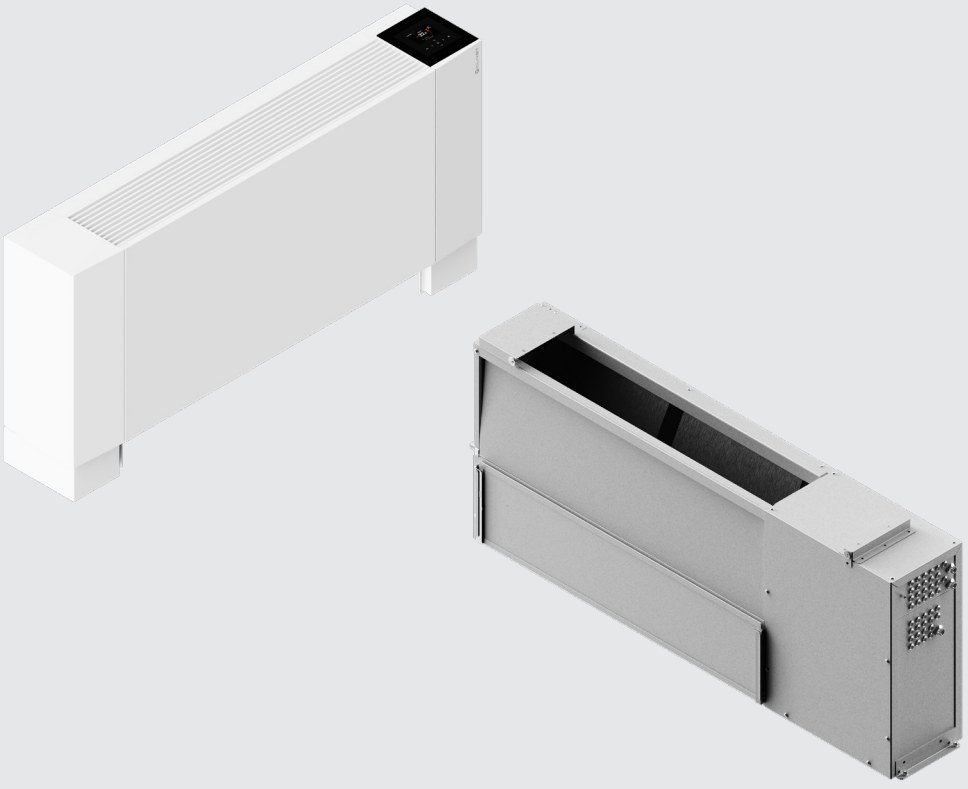
VERSATEMP FLOOR

EQV-P RANGE

Packaged WLHP air conditioner



TECHNICAL BULLETIN

SIZE	3	7	15
Nominal flow-rate m^3/h	320	450	650
Cooling capacity kW	1,37	2,39	3,43

R-290

ErP

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Features

HVAC systems: what are they for?

To ensure comfortable thermal and hygrometric conditions for building occupants, HVAC (Heating, Ventilation and Air Conditioning) systems are used to:

- Offset energy losses or gains through casing surfaces;
- Counteract indoor loads generated by activities and equipment in the environment;
- Reduce the load related to the intake of outside air, introduced either through natural ventilation or dedicated mechanical systems (VMC);
- Reduce the concentration of pollutants in the environment (through filtration or fresh air).

The role of WLHPs (Water Loop Heat Pumps)

The VERSATEMP series consists of self-contained air-conditioning terminals that independently heat and cool rooms all year round using water as the heat source.
They are the ideal solution for air conditioning in shopping centres, offices and hotels, and more generally in all large, multi-zone buildings characterised by frequent conflicting thermal demands.
In fact, when opposing thermal loads occur in a system comprising several terminals that share the same water loop, the energy dissipated by the units in cooling mode is transferred to the units in heating mode, thereby balancing the temperature of the loop without the need to activate the source control systems.



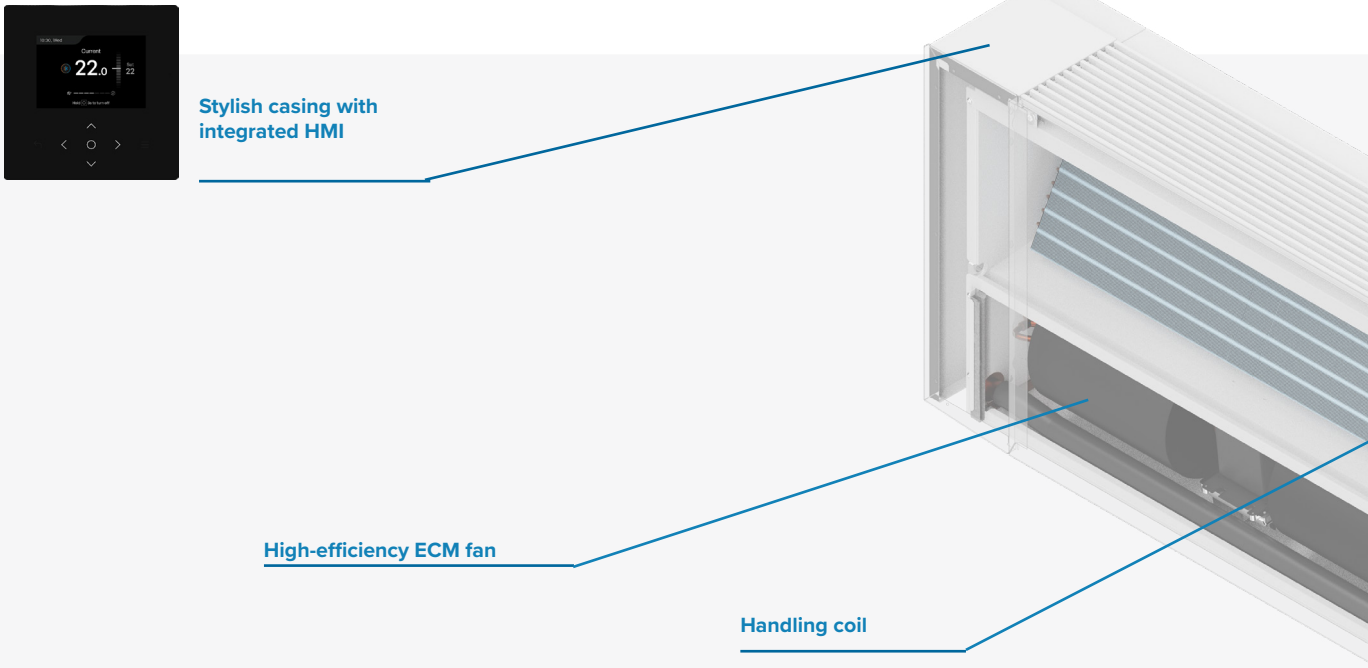
Thanks to the packaged structure, all the components are integrated into the unit, already assembled and factory tested.

- The use of an environmentally friendly refrigerant makes this an F-Gas compliant solution.
- Stylish casing suitable for any type of environment. Available in an uncased version for seamless integration into the décor.
- The high-efficiency centrifugal fans ensure quiet operation at every workstation.
- Automatic control of the airflow based on the actual needs of occupants.
- Possibility of remote management using the Clivet EYE APP and CONTROL4 NGR, with compatibility with main supervision systems through MODBUS protocol.

Features

Ventilation and comfort

- Variable airflow depending on the actual ambient load
- Silent mode for the utmost acoustic comfort



Retrofit solution

- Simultaneous heating and cooling with energy transfer
- A system that is easy to expand: investments spread out over time
- Energy distribution within the building using plain water at room temperature
- Refrigerant found only in indoor units and in loop control systems
- Compatible with various natural sources: the sea, lakes, the ground, well water or mains water

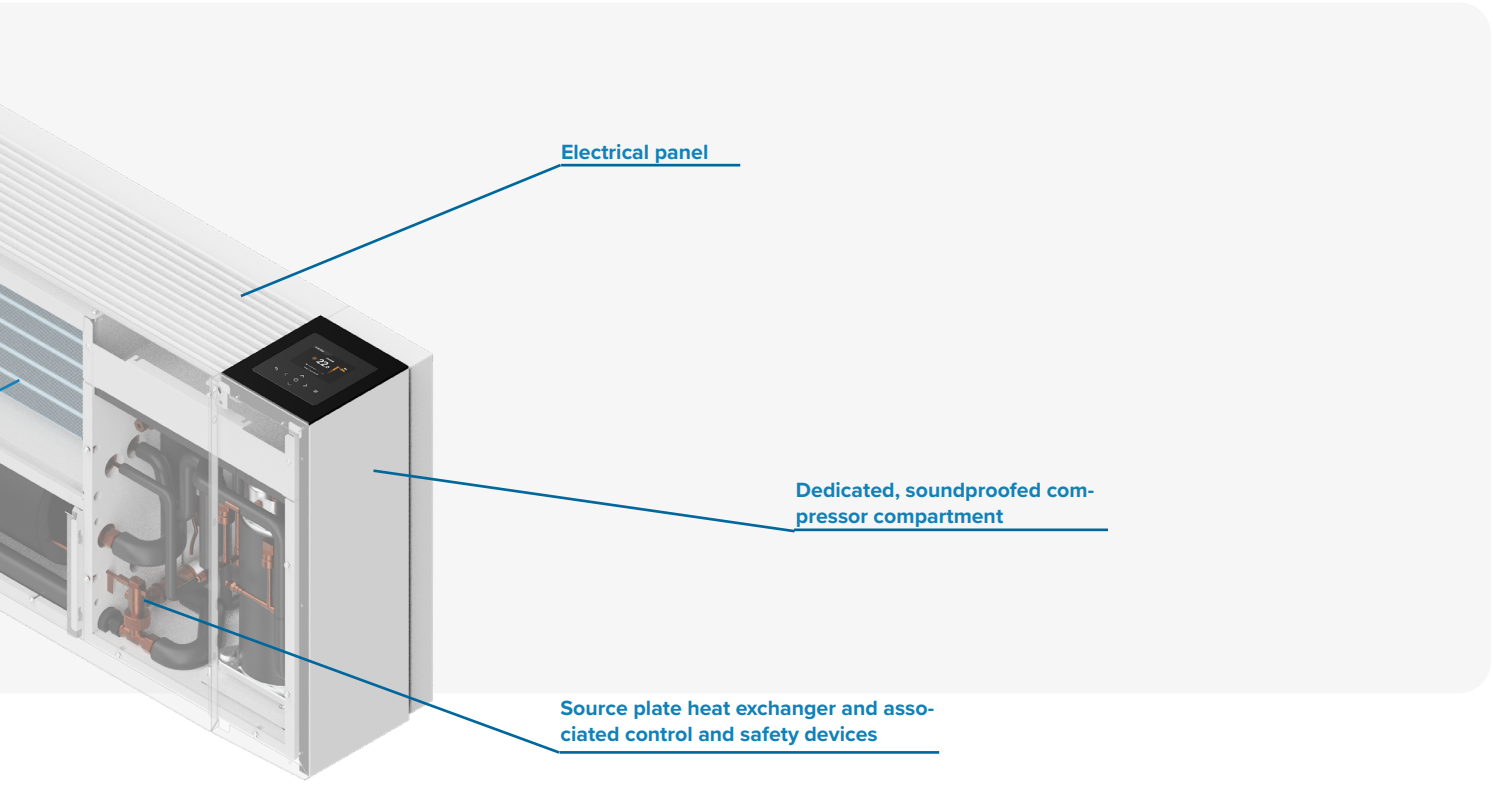
Advantages of the WLHP system

VERSATEMP FLOOR (EQV-P) units can be easily installed in existing systems to replace units from the EQV-X, EQV, VM and VV series.
This is possible thanks to compatibility:

- of the output power
- of the range of airflows
- of the range of source water flow-rates
- of the hydraulic connections

Ideal for both existing buildings and new builds

- A compact and fully self-contained unit
- Reduced amount of refrigerant inside the building, resulting in lower frequency of periodic checks required by the F-GAS regulation.
- Specific hydraulic groups are available for the various system configurations
- Standard Modbus connectivity
- Integration into CONTROL4 NRG supervision systems with remote management via the Clivet EYE APP



Industrial quality and safety

- All components are designed for installation on the unit
- The units are tested and inspected by Clivet following strict quality standards

Clivet's choice towards a green evolution

Thanks to the use of a refrigerant with an extremely low environmental impact (GWP = 3) and the careful design of every component, this system's environmental footprint is extremely low.

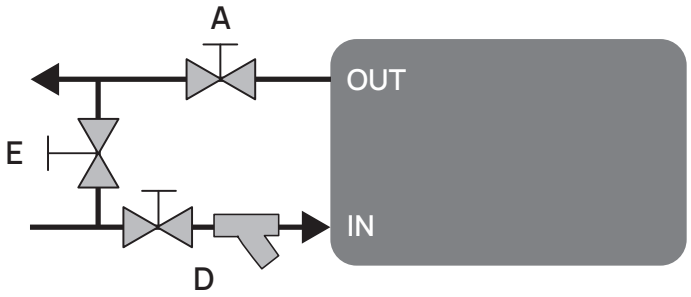
Features

Typical applications

The supply water may come from a WLHP energy-transfer loop, from a natural source such as a well or groundwater aquifer, or even from the water supply system in specific cases where there are architectural constraints.
The integration of optional hydraulic components simplifies the start-up and operation of the system. As well as helping to improve the system's efficiency, they make it easier to maintain the equipment and replace the units without the need for downtime.

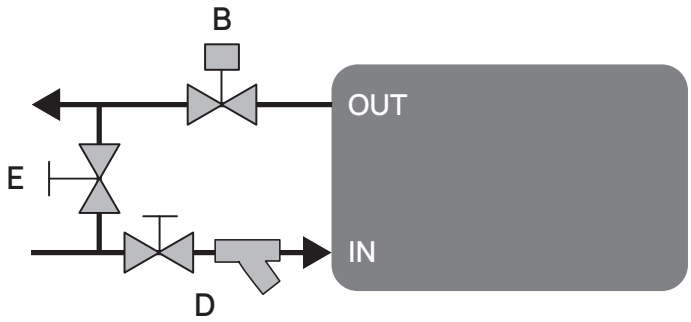
- Loop with constant flow-rate
- Loop with variable flow-rate
- Loop with disposable water

Application: loop with constant flow-rate



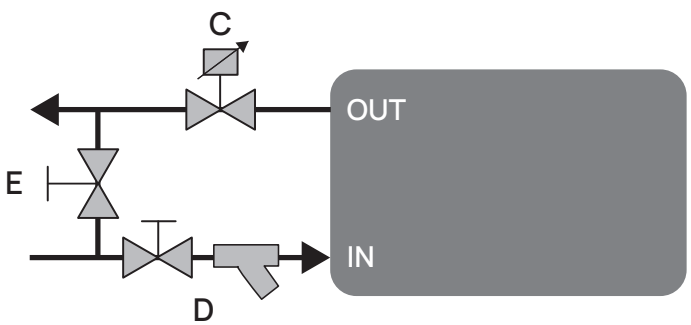
A Manually operated shut-off valve
D Steel mesh filter and manually operated shut-off valve
E Manually operated by-pass valve

Application: loop with variable flow-rate



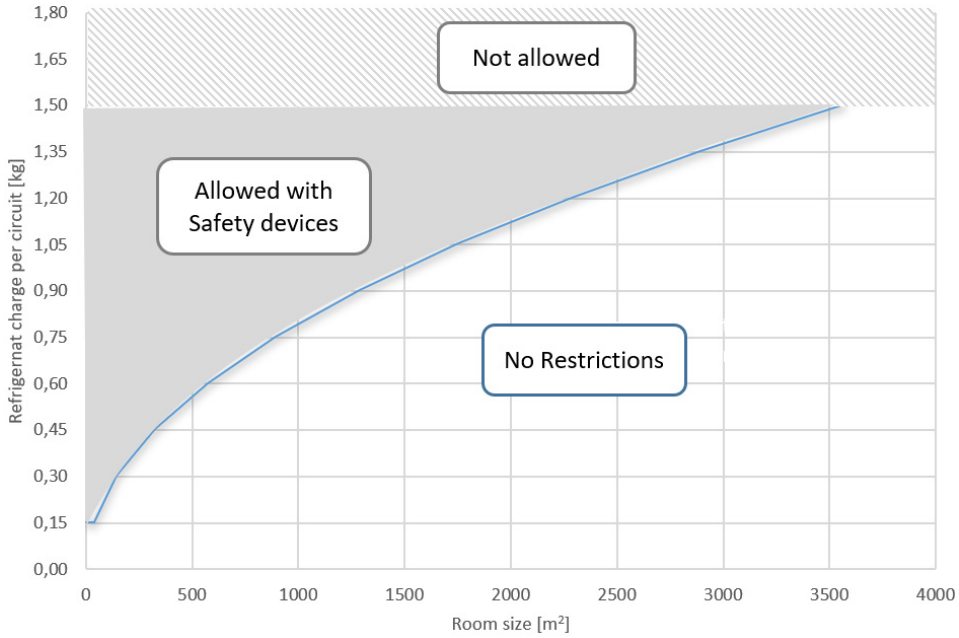
B Motorised ON/OFF 2-way valve
D Steel mesh filter and manually operated shut-off valve
E Manually operated by-pass valve

Application: system using disposable water



C Motorised modulating 2-way valve
D Steel mesh filter and manually operated shut-off valve
E Manually operated by-pass valve

R290 refrigerant



Limit curve calculated with height of the device of 0.6 m
No limitation for refrigerant charges of less than 0.15 kg of R290

European regulation EC 517/2014 envisages a reduction in the use of HFC (F-gas) refrigerants with the aim of reducing their environmental impact, measured through the GWP (Global Warming Potential) parameter.

For units with WLHPs below 50 kW, from 1 January 2027, only systems using environmentally friendly refrigerants with a GWP of less than 150 may be placed on the European market.

Clivet, which has always placed a strong focus on the development of technological solutions aimed at protecting the environment, adopts R290 refrigerant with a low GWP (3) which has virtually no impact on the environment.

The use of this A3 refrigerant (flammable) is in line with the EN 60335-2-40 standard, which defines its correct application based on the refrigerant charge and the surface of the rooms served.

Operating principle

Thermoregulation

The unit is an air conditioner with an integrated heat pump that exchanges heat with air in the indoor environment and with water on the source side.
Thermoregulation is based on a comparison between the return temperature of the unit and the setpoint.
Correct operation at high efficiency levels is ensured by the continuous monitoring of the pressure and temperature in the refrigeration circuit.

Intrinsic safety

The unit constantly monitors the main operating parameters in order to ensure reliable and continuous operation and thereby prevent malfunctions and the risk of formation of ice on the source side. Specifically, the units are fitted as standard on the source water side with inlet and outlet temperature sensors and a differential pressure switch.

Features

Automatic management of the air flow-rate



Constant: just the flow-rate required

The nominal air flow-rate is set directly on the display.

Variable: only the flow-rate required

Flow-rate modulation can be carried out in 2 modes:

automatic:

The flow-rate is adjusted according to the difference between the setpoint and the actual room temperature measured.

- It ensures lower energy consumption for ventilation whilst also improving acoustic comfort in the room.

the external signal:

Ideal solution for rooms in buildings such as hotels or offices with variable occupancy profiles.

- It allows the building manager to adjust operation of the unit in a flexible manner and at their discretion.

Silent Mode

To minimise the sound impact of the unit and distribution ducts, Silent mode can be activated via an external signal, control keypad or supervisory system.
This mode works by reducing the speed of the fans whilst still maintaining control over the room loads.



Unit management

The optional user interface allows for simple and intuitive operation of the unit.

In addition to managing the standard operating parameters and modes and detecting the temperature with an integrated probe, the device features an 'end-user' mode: interaction with the interface is limited to adjusting the setpoint and airflow, making the experience intuitive and straightforward for the typical hotel guest or office worker.

Finally, the device allows the system operator to control it remotely via the CLIVET EYE APP using the integrated Wi-Fi.



Connectivity

VERSATEMP systems can be easily integrated into supervision systems that use Modbus as a communication protocol, thus providing access to the full list of operating variables, commands and alarms.
It is also possible to manage the unit from systems such as:

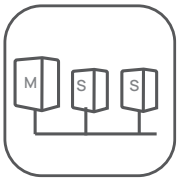
√ Clivet EYE (HMI standard)
- System for the monitoring and control of individual units



√ CONTROL4 NRG
- Monitoring system and system control consisting of several units



√ Mini-network
- Local management of up to 15 units, one of which is the master and the others are slaves



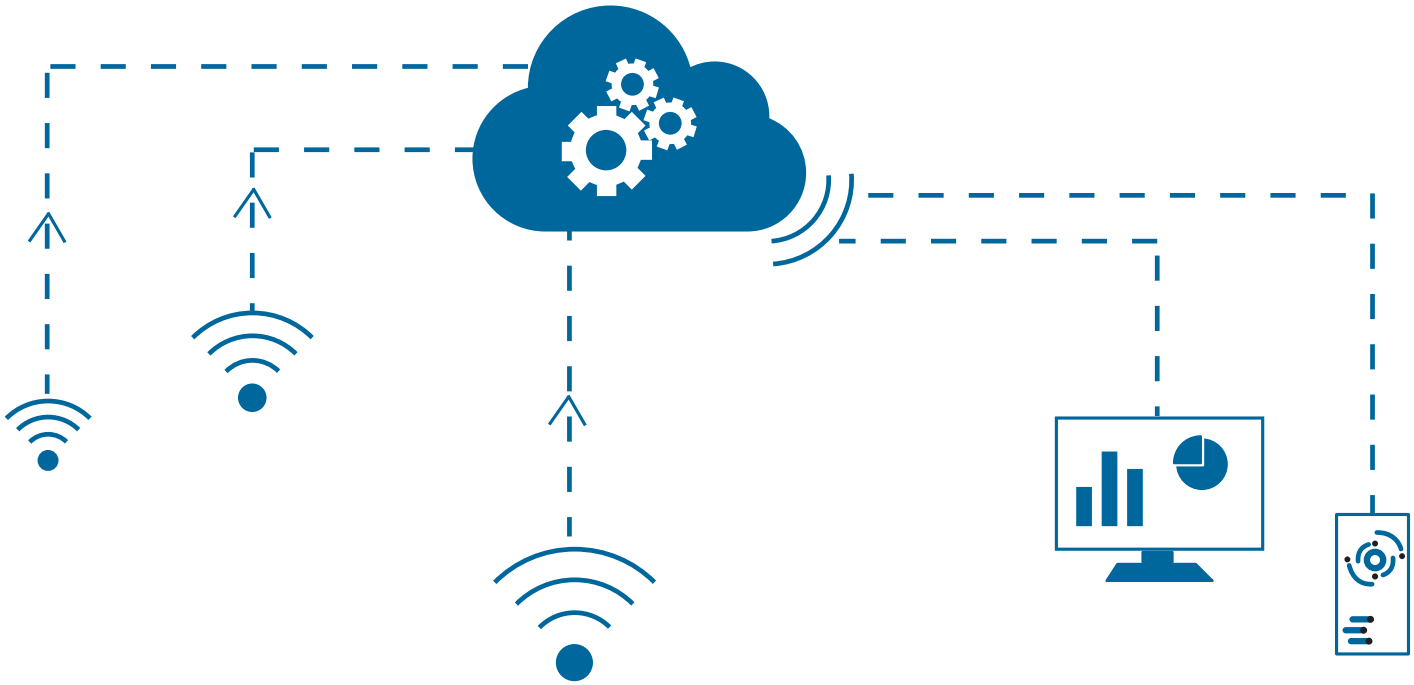
Features

CLIVET EYE

CLIVET EYE is the remote monitoring and control platform for Clivet products.
The system integrates IoT and Cloud technologies to provide users with a simplified view of the units and, at the same time, provide an effective tool to support maintenance personnel.

Real-time access to operational data allows users to intelligently manage their equipment, fully understanding its functionality and optimising its use through in-depth parameter analysis. Remote accessibility also gives professionals the ability to quickly detect malfunctions and significantly reduce intervention times through simplified diagnostics directly in the Cloud.

Product connectivity via mobile devices is therefore an essential element today to ensure business continuity and increase equipment lifetime.



Supervision

- Constant monitoring of operating data

Analysis

- Simplified inspection and diagnostics
- Detection of consumption and wear

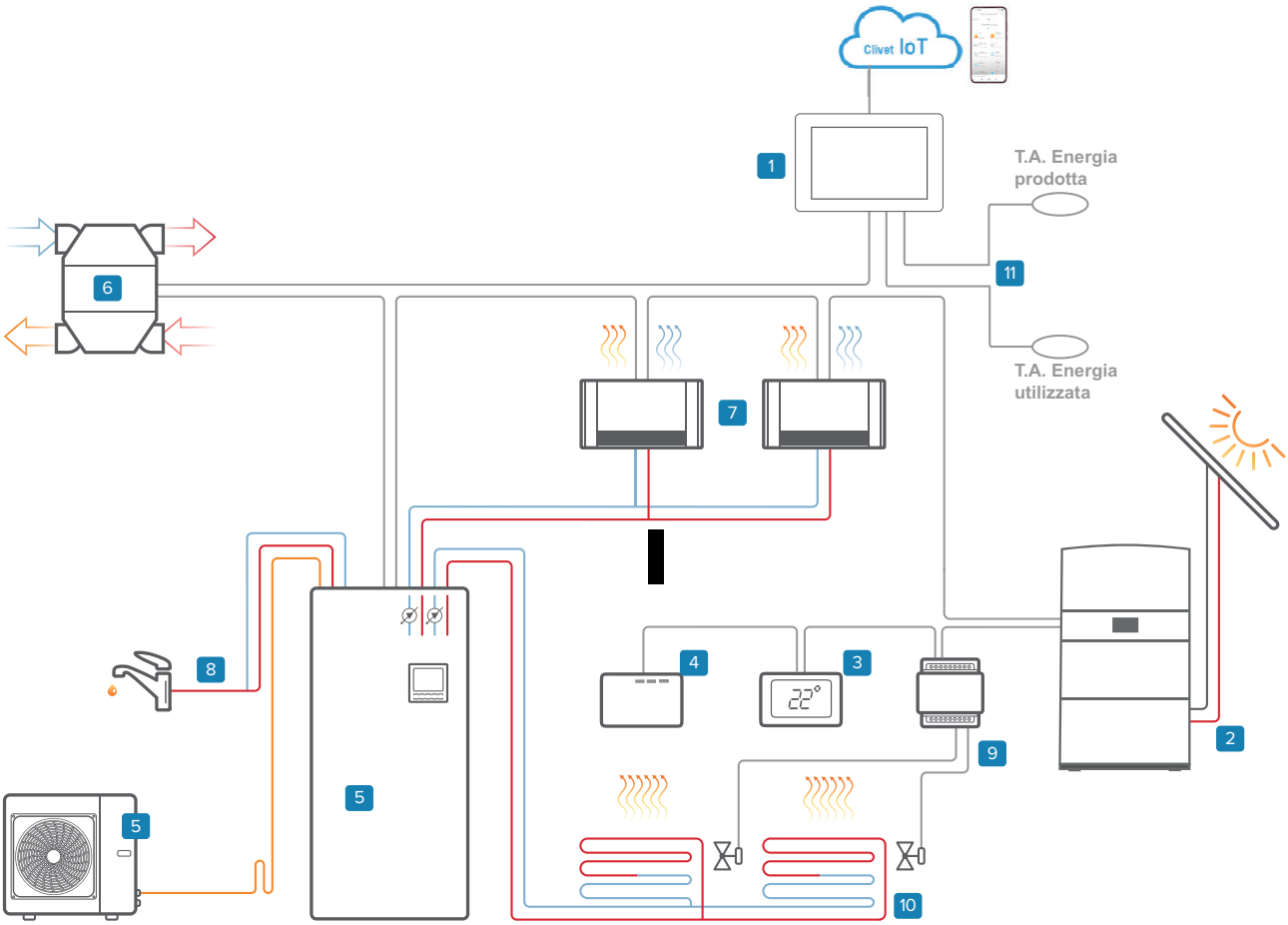
Action

- Remote control
- Reduced maintenance costs
- Longer equipment life

CONTROL4 NRG

A single smart system with all the elements that generate year-round comfort:

- ✓ Heating
- ✓ Cooling
- ✓ Domestic hot water
- ✓ Air renewal and purification
- ✓ Humidity control
- ✓ Local and remote monitoring of electricity produced by the system and absorbed by the systems

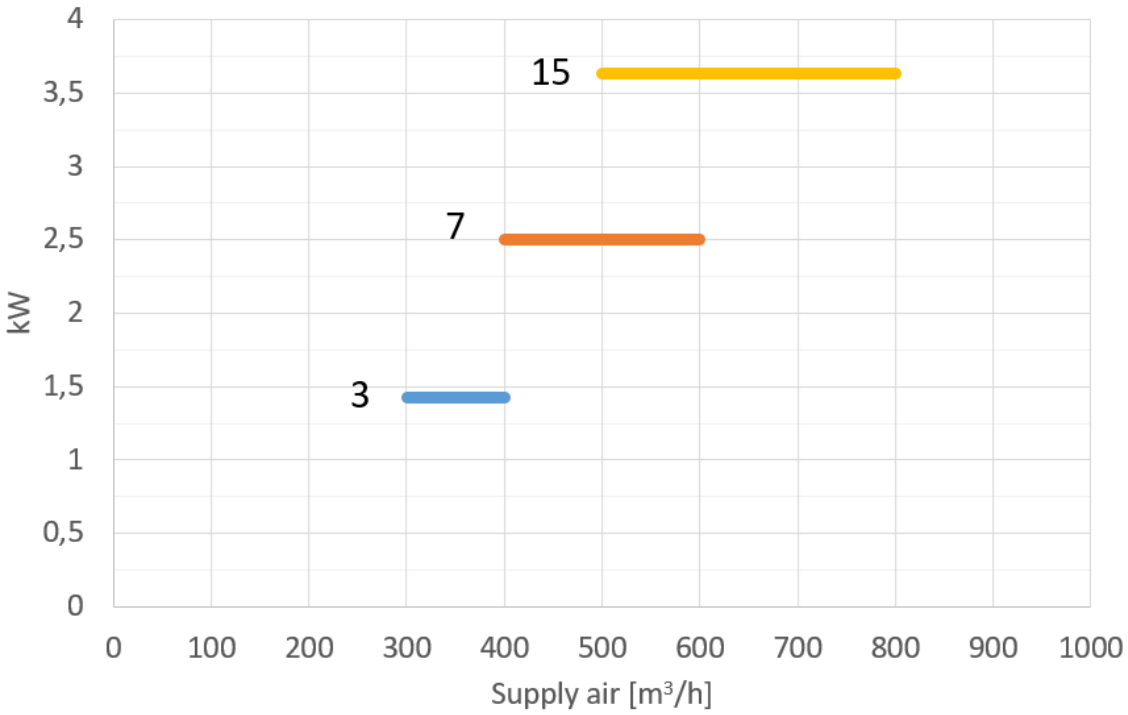




1 CONTROL4 NRG
2 SINERGY2
3 HID-TSmart
4 Z-IAQ
5 SPHERA EVO 2.0
6 ELFOFRESH EVO
7 ELFOROOM2
8 DOMESTIC HOT WATER
9 MODULE FOR RADIANT ZONES
10 RADIANT PANELS
11 ELECTRICITY METER

Unit configuration

How to select the unit



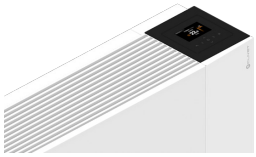
Filter nomenclature in accordance with EN ISO 16890

The classification of air filters is based on the ability to retain airborne particulate matter.
To make it possible and easier to select appropriate filters according to different applications, the global reference standard for filtration is EN ISO 16890.
It defines a new classification for air filters based on their ability to retain dispersed airborne particulate matter (PM10, PM2.5 and PM1) through stringent and specific test methods.
The previous standards in force, such as EN 779-2012, ASHRAE 52.2 and other local standards, are thus unified for all countries worldwide.
Below, the correlation between the traditional nomenclature and the global standard for filters used in Clivet units. For easier reading, both names have been kept in the text.

Supply section	Filtration stage (standard)	ISO 16890 COARSE 40%	G2

Aesthetically pleasing configuration

Control panel on the unitl (cased unit)



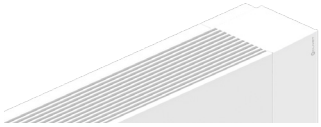
* Opz. CONT

Control panel on the unit (uncased unit)

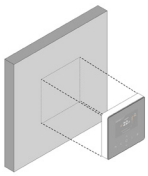


* Opz. CONTX

Control panel not on the unit

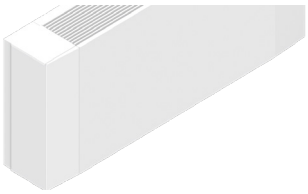


Control panel for wall installation



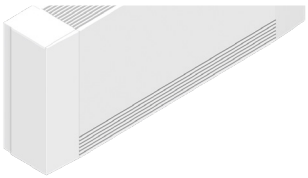
* Opz. CWMX

Downward air return (cased unit)



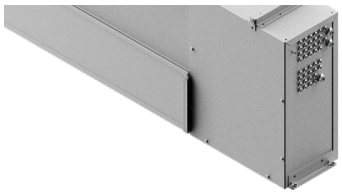
* Opz. R3

Return at front (cased unit)



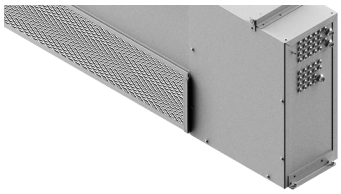
* Opz. RF

Downward air return (uncased unit)



* Opz. R3

Return at front (uncased unit)



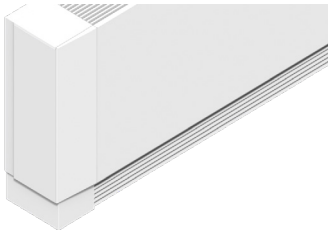
* Opz. RF

Air return from below with feet (a) (cased unit)



* Opz. R3 + FXVFX

Air return at front with feet and grid (a) (cased unit)



* Opz. R3 + FXVFGX

(a) Configurations compatible with BACKVX - Rear panel for cased unit

Standard unit technical specifications

Compressor

Size 3-7-15. Hermetic rotary compressor with gas compression in the crankcase, direct suction, no oil heater. it is mounted on antivibration rubber pads. includes oil feed.

Structure

Supporting structure entirely made of ZM steel sheet, ensuring excellent mechanical properties and high long-term corrosion resistance. The compressor compartment is constructed from thick sheet metal and fully lined with sound-absorbing and sound-insulating material to minimize noise emissions. The fan section is completely lined with anti-condensation and sound-absorbing insulation.

Casing (only cased configuration)

Elegant removable outer casing, made of 8/10 thick sheet metal powder-coated in RAL 9003 with a smooth matte finish, top-mounted for practical access to internal components.

Internal exchanger

Direct expansion finned pack heat exchanger, made of copper tubes arranged in staggered rows and mechanically expanded to better adhere to the fin collars. The fins are made of aluminum with a specially corrugated surface, adequately spaced to ensure maximum heat exchange efficiency.

External exchanger on source side (water)

Direct expansion heat exchanger with AISI 316 stainless steel brazed plates, featuring a high heat exchange surface area and complete with external anti-condensation thermal insulation. The heat exchanger is fitted with:

- Water-side flow switch;
- water inlet temperature sensor;
- outlet water temperature sensor with antifreeze function.

Fan

Direct-drive centrifugal fans, featuring a single-inlet (single-scroll) configuration for size 3, and a double-inlet (double-scroll) configuration for sizes 7 and 15. All models are equipped with high-efficiency ECM synchronous motors with integrated thermal overload protection. The system includes a dedicated electronic controller/driver allowing the setting of 7 distinct rotational speeds (counterclockwise). The outer structure, including the scrolls, impellers, and robust support frame, is made entirely of galvanized sheet metal to ensure maximum mechanical strength and vibration damping.

Refrigeration circuit

Cooling circuit complete with:

- 4-way cycle reversing valve;
- safety high pressure switch,
- low-pressure transducer;
- high-pressure transducer;
- electronic expansion valve;
- mechanical filters.

Filtration

Regenerable filter with honeycomb polypropylene filter media. The frame, constructed from galvanized sheet metal, is inserted into dedicated fixed guides integrated into the unit's internal structure, allowing for easy and quick removal. The system is designed as a high-efficiency mechanical pre-filter for the separation and retention of coarse airborne particles (dust, fibers, and macro-pollutants with a diameter greater than 50 µm), ensuring minimal pressure drop to safeguard the system's aeraulic balance. The overall air filtration efficiency (ISO 16890 COARSE 40% - filtration class G2) is tested and certified in compliance with the current UNI EN ISO 16890 standard.

Drain pan

Plastic condensation drain pan (ABS UL94 HB), L-shaped and fixed to the internal frame. Equipped with a drain pipe connection externally lined with anti-condensation insulation. Water level sensor. Provide a trap to offset the negative pressure generated by the fan and prevent air suction from the drain pipe. Drain trap to be provided and fitted by the installer.

Electrical panel

The electrical panel, including the microcontroller control, is located inside the unit, with access provided by an easily removable panel.
The power section includes:

- power inlet terminals

The control section includes:

- microprocessor control;
- self-diagnosis system;
- Daily and weekly ON/OFF timer and setpoint configuration;
- terminal block (by customer) for: summary alarm, fire/gas alarm, water flow switch status, remote controls, ON-OFF, summer/winter mode switch, standard/ECO mode setting, high/normal/silent fan speed setting;
- anti-freeze protection water side;
- water flow failure protection with flow switch;
- return air temperature sensor with thermoregulation function;
- manual or automatic fan speed selection;
- dirty filters warning timer that periodically alerts to the need for maintenance of the filters.

Technical data

Performances

Size			3	7	15
Nominal Airflow		m^3/h	320	450	650
Cooling A 27/19 W 30					
Cooling capacity	1	kW	1,37	2,39	3,43
Sensitive power	1	kW	1,16	2,03	2,91
Compressor power input	1	kW	0,30	0,49	0,72
EER	1	-	4,58	4,92	4,79
Water flow rate	1	l/s	0,08	0,14	0,20
Water-side pressure drop	1	kPa	6	19	34
Heating A 20 W 20					
Heating capacity	2	kW	1,41	2,88	4,56
Compressor power input	2	kW	0,32	0,59	0,93
COP	2	-	4,46	4,84	4,88
Water-side temperature difference	2	K	4,2	5,0	5,5

The Product respects European Directive ErP (Energy Related Products), which includes the delegated regulation (UE) N. 2016/2281 of the Commission, also known as Ecodesign Lot21.
Contains fluorinated greenhouse gases (GWP 3)
A 27/19 W 30 = Unit inlet air temperature 27°C D.B. / 19°C W.B. Unit inlet water temperature 30°C
A 20 W 20 = Unit inlet air temperature 20°C Unit inlet water temperature 20°C

1. Exchanger inlet/outlet water temperature 30°C/35°C
2. The outlet water temperature depends on the cooling water flow-rate

ErP data (Reg. EU 2016/2281)

Size			3	7	15
Cooling					
Cooling capacity (EN 14511:2022)	1	kW	1,34	2,36	3,42
EER (EN 14511:2022))	1	-	4,17	4,62	4,56
SEER	2	-	3,84	4,28	4,11
nsc	2	%	150,6	168,2	161,4
Water flow rate	1	l/s	0,08	0,14	0,20
Heating					
Heating capacity (EN 14511:2022)	3	kW	1,43	2,90	4,59
COP (EN 14511:2022)	3	-	4,17	4,67	4,72
SCOP	2	-	3,90	4,38	4,43
nsh	2	%	153,0	172,2	174,2

Data referring to nominal flow-rate.
1. Performance in accordance with EN 14511-2022; indoor air temperature 27°C D.B./19°C W.B.; inlet/outlet water temperature 30°C/35°C
2. Data calculated in compliance with EN 14825:2022.
3. Performance in accordance with EN 14511-2022; indoor air temperature 20°C D.B.; water inlet/outlet temperature 20°C/17°C

Technical data

Construction

Size			3	7	15
Compressor					
Type of compressor		-	ROT	ROT	ROT
N° compressors		Nr		1	
Refrigerant type		-		R290	
Refrigerant charge		kg	0,10	0,12	0,15
Treatment area fans (supply)					
Supply fan type		-	CFG	CFG	CFG
Nominal air flow-rate		m^3/h	320	450	650
Max. static pressure supply fan	1	Pa	40	50	50
Minimum air flow-rate		m^3/h	300	400	500
Maximum air flow-rate		m^3/h	400	600	800
Installed unit power		kW	0,04	0,05	0,16
Water side exchanger					
Type of exchanger			PHE	PHE	PHE
Nominal water flow-rate	2	l/s	0,08	0,14	0,20
Nominal pressure drops	3	kPa	4	10	8
Minimum water flow-rate		l/s	0,06	0,06	0,06
Maximum water flow-rate		l/s	0,25	0,25	0,29
Maximum working pressure		bar	10	10	10
Connections					
Water fittings	4	inch	1/2"	1/2"	1/2"
Condensate drain	5	mm	15	15	15
Power supply					
Standard power supply		V	230/1~/50	230/1~/50	230/1~/50

ROT = rotary compressor
CFG = Centrifugal fan
PHE = plate exchanger

1. Static head at nominal flow-rate
2. Water flow-rate calculated in relation to nominal cooling performance
3. Total pressure drops for the standard unit (excluding optional hydraulic units). To calculate the total pressure drops, including any additional hydraulic components, please refer to the accessories section.
4. Water inlet/outlet diameters
5. Outer diameter

Electric fan performance

Size			3	7	15
Nominal air flow-rate		m^3/h	320	450	650
Supply fan consumption	1	W	30	30	40
SFP (Specific Fan Power)		$W/(m^3/s)$	340	240	220

1. Available static pressure 20 Pa

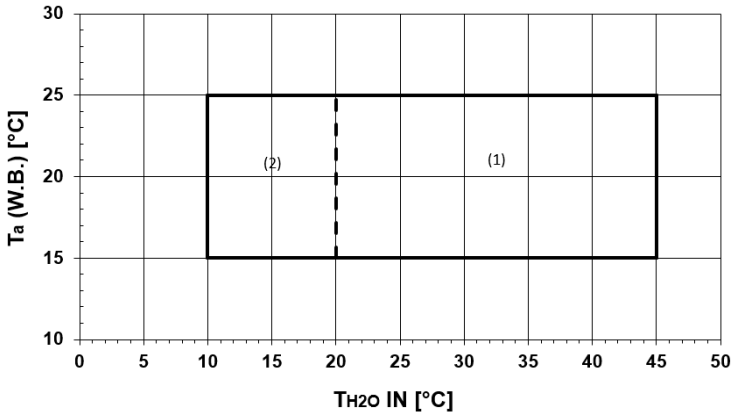
Electrical data

Size		3	7	15
F.L.A. - Full load current at max admissible conditions				
F.L.A. - Total	A	2,2	3,4	5,1
L.R.A. - Locked rotor amperes				
L.R.A. - Compressor	A	5,3	12,2	21,6
F.L.I. - Full load power input at max admissible conditions				
F.L.I. - Total	kW	0,44	0,68	1,03
M.I.C. Maximum inrush current				
M.I.C. - Value	A	5,6	12,6	22,4

Data refers to standard units
Voltage variation: max +/- 10%

Technical data

Operating range (Cooling)



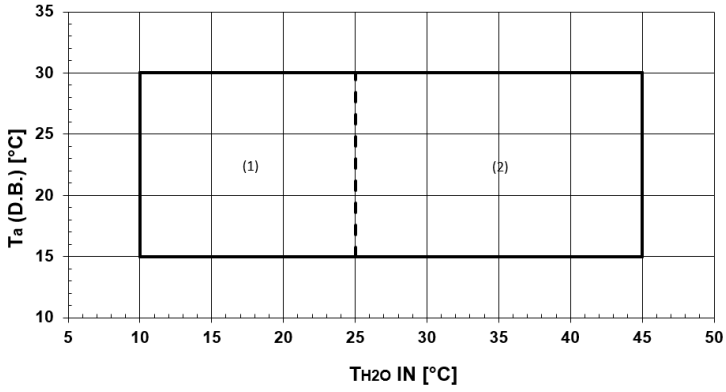
The limits are meant as an indication and they have been calculated by considering:
- general and non specific sizes
- standard airflow (Fan speed: standard)
- unrestricted positioning of the unit and its correct use
- operation at full load
- water temperature differential = 5°C

Ta = Temperature of the air entering the handling coil (°C)
Wet-bulb temperature measured (W.B. = wet bulb)

TH_2O= Inlet water temperature at the plate heat exchanger (°C)

1. Standard unit operating range
2. Operating range with the 'V2MODX – two-way modulating valve for systems with disposable water' option, for example a well, groundwater, mains water or any other source of water at low temperature. With this option, the water supply system must be of the variable flow type.

Operating range (Heating)



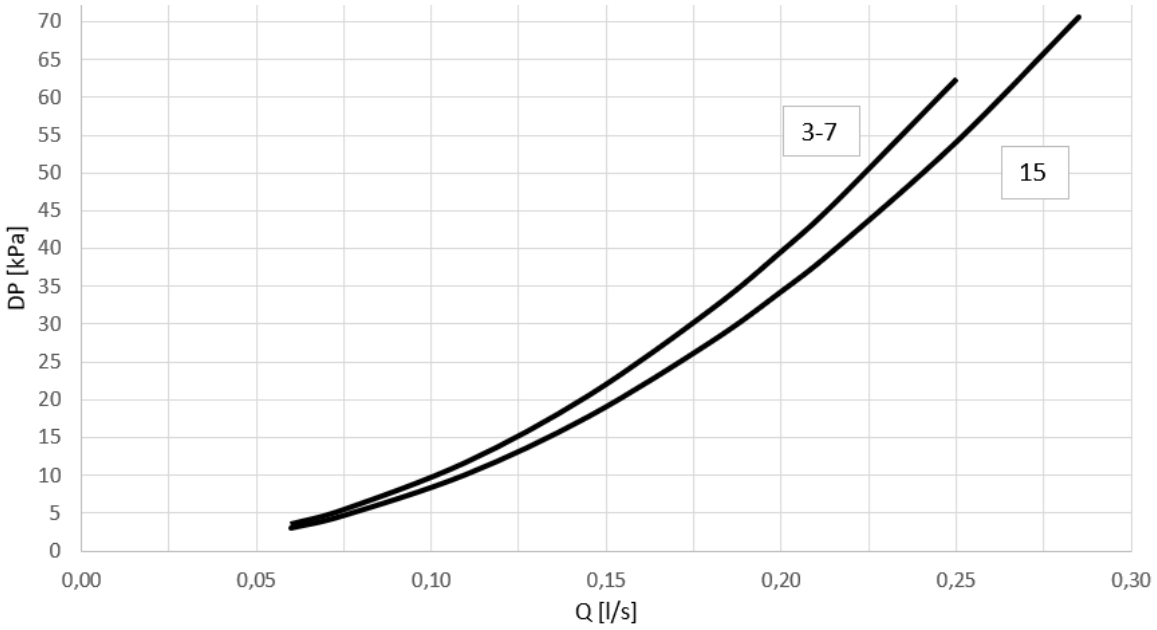
The limits are meant as an indication and they have been calculated by considering:
- general and non specific sizes
- standard airflow (Fan speed: standard)
- unrestricted positioning of the unit and its correct use
- operation at full load
- water temperature differential = 5°C

Ta = Temperature of the air entering the handling coil (°C)
Dry-bulb temperature measured (D.B. = dry bulb)

TH_2O= Inlet water temperature at the plate heat exchanger (°C)

1. Standard unit operating range
2. Operating range with the 'V2MODX – two-way modulating valve for systems with disposable water' option, for example a well, groundwater, mains water or any other source of water at low temperature. With this option, the water supply system must be of the variable flow type.

Pressure drops of the hydraulic circuit of the standard unit



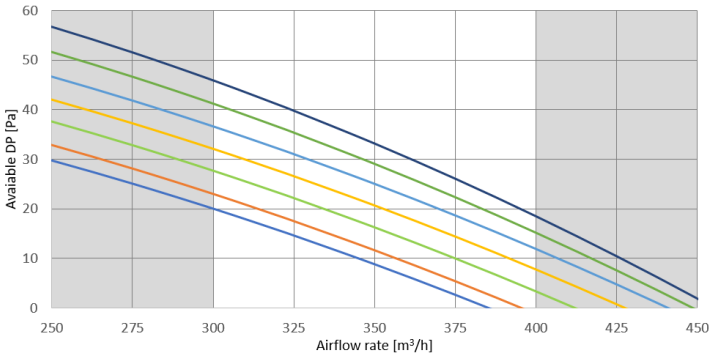
Q = Water flow-rate[l/s]
DP = Water side pressure drops (kPa)

Technical data

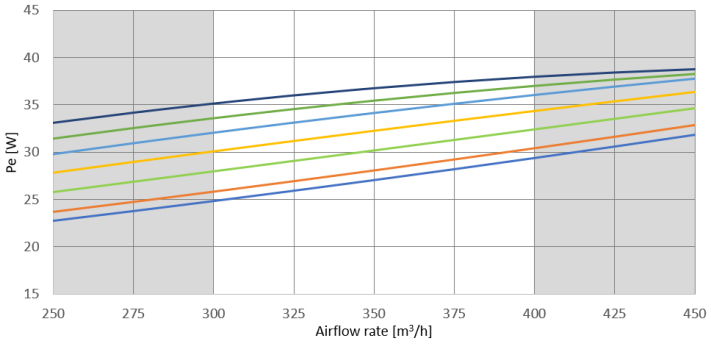
Fan performances

Size 3

Fan static pressure

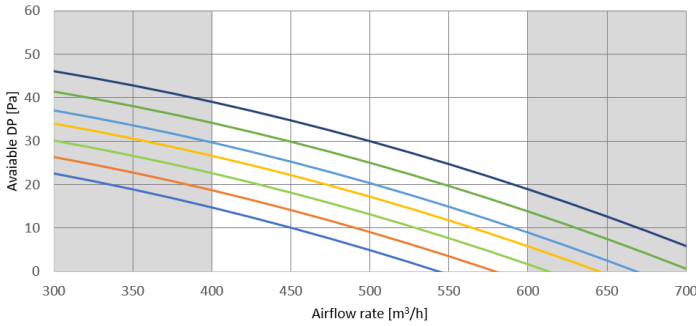


Fan power consumption

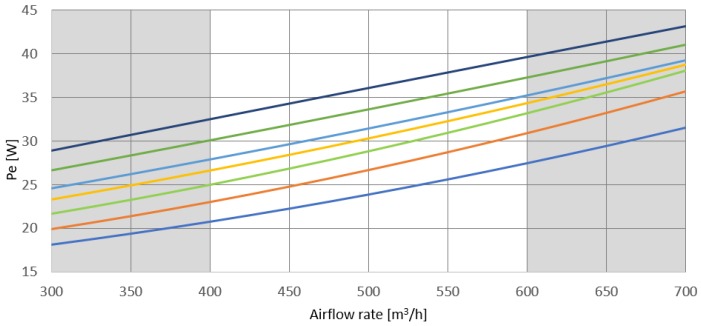


Size 7

Fan static pressure

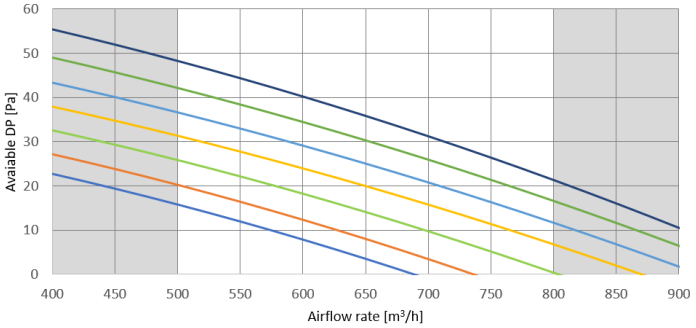


Fan power consumption

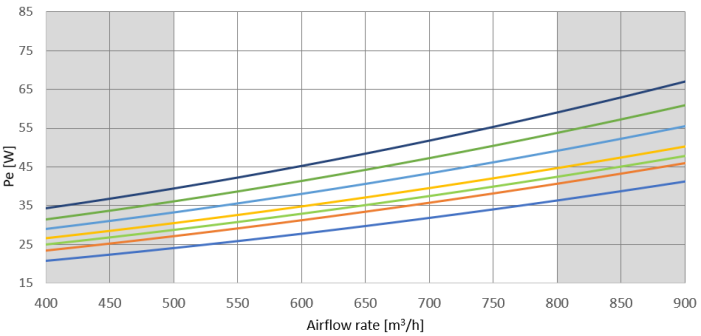


Size 15

Fan static pressure



Fan power consumption



The grey areas identify flow rate ranges outside the optimal operating range. Operation in these zones does not guarantee proper heat exchange and/or sufficient residual external static pressure for unit operation.
Performance referred to the uncased version (UC - Uncased).
DP = Available static pressure
Pe = Electrical power absorbed

Option compatibility

RIF.	DESCRIPTION	WITH CASING	UNCASED
	Version		
CAB	Configuration with fairing for cased applications	√	-
UC	Uncased configuration	-	√
	Aeraulic circuit		
FAS	Standard air filter	√	√
DAOJX	Supply air duct with flexible joint	-	◊
RF	Front air inlet	O	O
R3	Air return from below	√	√
	Water circuit		
CDPA	Condensation drain pump, installed on the unit	O	O
CSVX	Pair of manually operated shut-off valves	◊	◊
FCVBX	Manual balancing valve	◊	◊
IFWX	Steel mesh strainer on the water side	◊	◊
KFVMX	Fixing kit for two-way modulating valve	◊	◊
MPC	Hydraulic group for constant flow loop with manual valves	O	O
MIPV	Hydraulic group for variable flow loop with two-way ON-OFF valve	O	O
REQV	Hydraulic connections for retrofitting EQV, VM and VV units	O	O
V2MODX	Modulating two-way valve for open-loop water system	◊	◊
	Electric circuit		
CONT	Unit-mounted room control with casing	◊	-
CONTX	Room control o for unit-mounted installation	-	◊
CWMX	Electronic room control for wall-mounted installation	◊	◊
MOB	RS485 serial port with Modbus protocol	√	√
CTEM	Ambient temperature control with probes on board the unit	√	√
SICE	Antifreeze sensor for the water leaving the exchanger	√	√
	Installation		
BACKVX	Back panel for unit with exposed installation	◊	-
FXVFGX	Floor mounting feet + grille for exposed unit	◊	-
FXVFX	Painted feet for floor mounting	◊	-

√ Standard component
O Componente optional
◊ Accessory supplied separately

Standard functions

MOB

RS485 serial port with Modbus protocol

Enables serial connection to supervision systems using Modbus RTU with RS485 serial port as the communication protocol.
Allows access to the complete list of operating variables, commands, and alarms.

⚠ The total length of each individual serial line must not exceed 1000 m and the line must be connected in supervision bus type (input/output).
⚠ The serial port is on the unit itself.

CTEM

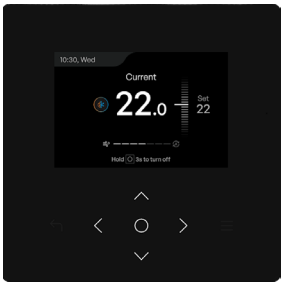
Ambient temperature control with probes on board the unit

Thermoregulation is carried out on the basis of the temperature conditions of the return air flow measured by the probe installed on the unit.

Accesories

CONT

Room control installed on the unit with casing



The user interface allows full control of the unit's parameters. It integrates an ambient temperature sensor, enabling it to function as a zone thermostat.
It also includes a Wi-Fi module for management and monitoring via the dedicated Clivet EYE App.

Main functions:

- switching the unit on and off;
- manual or automatic changing of the operating mode (heat, cool and ventilation) and/or setpoint;
- setting the Dry mode
- manual or automatic changing of airflow (7 levels)
- configuration of the 'end-user' mode for interaction with the end user;
- setting the ECO and Silent modes;
- calculation and display of the unit's efficiency parameters, such as output power, input power and performance coefficients (not suitable for legal metrology purposes)
- scheduling, according to daily and weekly time slots, of when the system is switched on or off and of the standard or economy setpoint;
- display of the alarm code and unit statuses;
- management of operating parameters;
- password protection to access the unit's parameters.

⚠ Solution compatible with the version "CAB - Configuration with casing for cased applications"

CDPA

Condensation drain pump, installed on the unit



Device allowing discharging the condense water from the collection tray in the event it cannot outflow by gravity.
Necessary in installations where the external discharge is placed higher than the tray itself. The integrated sensor only activates the pump when necessary. If the level of water in the tray exceeds a preset limit value, the unit stops the compressor to avoid overflowing of the tray and an alarm is triggered alerting to the fault.

The device is installed and wired on the unit.

Features of the condensation drain pump

size		3	7	15
Water flow rate	l/h	6	6	6
Available pressure	mH_2O	6.12	6.12	6.12

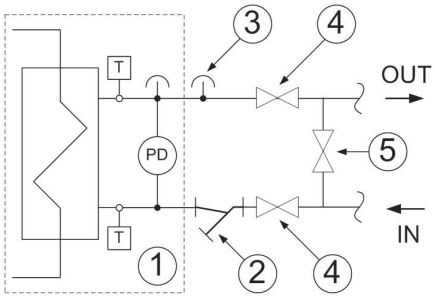
Accesories

MPC

Hydraulic assembly for constant flow loop

Option supplied on the unit. It simplifies design and installation in the case of applications with constant-flow closed loop.
It is equipped with a steel mesh filter, two manually operated two-way shut-off valves at the inlet and outlet of the exchanger on the water side, a manually operated two-way valve that acts as a by-pass valve during washing of the hydraulic circuit, and two relief valves.

Option MIPC layout diagram



1. Internal exchanger with temperature sensors, differential pressure switch, relief valve
2. Water side mechanical steel mesh filter
3. Relief valve
4. manual shut-off valve
5. manual by-pass valve

Features of the MIPC option

size		3	7	15
Diameter of the water fittings	inch	1/2"	1/2"	1/2"
Water fittings	-	FEMALE	FEMALE	FEMALE
Maximum working pressure	bar	10	10	10

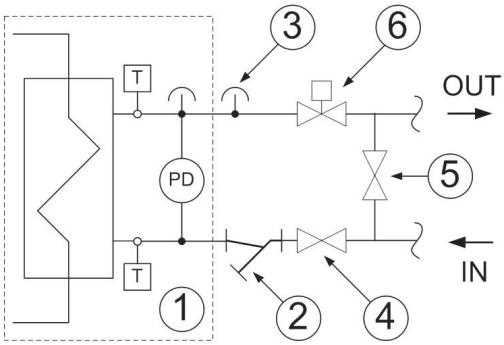
MIPV

Hydraulic assembly for variable flow loop

Option supplied on the unit. It simplifies design and installation in the case of applications with variable-flow closed loop.
It includes an ON/OFF motorised two-way valve located at the outlet of the exchanger on the water side, powered and controlled by the unit. Its operation is linked to that of the refrigeration circuit: when the compressor is off, the valve remains closed, reducing water consumption.
It is also equipped with a steel mesh filter, a manually operated two-way shut-off valve at the inlet of the exchanger on the water side, a manually operated two-way valve that acts as a by-pass valve during washing of the hydraulic circuit, and two relief valves.

⚠ The supplied valve ensures proper opening and closing for water differential pressures that do not exceed 2000 kPa.

Option MIPV layout diagram



6. Internal exchanger with temperature sensors, differential pressure switch, relief valve
7. Water side mechanical steel mesh filter
8. Relief valve
9. Manual shut-off valve
10. Manual by-pass valve
11. Motorised ON/OFF 2-way valve

Features of the MIPV option

size		3	7	15
Diameter of the water fittings	inch	1/2"	1/2"	1/2"
Water fittings	-	FEMALE	FEMALE	FEMALE
Maximum working pressure	bar	10	10	10

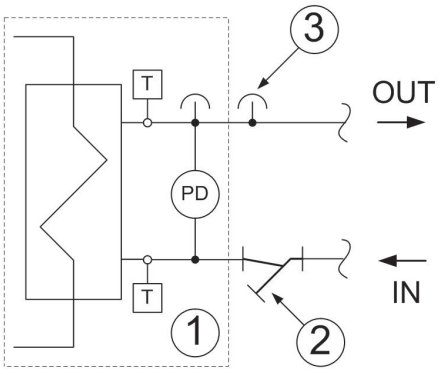
REQV

Hydraulic connections for retrofitting constant-flow EQV, VM and VV units



Option supplied on the unit. It simplifies hydraulic connection when replacing VERSATEMP units of the EQV, VM and VV series, both uncased and cased, as the size and positions of the connections are similar. It is equipped with a steel mesh filter and relief valves.
Device installed built-in the unit.

REQV option diagram



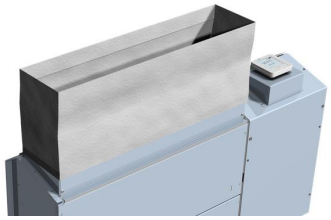
1. Internal exchanger with temperature sensors, differential pressure switch, relief valve
2. Water side mechanical steel mesh filter
3. Relief valve

⚠ The chart indicates only the sizes of the EQV-X suitable for the replacement (retrofitting) of VERSATEMP units from the EQV, VM and VV series.
⚠ The system side connections are female

Accessories separately supplied

DAOJX — Air supply channel with flexible joint

Device for ducting the supply of the unit. It consists of a galvanised steel frame that must be secured to the supply flange and a PVC flexible channel that allows for a fair amount of freedom to decide where to position the air distribution grid.



⚠ Option available only for the "UC - uncased configuration" version of the unit

CSVX — Pair of manually operated shut-off valves

A shut-off device that allows the unit to be hydraulically isolated for maintenance work or to prepare the system prior to connecting the unit. The two manually operated valves must be fitted to the inlet and outlet water lines.

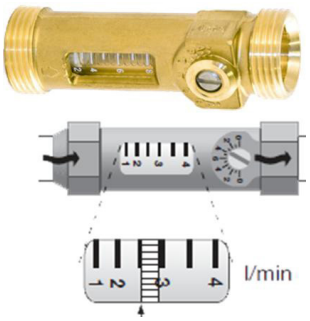


Features of the manual shut-off valves

size		3	7	15
Diameter of the water fittings	inch	1/2"	1/2"	1/2"
System-side fittings	-	FEMALE	FEMALE	FEMALE
Unit-side fittings	-	MALE	MALE	MALE
Maximum working pressure	bar	10	10	10

FCVBX — Manual balancing valve

The device allows the flow of water through the unit to be calibrated without the need for tables or measuring devices. This makes it possible to balance the flow of water in the circuit. The water flow rate is shown in real time on the dedicated display (in litres per minute). Calibration can be carried out easily even by untrained operators by turning the adjustment screw. It includes adaptors to accommodate the difference in diameter between the balancing valve and the water connections.



The pressure drop on the water side can be calculated using the formula:

$$Dp\ [bar] = \left(\frac{3.6 \times Q\ [l/s]}{Kvs} \right)^2$$

Q = Water flow-rate [l/s]
Dp = water side pressure drops (bar)
Kvs = flow coefficient [m³/h]

Characteristics of the manual balancing valve

size		3	7	15
Valve diameter	inch	3/4"	3/4"	1"
Diameter of the water fittings	inch	1/2"	1/2"	1/2"
System-side fittings	-	MALE	MALE	MALE
Unit-side fittings	-	MALE	MALE	MALE
Maximum working pressure	bar	10	10	10
Flow rate adjustment range	l/s	0.05 ÷ 0.2	0.05 ÷ 0.2	0.13 ÷ 0.5
Flow coefficient (Kvs)	-	1.85	1.85	5

IFWX

Steel mesh strainer on the water side

The device protects the plate exchanger from any impurities inside the hydraulic circuit. The stainless steel mesh mechanical filter must be placed on the water inlet line.
It can be easily removed for periodic maintenance and cleaning.



IFWX option technical features

size		3	7	15
Filter diameter	inch	1/2"	1/2"	1/2"
Diameter of the water fittings	inch	1/2"	1/2"	1/2"
System-side fittings	-	FEMALE	FEMALE	FEMALE
Unit-side fittings	-	MALE	MALE	MALE
Degree of filtration	µm	400 µm	400 µm	400 µm

KFVMX

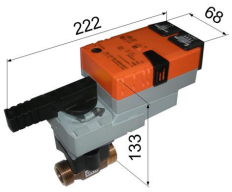
2-way modulating valve fixing kit for open-loop water system

An option that simplifies the mechanical and electrical installation of the "V2MODX - Two-way modulating valve for systems with disposable water" device, in both the cased and uncased configurations.
It comprises the pipework, fittings and a fixing bracket. It also includes the drain valve; otherwise, this must be provided by the customer.

⚠ This accessory is to be used in conjunction with the V2MODX option – Two-way modulating valve for systems with disposable water.
⚠ For units in the 'CAB - Configuration with casing for cased applications' version, this accessory must be used in conjunction with the 'FXVFGX - Feet for fixing to the ground + grid for cased unit' or 'FXVFX - Painted feet for fixing to the ground' options.

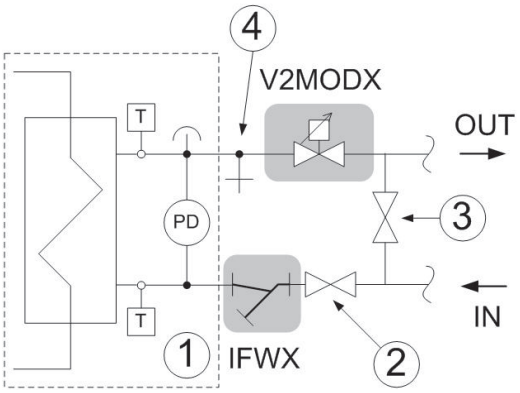
Accessories separately supplied

V2MODX **Two-way modulating valve for systems with disposable water**



This option is recommended for applications involving disposable water at relatively low temperatures (well water, groundwater or mains water) or with a variable-flow loop where the unit is required to operate in heating mode at high water temperatures or in cooling mode at low water temperatures.
The motorised two-way modulating valve is placed at the outlet of the exchanger on the water side and is supplied and controlled by the unit. Its operation is combined with that of the refrigeration circuit: modulation by a 0-10V signal based on the refrigerant pressure in the source side exchanger reduces water consumption and keeps the unit within its intended operating range in both cooling and heating mode.

Hydraulic connection diagram



1. Internal exchanger with temperature sensors, differential pressure switch, relief valve
2. Manual shut-off valve (to be installed by the customer)
3. Manual bypass valve (to be installed by the customer)
4. Drain valve (to be installed by the customer)

V2MODX - Two-way modulating valve for systems with disposable water
IFWX - Water side steel mesh filter

⚠ The supplied valve ensures proper opening and closing for water differential pressures that do not exceed 800 kPa, i.e. 8 bar
⚠ Option to be installed outside the unit on the water outlet pipe of the exchanger. Hydraulic connection to be carried out by the Customer.
⚠ Provide space to fit/remove the valve.
⚠ With this option, the unit is supplied complete with quick-connect electrical terminals for the power supply and automatic control of the valve.

Technical specifications of the V2MODX option

size		3	7	15
Diameter of the water fittings	inch	1/2"	1/2"	1/2"
System-side fittings	-	FEMALE	FEMALE	FEMALE
Unit-side fittings	-	FEMALE	FEMALE	FEMALE
Maximum working pressure	bar	8	8	8

CONTX **Room control to be installed on the uncased unit**

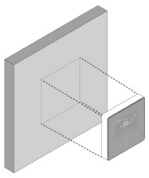
Option for mounting the user interface on the unit in a visible horizontal position.



- ⚠ Option compatible with the "UC - Uncased configuration" version
- ⚠ The fixing screws and the power supply and serial communication cables (to be fitted by the customer) are included in the package.

CWMX **Electronic room control for wall installation**

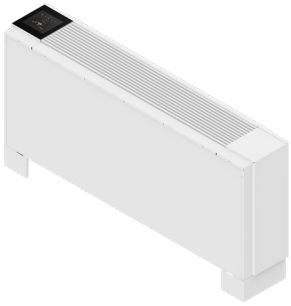
Option for controlling the unit remotely via the user interface.



- ⚠ The device is designed to be connected to the unit's electrical panel (installation to be carried out by the customer) over a distance of up to 50 m.
- ⚠ Provide a separate 12V DC power supply (to be installed by the customer) for a distance of up to 300 m.
- ⚠ Connection of the user interface with 3 x 0.75 mm2 shielded cable for communication, 2 x 1 mm2 cable for the power supply if required.

BACKVX **Rear panel for cased installation**

Option enabling unit installation with a visible rear panel (e.g., against a glass wall).
Includes a rear aesthetic panel made of galvanized steel, powder-coated in the same color as the casing.

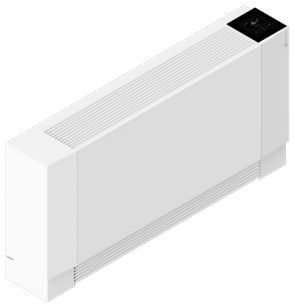


- ⚠ To be installed by the customer.
- ⚠ Option available only for the "CAB - Configuration with casing for cased applications" version of the unit.

FXVFGX **Feet for fixing to the ground + grid for cased unit**

Enables secure positioning even when the unit cannot be wall-mounted to a rear wall, such as with drywall partitions or close to a glass wall.
It also allows concealing any customer-supplied system components under the unit.
Includes:

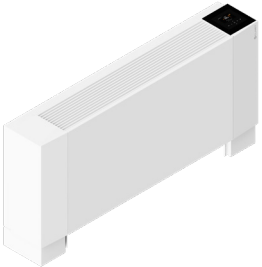
- feet made of galvanised and powder-coated steel in the same colour as the casing, fitted with height-adjustable rubber feet,
- an air return grid identical to the supply grid



- ⚠ To be installed by the customer.
- ⚠ Option available only for the "CAB - Configuration with casing for cased applications" version of the unit.

FXVFX **Painted feet for fixing to the ground**

Enables secure positioning even when the unit cannot be wall-mounted to a rear wall, such as with drywall partitions or close to a glass wall.
The feet are made of galvanized steel, powder-coated in the same color as the casing, and equipped with height-adjustable rubber mounts.

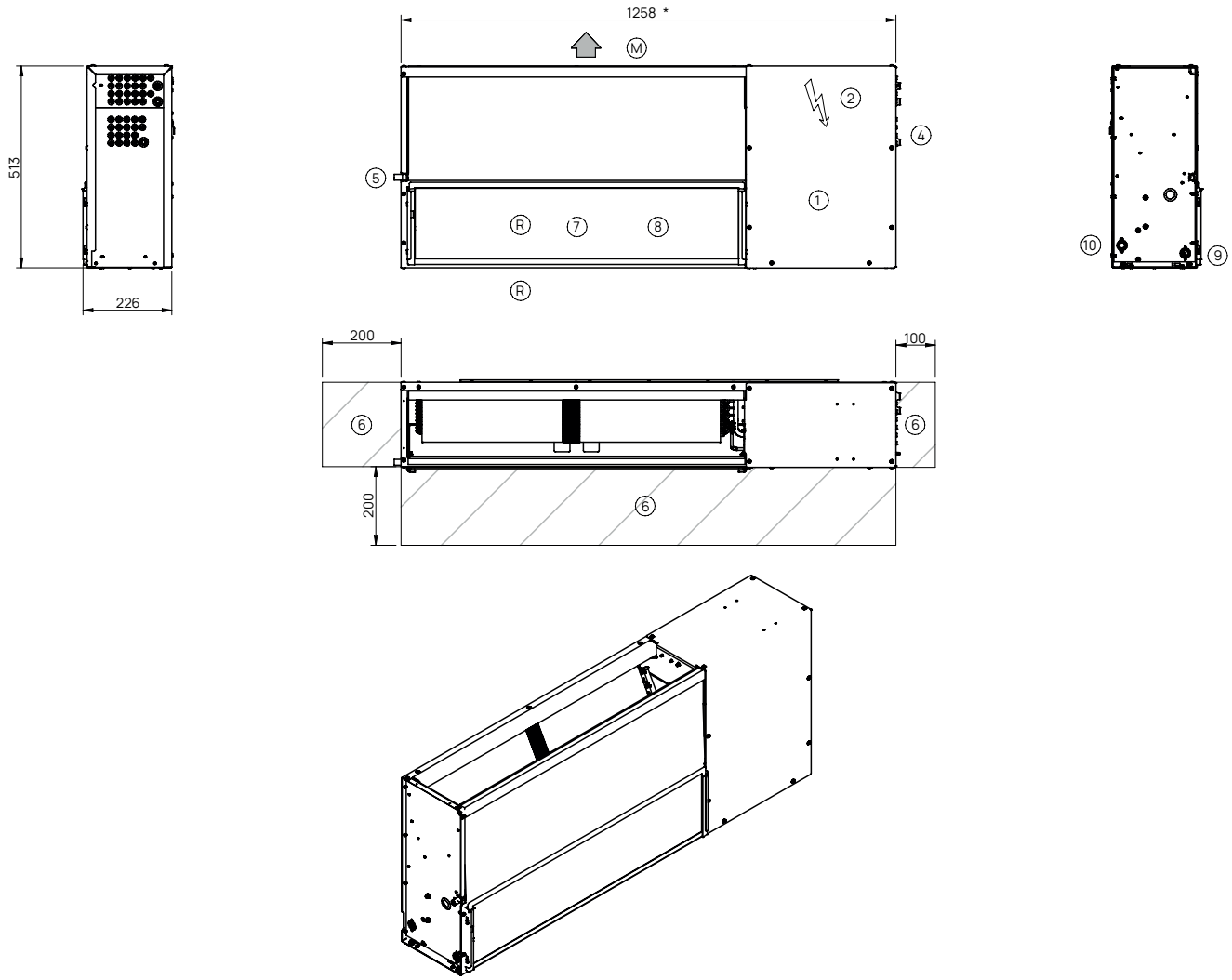


- ⚠ To be installed by the customer.
- ⚠ Option available only for the "CAB - Configuration with casing for cased applications" version of the unit

Dimensional drawings

Sizes 3 - 7 - 15 - UC - Uncased configuration

AAH505PT REV. A
DATA/DATE 16/07/2026



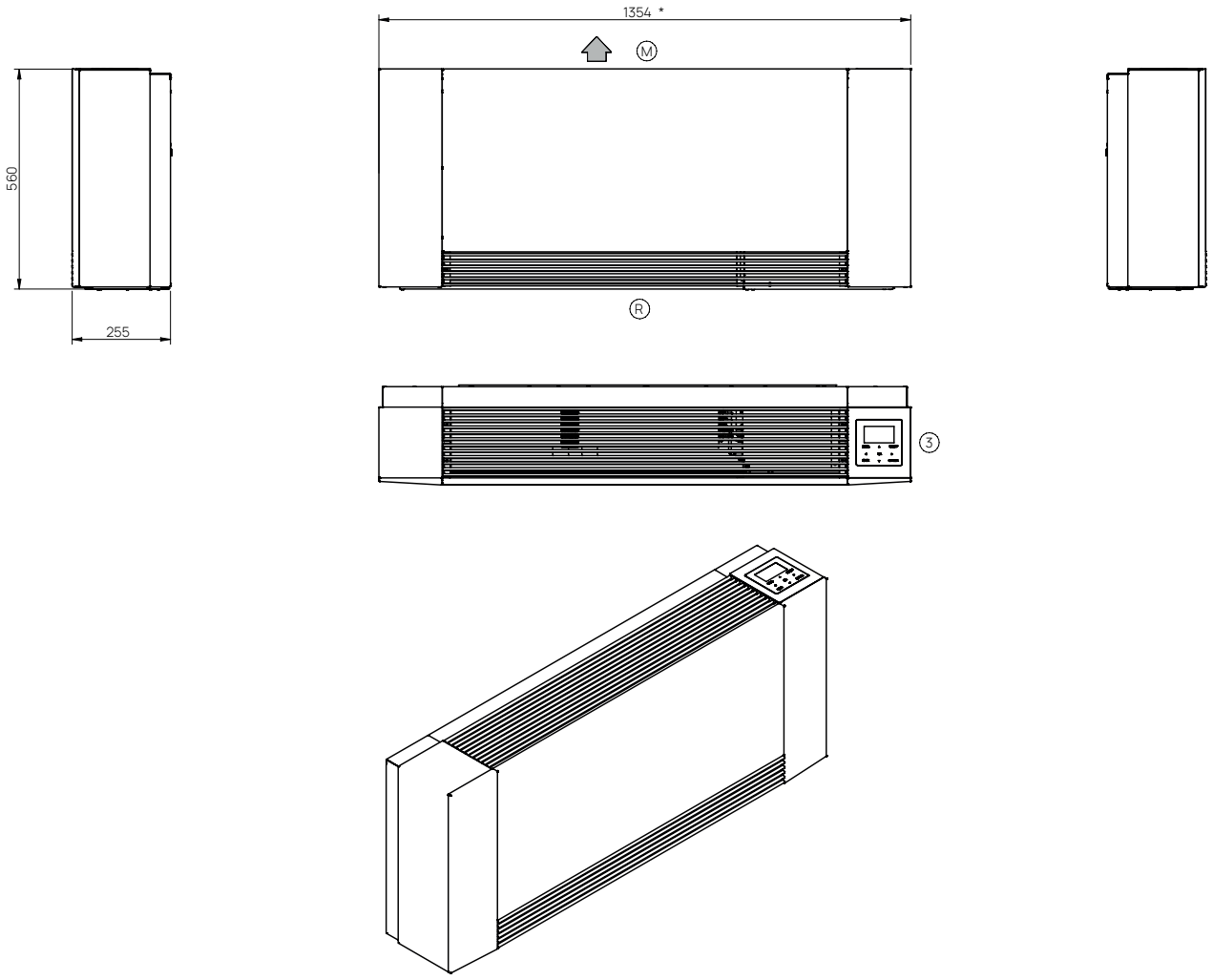
1. Compressor compartment
2. Electrical panel
3. Control keypad
4. Power input
5. Condensate drain
6. Functional spaces
7. G2 filters (Standard)
8. Electric fan (Supply)
9. Water inlet (F1/2")
10. Water outlet (F1/2")

(R) Air return
(M) Air supply

Size	Length
3	831 mm
7	1043 mm
15	1258 mm

Sizes 3 - 7 - 15 - CAB - Configuration with casing for cased applications

AAH505PT REV. A
DATA/DATE 16/07/2026



1. Compressor compartment
2. Electrical panel
3. Control keypad
4. Power input
5. Condensate drain
6. Functional spaces
7. G2 filters (Standard)
8. Electric fan (Supply)
9. Water inlet (F1/2")
10. Water outlet (F1/2")

(R) Air return
(M) Air supply

Size	Length
3	927 mm
7	1139 mm
15	1354 mm

For over 35 years we have been offering solutions to ensure sustainable comfort and the well-being of people and the environment

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