HEAT PUMP - AEROTHERMAL MULTITASKING MONOBLOC

MUAMR-H14 Series

HOT WATER UP TO 75 °C

- Fully hydraulic installation.
- Variable speed circulating pump.
- Low noise level.
- Multiple uses: heating, cooling and/or Domestic Hot Water.
- Up to two configurable zones.
- Possibility of cascade installation of up to 6 units.
- Control included with schedule and weekly programming.
- Configurable anti-legionella mode.
- Hybridization with a thermal solar system that can be integrated into the panel.
- Smart Grid function for hybridization with a photovoltaic installation.

4 and 6 kW

8 to 16 kW

KJRH-120LBMWFNKDOU-E
(CL09209)
Included

HIGH PERFORMANCE AT LOW OUTDOOR TEMPERATURES

Hot water at 55 °C with outside temperature at -25 °C

Hot water at 75 °C with outside temperature at -10 °C

WIFI CONNECTION FOR CONTROL THROUGH APP

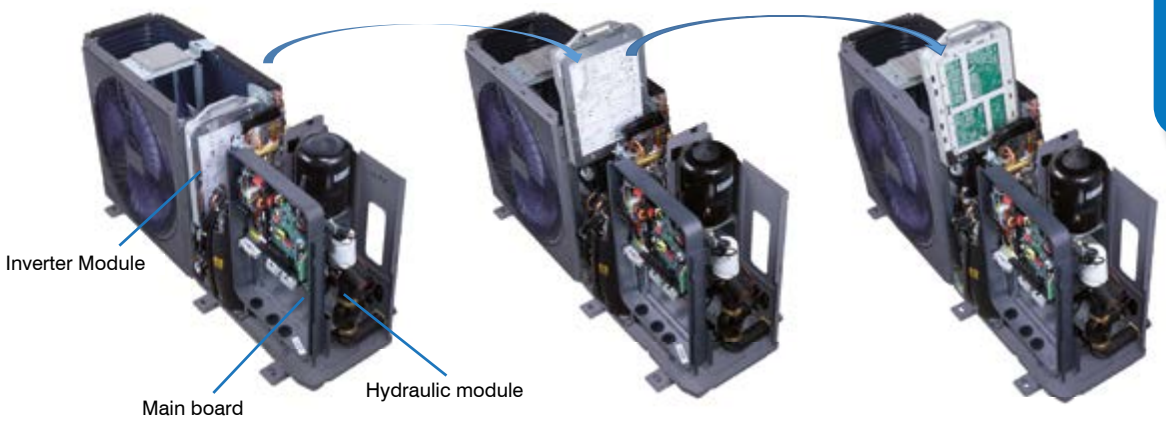
Download "iLetComfort" application

AEROTHERMAL MULTITASKING MONOBLOC
High Temperature Heat Pump Series H14

MUNDOCLIMA®

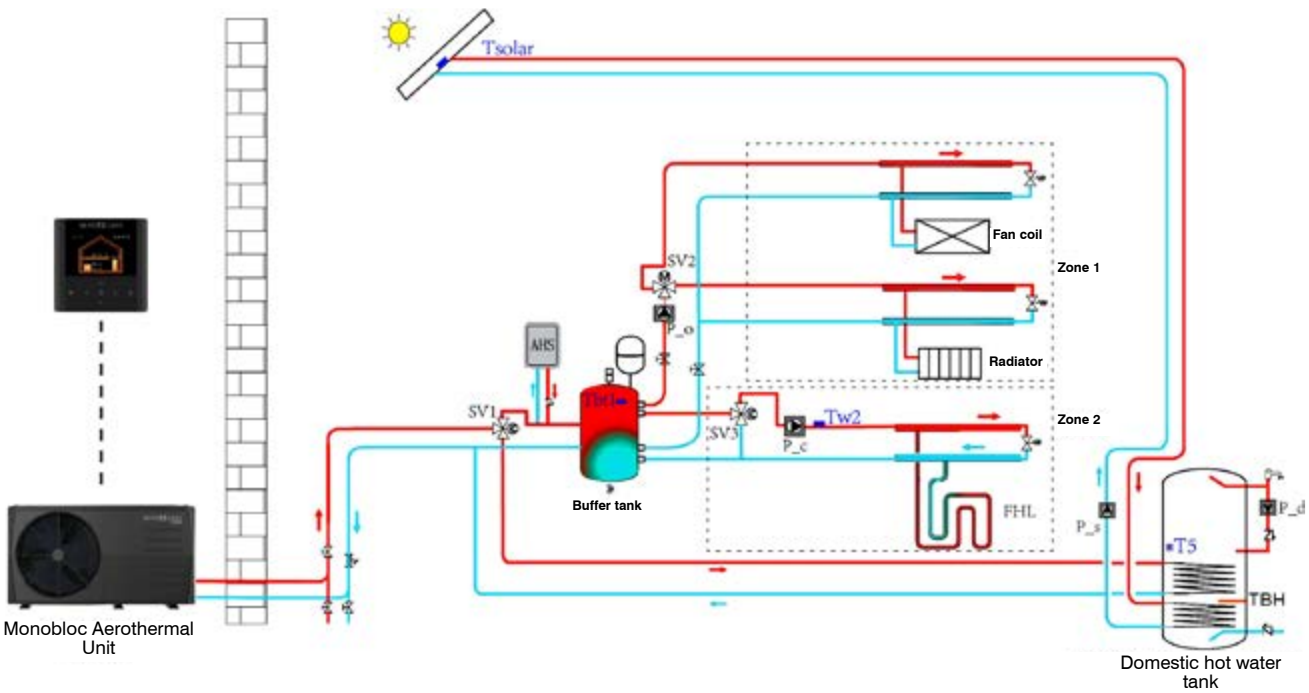
HIGH SECURITY

EASY SERVICE



The inverter module can be removed easily

DIAGRAM



AEROTHERMAL MULTITASKING MONOBLOC
High Temperature Heat Pump Series H14

MUNDOCLIMA®

TECHNICAL SPECIFICATIONS

Model				MUAMR-04-H14	MUAMR-06-H14	MUAMR-08-H14	MUAMR-10-H14	MUAMR-12-H14
Code				CL45220	CL45221	CL45222	CL45223	CL45224
Heating (middle zone)	Conditions 1 Air: 7 ºC / 85 % RH Water: 30 / 35 ºC	Capacity	kW	4.5	6.20	8.40	10.00	12.00
		Consumption	kW	0.87	1.27	1.68	2.13	2.50
		COP		5.15	4.90	5.00	4.70	4.80
		SCOP		5.07	4.89	5.19	5.07	4.67
		ηs	%	199.80	192.60	200.40	196.30	183.70
		Energy Efficiency Class		A+++	A+++	A+++	A+++	A+++
	Conditions 2 Air: 7 ºC / 85 % RH Water: 40 / 45 ºC	Capacity	kW	4.5	6.40	8.20	10.00	12.00
		Consumption	kW	1.11	1.68	2.13	2.74	3.24
		COP		4.05	3.80	3.85	3.65	3.70
	Conditions 3 Air: 7 ºC / 85 % RH Water: 47 / 55 ºC	Capacity	kW	4.6	6.20	7.80	9.50	12.00
		Consumption	kW	1.44	2.00	2.44	3.12	3.87
		COP		3.20	3.10	3.20	3.05	3.10
		SCOP		3.79	3.82	3.82	3.82	3.62
		ηs	%	148.60	149.70	149.50	149.50	141.80
		Energy Efficiency Class		A++	A++	A++	A++	A++
Cooling	Conditions 4 Air: 35 ºC Water: 23 / 18 ºC	Capacity	kW	4.50	6.50	8.30	10.00	12.00
		Consumption	kW	0.82	1.28	1.61	2.11	2.67
		EER		5.50	5.10	5.15	4.75	4.50
		SEER		6.36	6.65	8.14	8.16	6.42
	Conditions 5 Air: 35 ºC Water: 12 / 7 ºC	Capacity	kW	4.70	6.80	7.50	8.90	11.50
		Consumption	kW	1.29	2.19	2.17	2.74	3.77
		EER		3.65	3.10	3.45	3.25	3.05
		SEER		5.23	5.32	5.86	5.55	5.19
Plate heat exchanger	Water flow (min ~ max)		m³/h	0.40 ~ 0.90	0.40 ~ 1.25	0.40 ~ 1.65	0.40 ~ 2.10	0.7 ~ 2.5
	Water volume		L	0.98	0.98	0.98	0.98	1.27
Water pump	Model			For 25/9 IPWM-130-1-1-1				
	Nominal flow		m³/h	3	3	3	3	3
	Height		m	9	9	9	9	9
Hydraulic connections	Inlet/outlet water		mm	DN25	DN25	DN32	DN32	DN32
Expansion tank volume			L	8	8	8	8	8
Safety valve			MPa	0.3	0.3	0.3	0.3	0.3
Fan	Air flow rate		m³/h	2875	2875	4031	4031	4457
Compressor	Brand			GMCC	GMCC	GMCC	GMCC	GMCC
	Model			EDTM310D53EFT	EDTM310D53EFT	EDTF420D62EM5B	EDTF420D62EM5B	EDTQ580D20EN5B
Sound pressure			dB(A)	44	46	48	49	51
Sound power			dB(A)	56	58	60	61	65
Dimensions (W x H x D)			mm	1299 x 717 x 426	1299 x 717 x 426	1385 x 865 x 523	1385 x 865 x 523	1385 x 865 x 523
Weight			kg	90	90	117	117	135
Refrigerant	Type / GWP			R290 / 3	R290 / 3	R290 / 3	R290 / 3	R290 / 3
	Charge		kg	0.70	0.70	1.10	1.10	1.25
	CO_2 equivalence		TCO_2eq	0	0	0	0	0
Electrical data	Power supply		V / Ph / Hz	220 ~ 230 V / 1 Ph / 50 Hz				
	Nominal / max. current		A	12 / 16	13.5 / 16	16 / 20	17.5 / 20	25 / 32
	Power cable (1)		mm²	2 x 4 + T	2 x 4 + T	2 x 6 + T	2 x 6 + T	2 x 10 + T
Operating temperature range		Cooling	ºC	-5 ~ 46				
		Heating	ºC	-25 ~ 35				
		DHW	ºC	-25 ~ 46				
Water supply temperature range		Cooling	ºC	5 ~ 30				
		Heating	ºC	12 ~ 75				
		DHW	ºC	10 ~ 70				

Note: (1) Recommended power wiring for L < 20 m, it should be calculated according to the conditions of each installation.
Warnings: Data and specifications can be changed without previous notice.

AEROTHERMAL MULTITASKING MONOBLOC
High Temperature Heat Pump Series H14

MUNDOCLIMA®

TECHNICAL SPECIFICATIONS

Model				MUAMR-14-H14	MUAMR-16-H14	MUAMR-12-H14T	MUAMR-14-H14T	MUAMR-16-H14T
Code				CL45225	CL45226	CL45227	CL45228	CL45229
Heating (middle zone)	Conditions 1 Air: 7 ºC / 85 % RH Water: 30 / 35 ºC	Capacity	kW	14.00	15.00	12.00	14.00	15.00
		Consumption	kW	3.11	3.41	2.50	3.11	3.41
		COP		4.50	4.40	4.80	4.50	4.40
		SCOP		4.63	4.59	4.67	4.64	4.59
		ηs	%	182.20	180.50	183.70	182.20	180.50
		Energy Efficiency Class		A+++	A+++	A+++	A+++	A+++
	Conditions 2 Air: 7 ºC / 85 % RH Water: 40 / 45 ºC	Capacity	kW	14.00	15.00	12.00	14.00	15.00
		Consumption	kW	4.00	4.48	3.24	4.00	4.48
		COP		3.50	3.35	3.70	3.50	3.35
	Conditions 3 Air: 7 ºC / 85 % RH Water: 47 / 55 ºC	Capacity	kW	14.00	15.00	12.00	14.00	15.00
		Consumption	kW	4.67	5.26	3.87	4.67	5.26
		COP		3.00	2.85	3.10	3.00	2.85
		SCOP		3.61	3.57	3.62	3.61	3.57
		ηs	%	141.40	139.90	141.80	141.40	139.90
		Energy Efficiency Class		A++	A++	A++	A++	A++
Cooling	Conditions 4 Air: 35 ºC Water: 23 / 18 ºC	Capacity	kW	14.00	16.00	12.00	14.00	16.00
		Consumption	kW	3.33	4.10	2.67	3.33	4.10
		EER		4.20	3.90	4.50	4.20	3.90
		SEER		6.75	6.65	6.42	6.75	6.65
	Conditions 5 Air: 35 ºC Water: 12 / 7 ºC	Capacity	kW	12.70	14.00	11.50	12.70	14.00
		Consumption	kW	4.38	5.09	3.77	4.38	5.09
		EER		2.90	2.75	3.05	2.90	2.75
		SEER		5.18	5.12	5.19	5.18	5.12
Plate heat exchanger	Water flow (min ~ max)		m^3/h	0.7 ~ 2.75	0.7 ~ 3	0.7 ~ 2.5	0.7 ~ 2.75	0.7 ~ 3
	Water volume		L	1.27	1.27	1.27	1.27	1.27
Water pump	Model			For 25/9 IPWM-130-1-1-1				
	Nominal flow		m^3/h	3	3	3	3	3
	Height		m	9	9	9	9	9
Hydraulic connections	Inlet/outlet water		mm	DN32	DN32	DN32	DN32	DN32
Expansion tank volume			L	8	8	8	8	8
Safety valve			MPa	0.3	0.3	0.3	0.3	0.3
Fan	Air flow rate		m^3/h	4457	5042	4457	4457	5042
Compressor	Brand			GMCC	GMCC	GMCC	GMCC	GMCC
	Model			EDTQ580D20EN5B	EDTQ580D20EN5B	EDTQ580D20EN5B	EDTQ580D20EN5B	EDTQ580D20EN5B
Sound pressure			dB(A)	52	56	51	52	56
Sound power			dB(A)	65	69	65	65	69
Dimensions (W x H x D)			mm	1385 x 865 x 523	1385 x 865 x 523	1385 x 865 x 523	1385 x 865 x 523	1385 x 865 x 523
Weight			kg	135	135	137	137	137
Refrigerant	Type / GWP			R290 / 3	R290 / 3	R290 / 3	R290 / 3	R290 / 3
	Charge		kg	1.25	1.25	1.25	1.25	1.25
	CO_2 equivalence		TCO_2eq	0	0	0	0	0
Electrical data	Power supply		V / Ph / Hz	220 ~ 230 V / 1 Ph / 50 Hz		380 ~ 415 V / 3 Ph / 50 Hz		
	Nominal / max. current		A	26.5 / 32	28 / 32	8.5 / 16	9 / 16	9.5 / 16
	Power cable (1)		mm^2	2 x 10 + T	2 x 10 + T	2 x 4 + T	2 x 4 + T	2 x 4 + T
Operating temperature range		Cooling	ºC	-5 ~ 46				
		Heating	ºC	-25 ~ 35				
		DHW	ºC	-25 ~ 46				
Water supply temperature range		Cooling	ºC	5 ~ 30				
		Heating	ºC	12 ~ 75				
		DHW	ºC	10 ~ 70				

Note: (1) Recommended power wiring for L < 20 m, it should be calculated according to the conditions of each installation.
Warnings: Data and specifications can be changed without previous notice.

Features Description

MUNDOCLIMA®

Comfort

WEEKLY TIMER
Sets the weekly operation of the unit.

FOLLOW ME FUNCTION (IFEEL)
The remote control incorporates an ambient temperature sensor.

AUTOMATIC RESTART
Recovery of the parameters before the electrical cut.

EMERGENCY OPERATION
Possibility of manually operating the unit with the button in case of any alarms sounding.

COLD AIR PRECAUTION
When heating, the initial fan speed is adjusted according to the battery temperature.

TURBO OPERATION
Maximum reduction of the cooling/ heating time.

LOW SOUND LEVEL
Thanks to the Silence mode and its new design, the sound level is reduced to the minimum.

TEMPERATURE COMPENSATION
The remote control allows you to adjust the compensation temperature for the heating and cooling mode.

FRESH AIR (ION)
The equipment incorporates an ionizer to generate OH(-) and thus purify the air by deactivating bacteria, viruses and other contaminants in the environment, providing a very pleasant feeling of freshness.

BREEZE AWAY
Function that allows the air flow to be diverted to another place to prevent the equipment from blowing directly on people.

QUIETER OUTDOOR UNIT
Optimized design of air outlet grille with noise reduction of 3.3 dB(A) compared to previous models.

WIDE WORKING RANGE
Cooling operation until 50 °C and -15 °C in heating.

NIGHT MODE
Makes the unit operate according to the preset nighttime temperature curve, which creates an ideal nighttime environment and improves sleep quality.

DAILY TIMER
The timer can be set to start and stop at any point in a 24-hour period.

360° DESIGN
Thanks to the 360° panel design, the air is more evenly distributed.

HORIZONTAL AND VERTICAL FLAP ROTATION
Better air distribution thanks to the flap's horizontal and vertical automatic swing.

GEAR
Allows to set the equipment capacity to 50 %, 75 % or 100 % (default).

COLD CATALYST FILTER
The equipment features a purifying filter that can absorb formaldehyde without needing ultra-violet light.

SPRINT START
Like a sprinter, this function allows the compressor to reach 65 Hz in just 6 s.

HUMIDITY CONTROL
In dehumidification mode, the relative humidity control can be set between 35 % and 85 %.

VENTILATION FUNCTION
Allows operation with only ventilation.

THERMOSTAT
It automatically maintains the set temperature.

DEHUMIDIFICATION
Humidity reduction helps restore an optimum temperature in wet areas.

MULTI-SPEED INDOOR FAN
The fan has up to 12 different speeds that are automatically adjusted if the automatic ventilation is activated.

SILENCE
This function allows you to select the ultra-quiet speed, so that the sound level of the equipment is very low.

CONTROL PANEL
A control panel is added to run the machine without any wireless remote control.

DUAL AIR FLOW
Top and bottom air outlet. In cooling mode only the upper outlet works, and in heating mode both outlets work, thus heating from ground level.

CORE GENIUS
The frequency of traditional Inverter equipment has a fluctuation of ± 1 °C of the ambient temperature during operation. However, with the new "CORE GENIUS" Inverter technology that adjusts 0.6 Hz for each step, the frequency variation of the Inverter is so smooth that the ± 0.5 °C fluctuation of the ambient temperature is not noticeable.

INDIVIDUAL FLAP CONTROL
Possibility to adjust the angle of the 4 flaps independently.

120°
The upper slat allows an adjustment at 120°.

BACKLIT WALL CONTROL
The new KJR-120N wired wall controller features a backlit screen for easy reading.

HEATING 8 °C
The unit automatically switches to heating mode when the ambient temperature is below 8 °C, thus preventing the room temperature from being too low when we are not at home.

Connectivity

WIFI
Possibility for the unit to be controlled via WIFI, through an APP.

CENTRALIZED CONTROLLER
Possibility of controlling several units with the same controller.

DOMOTICS
Possibility of connection with the main manufacturers of home automation systems (Consult).

Energy efficiency

ENERGY LABELLING FOR COOLING A+++

ENERGY LABELLING FOR COOLING A++

ENERGY LABELLING FOR COOLING A+

ENERGY LABELLING FOR COOLING A

ENERGY LABELLING FOR HEATING A+++

ENERGY LABELLING FOR HEATING A++

ENERGY LABELLING FOR HEATING A+

ENERGY LABELLING FOR HEATING A

STANDBY FUNCTION (ONLY 1W IN STANDBY)
The outdoor unit is automatically disconnected from the power supply when the unit is in standby, that way the consumption in standby mode is only 1W.

PRESENCE SENSOR
Detects inactivity (30 min) in the room to reduce the operating frequency and thus save energy.

Refrigerant

R410A
Equipment using refrigerant R410A with a GWP of 2088.

R32
Equipment using the most environmentally friendly refrigerant R32 with a GWP of 675. In order to install equipment with R32 refrigerant gas, you must review the current legislation.

R290
Equipment using the new refrigerant R290 which has a GWP of only 3.

Note: This Features Description is generic, you will find the icons that apply to this data sheet in the header of the first page of the data sheet.

Features Description

MUNDOCLIMA®

Easy installation and maintenance

REMOVABLE FILTERS
New filter fastening system with tabs to ensure correct fastening without vibrations.

OUTSIDE AIR INLET
Possibility of supplying outdoor air directly on the indoor unit.

DRAINAGE PUMP
Incorporates drainage pump to facilitate the drainage of the indoor unit.

REMINDER OF FILTER'S CLEANING
The equipment tells us when to clean and/or replace the air filter of the indoor unit.

PIPE COMPATIBILITY
Possibility of increasing one size over the standard diameter in the gas or liquid pipe or both.

DIGITAL LED DISPLAY
Equipment with a digital display showing the set temperature during normal operation or the ambient temperature in ventilation mode.

LESS SCREWS
Both the indoor unit and the outdoor unit have less screws, to make the disassembly easier.

REFRIGERANT LEAK DETECTION
The unit automatically detects the existence of possible leaks of refrigerant in the circuit.

SELF-CLEANING
This function performs a self cleaning on the indoor unit. When the "SELF-CLEANING" function is activated (SelfClean or iClean buttons), the unit initially operates in cooling mode with the fan at low speed, during this period the condensation water drags the dust from the battery. The unit then switches to heating mode with the fan at low speed, to dry the battery and the inside of the unit. Finally the unit changes to ventilation mode to finish drying completely.

ULTRA-REINFORCED MOUNTING PLATE
Reinforced mounting plate with measuring range and spirit level included.

POWER SUPPLY ONLY TO OUTDOOR UNIT
The indoor unit is powered by the same interconnection cable with the outdoor unit.

SINGLE-FAN OUTDOOR UNITS
Optimize outdoor space thanks to outdoor units with lower height.

HIGH STATIC PRESSURE
Wide static pressure range.

SET TEMPERATURES RANGE ADJUSTMENT
The remote control is able to adjust: minimum cooling from 16 °C up to 24 °C; maximum heating from 30 °C down to 25 °C.

LEG IN U FORM
Thanks to the new back leg in the outdoor unit, the installation is easier.

LOW VOLTAGE START
The equipment can start up and operate normally up to a supply voltage lower than the nominal voltage.

PROBLEM SOLVING
Error codes are displayed on the indoor panel, on the wall control or on the outdoor PCB.

REMOTE SIGNALS (CP)
The indoor unit has an ON/OFF input.

CONFIGURABLE STATIC PRESSURE
From the PCB (or any model with the wireless or wired remote control) the static pressure of the fan can be adjusted, so that the machine can be adapted to each installation.

CONFIGURABLE RETURN
The air intake can be set up either at the rear or at the bottom of the unit. By default, it is set up at the rear.

TWIN FUNCTION (2×1)
Two indoor units can be connected to the same outdoor unit.
Both indoor units will function identically as if they were one single unit. It is perfect for open rooms.

REVERSE ROTATION
When the unit is stopped, the outdoor unit fan rotates backwards to remove leaves or other external elements from the coil.

ROTATION & BACK UP
This function allows redundant operation in installations with 2 units connected to the same KJR-120N wired controller, in the event that one machine does not reach the set temperature, the two machines will automatically start operating together at 24 °C in the selected mode. At the same time a rotation in the operation of the 2 machines is carried out so that both machines operate for the same amount of time.

AUTO ROUTING
The outdoor unit can assign addresses to the indoor units automatically.

ENGINEERING MODE
Function adjustment and operating parameters query using the control.

EXTRA FLAT DUCT
Indoor unit height between 200 and 300 mm.

DELIVERY OUTLET TO ADJACENT ROOM
The unit has pre-drilled outlets for connecting a small duct to climatize an adjacent room.

AIR DISCHARGE TUBE TO THE OUTSIDE
Easy and quick to install, it allows the use of the air conditioner immediately.

CONDENSATE REMOVAL
Removes condensate water so it is not necessary to connect the air conditioner to a drain. In dehumidification mode and in very humid environments, it is recommended to connect the equipment to a drain.

PANEL OF COMPACT SIZE
The grid panel of the cassette type unit measures 600×600 mm.

GOLDEN FIN
Heat exchanger with special treatment, which protects the equipment against atmospheric phenomena and the effects of aggressive environments. It also prevents the proliferation of bacteria and mold.

BLUE FIN
Heat exchanger with treatment that protects the equipment against corrosion and the growth of bacteria and mold.

AUTOMATIC REFRIGERANT REFILL
Allows the system to be refilled with refrigerant gas without having to do any additional calculation.

HORIZONTAL / VERTICAL
Equipment that can be installed in both horizontal and vertical position.

META FUNCTION
Advanced air conditioning technology that optimizes temperature, refrigerant and air flow to save energy and maximize the comfort.

Technology

SUPER DC
Equipment that has both, DC Inverter compressor and DC fan motors.

COOLING AT LOW TEMPERATURES
Cooling operation down to -15 °C outside.

HEATING AT LOW TEMPERATURES
Heating operation down to -25 °C outside.

CONSTANT AIR FLOW CONTROL
The indoor fan adjusts to the required static pressure to ensure a constant air supply at all times.

DC
Unit with DC fan motor, low noise and low-energy consumption.

EVI COMPRESSOR
High efficiency asymmetric scroll compressor with steam injection technology.

0-10V INPUT
Unit with DC fan motor with 0-10V regulation.

0-10V OUTPUT
Equipment with 0-10V output for the control of an auxiliary valve.

7 SPEED FAN
Unit with DC fan motor with 7 speeds.

EXTERNAL FAN DIFFERENT SPEEDS
Accurate adjustment of fan speed thanks to the DC motor.

EXV
Equipment with an electronic expansion valve that adjusts the capacity of the equipment in a more stable way.

Note: This Features Description is generic, you will find the icons that apply to this data sheet in the header of the first page of the data sheet.