (EN14511)	kW	30	33
	BTU/h	102400	112600
EER/COP* (EN14511)		2.65	3.20
Rated capacity (Prated,c/Prated,h)*	kW	30	33
Seasonal space energy efficiency (ηs,c/ηs,h)*	%	185.2	133.2
I.U. air flow rate (H.)	m³/h	5200	
Dehumidification	l/h	2.0	
Fan speed (I.U./O.U.)	No.	4/2	
Sound pressure I.U. (H.-M.-L.)	dB(A)	55-54-53	
Sound pressure O.U. (H.)	dB(A)	65	
Sound pressure I.U. (H.-M.-L.)	dB(A)	65-64-63	
Sound pressure O.U. (H.)	dB(A)	75	
Electrical power supply	V/Ph/Hz	380-415/3/50-60	
Factory external static pressure (ESP)	Pa	120	
External static pressure (ESP) (adjustment range)	Pa	0-250	
Electrical power input	kW	11.3	10.3
Compressor type		Scroll Inverter	
Refrigerant type		R410A	
Refrigerant charge	kg/T.CO ₂ eq.	9.5/19.84	
Liquid pipe diameter	mm (inch)	12.7 (1/2")	
Gas pipe diameter	mm (inch)	25.4 (1")	
Length of pipes with standard charge	m	7.5	
Maximum length of pipes with additional charge	m	70	
Additional charge	g/m	120	
Maximum height difference (outdoor unit above)	m	30	
Maximum height difference (indoor unit above)	m	30	
Net dimensions I.U. (H./W./D.)	mm	450/1520/840	
Net dimensions O.U. (H./W./D.)	mm	1615/940/460	
Net weight I.U./O.U.	kg	105/175	

OPERATING LIMITS (outdoor temperature)

Cooling: from -7 °C to +48 °C

Heating: from -15 °C to +24 °C

ROOM TEMPERATURE ADJUSTMENT RANGE: 16-30 °C.

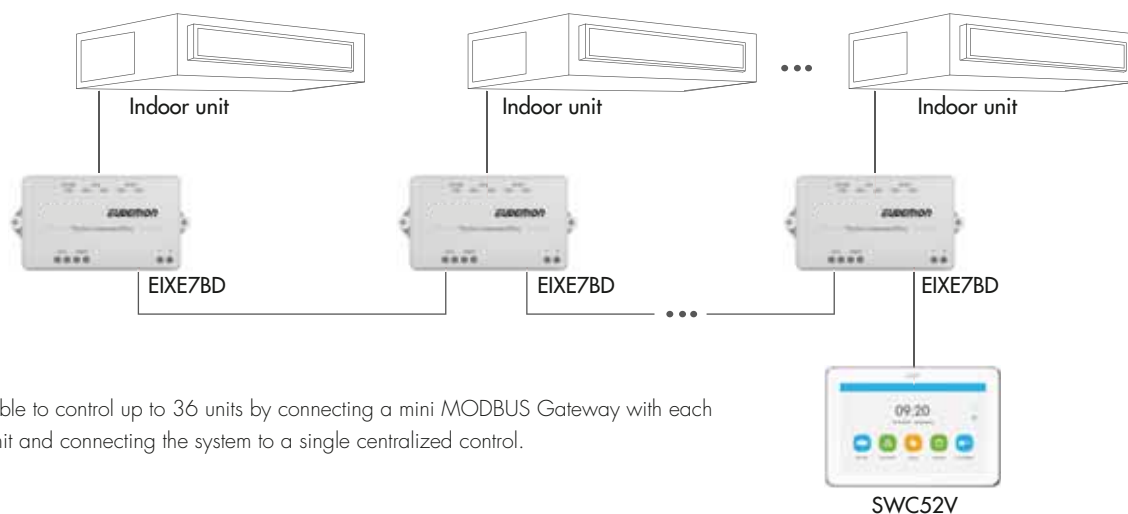
*Nominal data tested according to EN14511 and certified by EUROVENT. Nominal cooling capacity test conditions: indoor unit 27 °C DB/19 °C WB, outdoor unit 35 °C DB; length of connecting pipe: 5 m, without height difference between the units - Nominal heat capacity test conditions: indoor unit 20 °C DB, outdoor unit 7 °C DB/6 °C VWB; length of connecting pipe: 5 m, without height difference between the units - The sum of capacities of the indoor units connected must fall within the interval (50%~135%) of the capacity of the outdoor units. The pertinent parameters can be corrected by referring to correction table of the units' capacity. - The parameters shown above are tested on the basis of the standard length of the connecting pipe. In the actual project, the parameters must be corrected by referring to the correction of the capacities for the long connecting pipe of the units.

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ACCESSORIES

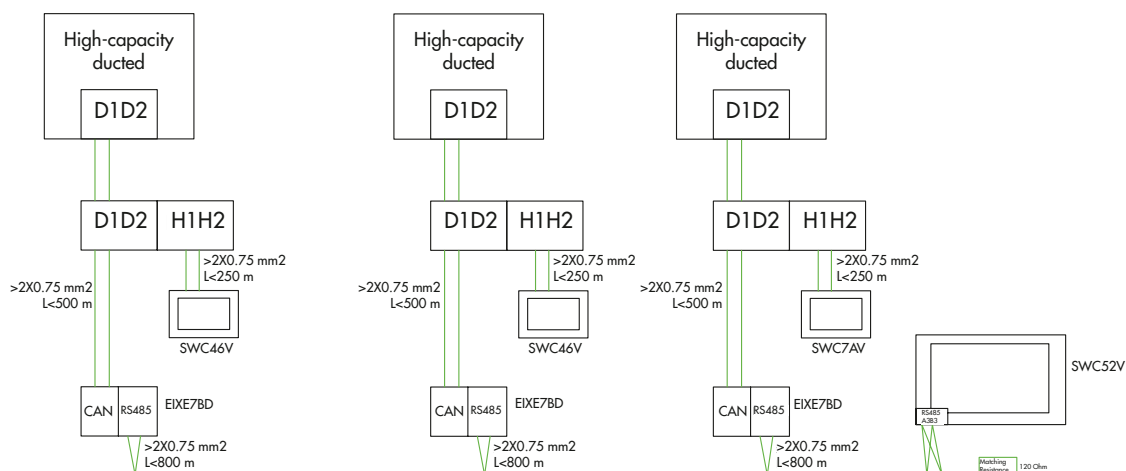
	Code	Model	Description
	398700048	EIXE7BD	MINI MODBUS GATEWAY
	398700039	SWC7AV	Wired controller with WiFi
	398800104	SWC52V	Centralized controller up to 36 units (it requires 1 MINI MODBUS GATEWAY for each indoor unit)
	398700041	EIX60V	ON/OFF contact interface

BIG DUCT CENTRALIZED CONTROLLER

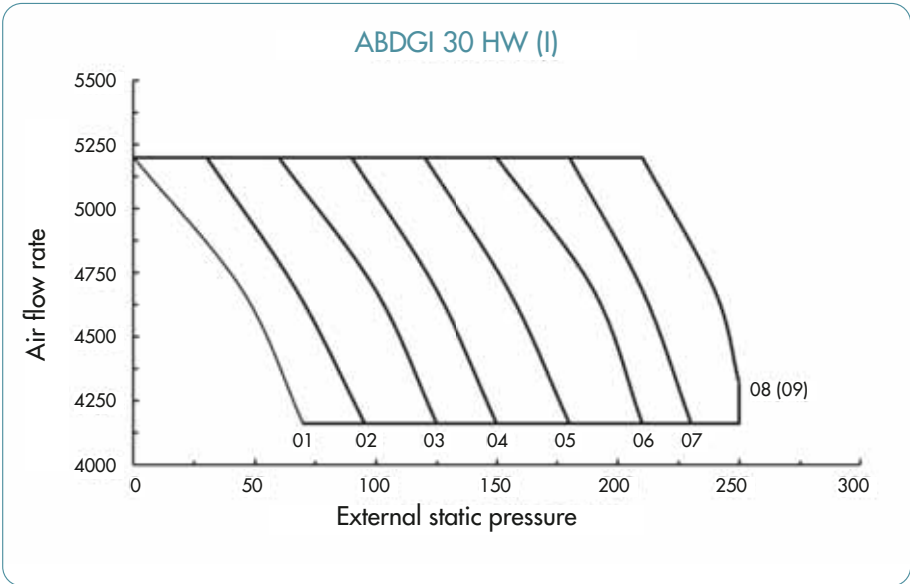
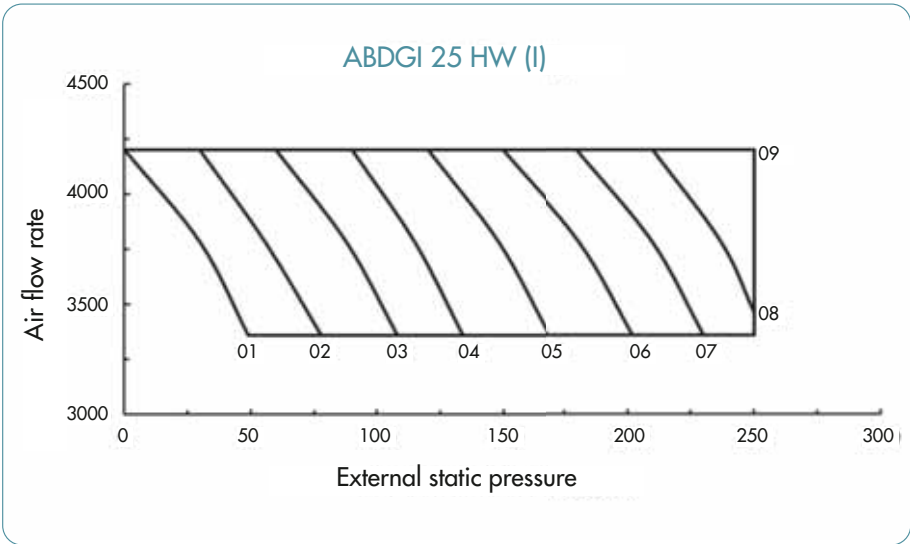
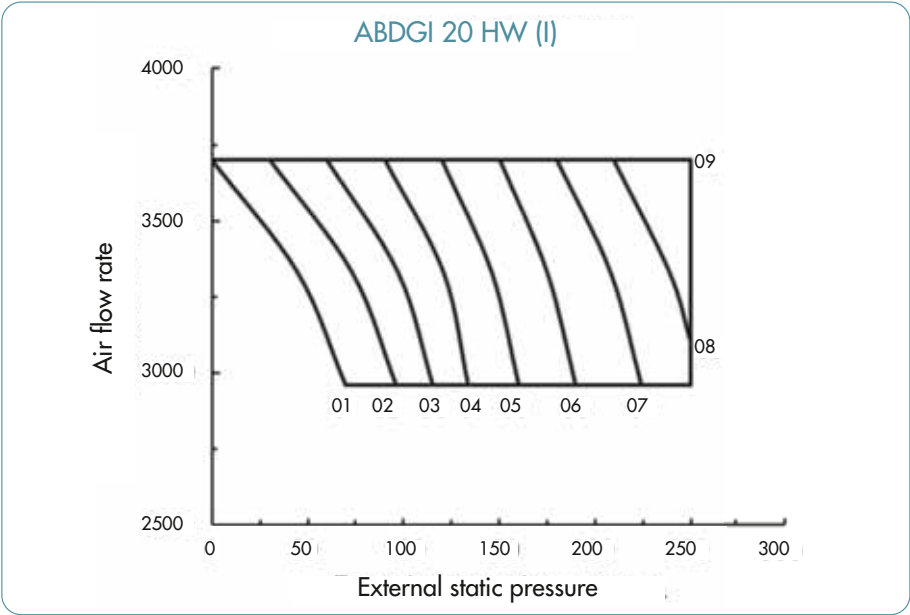


It is possible to control up to 36 units by connecting a mini MODBUS Gateway with each indoor unit and connecting the system to a single centralized control.

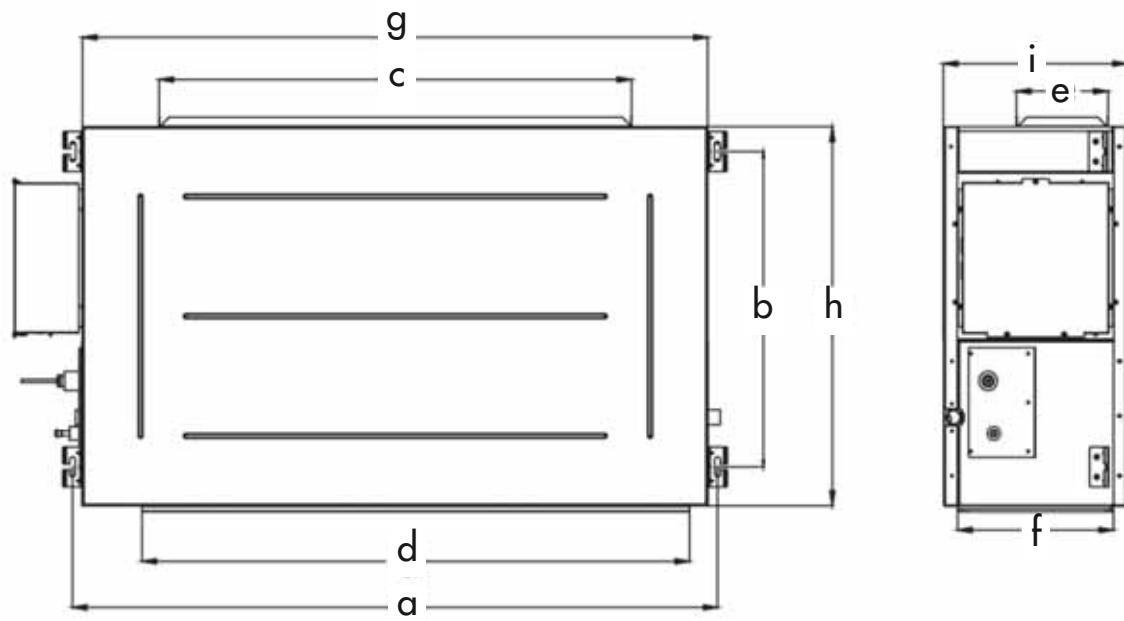
CENTRALIZATION SCHEME



EXTERNAL STATIC PRESSURE CURVES



DIMENSIONAL DRAWING



AIR
CONDITIONERS

MODEL	A	B	C	D	E	F	G	H	I
ABDGI 20 HW	1355	632	992	1150	192	328	1315	760	385
ABDGI 25 HW	1563	707	992	1350	192	402	1520	840	450
ABDGI 30 HW	1563	707	962	1350	262	402	1520	840	450



X3 FS

Floor standing air conditioners

FLOOR STANDING



SINGLE PHASE VERSION



TRI PHASE VERSION



IRC1F11FSS
(Standard for SINGLE
PHASE version)
Infrared remote
controller



IRC1FB8FST
(Standard for TRI
PHASE version)
Infrared remote
controller

Code	Model	
398700045	AFSI ECO 120HL1	1PH
398700046	AFSI ECO 120SH	1PH
398700043	AFSI ECO 120HL N	3PH
398700044	AFSI ECO 120SH3 N	3PH
398710001	EIX1FS (Kit WiFi optional - Bluetooth)	

MAXIMUM COMFORT IN EVERY SITUATION THANKS TO THESE FEATURES:

1. QUICK COOLING AND HEATING

Cooling/heating at maximum power and speed allows to reach optimal comfort in a very short time.

2. TURBO MODE

It allows to have maximum cold in a very short time.

3. AUTOSWING

The automatic oscillation of both horizontal and vertical flaps guarantees maximum comfort for everyone in situations of conviviality.

4. AUTO FUNCTION

Automatically adjusts the operation of the unit based on the desired conditions.



FAST
Quick cooling
and heating



3D airflow



Sleep mode



Cold air
prevention



Intelligent
defrosting



Auto mode



Child lock



Automatic
swinging



Fan speed
regulation



Automatic fan
speed



Turbo fan speed



Light
(vers. 3PH)



Save energy



Remote
control



Auto restart
memory



Auto
diagnosis



Timer on/off



Ambient
temperature
control



AutoClean
(vers. 3PH)



Capacity limitation
(vers. 3PH)



Cold Plasma
(vers. 3PH)

TECHNICAL DATA SINGLE PHASE

Indoor unit model		AFSI ECO 120HL1	
Outdoor unit model		AFSI ECO 120SH	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	12.30 (1.50-13.50)	12.60 (2.50-14.0)
	BTU/h	41970 (5118-46062)	42991 (8530-47768)
EER/COP (EN14511)		2.95	3.30
Rated capacity (Prated,c/Prated,h)*	kW	12.30	12.60
Seasonal space energy efficiency ($\eta_{s,c}/\eta_{s,h}$)*	%	227.0	147.0
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	2000-1850-1700-1580	
Dehumidification	l/h	5	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	53-51-50-48	
Sound pressure Outdoor (h.)	dB(A)	63	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	64-61-60-58	
Sound power Outdoor (h.)	dB(A)	73	
Power supply	V/Ph/Hz	220-240~/1/50	
Power input	kW	4.17 (0.55-5.06)	3.82 (0.50-5.06)
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.0/1.35	
Liquid pipe diameter	mm (inch)	6.35 (1/4")	
Gas pipe diameter	mm (inch)	15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	3-5	
Max. pipe lenght with additional charge	m	30	
Additional refrigerant charge	g/m	50	
Max. height difference (Outdoor above)	m	20	
Max. height difference (Indoor above)	m	20	
Indoor net dimension (H./W./D.)	mm	1882/587/394	
Outdoor net dimension (H./W./D.)	mm	746/1000/427	
Net weight Indoor/Outdoor	kg	53/55	

OPERATING RANGE: outdoor temperature
 Cooling mode: from -15 °C to +50 °C
 Heating mode: from -15 °C to +30 °C
 RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 32 °C.

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TECHNICAL DATA TRI PHASE

Indoor unit model		AFSI ECO 120HL N	
Outdoor unit model		AFSI ECO 120SH3 N	
	Units	Cooling	Heating
Nominal (min.-max.) capacity (EN14511)	kW	12.50 (3.10-14.50)	14.50 (3.30-16.50)
	BTU/h	42650 (10557-46062)	49747 (11260-56298)
EER/COP (EN14511)		3.30	3.76
Rated capacity (Prated,c/Prated,h)*	kW	12.50	14.50
Seasonal space energy efficiency ($\eta_{s,c}/\eta_{s,h}$)*	%	241.0	157.0
Air flow rate Indoor (sh.-h.-m.-l.)	m ³ /h	2400-2200-2000-1800	
Dehumidification	l/h	5	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	56-54-53-51	
Sound pressure Outdoor (h.)	dB(A)	63	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	66-64-63-61	
Sound power Outdoor (h.)	dB(A)	74	
Power supply	V/Ph/Hz	380-415 ~/3/50	
Power input	kW	3.79 (0.30-5.70)	3.86 (0.64-4.70)
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2.8/1.89	
Liquid pipe diameter	mm (")	9.52 (3/8")	
Gas pipe diameter	mm (")	15.88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	3-5	
Max. pipe lenght with additional charge	m	30	
Additional refrigerant charge	g/m	40	
Max. height difference (Outdoor above)	m	20	
Max. height difference (Indoor above)	m	20	
Indoor net dimension (H./W./D.)	mm	1882/587/394	
Outdoor net dimension (H./W./D.)	mm	820/940/370	
Net weight Indoor/Outdoor	kg	57/86	

OPERATING RANGE: outdoor temperature

Cooling mode: from -15 °C to +50 °C

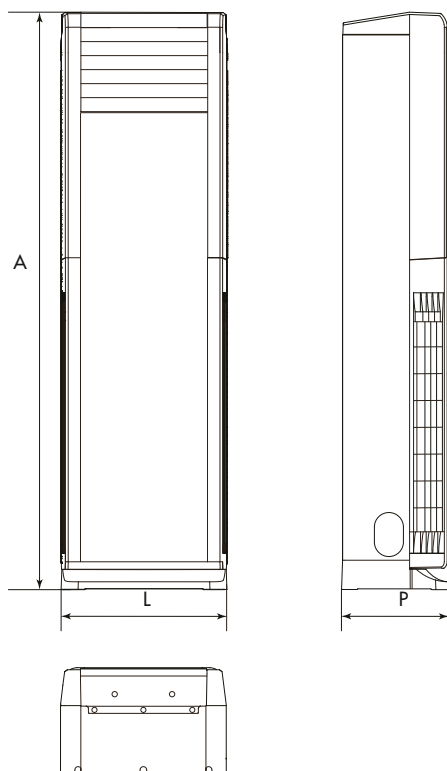
Heating mode: from -15 °C to +30 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 32 °C.

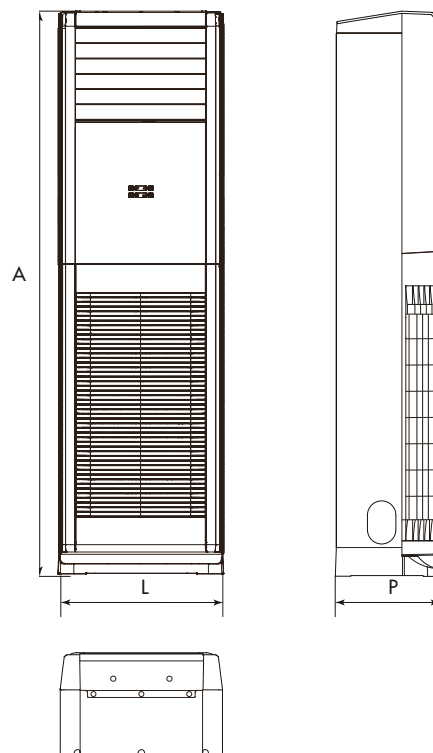
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DIMENSIONAL DRAWINGS

SINGLE PHASE INDOOR UNIT

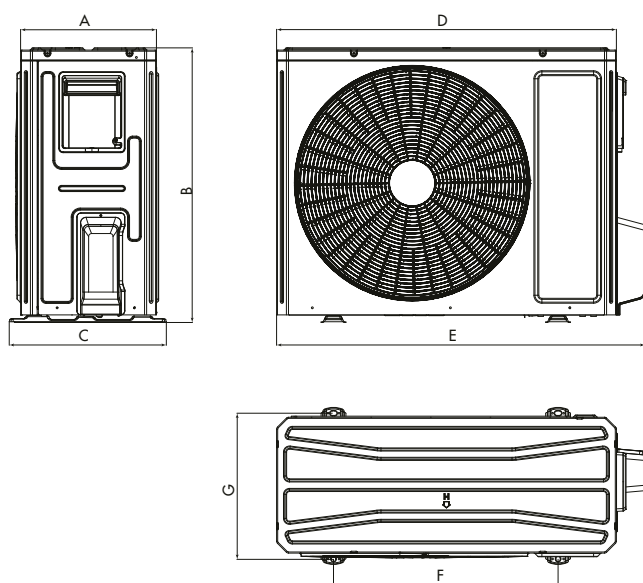


TRI PHASE INDOOR UNIT

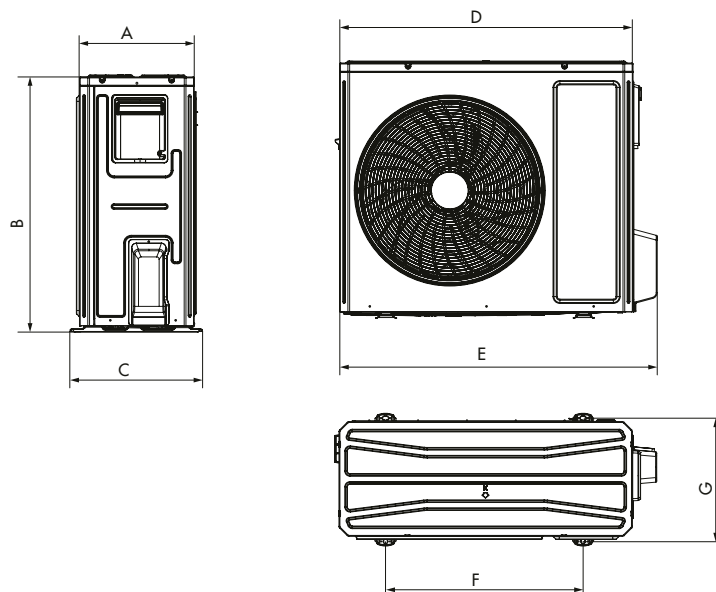


Indoor unit model SINGLE and TRI PHASE	DIMENSIONS (mm)		
	W	H	D
AFSI ECO 120HL1 (1PH)	587	1882	394
AFSI ECO 120HL N (3PH)			

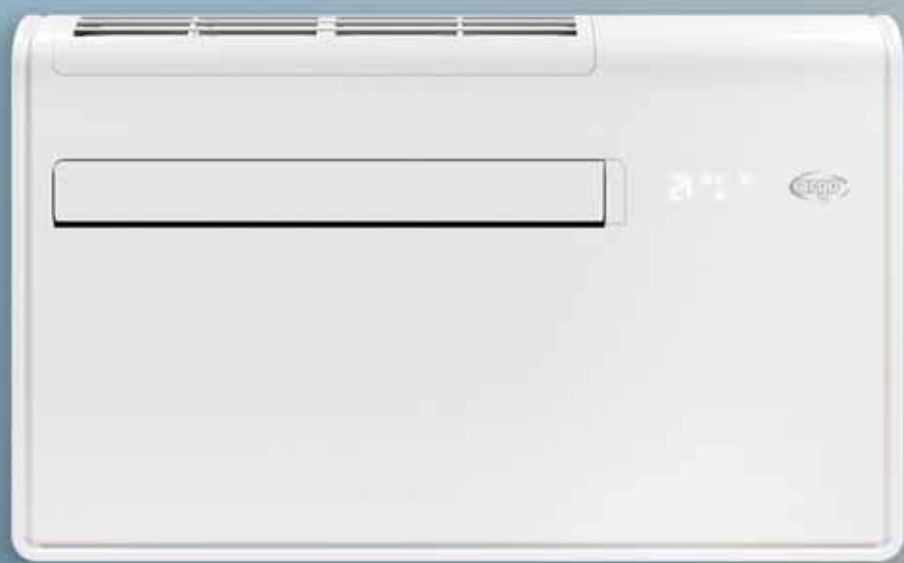
SINGLE PHASE OUTDOOR UNIT



TRI PHASE OUTDOOR UNIT



Outdoor unit model SINGLE and TRI PHASE	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AFSI ECO 120SH	369	427	746	923	1000	610	395
AFSI ECO 120SH 3 N	370	820	427	940	1020	635	397



AIR CONDITIONERS

APOLLO: air conditioner without OUTDOOR UNIT - DC Inverter R32

ULISSE ECO: D-I-Y Console - DC Inverter R32

APOLLO

AIR CONDITIONER WITHOUT OUTDOOR UNIT

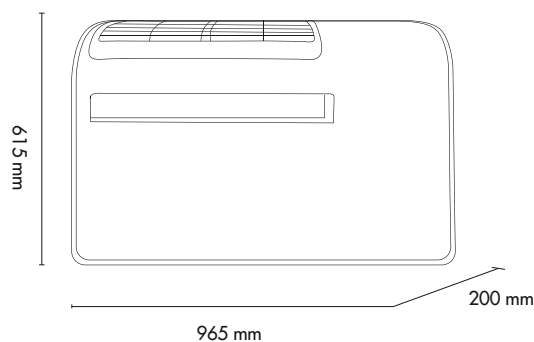


APOLLO 12HP

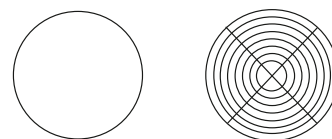
- Ideal for buildings with urban planning constraints.
- 4 in 1: cooling, heating, dehumidification, fan.
- R32, gas with a low impact on global warming.
- DC Inverter technology.
- Integrated WiFi for remote control of functions.



DIMENSIONAL DATA



Digital remote control with LCD screen



Two holes in the perimeter wall, 200 mm diameter, minimal aesthetic impact

Code	Model	*Cooling capacity [kW]	EER	*Heating capacity [kW]	COP
398000761	APOLLO12HP	2.35	2.62	2.36	3.10

Performances related to EN14511:

* Cooling capacity: Outdoor air temperature 35 °C, Indoor air temperature 27 °C
 Heating capacity: Outdoor air temperature 7 °C, Indoor air temperature 20 °C

Code	Accessorio modello
398100689	Installation kit for 160 mm hole installation

ULISSE ECO

CONSOLE SPLIT

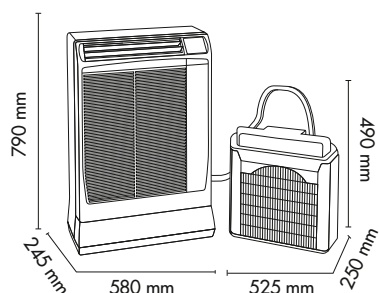


- Just 24 cm depth, this special air conditioner is equipped with the Full DC Inverter technology of iSERIES.
- Thanks to the special Aeroquip quick connection certified for R32, it doesn't require the intervention of an installer for its installation or its transfer.
- The condensate is vaporized through the case positioned outside, so it is not necessary to drain the condensate.
- Equipped with an efficient Twin Rotary Inverter compressor, Ulisse Eco is particularly silent thanks to suitably selected components.
- The new soft-touch remote controller, with an innovative concept, adds important features to the unit.
- Also available with integrated WiFi and dedicated App.



AIR
CONDITIONERS

DIMENSIONAL DATA



Soft touch remote controller
supplied with the unit

Code	Model	*Max Cooling capacity [kW]	SEER
397028967	ULISSE ECO - FULL DC Inverter air conditioner using R32 - infrared remote controller with built-in temperature sensor - refrigeration pipe length 1.8 m	4.00	5.2
397028973	ULISSE ECO WiFi - FULL DC Inverter air conditioner using R32 - infrared remote controller with built-in temperature sensor - refrigeration pipe length 1.8 m - WiFi integrato	4.00	5.2
387027191	Ulisse Bracket kit	-	-
397016929	2 meter pipe extension kit	-	-
397016930	4 meter pipe extension kit	-	-

*Performance related to cooling capacity: Outdoor air temperature 35 °C, Indoor air temperature 27 °C



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Tel: +39 030 7285700

argoclima.com

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Argo is a brand of Argoclima S.p.A., a leading European company in climate control, heating and air treatment.