



**Integrated “*plug&play*” system**  
**Eco-Design: *high seasonal efficiency***  
**Reliability with superior quality**  
**Optimized dimensions and weights**  
**Brand new *intelligent control* concept**

Cooling capacity: 22,5 to 91,2 kW  
 Heating capacity: 22,0 to 90,1 kW



Cooling & heating



Heating recovery



Air filtration



Free cooling



Dehumidification



R410A



## DESCRIPTION

The Vectios™ range are compact, horizontal and autonomous air to air units, rooftop-type design. They are equipped with all the components required for the correct air conditioning to the installation.

■ **RPJ series:** Units for **cooling** operation.

■ **IPJ series:** Units for **reversible heat pump** operation.

The unit is connected directly to an air distribution ductwork without additional elements or equipment, pipes, cables, etc. taking up no floor space at all. This design reduces the cost of installation, facilities connections and ensures reliable operation.

The range of capacities of these units allows for the air conditioning of medium and large surface areas used for business or industry.

A vast number of options meet many operating requirements, such as:

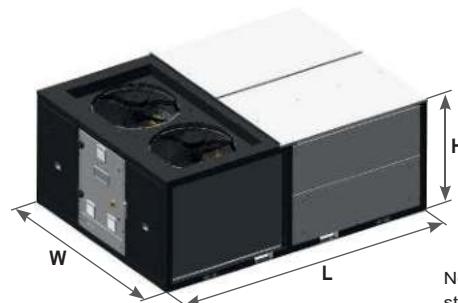
- Recovery of the extracted air energy.
- Free-cooling.
- Air renewal.
- Indoor air quality control.
- Air filtration.
- Auxiliary devices for heating.
- Extension of operating limits for adaptation to extreme temperatures.

These units are equipped with electronic axial fans in the outdoor circuit, electronic plug-fans in the indoor circuit, air coils, hermetic scroll compressors and electronic control with microprocessor, optimized components for the refrigerant R-410A.

All of the units are tested and checked in the factory.

## RANGE

Vectios™ PJ models	Dimensions: L x W x H (mm)
0090 - 0120	2.225 x 1.750 x 1.230
0140 - 0160 - 0180 - 0190	2.225 x 1.750 x 1.230
0200 - 0220 - 0240	3.000 x 2.200 x 1.230
0280 - 0320 - 0360 - 0380	3.650 x 2.200 x 1.230



Note: Dimensions for the standard configuration.

## COMPLIANCE

Machinery Directive 2006/42/EC (MD)

Electromagnetic Compatibility Directive 2014/30/EU (EMC)

Low Voltage Directive 2014/35/EU (LVD)

Pressure Equipment Directive 2014/68/EU (Category 2) (PED)

RoHS Directive 2011/65/EU (RoHS)

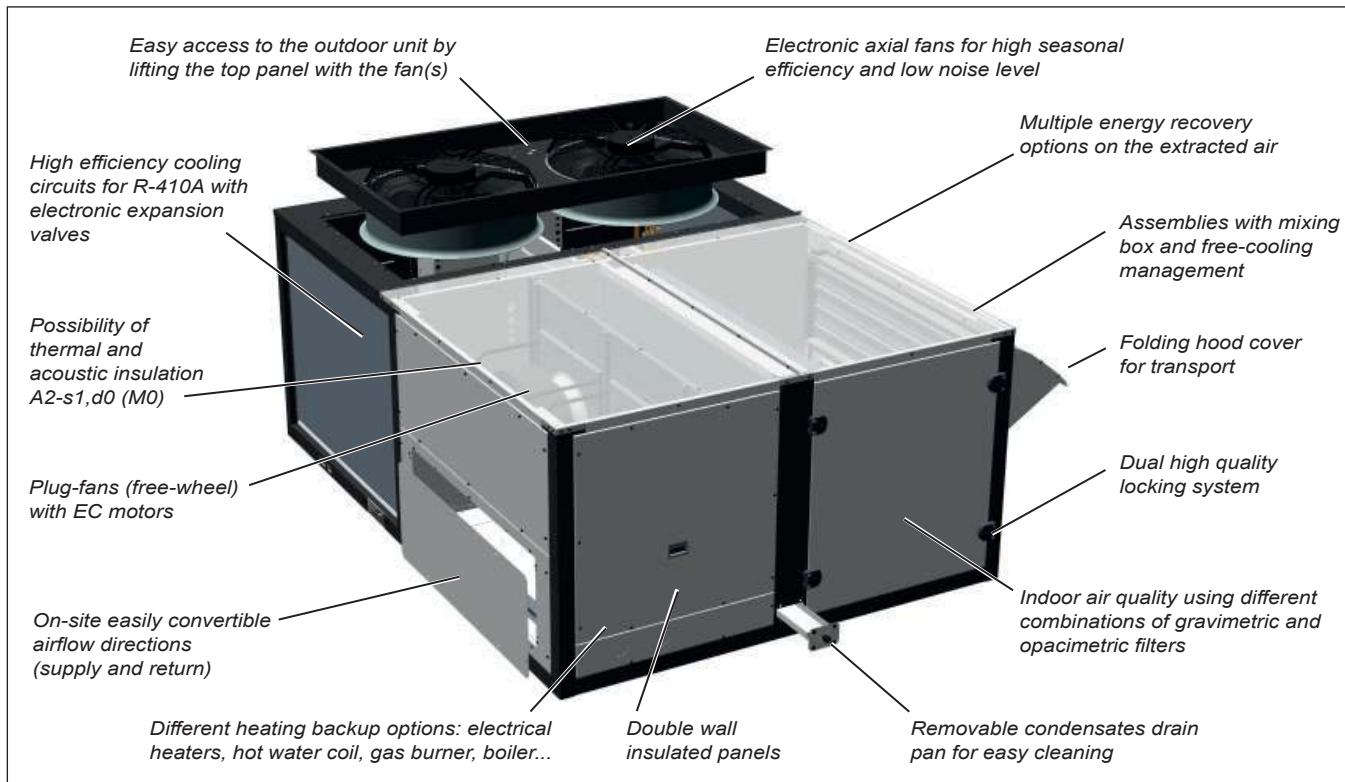
Eco-design Directive 2009/125/EC (ECO-DESIGN)

Energy Labelling Directive 2017/1369/EU (ECO-LABELLING)

Harmonised Standard: EN 378-2:2012 (Refrigerating systems and heat pumps - Safety and environmental requirements).



## UNIT COMPONENTS



### Casing

- Casing made of galvanised steel metal with polyester paint, white colour RAL 7035 and graphite grey colour RAL 7024.
- New self-supporting frame that allow the transport of two stacked units and without the need for a wooden pallet.
- Removable panels for easy access to all components: electrical cabinet, compressors, fans, filters, etc.

### Outdoor unit

- Coil with copper pipes and aluminium fins.
  - EC electronic axial fan(s) which adapt the rotation speed to the installation's requirements, thereby reducing electricity consumption, the sound level at partial charge and improving the unit's average seasonal efficiency.
- The cover with the motor fan(s) may be lifted to access the inside of the outdoor unit.

### Indoor unit

- Thermal and acoustic insulation, in double wall panels and registers, with Euroclass A2-s1, d0 (M0) fire classification.
- Coil with copper pipes and aluminium fins.
- EC electronic supply plug-fans with variable control speed and flow rate controller.

In tertiary sector installation, a high percentage of the annual air conditioning energy consumption comes from the use of fans for transporting air. Using fans which are more efficient has a direct impact on reducing consumption. Plug-fans with direct drive and variable speed offer the following advantages:

- Elimination of friction losses during transmission thanks to the direct drive.
- Greater aeraulic efficiency of the rotor (reactive blades

with an optimized profile), running at very high operating pressures.

- Greatly increased motor efficiency. Permanent magnets DC motors activated using electronic switching integrated into the motor itself.
- Variable speed to ensure a constant supply air flow rate, independent of the filters clogging level.
- Measuring the flow rate thought a calibrated section at the fan intake and a differential pressure sensor allows the control to handle the flow rate reliably and precisely in both on CAV and VAV systems.
- Reusable gravimetric air filters G4, mounted on a frame. Dual locking system mounted on the access panel to filters.
- Isolated pan of condensates drainage sloping down towards the drain. This pan is removable for easy cleaning.

### Cooling circuit

- Hermetic scroll-type compressors in tandem design that improves the management of stages and the part load efficiencies, assembled over antivibration mounts. Relay for phase-sequence monitoring and phase loss protection.
- Crankcase heater.
- Electronic expansion valve(s).
- Four-way cycle reversing valve(s) (heat pump units).
- Acid-resistant filter(s) dryer.
- Cooling design:
  - 1-air volume: IPJ models 0090 to 0190 and RPJ models.
  - 2-air volumes: IPJ models 0200 to 0380.



## Protections

- High pressure pressostat(s).
- High and low pressure transducers.
- Compressor discharge temperature control.
- Main door switch.
- Protection for power lines of compressors with manual motor starters and power lines of fan motors with magnetothermic switches. These devices provide protection against overload, short circuit, phase failure and undervoltage.
- Automatic switch in the control circuit.

## Electrical cabinet

- Complete and fully wired electrical cabinet. Insulated access door to prevent condensation. Forced ventilation of the electrical cabinet. Protection IP54.
- Numeration of wired and identification of components in the electrical cabinet. It permits easy tracing and diagnostics.
- Hinges + quarter-turn latches on the removable access door.
- Electrical power supply with neutral.
- Main ground connection.
- Compressor and fan motor contacts.

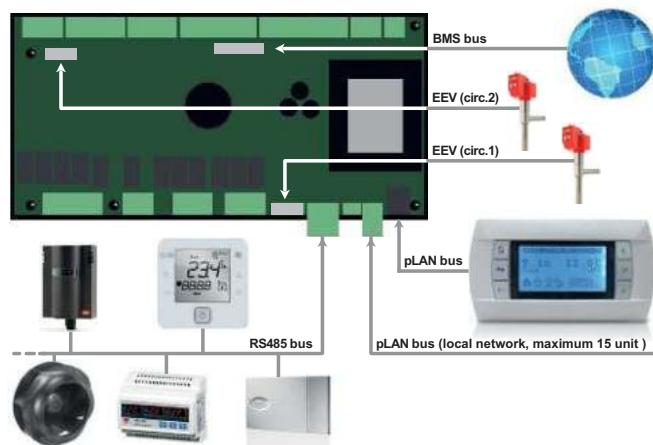
## Vectic electronic control

The Vectic control consist of a control board, sensors, a graphic terminal, an user terminal (optional).

This system uses a RS485 field-bus to manage additional components.

ABMS card (optional) allows the control board to be connected to a centralised technical management system.

It also manages a local connection between units through a pLAN network (Vectic Local Area Network), allowing data and information to be exchanged between units, for a maximum of 15 units.



## Main functions:

- Selection of setpoint and operating mode: HEATING / COOLING / AUTO / VENTILATION.
- Continuous control of the operating parameters.
- Display of the values measured by the sensors.
- Compressors time delays.
- Defrosting management (heat pump units).
- Control of the supply air temperature.
- All-seasons operation via the condensation and evaporation pressure control.

The management of the unit in cooling mode is based on the principle of a high floating pressure. The condensation pressure setpoint is continually calculated depending on the outdoor temperature. This pressure is regulated by adjusting

the air flow on the outdoor fans.

- Setpoint compensation based on the outdoor temperature.
- Hourly and weekly schedule.
- Fire protection.
- Diagnosis of faults and general alarm.

## Optional functions:

This control is used to manage addition components such as:

- External air damper for the renewal of fresh air, depending on the temperature of the mixed air or depending on the air quality sensor.
- Mixing box for thermal, enthalpic or thermoenthalpic free-cooling.
- Cooling circuit for the recovery of the extracted air energy.
- Rotary heat exchanger, with proportional or on/off control.
- Auxiliary electrical heaters: two-stage with on/off control or single-stage with proportional control.
- Hot water coil with 3-way valve, with proportional or on/off control.
- Gas burner with proportional control.
- Gas boiler with proportional control.
- Heat recovery coil with 3-way valve, with proportional control.
- Humidifier with proportional or on/off control.
- Basic dehumidification.
- Active dehumidification with condensation coil.
- Clogged filter pressostat.
- Smoke detection station.
- Refrigerant leak detector.
- Air quality sensor(s) for measuring CO<sub>2</sub>.
- Energy meter and calculation of the cooling and heating capacities.
- Zoning up to 4 zones with variation of air flow by sending the control signal to the damper of each zone.
- Management of the low return temperature application.

## VecticGD graphic terminal:

This terminal, fitted as standard on the electrical cabinet, is very easy to use. It provides detailed explanations of control in easy to understand English. No decoding is required.



Only 6, large, easy-to-use buttons are required to maneuver through the entire menus.

This terminal is used to:

- Carry out initial programming of the unit.
- Modify operating parameters.
- Switch the unit ON / OFF.
- Select the operating mode and adjust the setpoints.
- Display the variables controlled and sensor values measured.
- Display the current alarms and their historical record.

## TCO user terminal (optional):

This terminal can be installed on the electrical cabinet, instead of the VecticGD terminal. In this case, the remote connection of the VecticGD terminal is possible. Please consult the chapter "Options".



This terminal is used to:

- Switch the unit ON / OFF.
- Select the operating mode and adjust the setpoints.
- Display the installation's temperatures and humidity, outdoor temperature, supply air temperature, CO<sub>2</sub> sensor and opening of the outdoor damper.
- Display alarms codes.



**Assembly (Group 6) + Indoor air direction (Group 25)**

Assembly	Description	Air flow	Models	Indoor air direction			
				0 Lower supply Lower return	1 Lateral supply Lower return	2 Lower supply Lateral return	3 Lateral supply Lateral return
<b>C0</b>	Standard	Cross Flow	All				
<b>CS</b>	Fresh air damper, interlocked with return damper	Cross Flow	All				
<b>CF</b>	100% fresh air	Cross Flow	All	X	X		
<b>CK</b>	Fresh air damper and exhaust air damper	Cross Flow	All			X	X
<b>CA</b>	Axial return fan	Cross Flow	All			X	X
<b>CP</b>	Lower return EC plug-fan	Cross Flow	All			X	X
<b>CR</b>	Lower return EC plug-fan + cooling recovery circuit	Cross Flow	All			X	X
<b>CQ</b>	Return EC plug-fan or centrifugal fan in top box	Cross Flow	All	X	X		

I: air supply

R: air return

N: fresh air intake

E: air extraction

Assembly	Description	Air flow	Models	Indoor air direction			
				0 Lower supply Lower return	1 Lateral supply Lower return	2 Lower supply Lateral return	3 Lateral supply Lateral return
<b>CT</b>	Return EC plug-fan or centrifugal fan in top box + cooling recovery circuit	Cross Flow	All	X	X		
<b>CW</b>	Lower return EC plug-fan + rotary heat exchanger	Cross Flow	All			X	X
<b>T0</b>	Standard in Tunnel Flow	Tunnel Flow	0200 to 0380		X		X
<b>TS</b>	Fresh air damper, interlocked with return damper	Tunnel Flow	0200 to 0240		X		X
			0280 to 0380		X		X
<b>TP</b>	Lower return EC plug-fan	Tunnel Flow	0200 to 0240		X	X	X
			0280 to 0380		X	X	X
<b>TW</b>	Lower return EC plug-fan + rotary heat exchanger	Tunnel Flow	0200 to 0380		X	X	X

I: air supply

R: air return

N: fresh air intake

E: air extraction

## Electrical power (Group 4)

These units can be supplied for the following power supply voltages:

- 400 V / 3 ph + N / 50 Hz (standard)
- 400 V / 3 ph / 50 Hz (optional)

## Coils coating (Group 7)

- Coils with copper pipes and copper fins. Upon request.
- Coils with copper pipes and fins of an aluminium alloy (INERA®), of high performance and great resistance to the corrosion.
- Coils with copper pipes and aluminium fins with polyurethane coating.
- Blygold® coating.

Note: These coating can be applied to various coils (outdoor, indoor and hot water coil) according to the combinations available in our "Selection Software".

Note: the active dehumidification is not compatible with the gas boiler.



## Heating (Group 8)

The unit only can incorporate one of these heating elements:

- **Auxiliary electrical heaters**, with two power stages and on/off control, for assembly and connection inside the unit.

Up to 3 values of total power available for each model:

Vectios™ PJ	E0L (Low)	E0N (Nominal)	E0H (High)
0090 to 0120	12 kW	18 kW	unavailable
0140 to 0190	12 kW	18 kW	27 kW
0200 to 0380	18 kW	27 kW	36 kW

- **Auxiliary hot water coil**, with three-way valve and proportional control, for assembly inside the unit.

The unit incorporates an anti-freeze thermostat as safety system.

There are two configuration types available:

- Standard (B0S), the only safety system is the anti-freeze thermostat.
- Great Cold (B0C), with anti-freeze technology based on the water temperature. This protection is made up of a circulation pump and two sensors inserted in the input and the output of the coil.

Important: this option is mandatory for an outdoor temperature lower than -20°C WB. Consult for percentages of glycol water above 20%.

Note: on units with the "Great Cold" option, air supply only may be lateral (factory-configured).

Note: the active dehumidification is not compatible with the hot water coil.

- **Gas boiler + Auxiliary hot water coil**. Natural or propane gas boiler with modulating actuator, in accordance with the Gas Directive 2009/142/EC, mounted on the side of the unit.

The boiler is connected to the water circuit of the auxiliary coil.

Up to 3 values of total power available for each model:

Vectios™ PJ	G1L (Low)	G1N (Nominal)	G1H (High)
0090 to 0190	unavailable	Condexa PRO 40 (coming soon)	Condexa PRO 70
0200 to 0380	Condexa PRO 50 (coming soon)	Condexa PRO 70	Condexa PRO 100

- Natural or propane **gas burner** with modulating actuator, in accordance with the Gas Directive 2009/142/EC, installed inside a pre-assembly roofcurb.

The PJ unit with lower air supply will be placed on this roofcurb.

Up to 3 values of total power available for each model:

Vectios™ PJ	G0L (Low)	G0N (Nominal)	G0H (High)
0090 to 0190	PCH020	PCH034	PCH045
0200 to 0240	unavailable	PCH065	PCH080
0280 to 0380	unavailable	PCH080	PCH105

Note: It's recommended to use the clogged filter pressostat (optional)in units with gas burner.



## Protection for low outdoor T (Group 9)

- Kit 1: Antifreeze protective kit (<-10°C). Mandatory for an outdoor temperature lower than -10°C WB.

This kit includes:

- Electrical heater for protection of the components of the electrical cabinet.
- Compressor with protection for low temperature.

- Kit 2: Antifreeze protective kit (<-14°C). Mandatory for an outdoor temperature lower than -14°C WB.  
In addition to the options of -10°C, this includes:
  - Reinforced electrical heater for protection of the components of the electrical cabinet.
  - Electrical heater for anti-freeze protection of dampers of the mixing box (if applicable).
  - Protective kit of the gas burner for low temperature (if applicable).
- Kit 3: Kit 1 + Dampers of the mixing box with spring for automatic closing in case of a power failure.
- Kit 4: Kit 2 + Dampers of the mixing box with spring for automatic closing in case of a power failure.

### **Available pressure of the indoor fan (Group 10)**

- There are 3 optional fans depending on the available pressure:
  - Low pressure (L): all models except for 0140, 0160, 0180, 0190, 0280 and 0320.
  - Nominal pressure (N): all models.
  - High pressure (H): all models.

Important: our "Selection Software" will choose the supply fan with lower consumption for the available pressure required.

### **Air filtration + stop-drop (Group 11)**

Options to improve indoor air quality:

- Different combinations of filters are available:
  - G4 gravimetric filters with low pressure drop.
  - G4 gravimetric filters standard type + M6, F7 or F9 folded opacimetric filters.
  - G4 gravimetric filters with low pressure drop + F7 or F9 folded opacimetric filters.
  - Dual-stage of folded opacimetric filters (M6+F7, M6+F9, F7+F9 or F9+F9).

Important: G4 filters standard type supplied from the factory cannot be replaced by other types of filters because the thickness of the frames is different.

Classification of the filters according to the new **ISO 16890 Standard**:

- G4 → ISO Coarse 60%
- M6 → ISO ePM2.5 50%
- F7 → ISO ePM1 60%
- F9 → ISO ePM1 90%

- Stop-drop in the indoor air coil. Recommended in cases where a high moisture content in the air is foreseen or when the air flow is high.

Note: with hot water coil it is not possible to assemble the stop-drop.

### **Type of outdoor fan (Group 12)**

- Axial 2-speed outdoor fan(s) directly coupled to the motor. Watertight motor class F, IP54 and internal thermal protection. Dynamically balanced propellers and outdoor protective grille. Not recommended with the optional active dehumidification and outdoor temperatures below 12°C.

### **External insulation (Group 13)**

- Ceramic panel for thermal and acoustic insulation, with Euroclass fire classification A2-s1, d0 (M0) in panels not removable in contact with the indoor air (top, bottom panel). Note: the other panels and registers of the indoor unit always include thermal and acoustic insulation, with Euroclass fire classification A2-s1, d0 (M0).

### **Indoor unit configuration (Group 14)**

- Condensate drain pan in stainless steel for corrosion protection.
- Control of the overpressure (available in CP, CQ, CW, TP and TW assemblies).
- In installations with different air flow in supply and return, to prevent the entry of outside air or to eliminate odours from inside, the fresh air damper and the exhaust damper will be managed independently.
- Differential pressure switch to detect clogged filters as safety protection.

### **Outdoor unit configuration (Group 15)**

- Fresh air intake protection grid (mesh of 9 x 9 mm).
- Outdoor coil protective grille.
- Antivibration mounts made of rubber.
- Stop-drop at the fresh air intake. This stop-drop and the thermoenthalpic free-cooling are necessary in cases where a high moisture content in the air is foreseen.

### **Passive recovery (Group 16)**

- The rotary heat exchanger is fitted into a module placed on one side of the unit (assemblies CW and TW). This module is supplied disassembled with the unit, for installation on site. This rotary recovery unit is used to transfer the sensible and latent heat from the air-conditioned room's return air to the fresh air used for ventilation, before it's discharged outdoors. This option reduces the compressors runtime, ensuring energy saving and benefiting the environment.

The efficiency of energy recovery depend on the wheel selected: material, wheel diameters, channel cross section and type of speed control.



### Extra heating (Group 17)

- Heat recovery coil (HRC). The coil function is to pre-heat the air that will pass through the main indoor coil. For this, it uses the temperature of an outdoor water installation.

The coil is supplied with a 3-way valve for installation outside the unit but managed by the electronic control.

This option is compatible with C0, CS, CF, CQ, CT, T0 and TS assemblies.

- With CF assembly, 100% fresh air, it is possible to incorporate a preheater module (electrical heater) coupled to the fresh air intake. This module is supplied in kit for installation on site.

The electrical heater with proportional control will modulate capacity to get the condenser inlet conditions within the operating limits of the cooling circuit in case of very low outdoor temperatures.

Two values of power are available: low (B) and nominal (N).

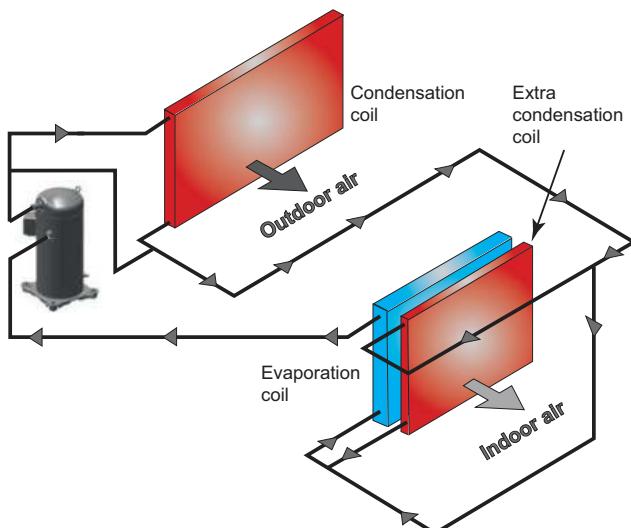


Note: The electrical connection of the kit is the responsibility of the installer.

### Special applications (Group 18)

- **Active dehumidification** with condensation coil. Extra condensation coil for dehumidification applications in high relative humidity ambients.

The dehumidification process is done by the main refrigerant coil. Hot gas recovered is injected in the additional condensation coil to reheat the air.



This new option is the solution for applications which require the highest degree of indoor comfort and humidity control.

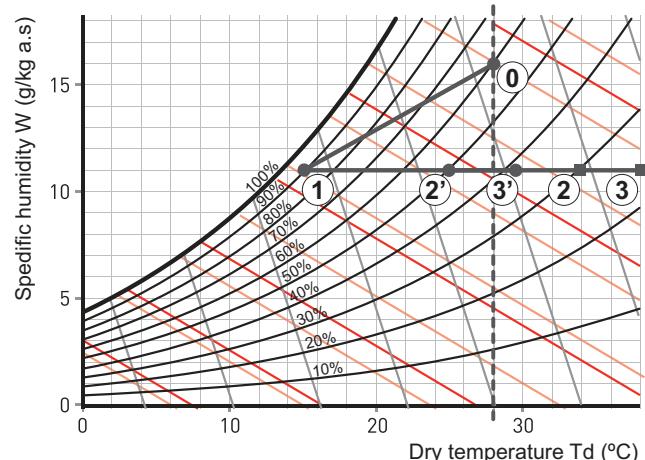
It could be of particular interest to the supermarkets, restaurants, museums and in cases of high latent cooling load and/or in humid climates. It's used in low temperature stock applications to avoid condensation over goods or refrigeration cabinets glass doors.

It allows controlling the maximum levels of humidity in the room in the most efficient way, and independently of the location and the part-load of the unit.



The use of the extra condensation coil to reheat the air after the evaporator provides a flexible and efficient operation to accurately compensate for the room demand.

This option also allows an additional reheating using the auxiliary electrical heaters (Group 8).



0 → 1: Normal evolution in the evaporator without using extra condensation coil

1 → 2: Reheating using extra condensation coil in units of 1 circuit

1 → 2': Reheating using extra condensation coil in units of 2 circuits

2 → 3: Additional reheating using the auxiliary electrical heaters in units of 1 circuit

2' → 3': Additional reheating using the auxiliary electrical heaters in units of 2 circuits

The "Selection software" allows to obtain the value of the supply air temperature for the point 2 (or 2') according to the extra condensation coil. It will also calculate point 3 (or 3') according to the power selected for the auxiliary electrical heaters.

Note: the active dehumidification is not compatible with the hot water coil, the gas boiler, the gas burner, the air zoning and the CF assembly.

### ■ Zoning of the air flow up to 4 different zones.

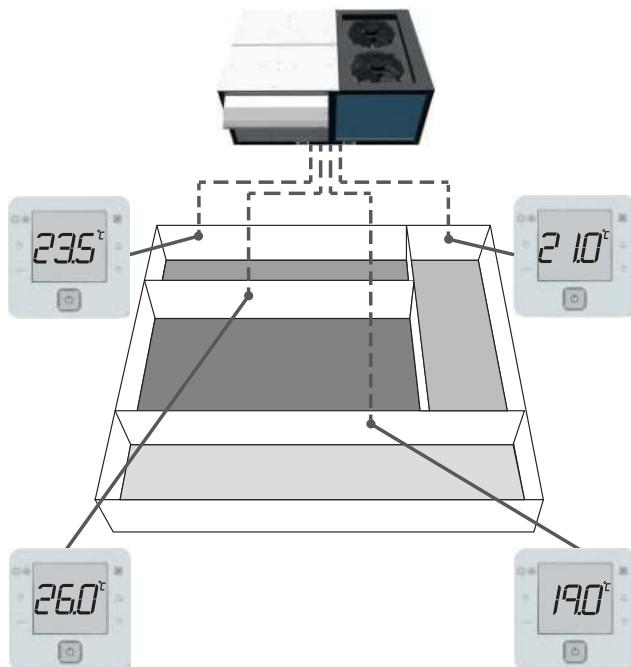
This option allows the management of the air flow of the unit to condition up to 4 different zones with a minimum air flow of 35% (all in one operating mode: heating or cooling).

The air zoning includes 4 zone terminals and a control board in a separate box. The zone terminals, the servomotors of the dampers as well as the main board of the Vetric control are connected to this box.

The unit adapts the air flow and the capacity according to the needs and active zones at any time. The electronic control sends the control signal to the servomotors of the dampers.

Important: the dampers and servomotors are not supplied from the factory.

Note: the active dehumidification is not compatible with the air zoning.



### ■ Low return temperature application.

This option is particularly interesting in certain applications for food conservation and it can be used in large storage facilities.

With this option, the unit, operating in cooling mode, is adapted to manage an installation with low return temperature (15°C).



■ The mounting **100% fresh air** with no return or extraction air flow (CF assembly) will address special requests where return air flow cannot be used, in order to avoid contamination (kitchens, and some other places with indoor odours or other pollutants).

In order to keep the cooling circuit working inside operation limits, and depending on design conditions, the unit could be selected with lower air flow than minimum used for the same size in the rest of assemblies.

Depending on the heating design conditions, it is also necessary to select an additional electrical heating in the fresh air intake (preheater module, Group 17).

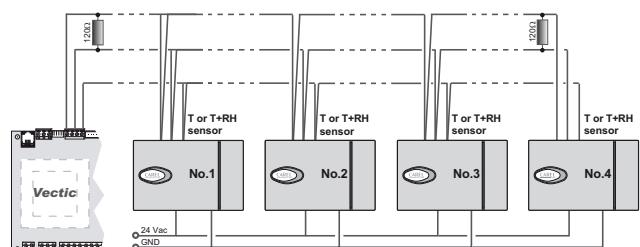


### Sensors (Group 19)

■ Sensor(s) of ambient temperature. There are 3 options:

- One NTC sensor connected to the control board.  
Note: An ambient sensor with RS485 communication is required for installation at more than 30 meters.
- One to four sensors with RS485 communication.
- Sensor(s) installed on the master unit of the local network (pLAN).

■ One to four sensors of ambient temperature + humidity, with RS485 communication or installed on the pLAN network. This sensor is compulsory in units with enthalpic or thermoenthalpic free-cooling (optional). In this case, the outdoor air humidity sensor is also added.



■ Smoke detecting sensor. Smoke detecting station in accordance with the NF S 61-961 standard.

■ Air quality sensor to enable measuring CO<sub>2</sub>. There are different options:

- Sensor for installation in the environment.
- Sensor duct-mounted (attached picture),
- Sensor installed on the master unit of the local network (pLAN).
- Double sensor for installation of:
  - both sensors in the environment;
  - one in the environment and one outdoor;
  - one in duct and one outdoor.

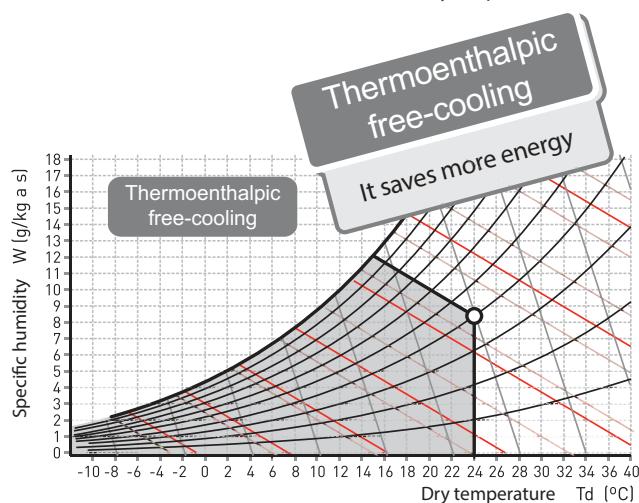
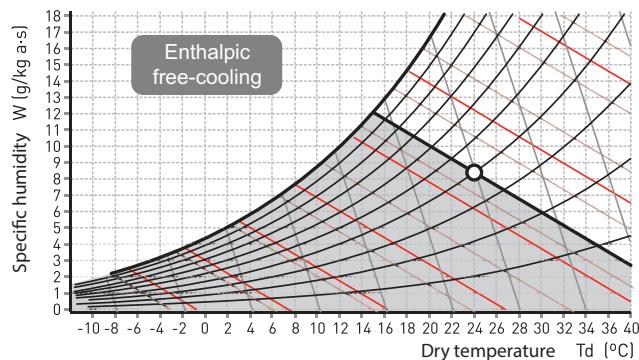
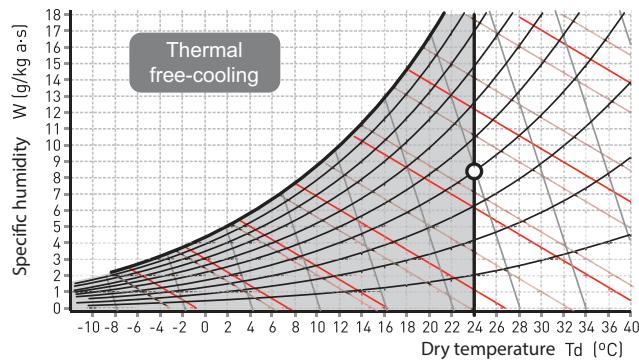


### Free-cooling + outdoor humidity (Group 20)

■ Running the unit in free-cooling mode allows it to make best use of outdoor air conditions when these are more favourable than the return air conditions. This allows the cooling capacity to be reduced. The percentage of outdoor air can vary between 0% and 100%.

There are three options for free-cooling management:

- Thermal, by comparing the temperatures.
- Enthalpic, by comparing the enthalpies. Recommended in cases where a high moisture content in the air is foreseen.
- Thermoenthalpic, by comparing the enthalpies and correcting for temperature. This is the optimum solution as it takes the variability of the climate into account.



■ Outdoor air humidity sensor (compulsory in units with optional enthalpic or thermoenthalpic free-cooling). There are 2 options:

- Sensor supplied with the unit.
- Sensor installed on another unit of the local network (pLAN).

### Terminal + unit communication (Group 21)

■ By default, the electronic control Vetic is supplied with a graphic terminal installed in the electrical cabinet of the unit, but these other configurations also are available:

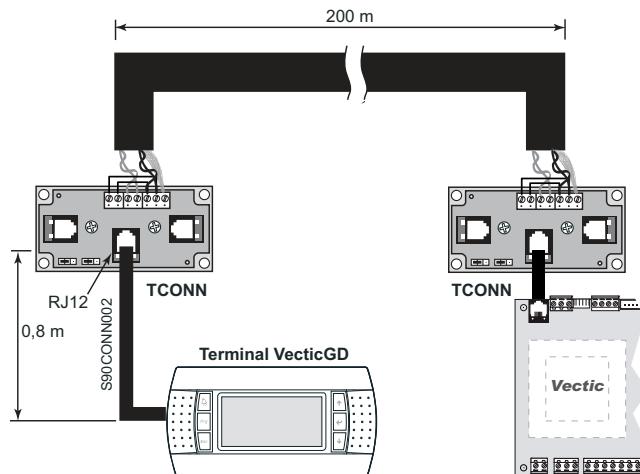


VetricGD graphic terminal

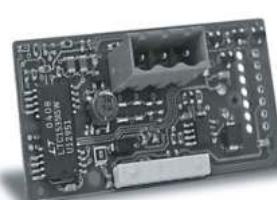


TCO user terminal

- TCO user terminal installed in the electrical cabinet, instead of the VetricGD graphic terminal.
- VetricGD graphic terminal installed in the electrical cabinet and TCO user terminal remote up to 100 meters.
- TCO user terminal installed in the electrical cabinet and VetricGD graphic terminal remote up to 200 meters (two TCONN bypass cards must be used from 50 to 200 meters).
- VetricGD terminal installed in the electrical cabinet and VetricGD terminal remote up to 200 meters (two TCONN bypass cards must be used from 50 to 200 meters).



- Control without terminal (for units with shared terminal in a pLAN network).
- By default, the electronic control is configured for a stand-alone unit, but it is also possible to place it in a pLAN network ( $\mu$ PC MEDIUM Local Area Network) as Master or Slave.
- This control allows the connection to a centralised technical management system by using a specific BMS card for some of the following communication protocols:
  - RS485 serial cards for network communication with protocols: Carel, Modbus, LonWorks®, BACnet™ MSTP, Konnex.
  - Ethernet pCO Web card for network communication with protocols: Modbus TCP/IP, BACnet™ Ethernet, TCP/IP, SNMP V1-2-3, FTP and HTTP.



RS485 Carel/Modbus card



Ethernet pCO Web card

## Supervision solutions

Different solutions of supervision are available bases on the dimensions of the installation for unit fitted with Ethernet pCO Web and RS485 Carel / Modbus cards.

- **pCO Web**

It is the solution for the management and supervision of a single unit if this incorporates the Ethernet pCO Web card.

- **PlantWatchPRO3**

This is a solution designed for the monitoring of small and medium-size installations, capable of manage up to 30 units. Suitable for technical environments, no parts are in movement. It's available in two versions: panel and wall.

Includes: 7 " touch display, buzzer for notifications, 1 USB port and 1 SD card slot for downloading reports, charge devices models and applying service packs.

- **BOSS**

This is the solution for the management and supervision of air-conditioning installations with up to 300 units. Integrated Hotspot Wi-Fi.

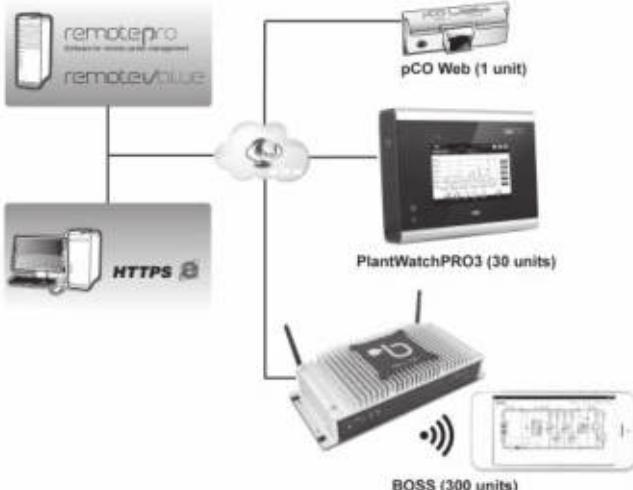
It offers advanced monitoring and maintenance functions and allows zones and groups to be created to simplify the management of the installation. It also allows energy meters to be integrated to monitor the installation electricity consumption.

BOSS is available in two versions:

- CPU device.
- CPU device, monitor, keyboard and screen.

For this option, each unit needs one RS485 Carel / Modbus board.

For this option, each unit needs one RS485 Carel / Modbus board.



These systems are used to manage the installation remotely. All the information on the system can be accessed via a simple Internet connection. The online interface, the same one used by the local user, enables monitoring and complete configuration of the installation: from the office or anywhere else the user happens to be.

To control multiple sites remotely, there are special tools dedicated to centralized management, such as **RemotePRO** and **RemoteValue**.

## Miscellaneous item 1 (Group 22)

- Management of an humidifier with proportional or on/off control.
- Energy meter for monitoring of the power consumption of the installation.

- Energy meter and calculation of the cooling and heating capacities. In addition to the energy meter, the unit incorporates mixing and supply enthalpic sensors with RS485 communication that enable cooling and heating capacities to be calculated.

- Refrigerant leak detector. This allows prompt identification of gas leaks, guaranteeing the safety of any people in the vicinity. Installation of the device ensures compliance with European standards F-GAS and EN378 as well as ASHRAE 15.

## Miscellaneous item 2 (Group 23)

- Compressor soft starter.
- Tropicalization: tropicalised components on the electrical cabinet with protective varnish: control board, cards and terminals.
- High performance phase monitoring relay, which ensures phase-sequence monitoring and protection against loss of phase, under and overvoltage as well as phase imbalance. Highly recommended for installations with power system voltage instability, high level of electromagnetic disturbances EMC, etc.
- High performance electrical switchgear.

## Centrifugal return fan (Group 24)

- Centrifugal return fan, coupled by pulleys and belts. Electric motor with tensioner, class F, IP55 and internal thermal protection. Turbine with an impeller of front-curved blades. Greased spherical bearings, with no maintenance required. Available in CQ and CT assemblies.

There are 9 fan options depending on:

- The air flow: low, nominal and high.
- The available pressure: low, nominal and high.

## Pre-assembly roofcurbs

- The "Cross flow" assemblies can rest on standardised pre-assembly roofcurbs with adjustable height, built in galvanised steel panelling with polyester paint and thermal insulation.

The levelling system uses angle pieces that allow adjustments in the X and Y axes.



- The "Tunnel flow" assemblies have a wide range of adaptation roofcurbs which are ready for the replacement on site of existing units from different manufacturers (upon request).

## TECHNICAL CHARACTERISTICS (EN-14511-2018)

RPJ series		0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380												
Cooling capacities	Cooling capacity ① (kW)	23,00	29,01	34,98	38,96	43,58	45,21	50,10	54,50	60,20	69,06	73,15	81,26	90,85												
	Power input ② (kW)	7,17	9,34	10,65	12,14	14,15	14,92	15,61	17,30	20,00	21,51	22,93	26,38	30,18												
	EER performance	3,21	3,11	3,28	3,21	3,08	3,03	3,21	3,15	3,01	3,21	3,19	3,08	3,01												
	SEER	4,92	4,89	4,60	4,46	4,34	4,33	4,66	4,58	4,50	4,51	4,50	4,32	4,26												
	$\eta_s$	194%	193%	181%	175%	171%	170%	183%	180%	177%	177%	177%	170%	167%												
Outdoor circuit fan	Nominal air flow (m³/h)	9.000	14.500	17.000	17.000	17.000	17.750	31.000	31.000	31.000	33.000	33.000	34.500	35.000												
	Available static pressure (mm.w.c)	5																								
	Type	Electronic axial fan																								
	Number / Diameter (mm)	1 / 630	1 / 800					2 / 800																		
	Motor output (kW)	0,9	2,6					2 x 2,6																		
	Maximum speed (r.p.m.)	1.140	1.020					1.020																		
Indoor circuit supply fan	Maximum absorbed current (A)	1,6	3,9					7,8																		
	Nominal air flow (m³/h)	5.100	6.500	8.500	8.750	9.000	9.000	12.000	12.500	12.500	15.500	15.500	16.000	16.000												
	Available static pressure (mm.w.c)	12	12	12	15	15	15	20	20	20	20	20	20	25												
	Type	Electronic plug-fan																								
	Number / Diameter (mm)	1 / 500	1 / 500					2 / 500					2 / 500													
	Motor output (kW)	1 x 2,65	1 x 2,83					2 x 2,65					2 x 2,83													
	Power input (kW)	0,62	1,01	1,79	1,90	2,00	2,04	2,04	2,20	2,20	3,53	3,53	3,42	3,75												
Compressor	Speed (r.p.m.)	1.700																								
	Maximum absorbed current (A)	4,2	4,3					8,4					8,6													
	Type	Scroll																								
	No. compressors / stages / circuits	2 / 2 / 1																								
Electrical characteristics	Oil type	Copeland 3MAF 32cST, Danfoss POE 160SZ, ICI Emkarate RL 32CF, Mobil EAL Artic 22CC																								
	Volume of oil (l)	2,5	2,5	3,3	3,5	3,5	3,5	3,6	5,0	5,0	5,0	6,5	6,8	6,8												
	Mains voltage	400 V / III ph / 50 Hz ( $\pm 10\%$ )																								
	Power supply	3 Wires + Ground + Neutral																								
	Maximum absorbed current (A)	18,9	26,5	26,4	29,9	33,6	34,0	42,6	49,0	53,5	54,6	55,7	61,3	74,3												
	Weight	C0 assembly (kg)	594	617	699	698	704	701	914	929	936	1.035	1.059	1.057	1.078											

① Cooling capacity calculated in accordance with the EN-14511-2018 standard given for indoor temperature conditions 27°C, 19°C WB and 35°C outdoor temperature.

② Total power input by compressors and motorised fans under nominal conditions, calculated in accordance with the EN-14511-2018 standard.

③ Climatic warming potential of a kilogram of fluorinated greenhouse gas in relation to a kilogram of carbon dioxide over a period of 100 years.



Eurovent certified values



## OVERALL DIMENSIONS OF THE DIFFERENT ASSEMBLIES

### Cross flow

Vectios™ PJ	C0, CS and CF assemblies			CK, CA, CP and CR assemblies			CW assembly			CQ and CT assemblies		
	Length (mm)	Width (mm)	Height (mm)	Length (mm)	Width (mm)	Height (mm)	Length (mm)	Width (mm)	Height (mm)	Length (mm)	Width (mm)	Height (mm)
<b>0090</b>	2.225	1.750	1.230	2.230	1.755	1.905	2.230	2.565	1.905	2.230	1.760	1.975
<b>0120</b>	2.225	1.750	1.230	2.230	1.755	1.905	2.230	2.565	1.905	2.230	1.760	1.975
<b>0140</b>	2.225	1.750	1.230	2.230	1.755	1.905	2.230	2.565	1.905	2.230	1.760	1.975
<b>0160</b>	2.225	1.750	1.230	2.230	1.755	1.905	2.230	2.565	1.905	2.230	1.760	1.975
<b>0180</b>	2.225	1.750	1.230	2.230	1.755	1.905	2.230	2.565	1.905	2.230	1.760	1.975
<b>0190</b>	2.225	1.750	1.230	2.230	1.755	1.905	2.230	2.565	1.905	2.230	1.760	1.975
<b>0200</b>	3.000	2.200	1.230	3.000	2.205	1.905	3.000	3.015	1.905	3.000	2.210	1.995
<b>0220</b>	3.000	2.200	1.230	3.000	2.205	1.905	3.000	3.015	1.905	3.000	2.210	1.995
<b>0240</b>	3.000	2.200	1.230	3.000	2.205	1.905	3.000	3.015	1.905	3.000	2.210	1.995
<b>0280</b>	3.650	2.200	1.230	3.655	2.205	1.905	3.655	3.015	1.905	3.655	2.210	1.995
<b>0320</b>	3.650	2.200	1.230	3.655	2.205	1.905	3.655	3.015	1.905	3.655	2.210	1.995
<b>0360</b>	3.650	2.200	1.230	3.655	2.205	1.905	3.655	3.015	1.905	3.655	2.210	1.995
<b>0380</b>	3.650	2.200	1.230	3.655	2.205	1.905	3.655	3.015	1.905	3.655	2.210	1.995

### Tunnel flow

Vectios™ PJ	T0 and TS assemblies			TP assembly			TW assembly		
	Length (mm)	Width (mm)	Height (mm)	Length (mm)	Width (mm)	Height (mm)	Length (mm)	Width (mm)	Height (mm)
<b>0200</b>	3.000	2.200	1.230	3.865	2.200	1.230	4.675	2.210	1.905
<b>0220</b>	3.000	2.200	1.230	3.865	2.200	1.230	4.675	2.210	1.905
<b>0240</b>	3.000	2.200	1.230	3.865	2.200	1.230	4.675	2.210	1.905
<b>0280</b>	3.650	2.200	1.230	3.655	2.210	1.905	4.465	2.210	1.905
<b>0320</b>	3.650	2.200	1.230	3.655	2.210	1.905	4.465	2.210	1.905
<b>0360</b>	3.650	2.200	1.230	3.655	2.210	1.905	4.465	2.210	1.905
<b>0380</b>	3.650	2.200	1.230	3.655	2.210	1.905	4.465	2.210	1.905



*Cross flow (all models)*



*Tunnel flow (models 0200 to 0380)*

## OPERATION LIMITS

Inlet air conditions		Cooling		Heating
		RPJ	IPJ	IPJ
Indoor coil	Minimum	9,7°C WB		10°C
	Maximum	24°C WB		27°C
Outdoor coil	Minimum	12°C ①		-15°C WB ②
	Maximum	52°C	48°C	15°C WB

① With a condensation pressure control operating down to -10°C.

② When the outdoor temperature is usually below 5°C WB, the installation of a support element is recommended.

## SOUND LEVELS dB(A)

### Sound power level (LW)

Vectios™ PJ	0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
63 Hz	55,2	60,8	61,4	60,9	61,3	63,1	64,3	64,5	64,9	64,8	64,6	64,6	65,3
125 Hz	64,2	66,7	68,9	66,1	70,0	71,1	69,6	69,9	71,5	72,4	71,3	71,4	74,0
250 Hz	71,8	74,8	76,1	72,9	76,3	76,4	77,0	77,7	78,9	79,7	78,4	77,9	79,3
500 Hz	70,2	76,7	76,4	76,8	77,1	78,3	79,5	80,1	80,4	79,9	80,1	80,2	80,9
1000 Hz	72,0	76,2	76,3	77,5	77,3	78,2	79,4	79,9	80,2	79,8	80,4	80,6	80,7
2000 Hz	69,7	73,5	74,3	75,3	74,1	75,5	77,0	77,4	77,8	77,7	78,3	78,1	77,7
4000 Hz	62,6	69,2	70,3	70,6	70,4	72,2	73,1	73,4	73,7	73,8	73,9	74,2	74,4
8000 Hz	59,0	63,7	65,5	65,8	65,6	67,5	67,9	68,2	68,6	68,9	69,1	69,4	69,6
Total dB(A)	77,5	82,0	82,5	82,5	83,0	84,0	85,0	85,5	86,0	86,0	86,0	86,0	86,5

### Sound pressure level (LP)

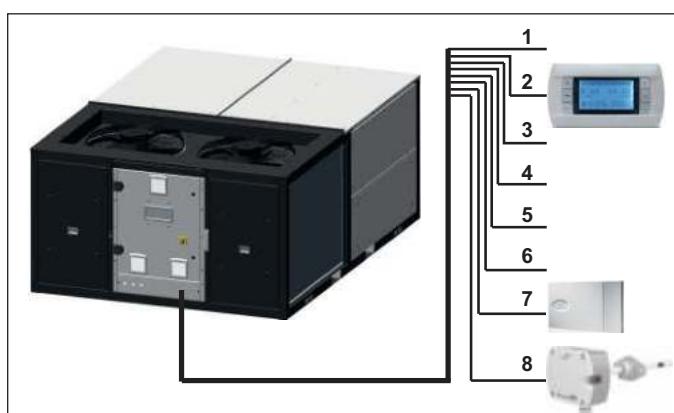
Measurement conditions: in a clear field, measured at a distance of 5 metres, directivity 2 and at 1,5 metres from the ground.

Vectios™ PJ	0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Total dB(A)	51,0	55,5	56,0	56,0	56,5	57,5	58,3	58,8	59,3	59,3	59,1	59,1	59,6

Note: The sound pressure level depends on the installation conditions and, as such, it only indicated as a guide. Values obtained according to the ISO 3744 standard.

## ELECTRICAL CONNECTIONS

No.	Vectios™ PJ		0090 to 0380
1	Main power supply	400 III ( $\pm 10\%$ )	3 Wires + Ground + Neutral
2	Remote connection of graphic terminal (by default installed on the electrical cabinet) ①		telephone cable 6 wires standard (RJ12 connector)
4	Remote off/on (optional)		2 wires
5	General fault signal (optional)		2 wires
6	Circulation pump signal for HWC (antifreeze sec.) (opt.)		1 wire
7	Ambient probe	NTC RS485	2 wires 5 wires ②
8	Air quality probe (optional)		3 wires



① In this case, it's possible to install the user terminal on the electrical cabinet.

② Up to four RS485 ambient sensors can be connected in series on the field-bus of the control board.







## OPTIONS FOR THE OUTDOOR UNIT

### Axial 2-speed outdoor fan

Vectios™ PJ		0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Nominal air flow	(m³/h)	9.000	14.500	17.000	17.000	17.000	17.750	31.000	31.000	31.000	33.000	33.000	34.500	35.000
Available static pressure	(mm.w.c.)							4						
Number	(mm)	1		1							2			
Diameter	(mm)	630		800							800			
Output	(kW)	0,4 / 0,6		1,2 / 1,9							2 x (1,2 / 1,9)			
Maximum speed	(r.p.m.)	690 / 840		670 / 880							670 / 880			
Maximum absorbed current	(A)	1,2		3,9							2 x 3,9			

## OPTIONS FOR THE INDOOR UNIT

### Stop-drop in the indoor air coil

Air flow at which it is recommended to install a stop-drop in the indoor coil.

Vectios™ PJ	0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Air flow (m³/h)	7.776	7.776	10.206	10.206	10.206	10.206	14.580	14.580	14.580	14.580	18.468	18.468	18.468

Note: for operating conditions with high dehumidification in the indoor coil (e.g. in installations close to the coast) it may be necessary to install a separator even if the flow is less than the previous one.

Note: the stop-drop in the indoor coil is not compatible with the hot water coil or the gas boiler.

### Supply plug-fan EC with high (H) or low (L) available pressure

Vectios™ PJ		0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Nominal air flow	(m³/h)	5.100	6.500	8.500	8.750	9.000	9.000	12.000	12.500	12.500	15.500	15.500	16.000	16.000
Nominal available static pressure	(mm.w.c.)	12	12	12	15	15	15	20	20	20	20	20	20	25
Low pressure (L)	Number / Diameter	(mm)	1 / 500		--						--		2 / 500	
	Output	(kW)	1,3		--			5,6			--		2 x 2,6	
	Speed	(r.p.m.)	1.350		--			2.200			--		1.700	
	Maximum absorbed current	(A)	2,1		--			8,9			--		2 x 4,0	
High pressure (H)	Number / Diameter	(mm)	1 / 500		2 / 500						2 / 500			
	Output	(kW)	2,8		2 x 2,6						2 x 5,6			
	Speed	(r.p.m.)	1.700		1.700						2.200			
	Maximum absorbed current	(A)	4,3		2 x 4,2						2 x 8,4			

Note: the value of power input according to the selected flow can be found at our "Selection Software".

### Axial return fan (CA assembly)

Vectios™ PJ		0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Maximum air flow	(m³/h)	5.100	6.500	8.500	8.750	9.000	9.000	12.000	12.500	12.500	15.500	15.500	16.000	16.000
Available static pressure	(mm.w.c.)							5						
Number / Diameter	(mm)	1 / 500		2 / 450			2 / 500			3 / 500				
Output	(kW)	0,7		2 x 0,5			2 x 0,7			3 x 0,7				
Speed	(r.p.m.)	1.390		1.360			1.390			1.390				
Maximum absorbed current	(A)	1,4		2 x 1,0			2 x 1,4			3 x 1,4				







## Auxiliary electrical heaters

Auxiliary electrical heaters, with two power stages and on/off control, for assembly and connection inside the unit.

- Up to 3 values of total power available for each model:

Vectios™ PJ	E0L (Low)	E0N (Nominal)	E0H (High)
0090 to 0120	12 kW	18 kW	unavailable
0140 to 0190	12 kW	18 kW	27 kW
0200 to 0380	18 kW	27 kW	36 kW

- Characteristics:

Total power (kW)	12	18	27	36
Stages power (kW)	6 + 6	9 + 9	9 + 18	18 + 18
Current (A)	17,3	26,0	39,0	52,0
Power supply	400 V / III ph			

## Auxiliary hot water coil

Auxiliary hot water coil, with three-way valve and proportional control, for assembly and connection inside the unit.

This option always incorporates an anti-freeze thermostat as safety system.

Vectios™ PJ		0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Air pressure drop	(mm.w.c.)	2,4	3,5	3,5	3,6	4,3	4,3	3,4	3,6	3,6	3,5	3,7	3,7	3,7
Water 80/60°C and inlet air 20°C	Heating capacity (kW)	27,6	32,0	47,6	48,4	49,2	49,2	95,8	98,3	98,3	129,0	129,0	131,5	131,5
	Water flow (m³/h)	1,4	1,6	2,1	2,1	2,1	2,1	2,7	2,8	2,8	3,6	3,6	3,7	3,7
	Water pressure drop (m.w.c)	0,2	0,3	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,9	0,9	1,0	0,9
Water 90/70°C and inlet air 20°C	Heating capacity (kW)	34,2	39,8	58,7	59,8	90,8	90,8	118,5	121,5	121,5	158,7	158,7	161,9	161,9
	Water flow (m³/h)	1,7	2,0	2,6	2,6	2,6	2,6	3,4	3,4	3,4	4,5	4,5	4,6	4,6
	Water pressure drop (m.w.c)	0,3	0,4	0,7	0,7	0,8	0,8	0,7	0,7	0,7	1,3	1,4	1,4	1,4

Note: Maximum water inlet temperature 95°C, maximum pressure 4 bar.

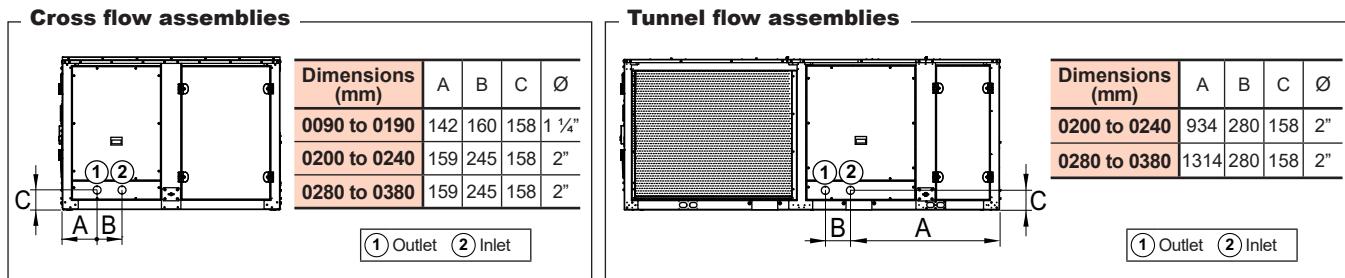
Note: the hot water coil is not compatible with the stop-drop in the indoor coil, the heat recovery coil or the active dehumidification.

## Position of the hydraulic connections of the hot water coil

The inlet/outlet connections of the hot water coil are located inside the unit and the connection is made via the side panel.

In models 0200 to 0380 it can also be made via the base of the unit using flexible piping (only available for units without pre-assembly roof curb).

The position of the sheet metal precuts on the side panel are shown in the following diagrams.



## “Great Cold” option (B0C)

Note: on units with the “Great Cold” option, air supply only may be lateral (factory-configured).

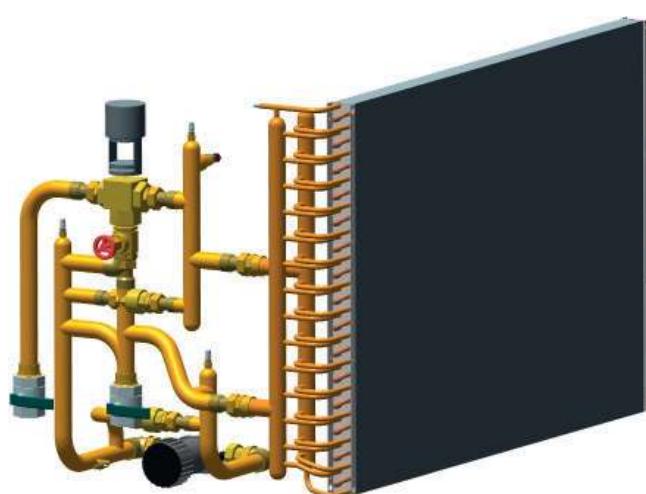
- This anti-freeze safety incorporates:

- Circulation pump.
- Water temperature sensors located in the inlet and the outlet of the coil.

Important: this option is mandatory for an outdoor temperature lower than -20°C WB. Consult for percentages of glycol water above 20%.

- Characteristics of the water circuit:

Vectios™ PJ		0090 to 0200	0220 to 0380
Circulation pump	Motor output (W)	90	140
	Max. absorbed current (A)	0,75	1,15



## Gas boiler + Auxiliary hot water coil

Natural or propane gas boiler with modulating actuator, in accordance with the Gas Directive 2009/142/EC, mounted on the side of the unit.

EC certification: 0085CP0214.

- Up to 3 values of total power available for each model:

Vectios™ PJ	G1L (Low)	G1N (Nominal)	G1H (High)
<b>0090 to 0190</b>	unavailable	Condexa PRO 40 (coming soon)	Condexa PRO 70
<b>0200 to 0380</b>	Condexa PRO 50 (coming soon)	Condexa PRO 70	Condexa PRO 100

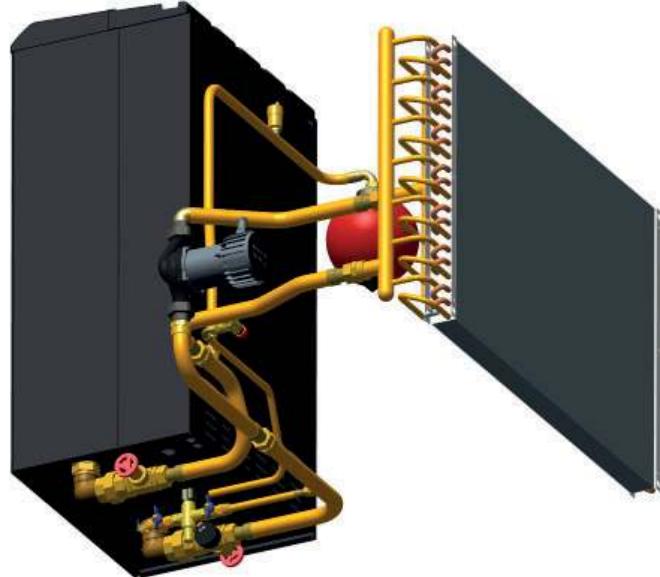
Note: the gas boiler is not compatible with the stop-drop in the indoor coil, the heat recovery coil or the active dehumidification.



- The key features of the boiler are:

- Type of equipment: B23 - B53 - B53P
- NOx Class (according to standard EN 297): 5
- Burner with premixing and modulation technology that allows outputs close to 109% (Hi performance).
- Heat exchanger made of stainless steel with a low carbon content.
- Proportional air / gas valve. Low NOx emissions (class 5, according to standard EN 297).
- Condensate drain with siphon.
- Forced draught.
- Electronic ignition.
- Safety devices: safety thermostat, low water pressure safety switch, flowmeter, Delta-T control, smoke temperature sensor.
- NTC sensor for boiler water temperature regulation.
- Working temperature of water from -7°C to 100°C. Consult for percentages of glycol water above 20%.
- Electronic controller with microprocessor and Multifunction LCD display for boiler's control, configuration and diagnostics. Possibility of ModBus communication.
- The electronic control of the unit will only manage the boiler connection as heating support depending on the ambient conditions.

- The boiler is connected to the hydraulic circuit of the auxiliary hot water coil. The water circuit, installed inside the unit, is composed of:
  - Water coil.
  - Circulation pump.
  - Expansion vessel.
  - Gate valves.
  - Safety valve with a tare value of 4 bar.
  - Automatic air bleeder valve.



- Characteristics of the water circuit:

Vectios™ PJ	0090 to 0200	0220 to 0380	
Expansion vessel	Volume (l)	5	5
	Filling pressure (kg/cm²)	1,5	1,5
Circulation pump	Motor output (W)	90	140
	Max. absorbed current (A)	0,75	1,15

- Type of gas used depending on the destination country:

Country	Category	Gas	Pressure (mbar)	Gas	Pressure (mbar)
Italy, Ireland, Great Britain, Portugal, Slovenia, Slovakia, Greece	II2H3+	G20	20	G30/G31	28-30/37
Spain	II2H3+	G20	18	G30/G31	28-30/37
Romania, Bulgaria, Turkey, Denmark, Estonia, Sweden, Norway, Latvia, Lithuania, Finland, Russia	II2H3B/P	G20	20	G30	30
Hungary	II2H3B/P	G20	25	G30	30
Poland	II2H3B/P	G20	25	G30	37
Croatia	II2H3B/P	G20	20	G30/G31	30
Holland	II2H3B/P	G25	25	G30	30
Czech Republic, Austria, Switzerland	II2H3B/P	G20	20	G30	50
Luxembourg	II2H3B/P	G20	20	G30	50
	II2E3P	G20	20	G31	37
Belgium	I2E(S)	G20/G25	20/25	--	--
	I3+	--	--	G30/G31	28-30/37
France	II2E+3+,	G20/G25	20/25	G30/G31	28-30/37
Malta, Cyprus, Iceland	I3B/P	--	--	G30	30
Germany	II2ELL3B/P	G20/G25	25	G30	50



## Gas burner

Natural or propane gas burner with modulating actuator, in accordance with the Gas Directive 2009/142/EC, installed inside a pre-assembly roofcurb. The PJ unit with lower air supply will be placed on this roofcurb.

EC certification: 0476CQ0451.

- Up to 3 values of total power available for each model:

Vectios™ PJ	G0L (Low)	G0N (Nominal)	G0H (High)
<b>0090 to 0190</b>	PCH020	PCH034	PCH045
<b>0200 to 0240</b>	unavailable	PCH065	PCH080
<b>0280 to 0380</b>	unavailable	PCH080	PCH105

Note: the gas burner is not compatible with the heat recovery coil or the active dehumidification.

- The key features of the boiler are:

- Condensation boiler with premixing and modulation technology that allows outputs close to 109% (Hi performance).
- The premixed burner, in combination with the air/gas valve, ensures a "clean" combustion. Low NOx emissions (class 5, according to standard EN 297).
- The combustion chamber and the burner are entirely made of stainless steel.
- Electronic controller with microprocessor and multifunction LCD display, located inside the burner, for burner's control, configuration and diagnostics.

- The electronic control of the unit will only manage the burner connection as heating support depending on the ambient conditions.



Note: It's recommended to use the clogged filter pressostat (optional) in units with gas burner.

Model		PCH020	PCH034	PCH045	PCH065	PCH080	PCH105						
Type of equipment		B23P - B53P - C13 - C43 - C53 - C63 - C83											
EC certification	PIN.	0476CQ0451											
NOx Class	Val	5											
Heater performance	Range	Min.	Max	Min.	Max	Min.	Max						
	Thermal output (Hi) kW	4,75	19,00	7,60	34,85	8,50	42,00						
	Useful thermal output kW	4,97	18,18	8,13	33,56	8,97	40,45						
	Hi performance (L.C.V.) %	104,63	95,68	106,97	96,30	105,50	96,30						
	Hs performance (H.C.V.) %	94,26	86,20	96,37	86,76	95,07	86,76						
	Flue losses with burner on (Hi) %	0,4	4,3	0,6	3,7	0,5	3,7						
	Flue losses with burner off (Hi) %	<0,1											
	Losses in enclosure ①	0%											
Exhaust gases - Polluting emissions	Max. condensation ② l/h	0,4	0,9	1,1	2,1	3,3	2,7						
	Carbon monoxide - C0 - (0% of O <sub>2</sub> ) ③ ppm	< 5											
	Nitrogen oxides - NOx - (0% of O <sub>2</sub> ) (Hi) ④	38 mg/kWh - 22 ppm	42 mg/kWh - 24 ppm	33 mg/kWh - 19 ppm	39 mg/kWh - 22 ppm	41 mg/kWh - 23 ppm	39 mg/kWh - 22 ppm						
	Nitrogen oxides - NOx - (0% of O <sub>2</sub> ) (Hs) ⑤	34 mg/kWh - 20 ppm	38 mg/kWh - 22 ppm	30 mg/kWh - 17 ppm	35 mg/kWh - 20 ppm	37 mg/kWh - 21 ppm	35 mg/kWh - 20 ppm						
Electrical data	Available pressure at flue Pa	80	90	100	120								
	Power supply	230 Vac - 50 Hz single-phase											
	Power input	11	45	11	74	24	82	15	97	20	123	20	130
	Power input in stand-by	<5											
	Ingress protection rating	IP X5D											
Connections	Operating Temperatures	from -15°C to +40°C											
	Ø gas connection GAS	UNI/ISO 228/1- 3/4"											
	Ø intake/exhaust pipes mm	80/80											

① Enclosure losses match those of the machine housing the PCH.

② Max. condensation produced acquired from testing 30%Qn.

③ Value referenced to cat. H (G20)

④ Weighted value to EN1020:2009 ref. to class H (G20), referred to Hi (L.C.V.).

⑤ Weighted value to EN1020:2009 ref. to class H (G20), referred to Hs (H.C.V.).



### Preheater in fresh air (CF assembly)

With CF assembly, 100% fresh air, it is possible to incorporate a preheater module (electrical heater) coupled to the fresh air intake. This module is supplied in kit for installation on site.

The electrical heater with proportional control will modulate capacity to get the condenser inlet conditions within the operating limits of the cooling circuit in case of very low outdoor temperatures.

- Two values of total power available for each model:

Vectios™ PJ	0090 to 0190	0200 to 0240	0280 to 0380
Low power	18 kW	27 kW	36 kW
Nominal power	36 kW	54 kW	72 kW

- Characteristics:

Total power	18 kW	27 kW	36 kW	54 kW	72 kW
Current (A)	26,0	39,0	52,0	78,0	104,0
Power supply	400 V / III ph				

### Operating limits with 100% fresh air unit (CF assembly)

COOLING mode: The maximum outdoor temperature depends on the air flow. The lower air flow, the higher temperature: 33°C DB with nominal air flow, 35°C DB with minimum air flow and 43°C DB with the minimum air flow of the CF assembly (50% lower than in rest of assemblies).

#### HEATING mode:

- Without electrical preheater: minimum outdoor temperature: 7°C with minimum air flow.
- With electrical preheater: the minimum outdoor temperature depends on the model, the air flow and the selected preheater. Refer to the attached table for reference although, depending on the model, this temperature may be lower.

Minimum outdoor temperature with preheater option	Electrical preheater	
	Low power	Nominal power
Nominal air flow	> 2°C	> -3°C
Minimum air flow of CF assembly	> -6°C	> -15°C

### Active dehumidification

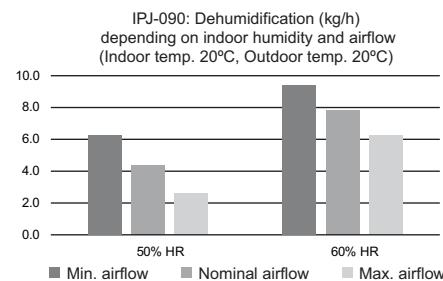
Active dehumidification with extra condensation coil for dehumidification applications in high relative humidity ambients.

The dehumidification process is done by the main refrigerant coil, the activation of compressors in cooling mode allows humidity to be removed from the evaporation coil. Depending on temperature conditions in comparison with set-point conditions, the control will adapt the amount of energy recovered in the additional condensation coil to reheat the air flow. This option also allows an additional reheating using the auxiliary electrical heaters (Group 8).

#### Influence of selection conditions

Dehumidification capacity of the unit is strongly influence by different factors:

- Supply air flow: The lower air flow, the higher dehumidification capacity.
- Relative humidity setpoint: The influence of humidity setpoint is key. The higher setpoint, the higher dehumidification capacity.



#### Technical performance

Calculations performed for the minimum supply air flow of the unit.

Vectios™ PJ	0090	0120	0140	0160	0180	0190	0200	0220	0240	0280	0320	0360	0380
Dehumidification capacity ① kg/h	7,0	8,9	9,7	12,4	15,4	17,5	16,9	19,6	21,6	22,3	25,3	31,2	38,4
Energy recovery capacity ① ④ kW	28,3	35,2	42,0	46,9	52,6	55,7	33,2	36,3	38,0	42,6	45,3	50,6	56,7
Dehumidification capacity ② kg/h	12,3	15,5	17,7	21,1	25,2	27,7	29,3	33,2	35,6	38,5	42,5	50,0	59,4
Energy recovery capacity ② ④ kW	30,0	37,5	44,9	50,0	56,1	59,3	35,4	38,7	40,4	45,5	48,3	53,9	60,2
Dehumidification capacity ③ kg/h	6,2	7,5	7,9	10,4	13,1	15,0	14,1	16,7	18,4	19,4	22,4	26,6	34,2
Energy recovery capacity ③ ④ kW	25,7	32,5	38,5	43,3	48,4	51,3	30,6	33,5	35,0	38,9	41,4	46,5	51,7

① Indoor coil conditions: 27°C and 50%HR. Outdoor temperature 35°C.

② Indoor coil conditions: 25°C and 60%HR. Outdoor temperature 20°C.

③ Indoor coil conditions: 20°C and 50%HR. Outdoor temperature 20°C.

④ Maximum energy recovery capacity in the additional condensation coil.

Note: Axial 2-speed outdoor fans (optional) are not recommended with active dehumidification and outdoor temperatures below 12°C.

Note: The active dehumidification is not compatible with the hot water coil, the gas boiler, the gas burner, the air zoning and the CF assembly.



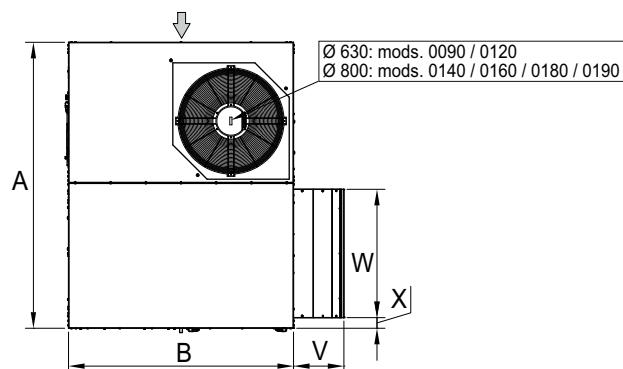
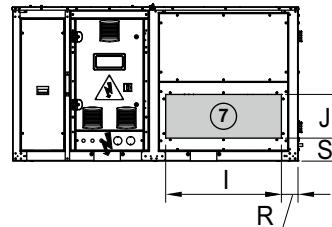
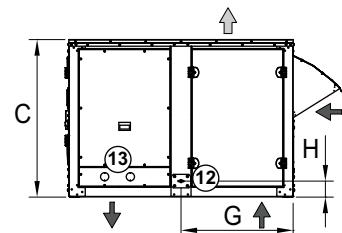
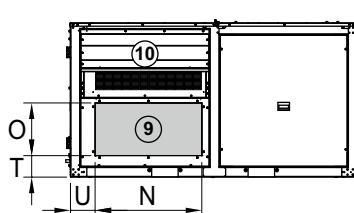
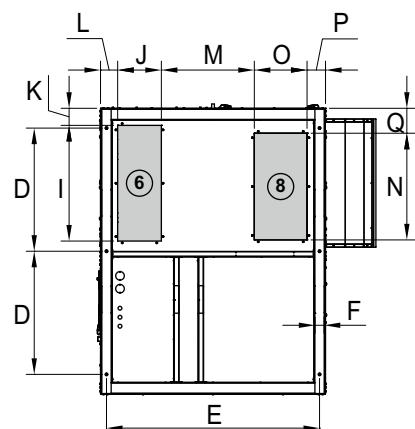




## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, C0, CS and CF assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return (C0 and CS assemblies)
⑨	Lateral air return (C0 and CS assemblies)
⑩	Fresh air intake (CS and CF assemblies)
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



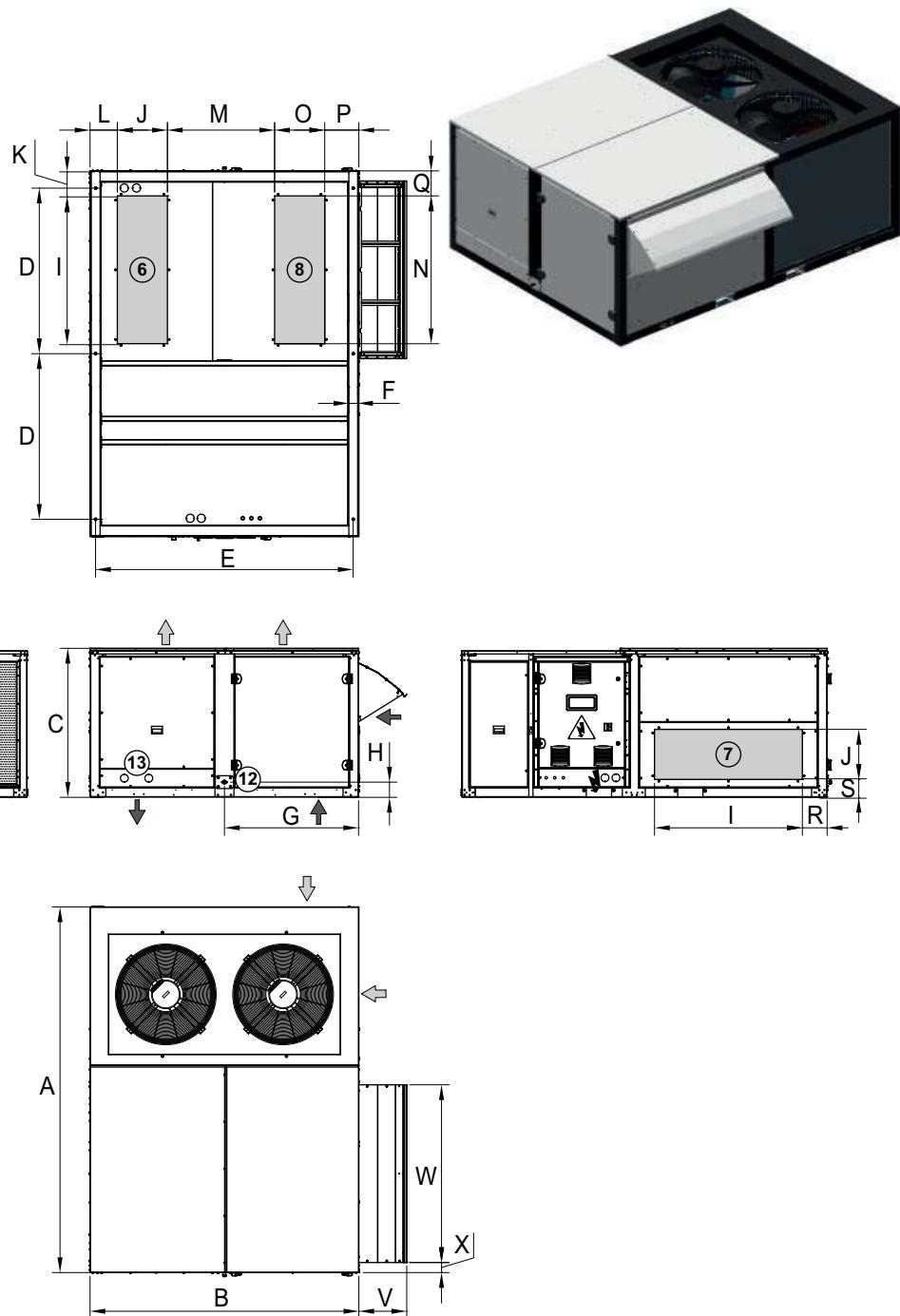
Dimensions	L x W x H			Supply				Return																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
0090 to 0190 (mm)	2.225	1.750	1.230	958	1.657	72	872	125	900	340	133	133	723	830	410	144	194	129	179	167	191	392	998	83

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, C0, CS and CF assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return (C0 and CS assemblies)
⑨	Lateral air return (C0 and CS assemblies)
⑩	Fresh air intake (CS and CF assemblies)
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



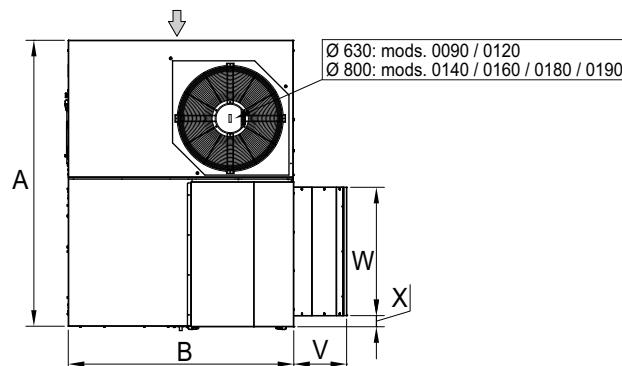
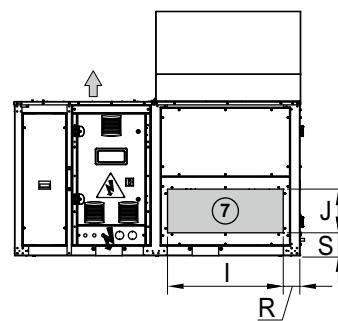
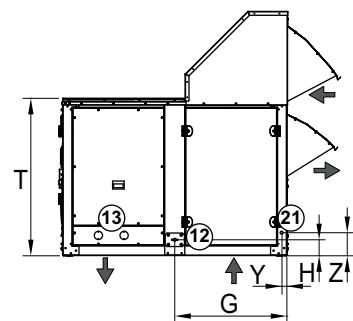
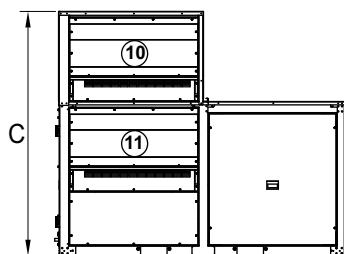
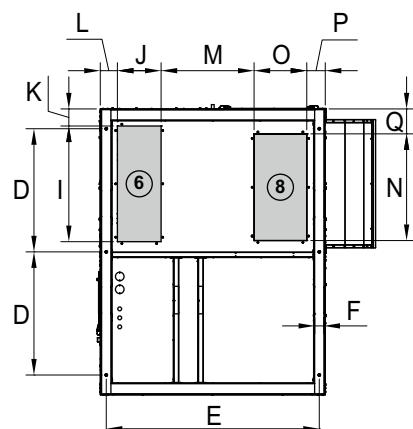
Dimensions	L x W x H				Supply				Return				P	Q	R	S	T	U	V	W	X			
	A	B	C	D	E	F	G	H	I	J	K	L	M											
0200 to 0240 (mm)	3.000	2.200	1.230	1.356	2.108	72	1.098	125	1.210	410	205	223	877	1.210	410	279	205	203	147	147	203	392	1.455	82
0280 to 0380 (mm)	3.650	2.200	1.230	1.683	2.108	72	1.098	125	1.510	410	245	223	877	1.510	410	279	245	243	147	147	243	392	1.835	82

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CK, CA, CP and CR assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CR assembly)
Anti-vibration anchoring: rivet nut M12	



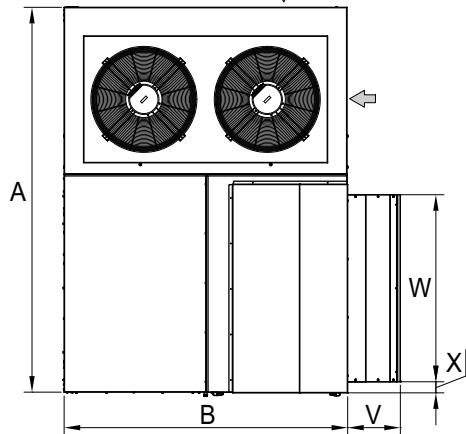
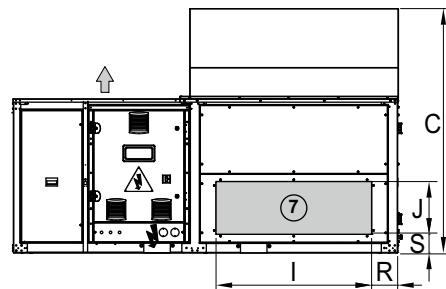
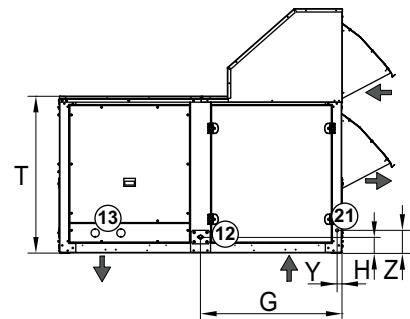
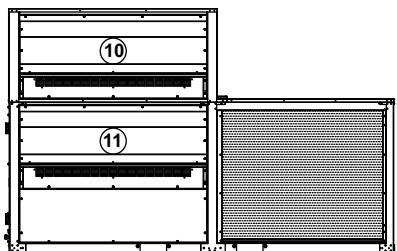
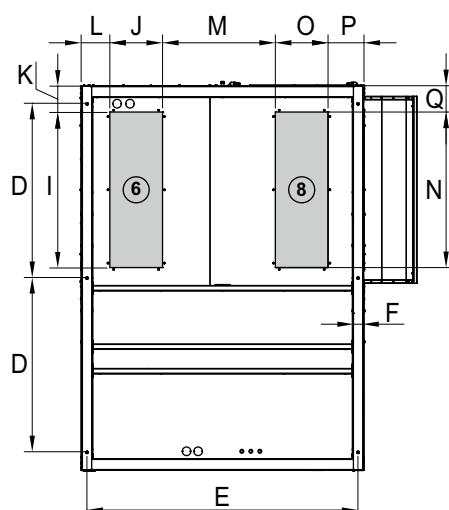
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0090 to 0190 (mm)	2.230	1.755	1.905	958	1.657	72	872	125	900	340	133	133	723	830	410	144	194	129	179	1.230	410	998	86	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CK, CA, CP and CR assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CR assembly)
Anti-vibration anchoring: rivet nut M12	



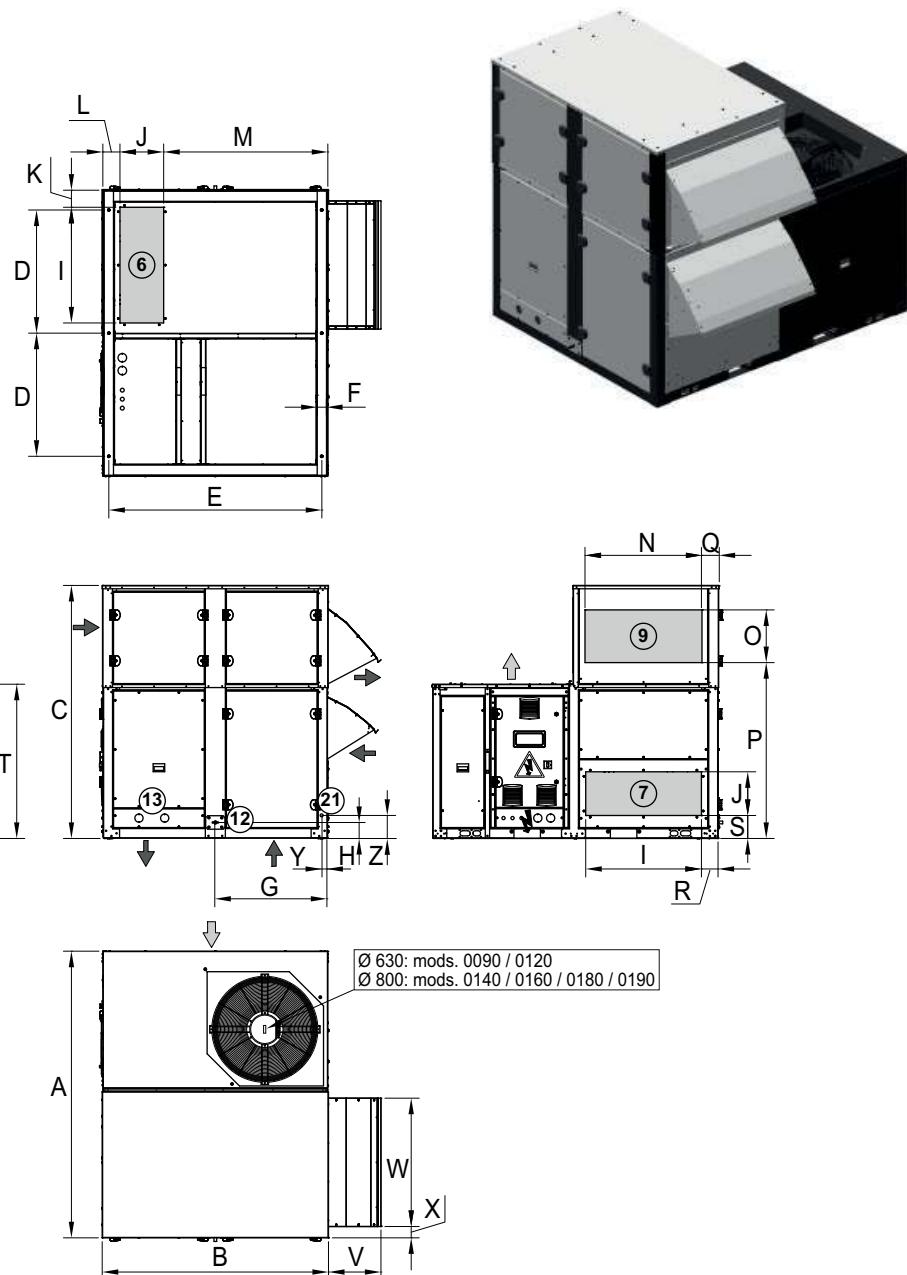
Dimensions	L x W x H			Supply						Return						P	Q	R	S	T	V	W	X	Y	Z
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0200 to 0240 (mm)	3.000	2.205	1.905	1.356	2.108	72	1.098	125	1.210	410	205	223	877	1.210	410	279	205	203	147	1.230	410	1.455	86	45	174
0280 to 0380 (mm)	3.655	2.205	1.905	1.683	2.108	72	1.098	125	1.510	410	245	223	877	1.510	410	279	245	243	147	1.230	410	1.835	86	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CQ and CT assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑨	Lateral air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CT assembly)
Anti-vibration anchoring: rivet nut M12	



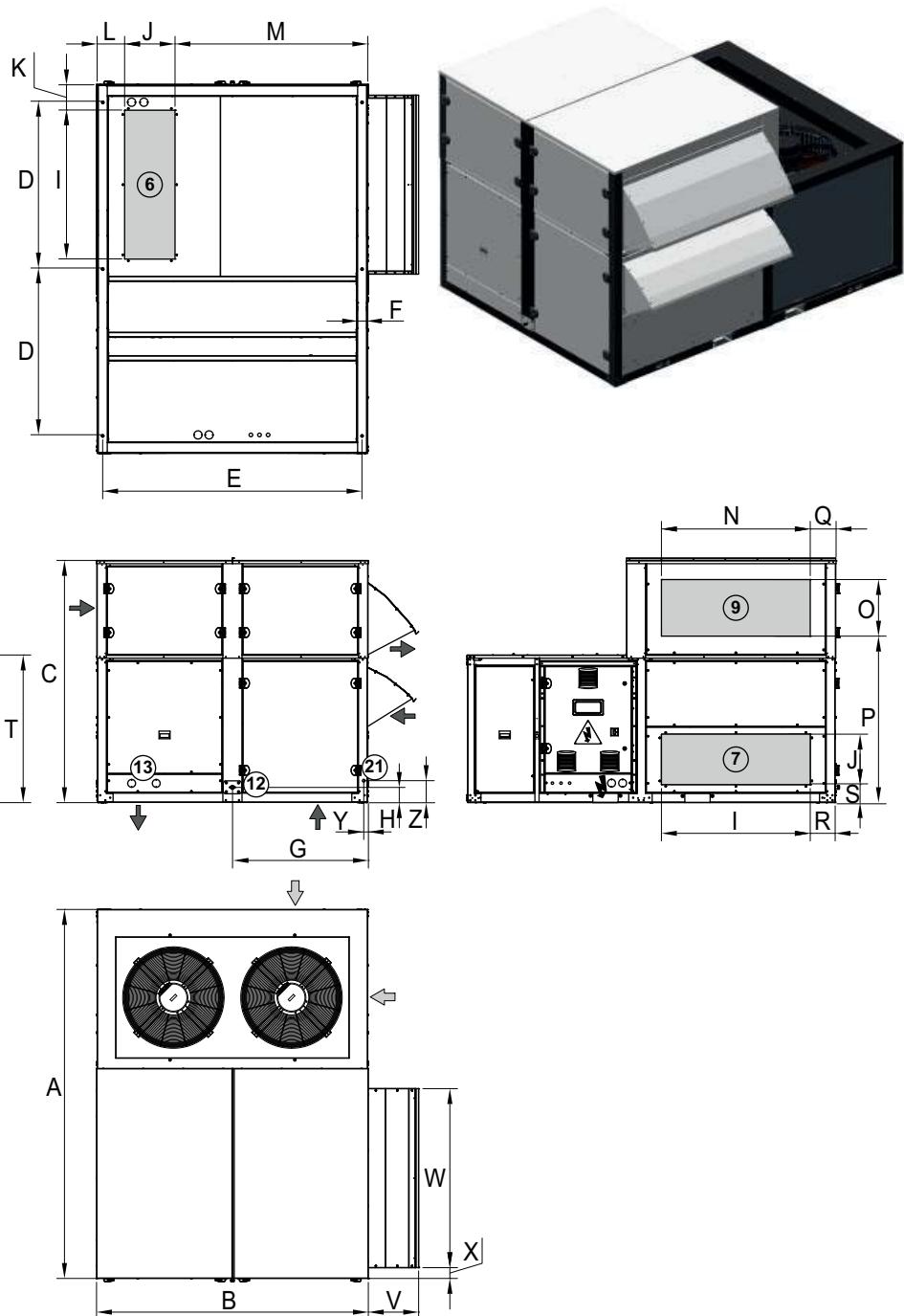
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	A	B	C	D	E	F	G	H	I	J	K														
0090 to 0190 (mm)	2.230	1.760	1.975	958	1.657	72	872	125	900	340	133	133	1.277	910	410	1.352	133	129	179	1.200	410	998	88	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CQ and CT assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑨	Lateral air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CT assembly)
Anti-vibration anchoring: rivet nut M12	



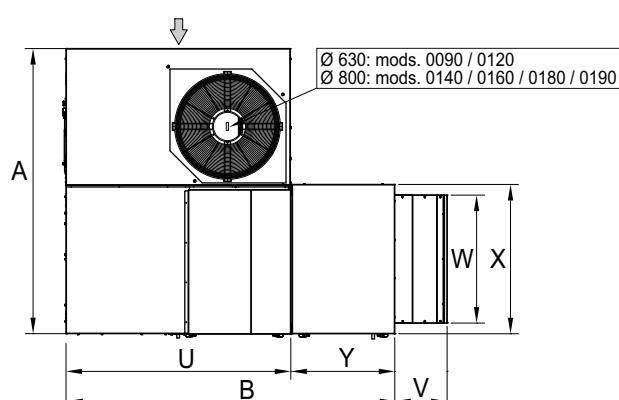
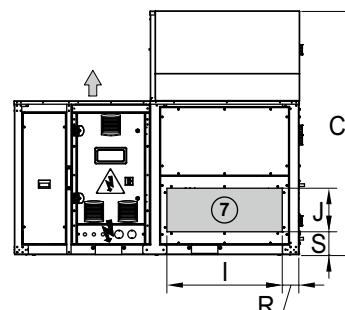
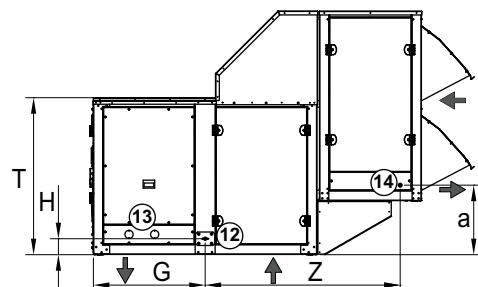
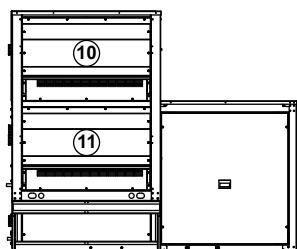
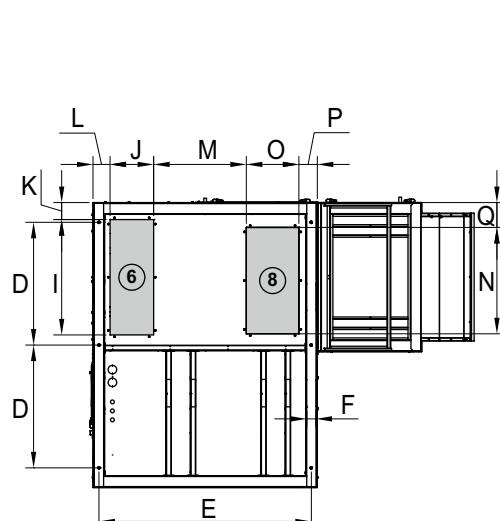
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0200 to 0240 (mm)	3.000	2.210	1.995	1.356	2.108	72	1.098	125	1.210	410	205	223	1.567	1.210	460	1.353	210	203	147	1.200	410	1.455	88	45	174
0280 to 0380 (mm)	3.655	2.210	1.995	1.683	2.108	72	1.098	125	1.510	410	245	223	1.567	1.210	460	1.353	400	243	147	1.200	410	1.835	88	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, montaje CW assembly**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑭	Wheel condensate outlet 1/2" M
Anti-vibration anchoring: rivet nut M12	



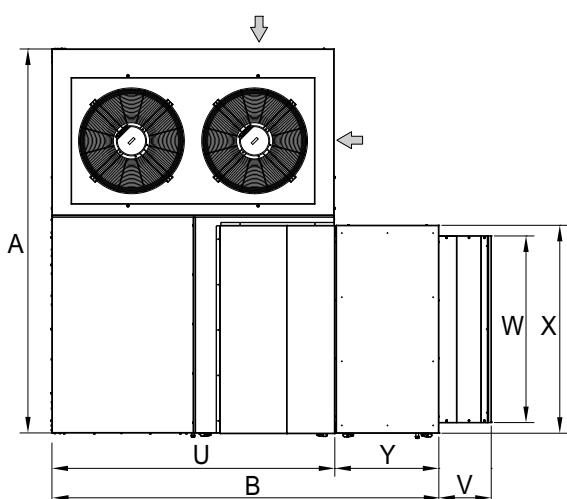
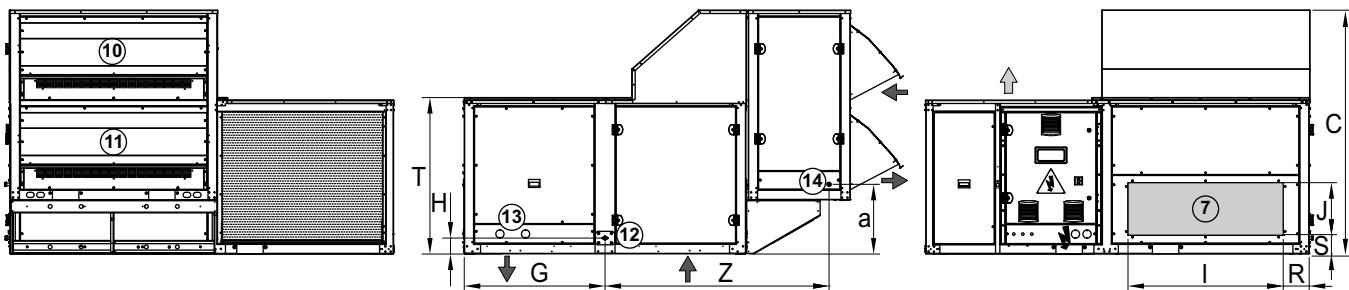
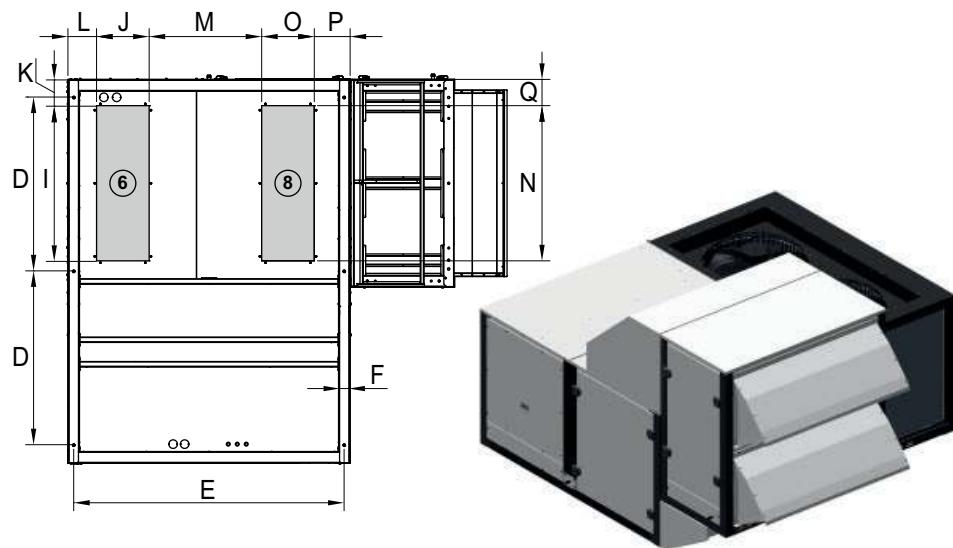
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	
0090 to 0190 (mm)	2.230	2.565	1.905	958	1.657	72	872	125	900	340	133	133	723	830	410	144	194	129	179	1.230	1.755	410	998	1.165
																					810	1.521	543	

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

### RPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CW assembly

	Outdoor air circulation
	Standard indoor air circulation
	Electrical cabinet
	Electric power supply
	Door switch
	Lower air supply
	Lateral air supply
	Lower air return
	Fresh air intake
	Exhaust air outlet
	Condensate outlet 1/2" M
	HWC connections (option)
	Wheel condensate outlet 1/2" M
Anti-vibration anchoring: rivet nut M12	

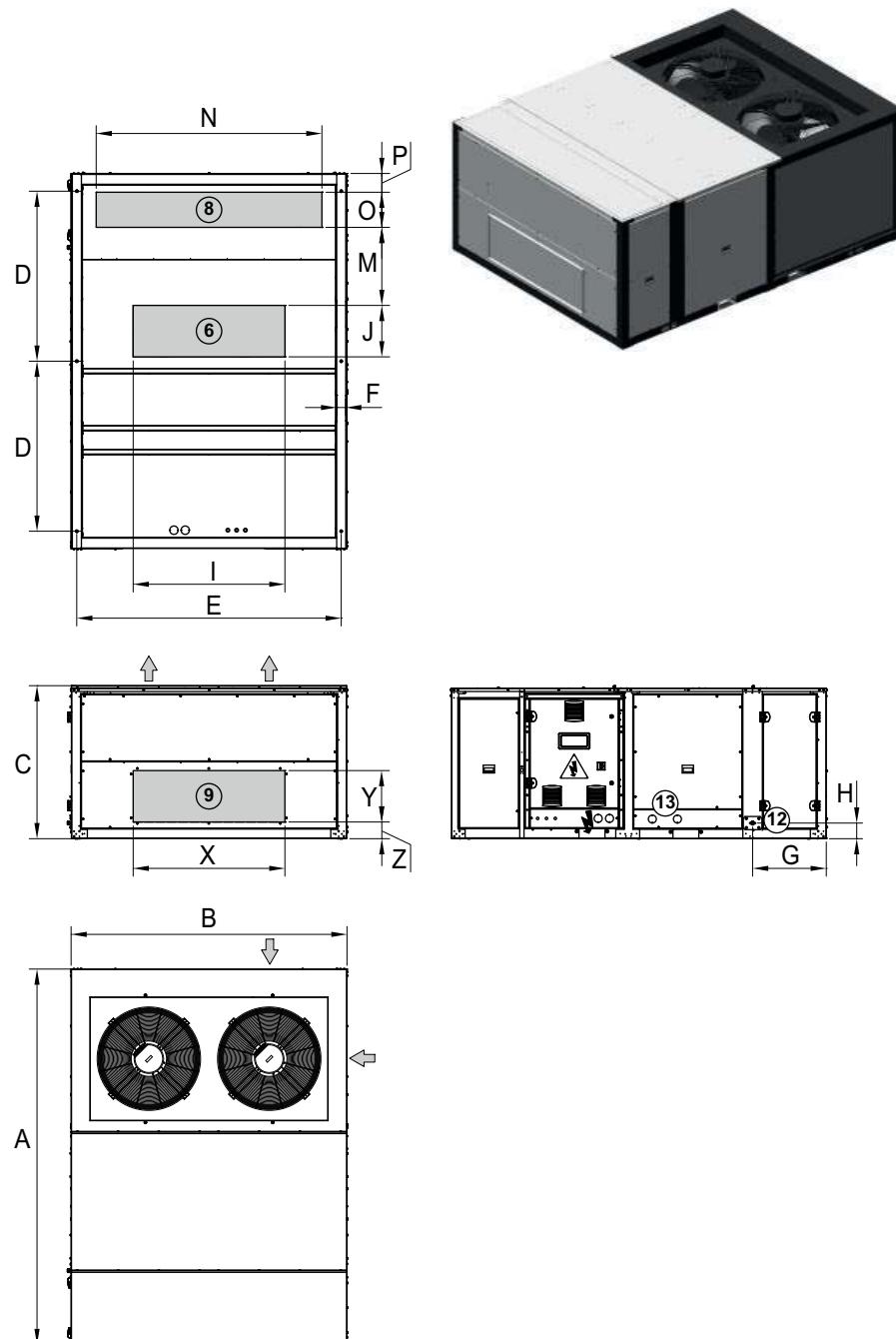
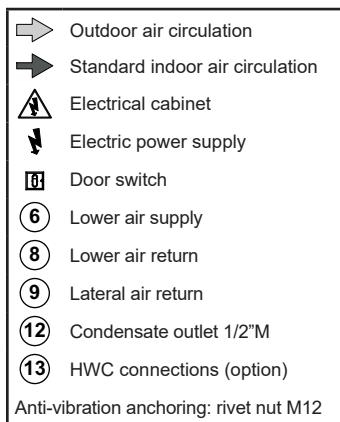


Dimensions	L x W x H			Supply						Return						a											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
0200 to 0240 (mm)	3.000	3.015	1.905	1.356	2.108	72	1.098	125	1.210	410	205	223	877	1.210	410	279	205	203	147	1.230	2.205	410	1.455	1.621	810	1.746	544
0280 to 0380 (mm)	3.655	3.015	1.905	1.683	2.108	72	1.098	125	1.510	410	245	223	877	1.510	410	279	245	243	147	1.230	2.205	410	1.835	2.201	810	1.746	243

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

### RPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, T0 assembly



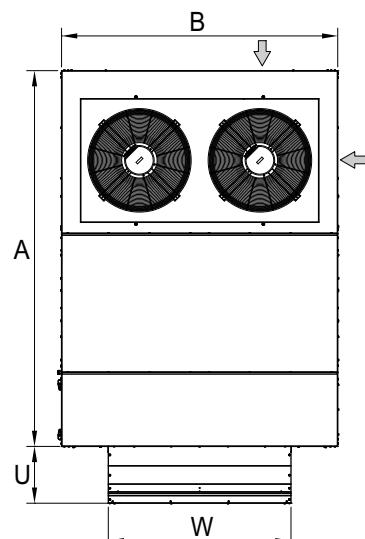
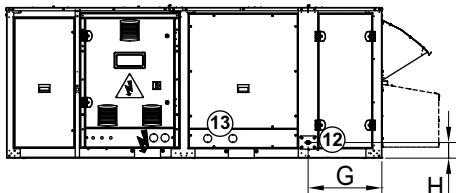
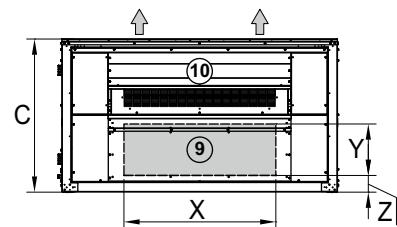
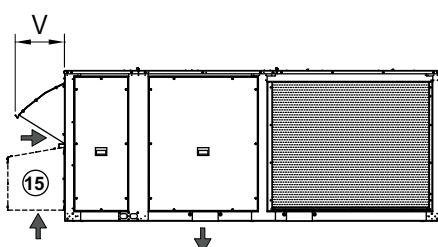
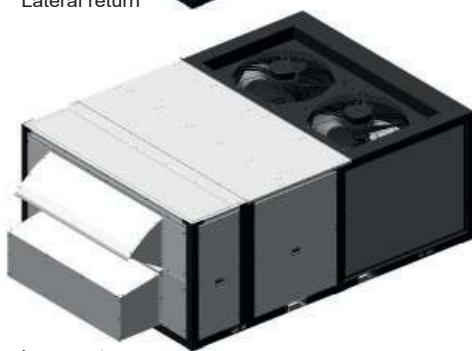
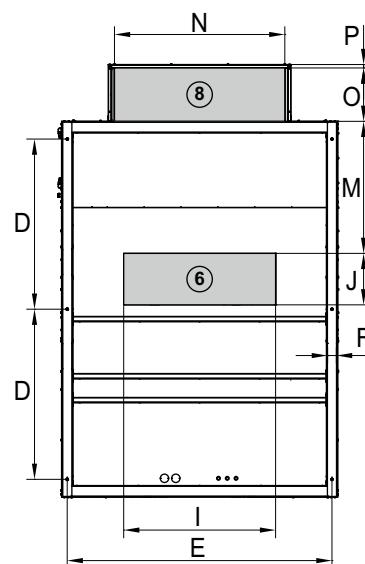
Dimensions	L x W x H			D	E	F	G	H	Supply		Return		M	N	O	P	X	Y	Z
	A	B	C						I	J	K	L							
0200 to 0240 (mm)	3.000	2.200	1.230	1.356	2.108	72	587	125	1.210	410	622	1.800	280	150	1.210	410	133		
0280 to 0380 (mm)	3.650	2.200	1.230	1.683	2.108	72	967	125	1.510	410	774	1.510	410	248	1.510	410	147		

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

### RPJ - 0200 / 0220 / 0240, TS assembly

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑧	Lower air return
⑨	Lateral air return
⑩	Fresh air intake
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑮	Enclosure for lower return (on-site configuration)
Anti-vibration anchoring: rivet nut M12	



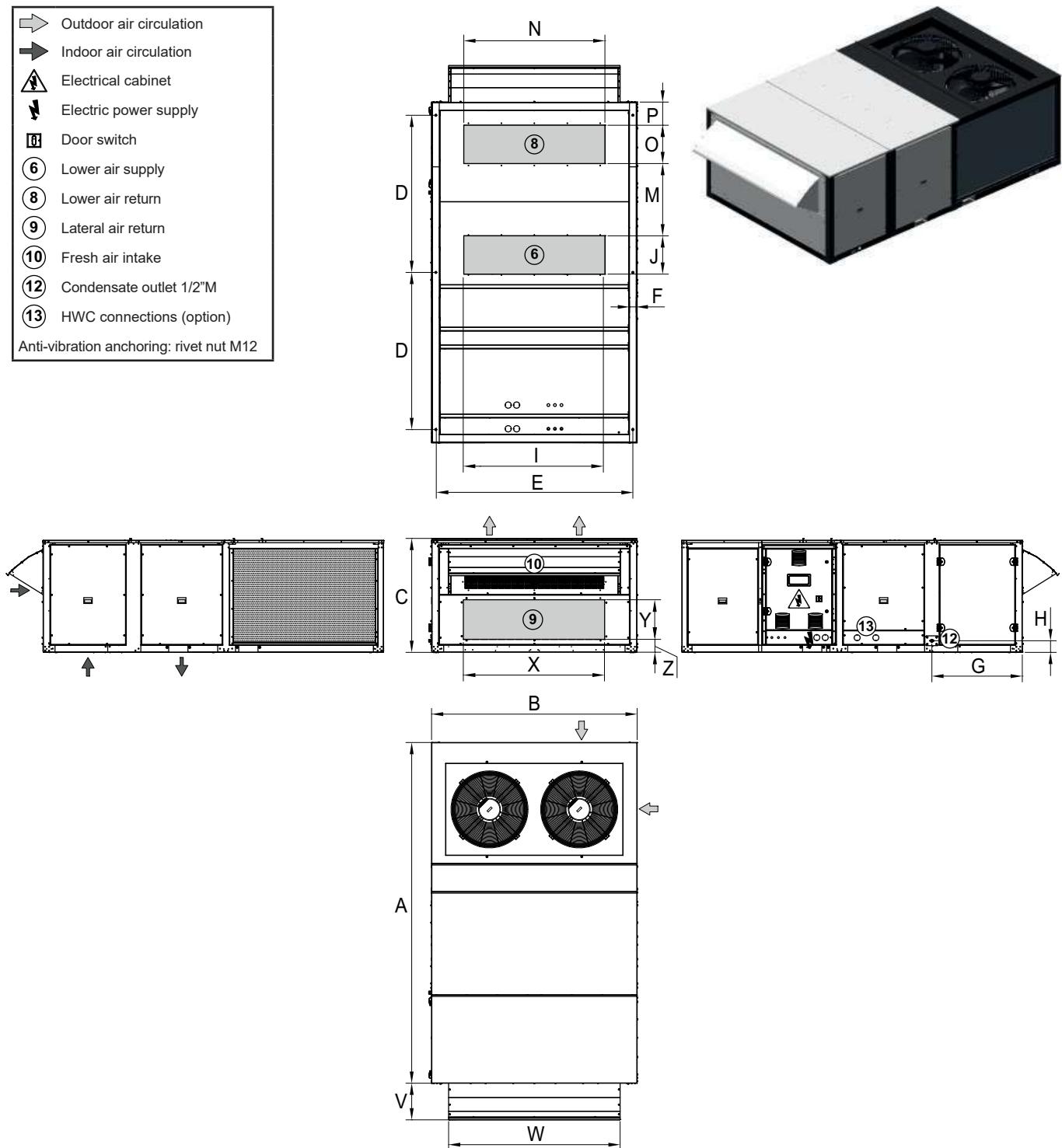
Dimensions	L x W x H			Supply				Return				M	N	O	P	U	V	W	X	Y	Z
	A	B	C	D	E	F	G	H	I	J											
0200 to 0240 (mm)	3.000	2.200	1.230	1.356	2.108	72	587	125	1.210	410	1.052	1.357	125	27	452	392	1.455	1.210	410	133	

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

### RPJ - 0280 / 0320 / 0360 / 0380, TS assembly

	Outdoor air circulation
	Indoor air circulation
	Electrical cabinet
	Electric power supply
	Door switch
	Lower air supply
	Lower air return
	Lateral air return
	Fresh air intake
	Condensate outlet 1/2" M
	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



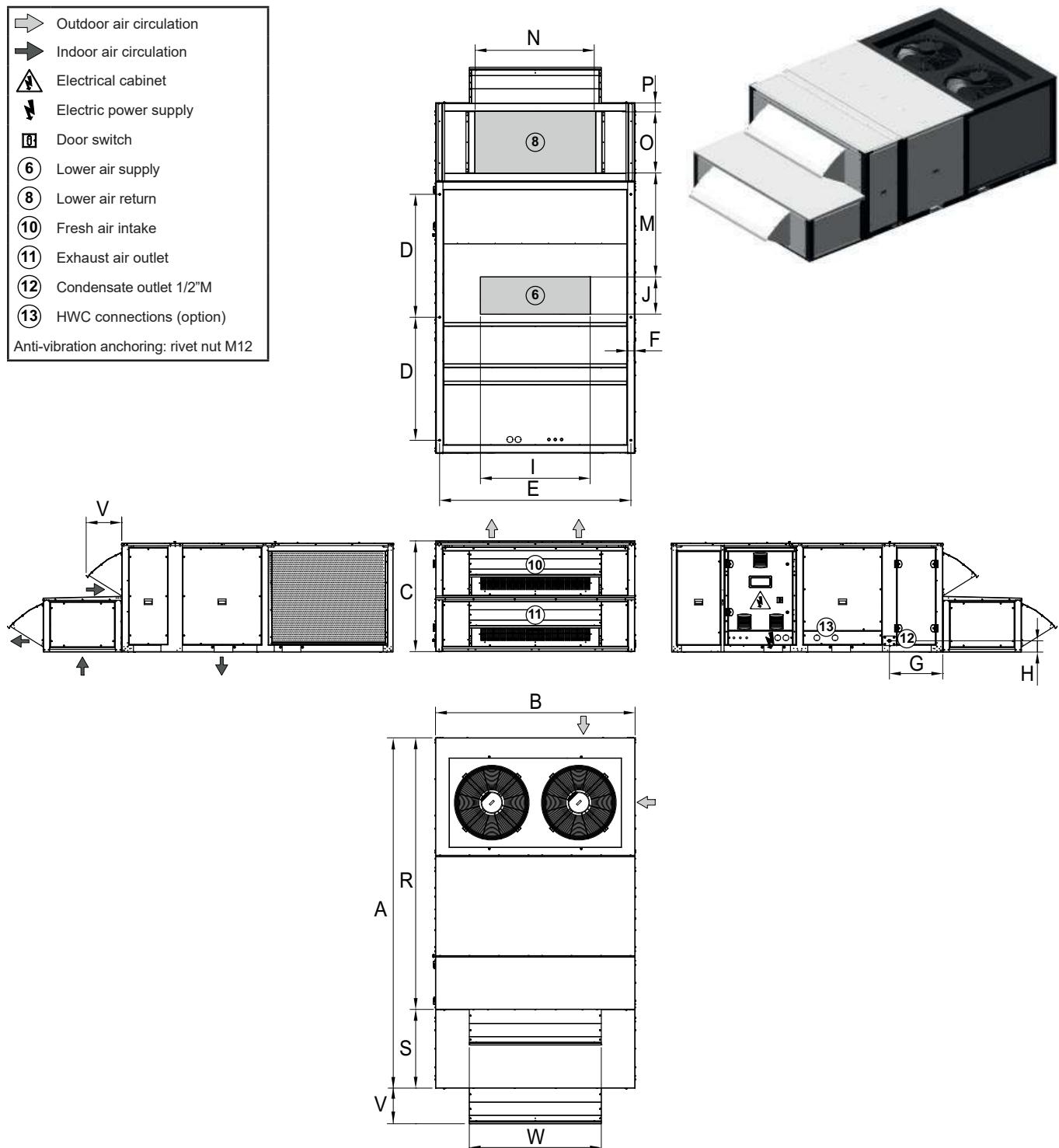
Dimensions	L x W x H			D	E	F	G	H	Supply		Return		P	V	W	X	Y	Z	
	A	B	C						I	J	M	N	O						
0280 to 0380 (mm)	3.650	2.200	1.230	1.683	2.108	72	967	125	1.510	410	774	1.510	410	248	392	1.835	1.510	410	147

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

### RPJ - 0200 / 0220 / 0240, TP assembly

	Outdoor air circulation
	Indoor air circulation
	Electrical cabinet
	Electric power supply
	Door switch
	Lower air supply
	Lower air return
	Fresh air intake
	Exhaust air outlet
	Condensate outlet 1/2" M
	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	

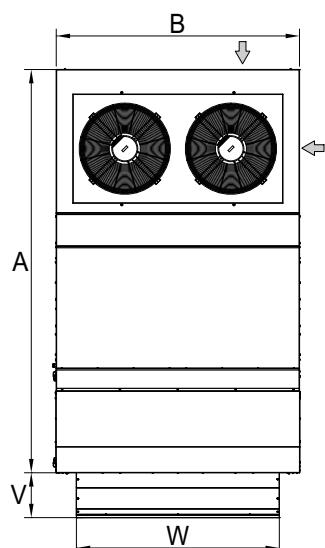
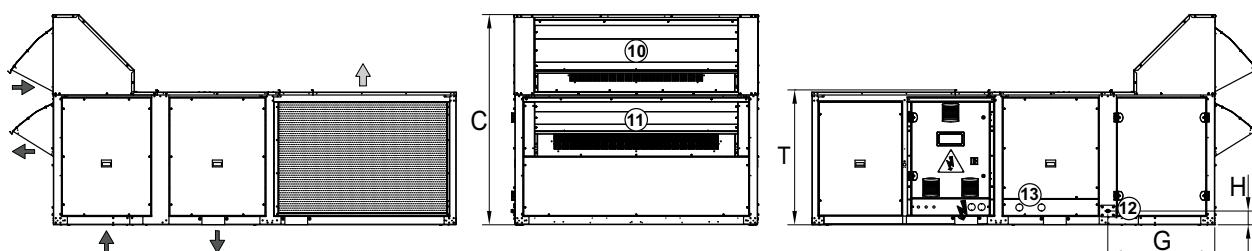
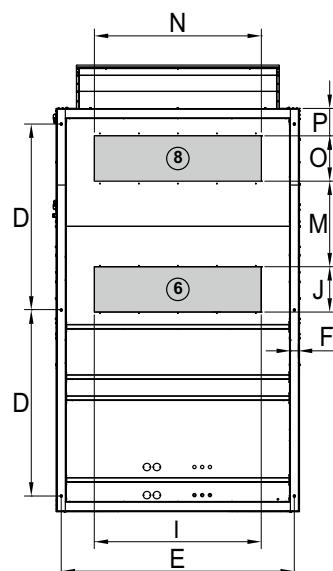
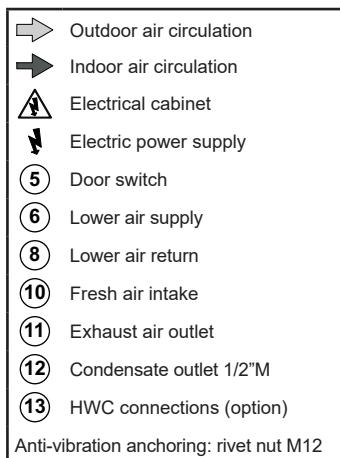


Dimensions	L x W x H			D	E	F	G	H	Supply		Return		M	N	O	P	R	S	V	W
	A	B	C						I	J	M									
0200 to 0240 (mm)	3.865	2.200	1.230	1.356	2.108	72	587	125	1.210	410	1.144	1.330	680	95	2.995	870	297	1.455		

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

### RPJ - 0280 / 0320 / 0360 / 0380, TP assembly

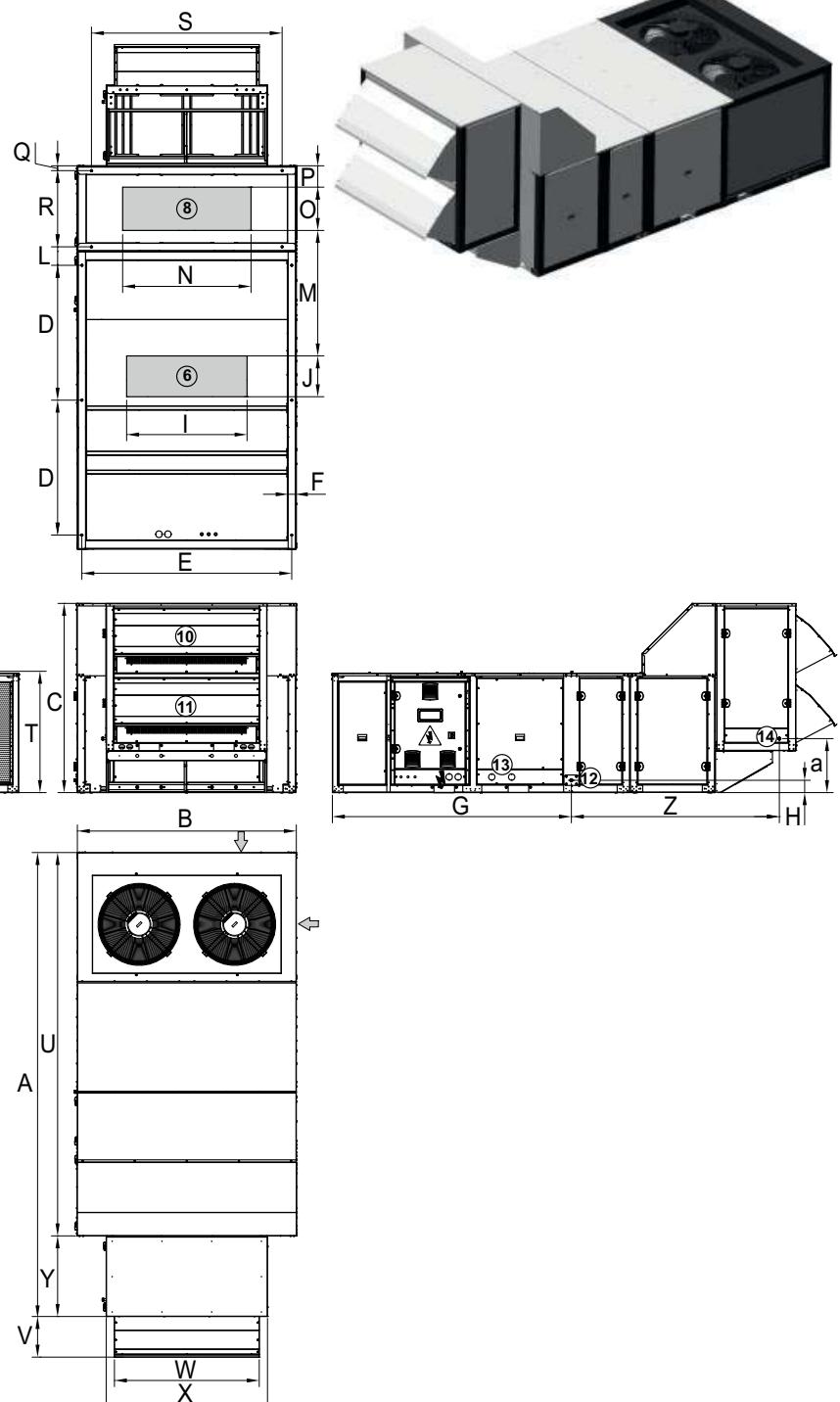
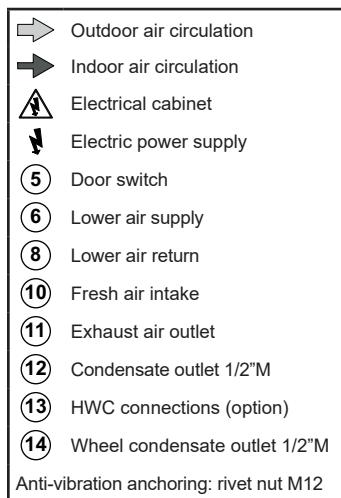


Dimensions	L x W x H							Supply		Return		P	T	V	W		
	A	B	C	D	E	F	G	H	I	J	M	N	O				
<b>0280 to 0380 (mm)</b>	3.655	2.210	1.905	1.683	2.108	72	967	125	1.510	410	774	1.510	410	248	1.230	410	1.835

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: RPJ SERIES

**RPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, TW assembly**



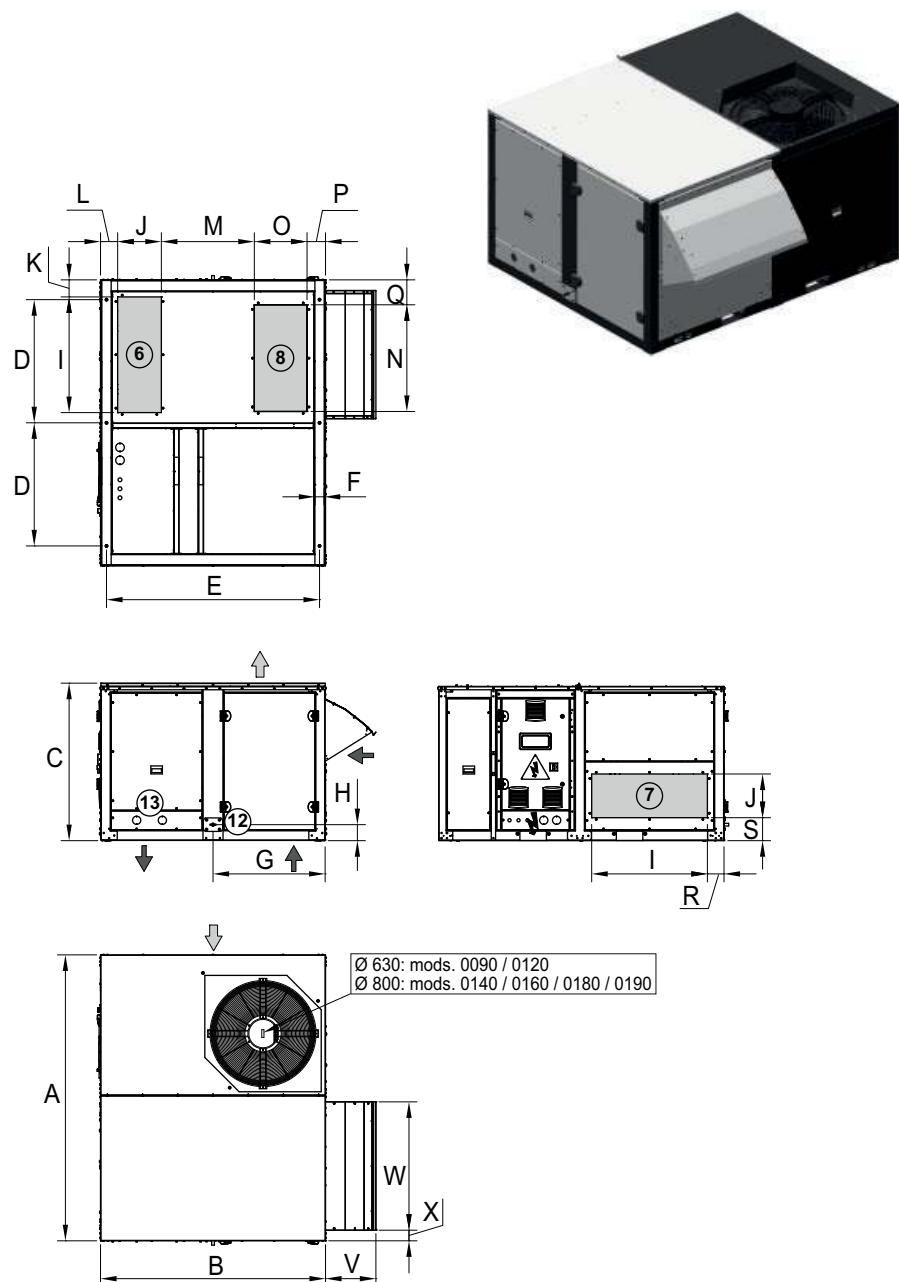
Dimensions	L x W x H			Supply				Return				P	Q	R	S	T	U	V	W	X	Y	Z	a			
	A	B	C	D	E	F	G	H	I	J	L	M														
0200 to 0240 (mm)	4.675	2.210	1.905	1.356	2.108	72	2.402	125	1.210	410	196	1.271	1.290	435	215	48	766	1.916	1.230	3.865	410	1.455	1.621	810	2.100	544
0280 to 0380 (mm)	4.465	2.210	1.905	1.683	2.108	72	2.676	125	1.510	410	--	774	1.510	410	248	--	--	--	1.230	3.655	410	1.835	2.001	810	1.614	243

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

**IPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, C0, CS and CF assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return (C0 and CS assemblies)
⑨	Lateral air return (C0 and CS assemblies)
⑩	Fresh air intake (CS and CF assemblies)
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



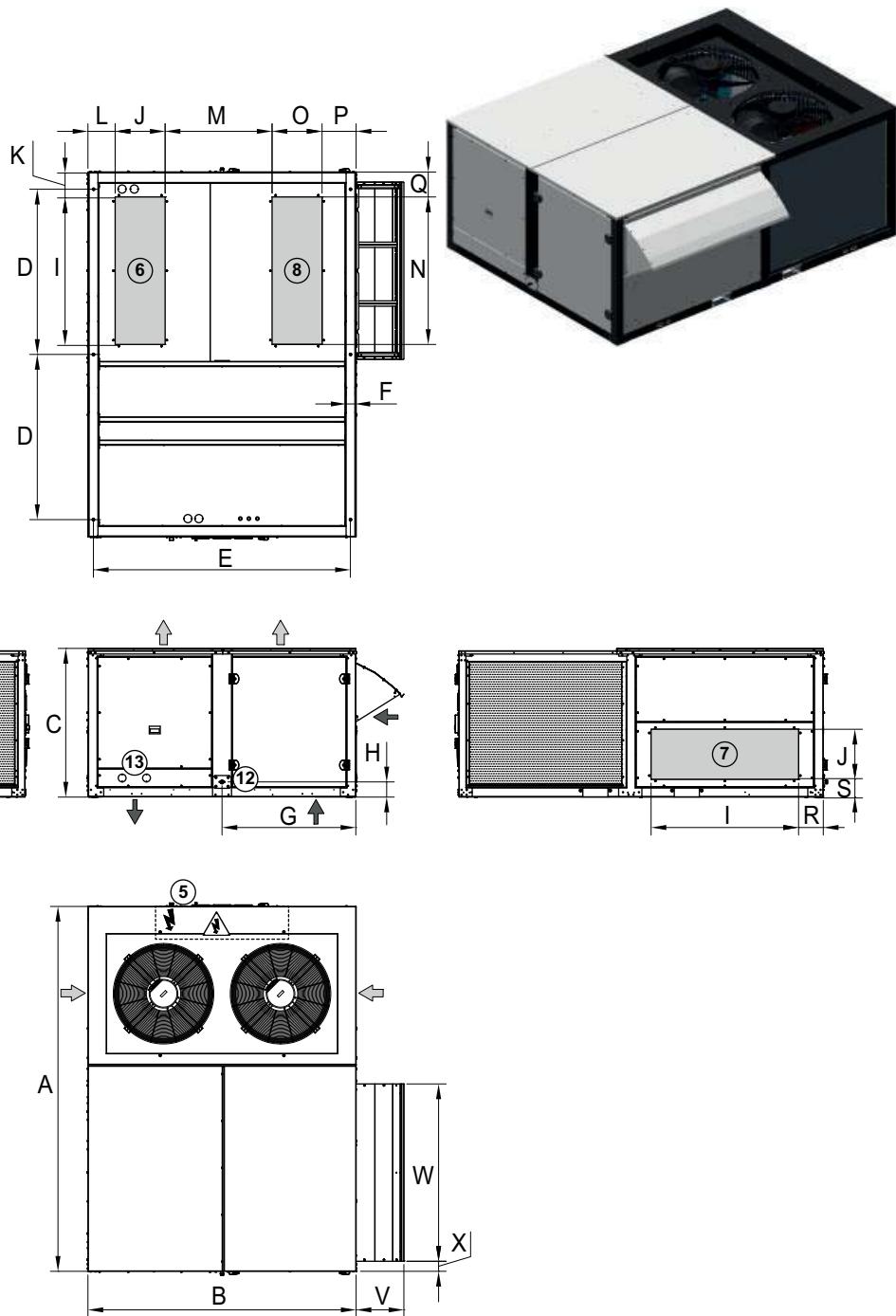
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	A	B	C	D	E	F	G	H	I	J	K	L	M											
0090 to 0190 (mm)	2.225	1.750	1.230	958	1.657	72	872	125	900	340	133	133	723	830	410	144	194	129	179	167	191	392	998	83

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

**IPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, C0, CS and CF assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
⑤	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return (C0 and CS assemblies)
⑨	Lateral air return (C0 and CS assemblies)
⑩	Fresh air intake (CS and CF assemblies)
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



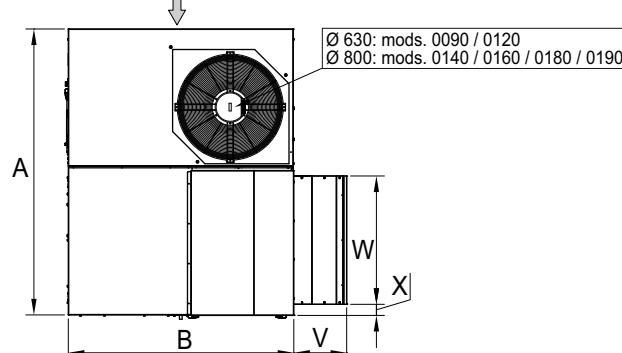
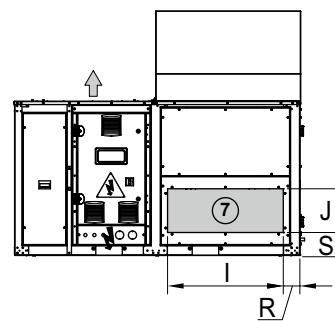
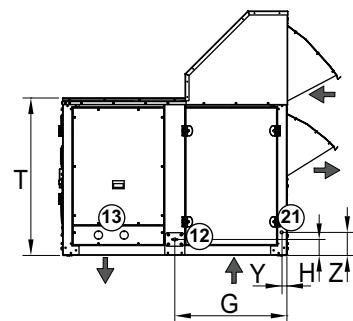
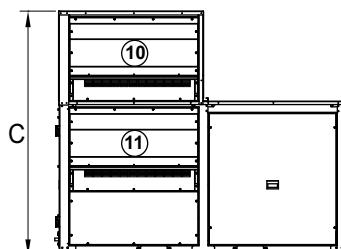
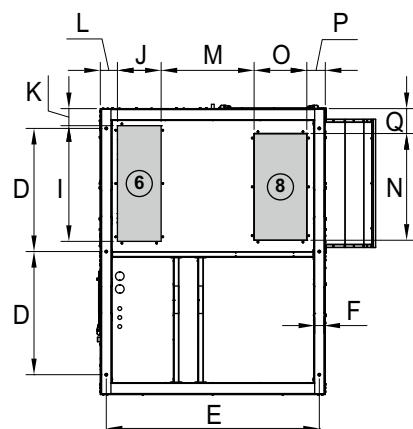
Dimensions	L x W x H			Supply						Return						T	U	V	W	X				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S					
0200 to 0240 (mm)	3.000	2.200	1.230	1.356	2.108	72	1.098	125	1.210	410	205	223	877	1.210	410	279	205	203	147	147	203	392	1.455	82
0280 to 0380 (mm)	3.650	2.200	1.230	1.683	2.108	72	1.098	125	1.510	410	245	223	877	1.510	410	279	245	243	147	147	243	392	1.835	82

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

**IPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CK, CA, CP and CR assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CR assembly)
Anti-vibration anchoring: rivet nut M12	



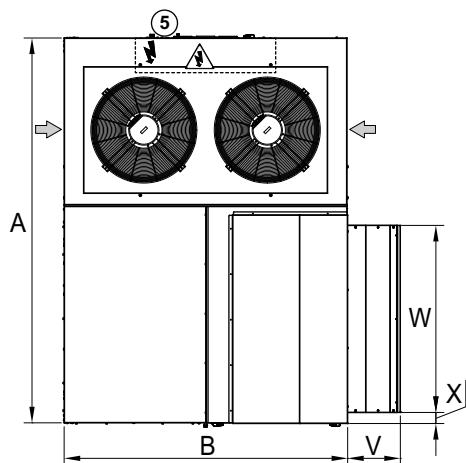
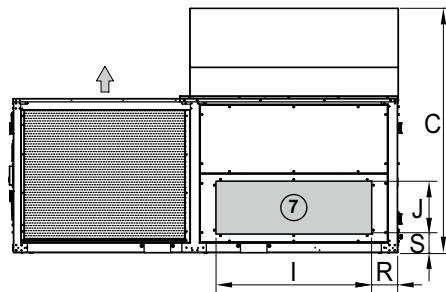
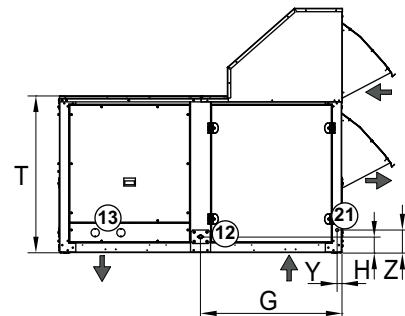
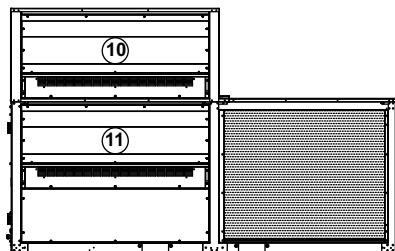
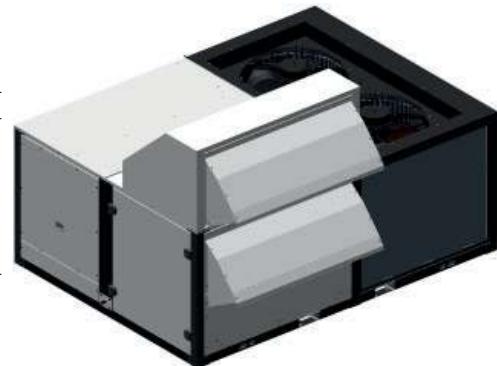
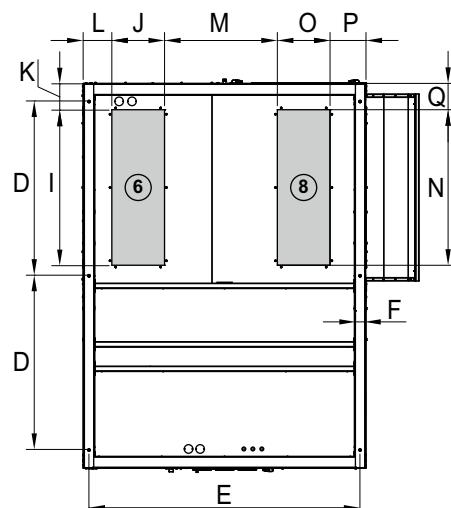
Dimensions	L x W x H				Supply				Return				P	Q	R	S	T	V	W	X	Y	Z			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0090 to 0190 (mm)	2.230	1.755	1.905	958	1.657	72	872	125	900	340	133	133	723	830	410	144	194	129	179	1.230	410	998	86	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

**IPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CK, CA, CP and CR assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
⑤	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CR assembly)
Anti-vibration anchoring: rivet nut M12	



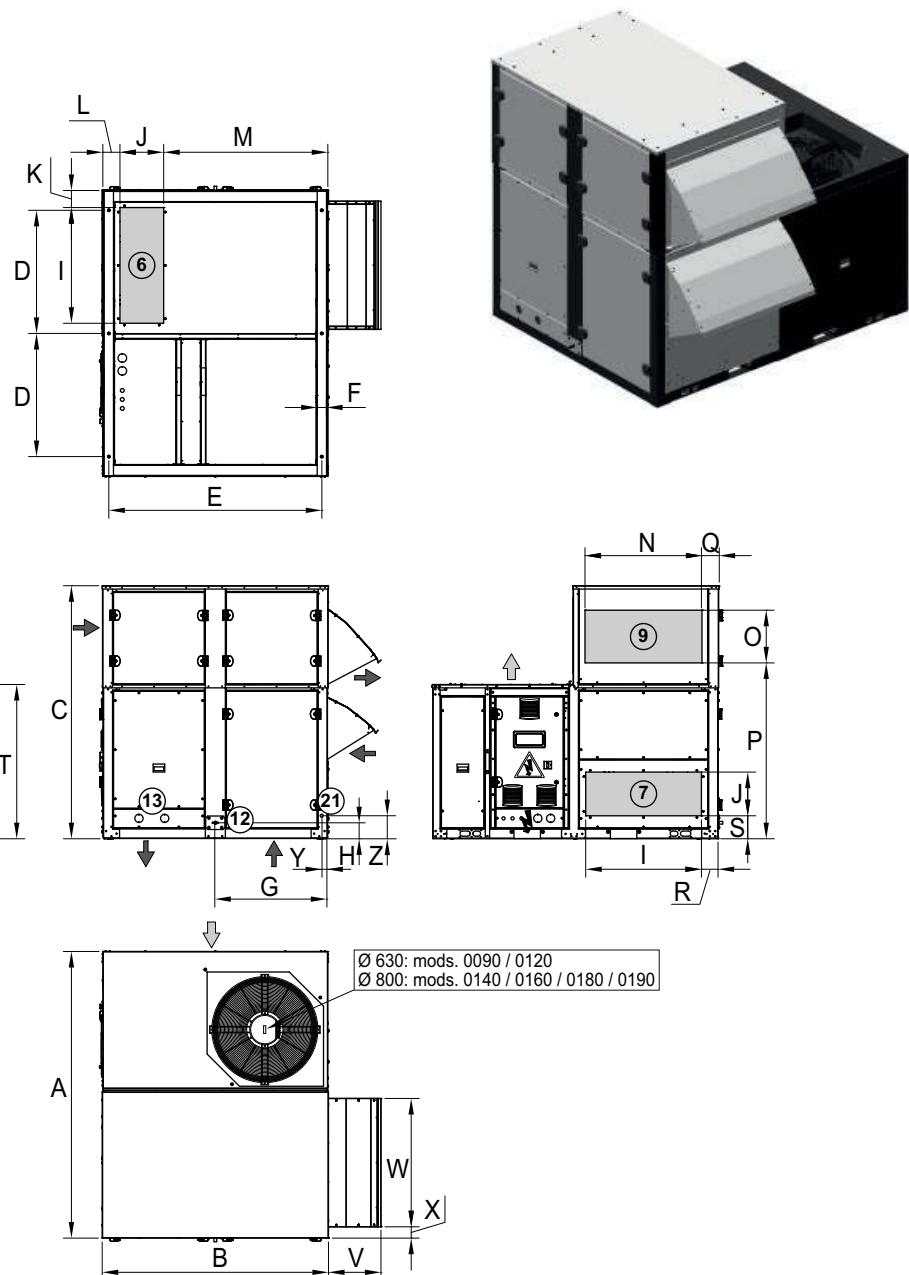
Dimensions	L x W x H			Supply						Return						P	Q	R	S	T	V	W	X	Y	Z
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0200 to 0240 (mm)	3.000	2.205	1.905	1.356	2.108	72	1.098	125	1.210	410	205	223	877	1.210	410	279	205	203	147	1.230	410	1.455	86	45	174
0280 to 0380 (mm)	3.655	2.205	1.905	1.683	2.108	72	1.098	125	1.510	410	245	223	877	1.510	410	279	245	243	147	1.230	410	1.835	86	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

**IPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CQ and CT assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑨	Lateral air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CT assembly)
Anti-vibration anchoring: rivet nut M12	



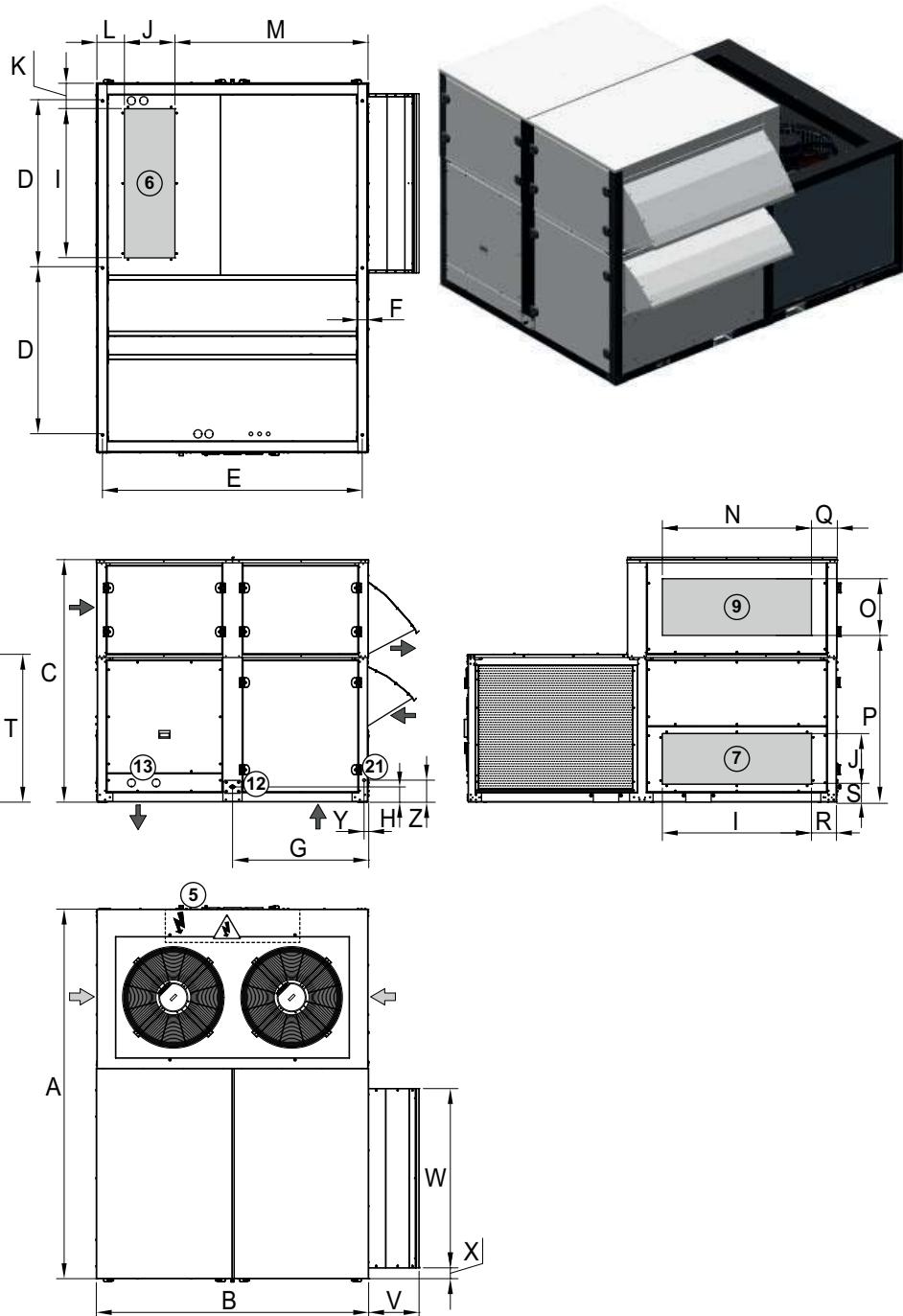
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0090 to 0190 (mm)	2.230	1.760	1.975	958	1.657	72	872	125	900	340	133	133	1.277	910	410	1.352	133	129	179	1.200	410	998	88	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

**IPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CQ and CT assemblies**

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
⑤	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑨	Lateral air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑯	Recovery circuit condensate outlet 1/2" M (CT assembly)
Anti-vibration anchoring: rivet nut M12	



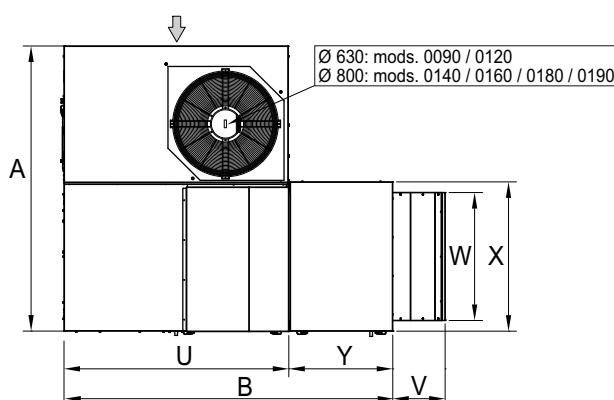
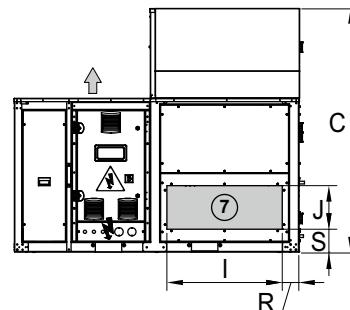
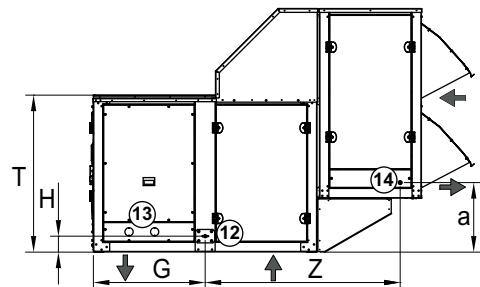
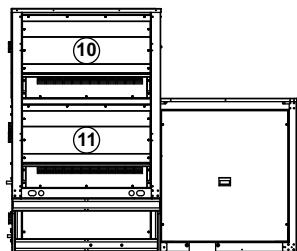
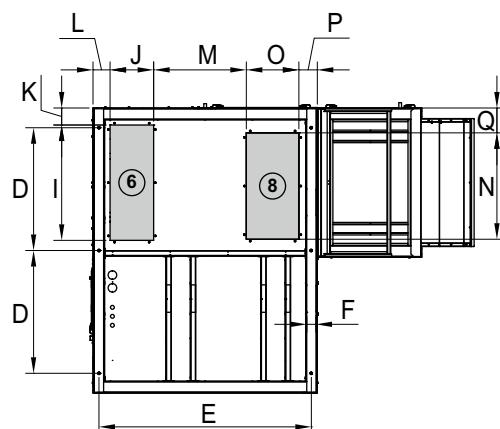
Dimensions	L x W x H			Supply						Return						P	Q	R	S	T	V	W	X	Y	Z
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O										
0200 to 0240 (mm)	3.000	2.210	1.995	1.356	2.108	72	1.098	125	1.210	410	205	223	1.567	1.210	460	1.353	210	203	147	1.200	410	1.455	88	45	174
0280 to 0380 (mm)	3.655	2.210	1.995	1.683	2.108	72	1.098	125	1.510	410	245	223	1.567	1.210	460	1.353	400	243	147	1.200	410	1.835	88	45	174

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CW assembly

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
▣	Door switch
⑥	Lower air supply
⑦	Lateral air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑭	Wheel condensate outlet 1/2" M
Anti-vibration anchoring: rivet nut M12	



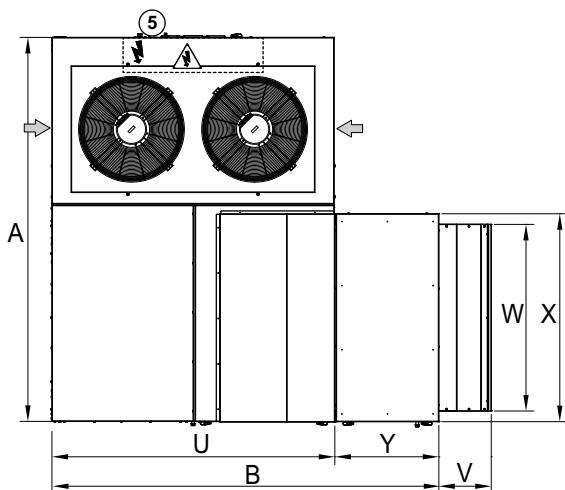
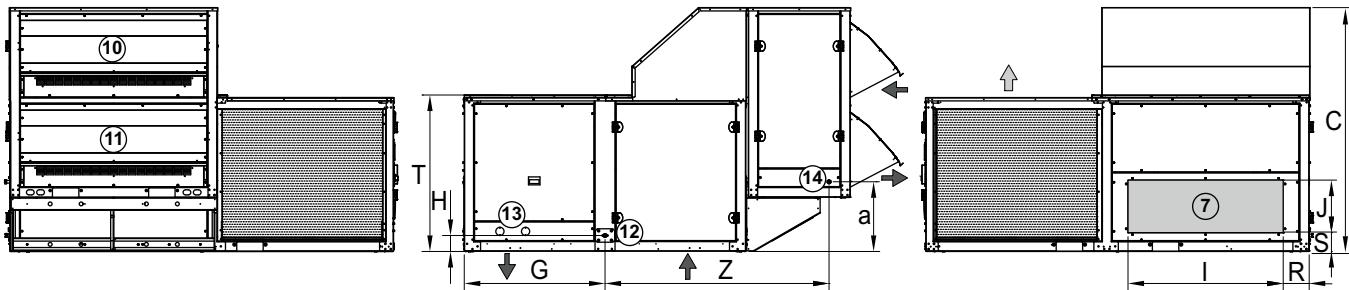
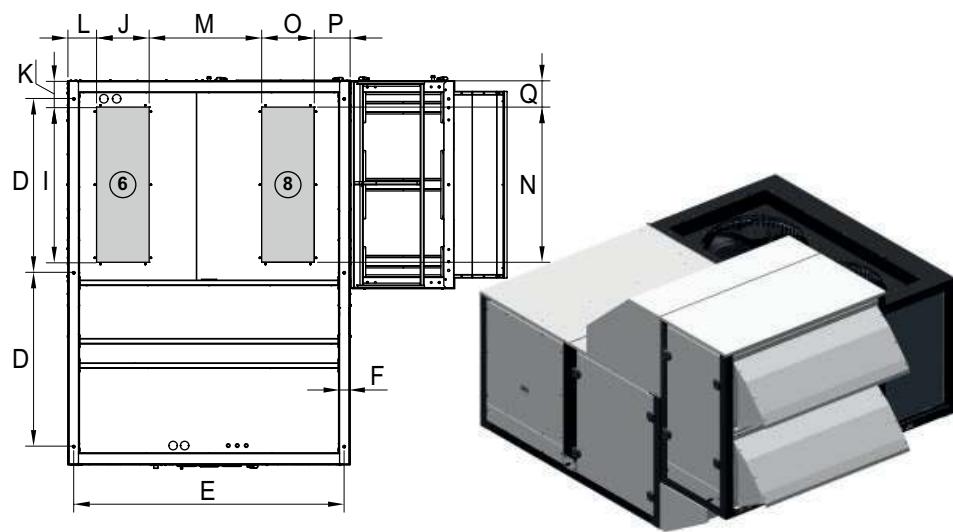
Dimensions	L x W x H			Supply							Return																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a
0090 to 0190 (mm)	2.230	2.565	1.905	958	1.657	72	872	125	900	340	133	133	723	830	410	144	194	129	179	1.230	1.755	410	998	1.165	810	1.521	543

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CW assembly

	Outdoor air circulation
	Standard indoor air circulation
	Electrical cabinet
	Electric power supply
(5)	Door switch
(6)	Lower air supply
(7)	Lateral air supply
(8)	Lower air return
(10)	Fresh air intake
(11)	Exhaust air outlet
(12)	Condensate outlet 1/2" M
(13)	HWC connections (option)
(14)	Wheel condensate outlet 1/2" M
Anti-vibration anchoring: rivet nut M12	



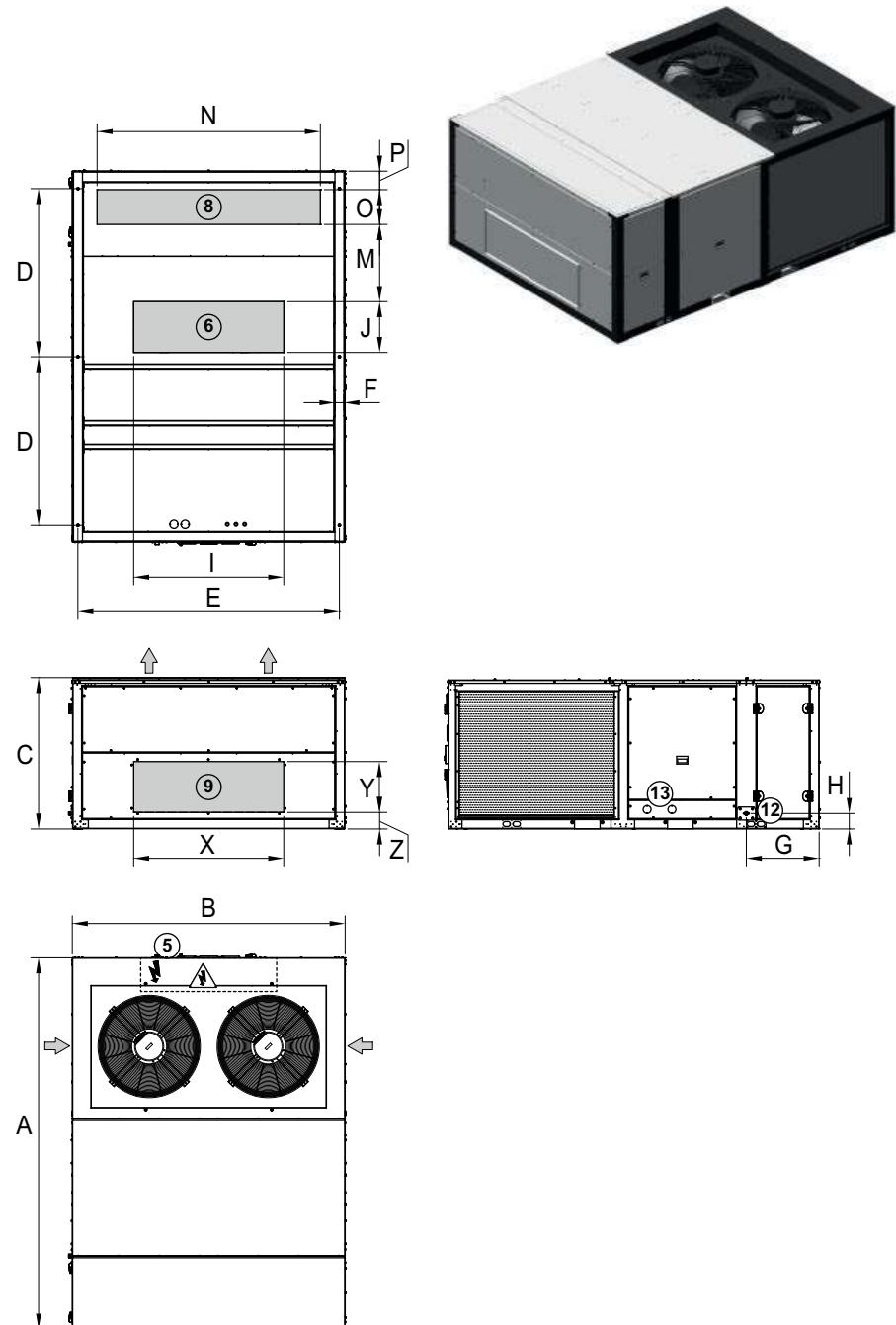
Dimensions	L x W x H			Supply						Return						a											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
0200 to 0240 (mm)	3.000	3.015	1.905	1.356	2.108	72	1.098	125	1.210	410	205	223	877	1.210	410	279	205	203	147	1.230	2.205	410	1.455	1.621	810	1.746	544
0280 to 0380 (mm)	3.655	3.015	1.905	1.683	2.108	72	1.098	125	1.510	410	245	223	877	1.510	410	279	245	243	147	1.230	2.205	410	1.835	2.201	810	1.746	243

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, T0 assembly

	Outdoor air circulation
	Standard indoor air circulation
	Electrical cabinet
	Electric power supply
	Door switch
	Lower air supply
	Lower air return
	Lateral air return
	Condensate outlet 1/2" M
	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



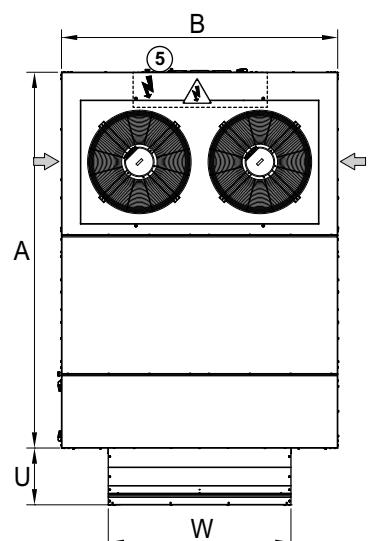
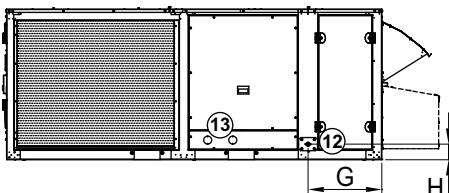
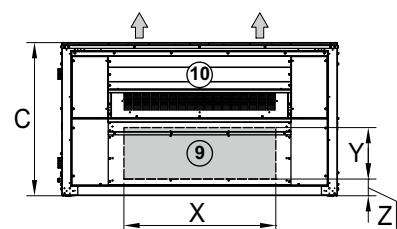
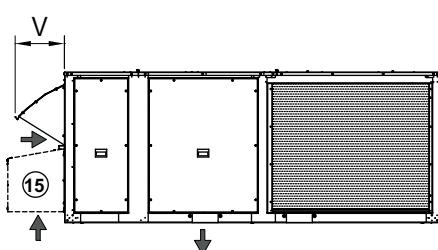
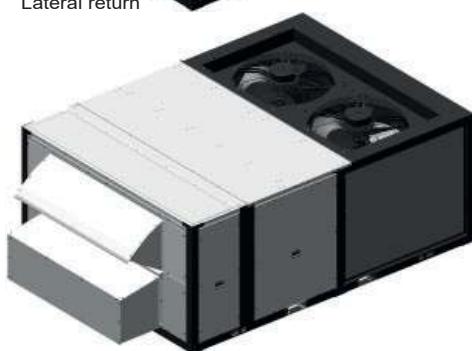
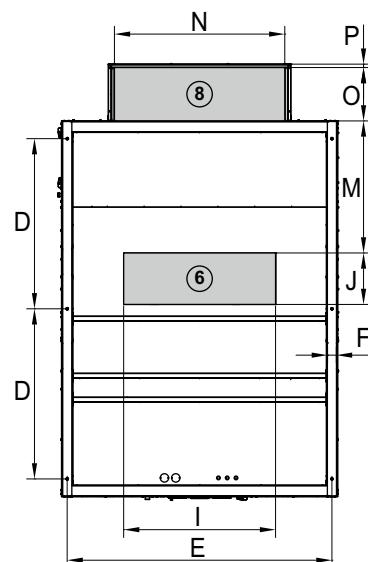
Dimensions	L x W x H				Supply				Return								
	A	B	C	D	E	F	G	H	I	J	M	N	O	P	X	Y	Z
0200 to 0240 (mm)	3.000	2.200	1.230	1.356	2.108	72	587	125	1.210	410	622	1.800	280	150	1.210	410	133
0280 to 0380 (mm)	3.650	2.200	1.230	1.683	2.108	72	967	125	1.510	410	774	1.510	410	248	1.510	410	147

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0200 / 0220 / 0240, TS assembly

→	Outdoor air circulation
→	Standard indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
⑤	Door switch
⑥	Lower air supply
⑧	Lower air return
⑨	Lateral air return
⑩	Fresh air intake
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
⑮	Enclosure for lower return (on-site configuration)
Anti-vibration anchoring: rivet nut M12	



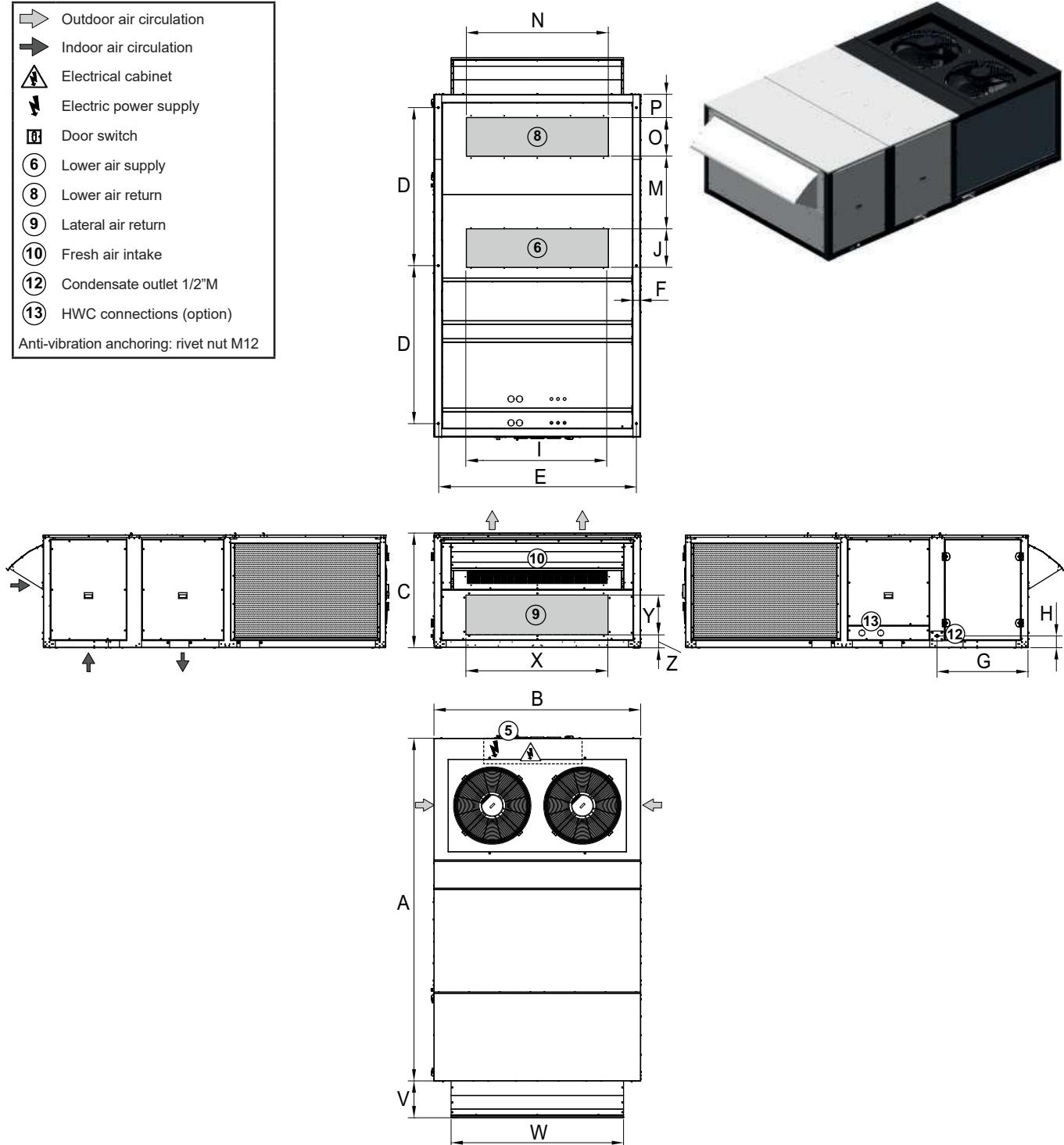
Dimensions	L x W x H			Supply				Return				M	N	O	P	U	V	W	X	Y	Z
	A	B	C	D	E	F	G	H	I	J											
0200 to 0240 (mm)	3.000	2.200	1.230	1.356	2.108	72	587	125	1.210	410	1.052	1.357	125	27	452	392	1.455	1.210	410	133	

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0280 / 0320 / 0360 / 0380, TS assembly

	Outdoor air circulation
	Indoor air circulation
	Electrical cabinet
	Electric power supply
	Door switch
	Lower air supply
	Lower air return
	Lateral air return
	Fresh air intake
	Condensate outlet 1/2" M
	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



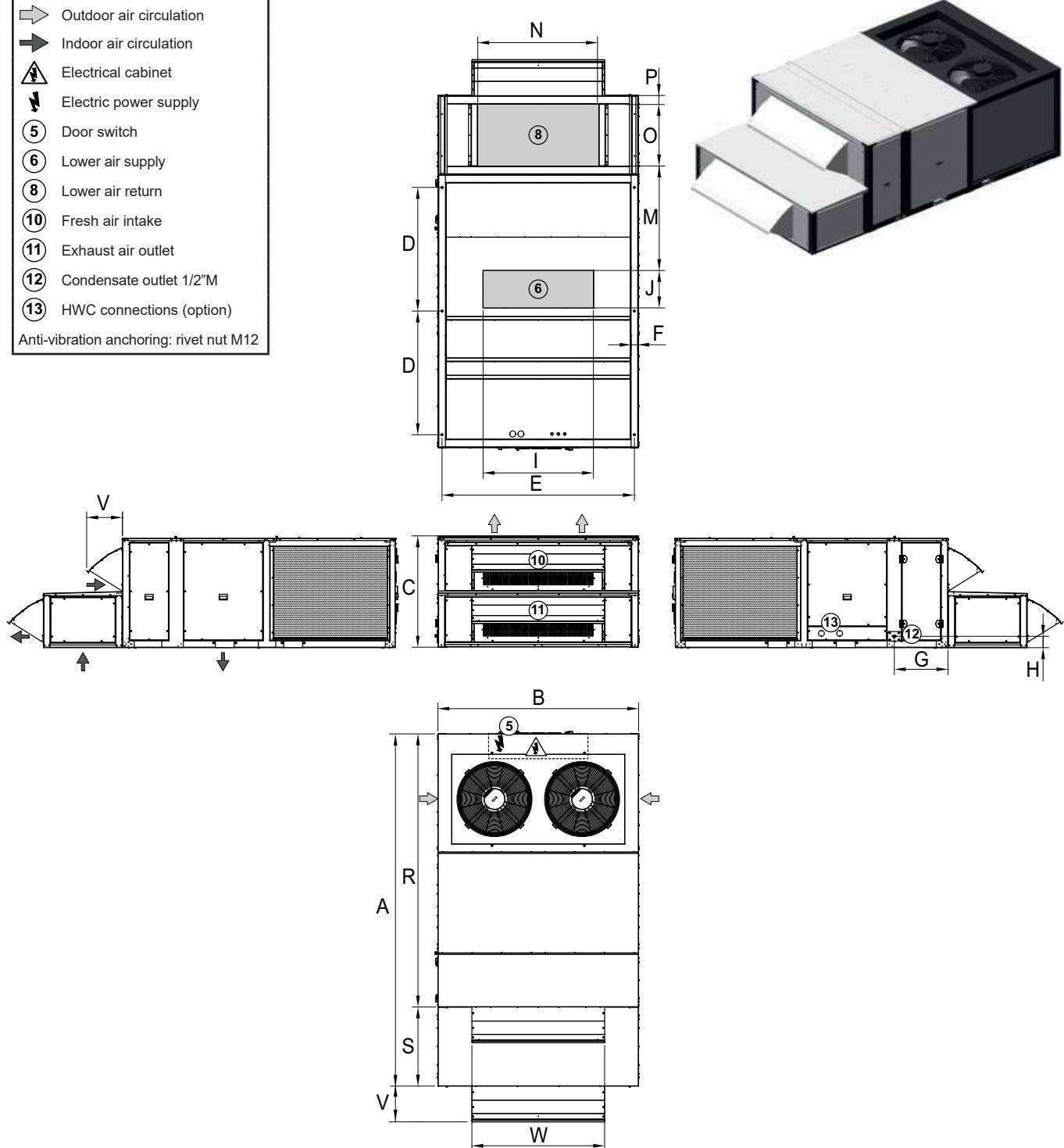
Dimensions	L x W x H			Supply				Return			P	V	W	X	Y	Z			
	A	B	C	D	E	F	G	H	I	J									
0280 to 0380 (mm)	3.650	2.200	1.230	1.683	2.108	72	967	125	1.510	410	774	1.510	410	248	392	1.835	1.510	410	147

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0200 / 0220 / 0240, TP assembly

→	Outdoor air circulation
→	Indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
⑤	Door switch
⑥	Lower air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	



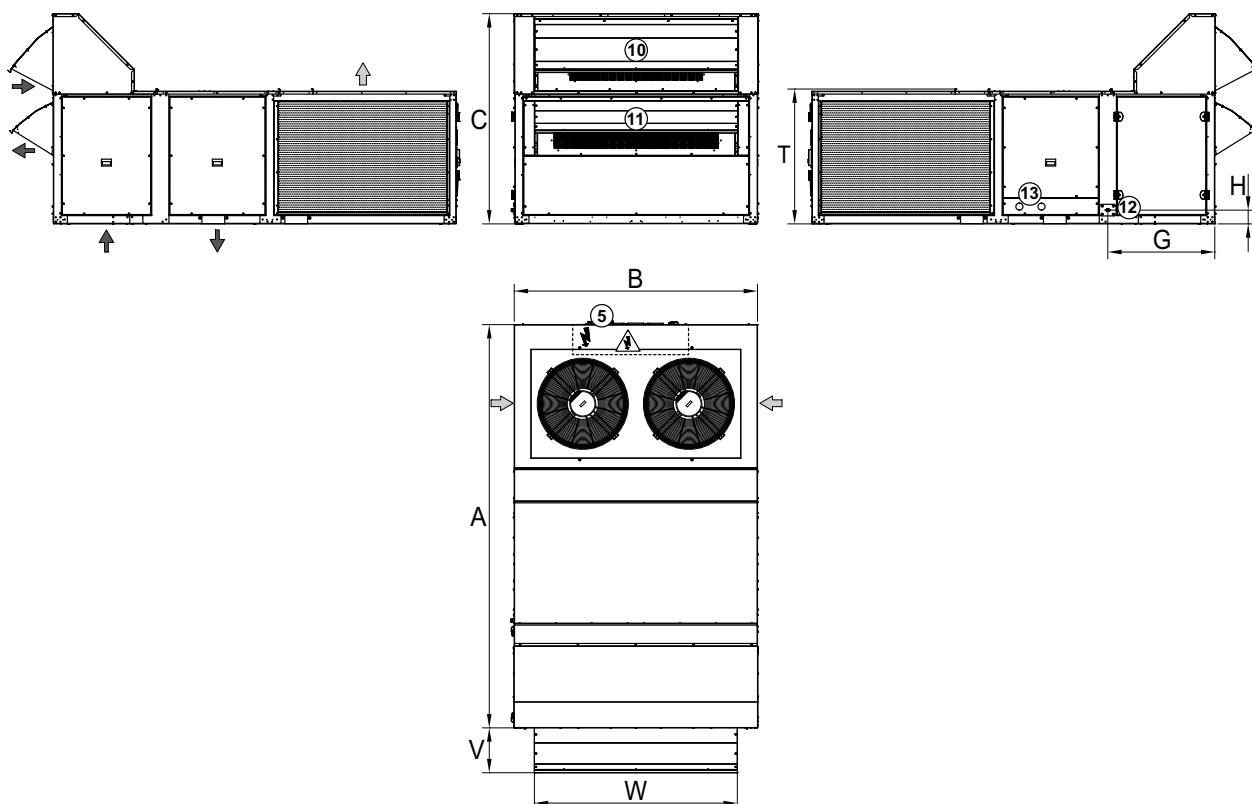
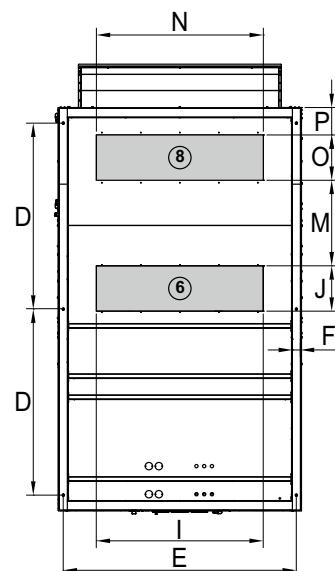
Dimensions	L x W x H			Supply						Return								
	A	B	C	D	E	F	G	H	I	J	M	N	O	P	R	S	V	W
0200 to 0240 (mm)	3.865	2.200	1.230	1.356	2108	72	587	125	1.210	410	1.144	1.330	680	95	2.995	870	297	1.455

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0280 / 0320 / 0360 / 0380, TP assembly

→	Outdoor air circulation
→	Indoor air circulation
⚠	Electrical cabinet
⚡	Electric power supply
⑤	Door switch
⑥	Lower air supply
⑧	Lower air return
⑩	Fresh air intake
⑪	Exhaust air outlet
⑫	Condensate outlet 1/2" M
⑬	HWC connections (option)
Anti-vibration anchoring: rivet nut M12	

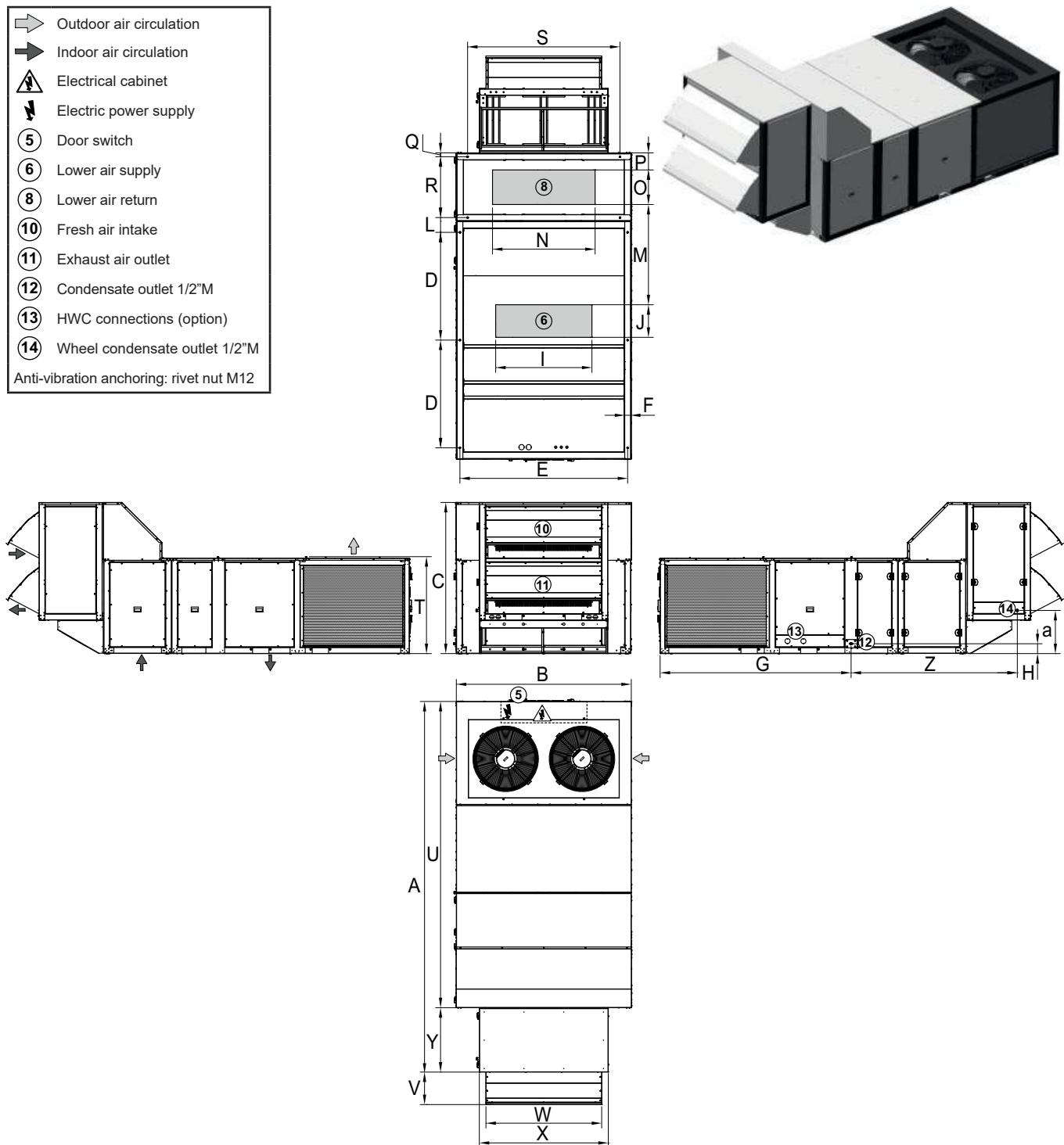
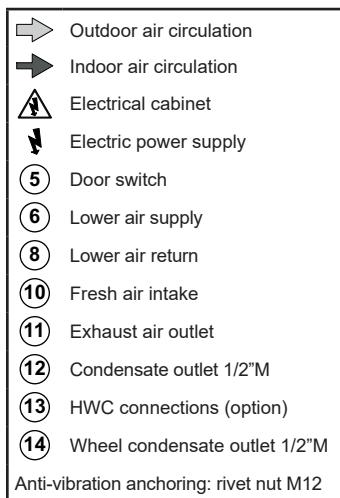


Dimensions	L x W x H			D	E	F	G	H	Supply		M	Return		P	T	V	W
	A	B	C						I	J		N	O				
0280 to 0380 (mm)	3.655	2.210	1.905	1.683	2.108	72	967	125	1.510	410	774	1.510	410	248	1.230	410	1.835

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS: IPJ SERIES

### IPJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, TW assembly



Dimensions	L x W x H			Supply				Return				P	Q	R	S	T	U	V	W	X	Y	Z	a			
	A	B	C	D	E	F	G	H	I	J	L	M	N	O												
0200 to 0240 (mm)	4.675	2.210	1.905	1.356	2.108	72	2.402	125	1.210	410	196	1.271	1.290	435	215	48	766	1.916	1.230	3.865	410	1.455	1.621	810	2.100	544
0280 to 0380 (mm)	4.465	2.210	1.905	1.683	2.108	72	2.676	125	1.510	410	--	774	1.510	410	248	--	--	--	1.230	3.655	410	1.835	2.001	810	1.614	243

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.











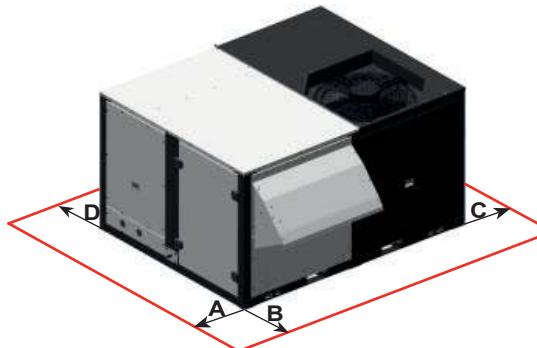






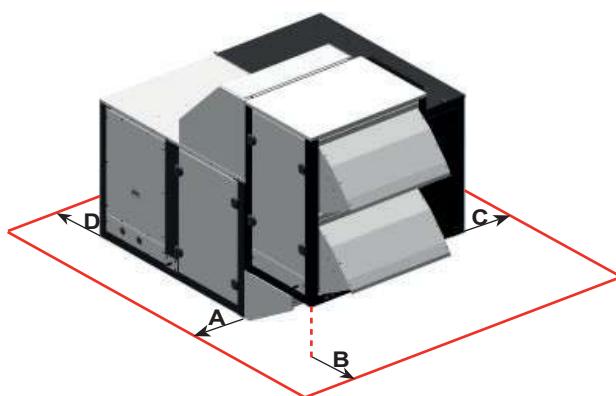
## RECOMMENDED SERVICE CLEARANCE

Vectios™ PJ - 0090 to 0190: C0, CS, CF, CK, CA, CP, CR, CQ and CT assemblies



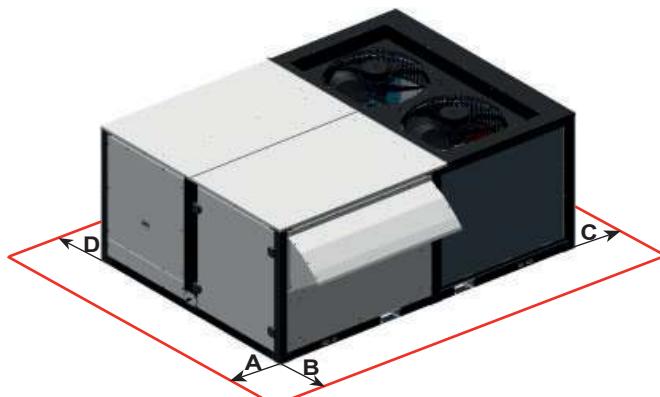
Distances	A	B	C	D
0090 to 0190 (mm)	1.200	1.000	1.000	1.600

Vectios™ PJ - 0090 to 0190: CW assembly



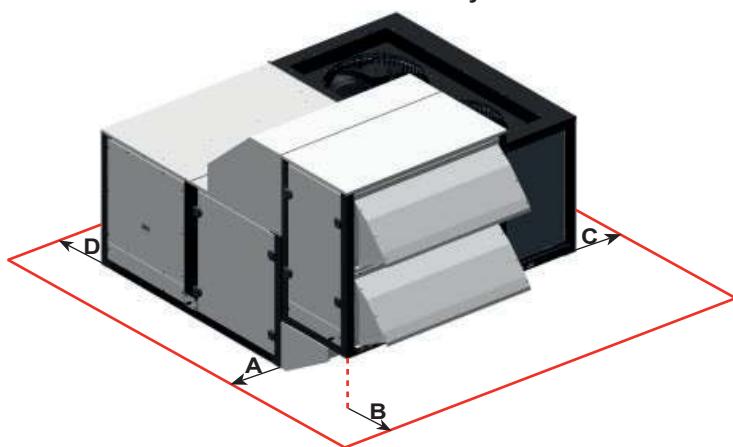
Distances	A	B	C	D
0090 to 0190 (mm)	1.200	1.000	1.000	1.600

Vectios™ PJ - 0200 to 0380: C0, CS, CF, CK, CA, CP, CR, CQ and CT assemblies



Distances	A	B	C	D
0200 to 0240 (mm)	1.600	1.000	1.000	1.000
0280 to 0380 (mm)	2.000	1.000	1.000	1.000

Vectios™ PJ - 0200 to 0380: CW assembly



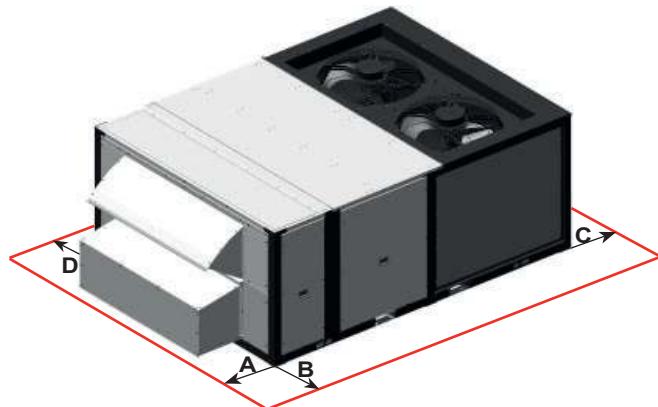
Distances	A	B	C	D
0200 to 0240 (mm)	1.600	1.000	1.000	1.000
0280 to 0380 (mm)	2.000	1.000	1.000	1.000

Note: Unit not designed to have overhead obstruction.

## RECOMMENDED SERVICE CLEARANCE

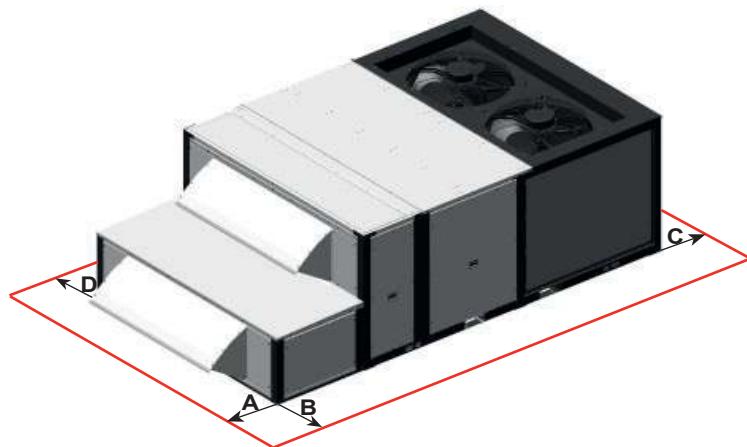
Vectios™ PJ - 0200 to 0380: T0 and TS assemblies

Vectios™ PJ - 0280 to 0380: TP assembly



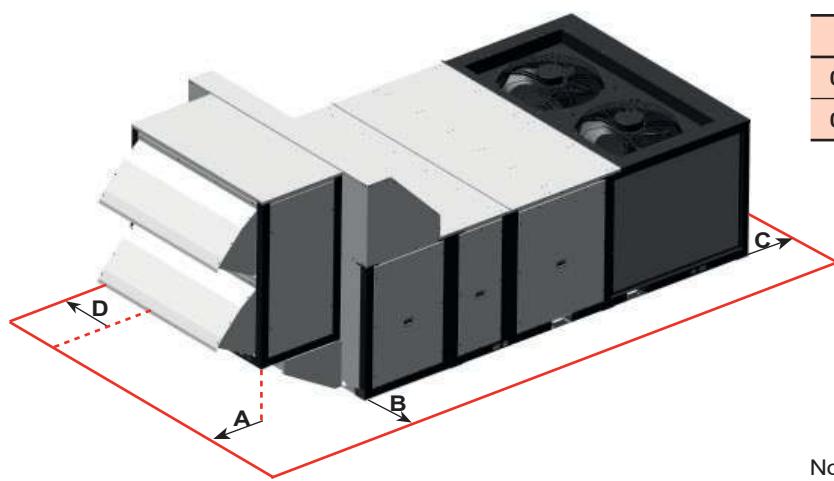
Distances	A	B	C	D
0200 to 0240 (mm)	1.000	1.000	1.300	2.200
0280 to 0380 (mm)	1.000	1.000	1.600	2.200

Vectios™ PJ - 0200 to 0240: TP assembly



Distances	A	B	C	D
0200 to 0240 (mm)	1.000	1.000	1.300	2.200

Vectios™ PJ - 0200 to 0380: TW assembly



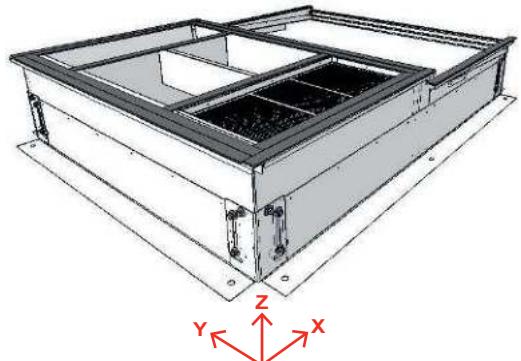
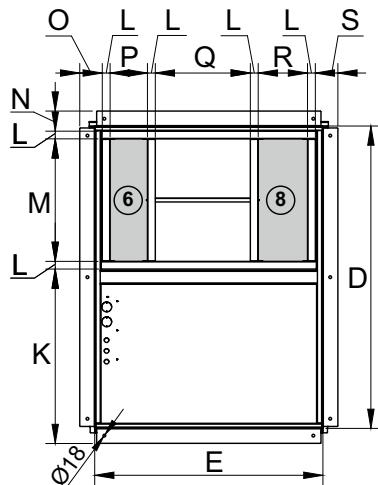
Distances	A	B	C	D
0200 to 0240 (mm)	1.000	1.000	1.300	2.200
0280 to 0380 (mm)	1.000	1.000	1.600	2.200

Note: Unit not designed to have overhead obstruction.

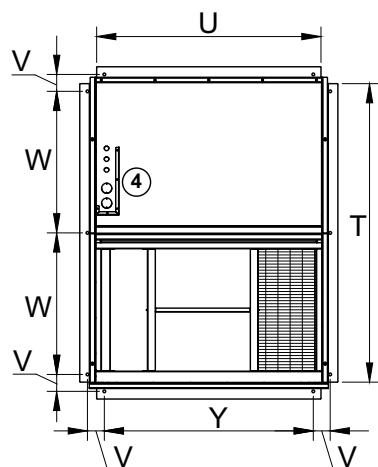
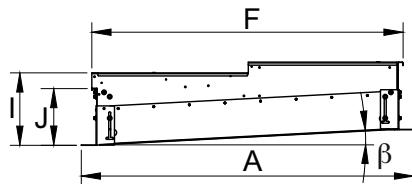
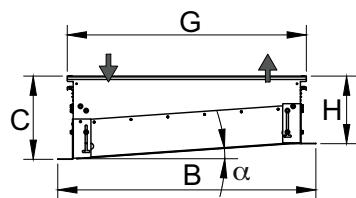
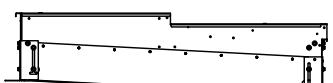
## PRE-ASSEMBLY ROOFCURBS

### Adjustable roofobergs (for "Cross Flow" assemblies)

- Lower air circulation
- ④ Precuts for the passage of electric power supply
- ⑥ Lower air supply
- ⑧ Lower air return



PJ roofoberg	Weight (kg)	Centre of gravity (mm)			Maximum slope	
		X	Y	Z	α	β
0090 to 0190	145	864	870	194	4° (7,0%)	3° (5,1%)



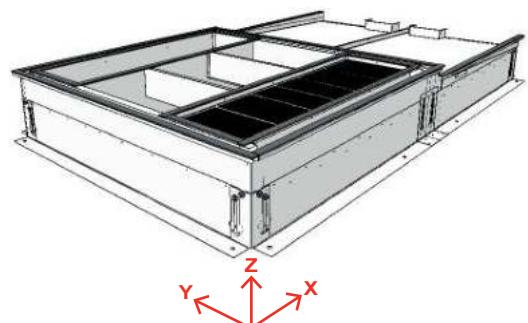
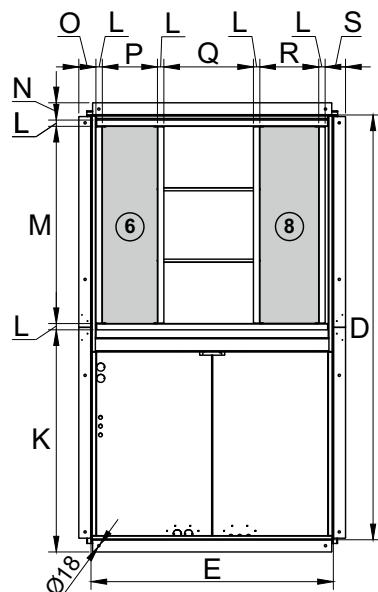
Dimensions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
0090 to 0190 (mm)	2163	1680	542	1968	1485	2026	1556	440	472	369	1136	50	798	131	147	243	619	321	147	1943	1460	110	922	0	1360

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

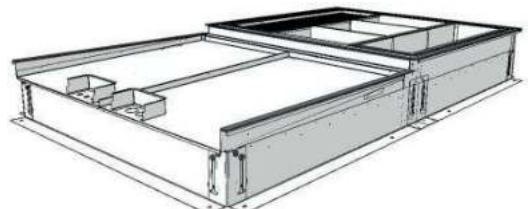
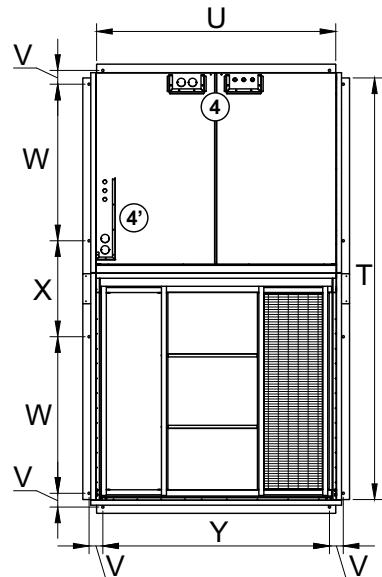
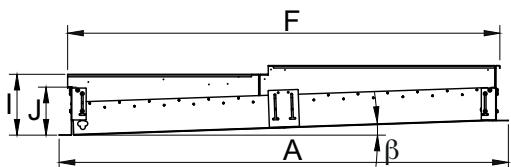
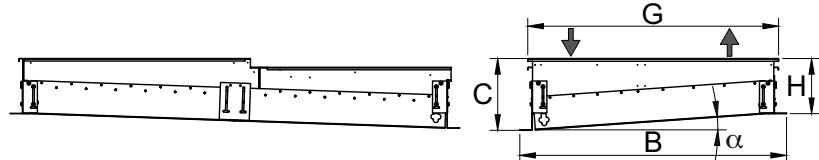
## PRE-ASSEMBLY ROOFCURBS

### Adjustable roofobergs (for "Cross Flow" assemblies)

Lower air circulation
(4) Precuts for the passage of electric power supply, IPJ units
(4') Precuts for the passage of electric power supply, RPJ units
(6) Lower air supply
(8) Lower air return



PJ roofergb	Weight (kg)	Centre of gravity (mm)			Maximum slope	
		X	Y	Z	$\alpha$	$\beta$
0200 to 0240	205	1.422	1.100	202	4° (7,0%)	3° (5,5%)
0280 to 0380	237	1.757	1.102	200	4° (7,0%)	2° (4,0%)



Dimensions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
0200 to 0240 (mm)	2933	2129	573	2738	1934	2796	2002	440	510	408	1474	50	1234	125	137	410	745	470	163	2713	1909	110	1307	0	1809
0280 to 0380 (mm)	3586	2129	573	3391	1934	3450	2002	440	486	383	1773	50	1575	138	137	440	715	470	163	3366	1909	110	1250	766	1809

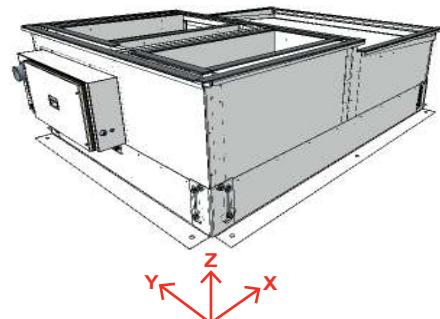
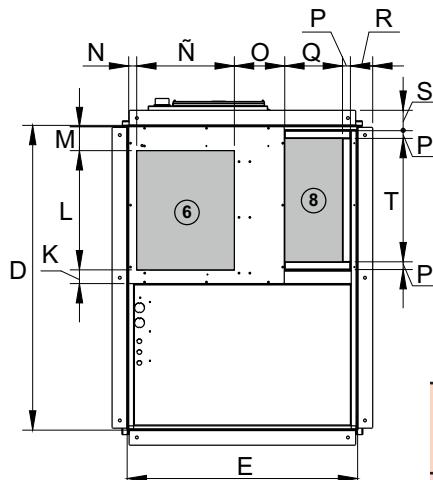
Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## PRE-ASSEMBLY ROOFCURBS

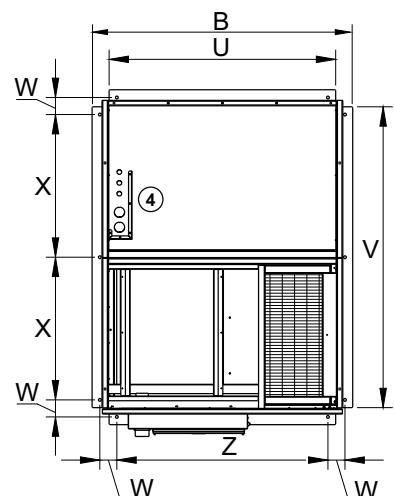
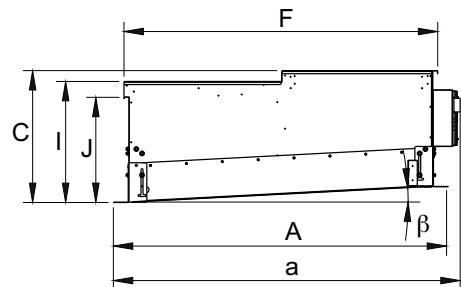
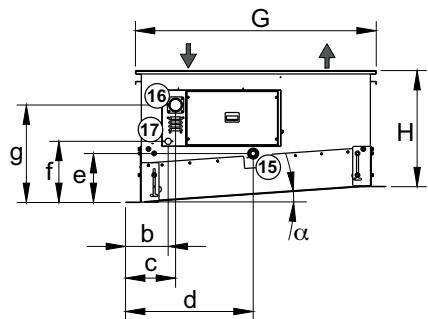
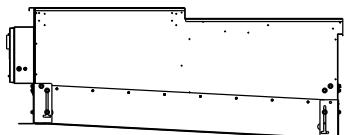
### Adjustable roofobergs with gas burner (for "Cross Flow" assemblies)

→ Lower air circulation
④ Precuts for the passage of electric power supply
⑥ Lower air supply
⑧ Lower air return
⑯ Burner drainage 1/2" M
⑯ Gas supply 3/4" M
⑰ Flue outlet, internal Ø 80mm (Flue connection)

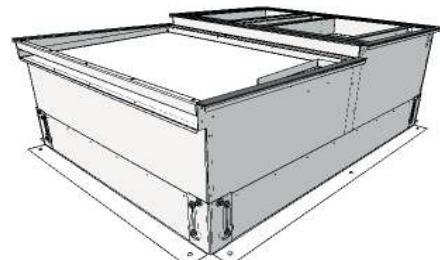
**Important:** The flue of the gas burner is not supplied with the unit. Its design and installation is the responsibility of the installer and must comply with all the directives and regulations in force in the installation location.



PJ burner roofoberg	Weight (kg)	Centre of gravity (mm)			Maximum slope	
		X	Y	Z	α	β
0090 to 0190	284	885	881	338	4° (7,0%)	3° (5,1%)



Dimensions	Burner	a	b	c	d	e	f	g
0090 to 0190 (mm)	PCH020	2239	275	323	824	316	395	630
	PCH034	2239	275	323	895	316	395	630
	PCH045	2239	275	323	895	316	395	630



Dimensions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Ñ	O	P	Q	R	S	T	U	V	W	X	Z
0090 to 0190 (mm)	2163	1683	852	1968	1488	2026	1555	750	782	679	89	770	155	52	631	325	50	373	144	132	797	1463	1943	110	922	1363

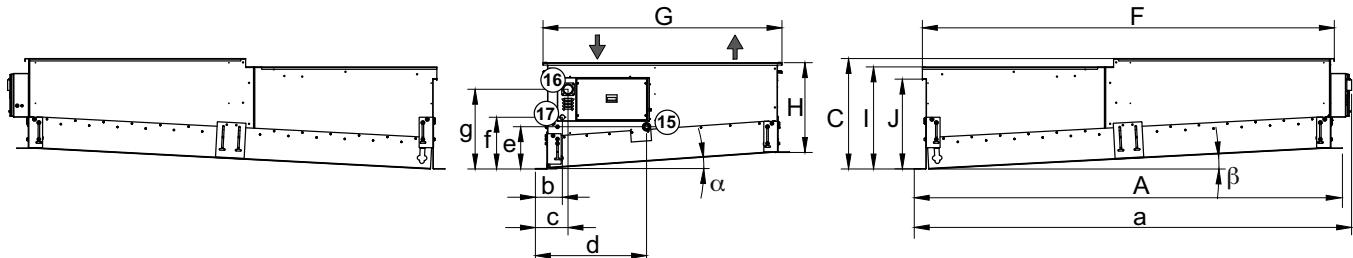
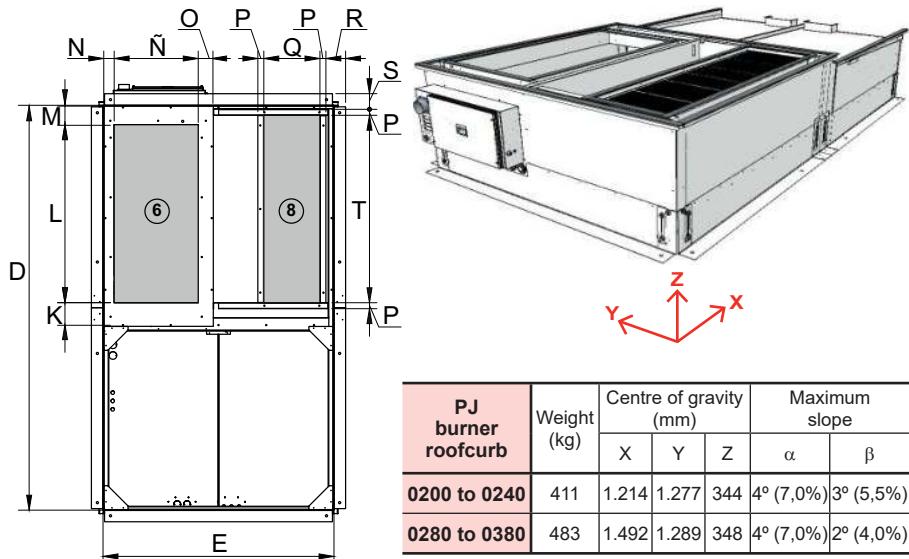
Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## PRE-ASSEMBLY ROOFCURBS

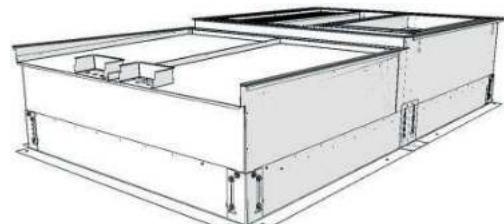
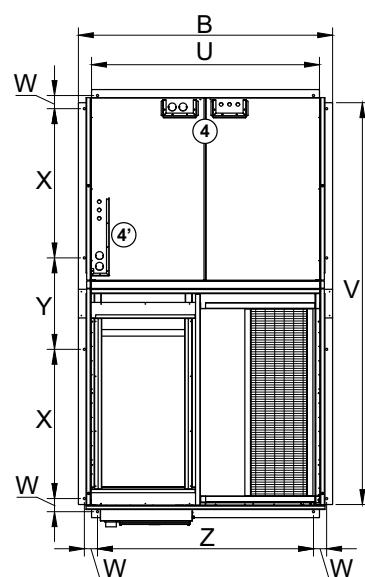
### Adjustable roofobergs with gas burner (for "Cross Flow" assemblies)

	Lower air circulation
(4)	Precuts for the passage of electric power supply, IPJ units
(4')	Precuts for the passage of electric power supply, RPJ units
(6)	Lower air supply
(8)	Lower air return
(15)	Burner drainage 1/2" M
(16)	Gas supply 3/4" M
(17)	Flue outlet, internal Ø 80mm (Flue connection)

**Important:** The flue of the gas burner is not supplied with the unit. Its design and installation is the responsibility of the installer and must comply with all the directives and regulations in force in the installation location.



Dimensions	Burner	a	b	c	d	e	f	g
0200 to 0240 (mm)	PCH065	3014	225	273	846	351	431	666
	PCH080	3014	255	273	931	351	431	666
0280 to 0380 (mm)	PCH080	3663	226	273	931	354	433	668
	PCH105							

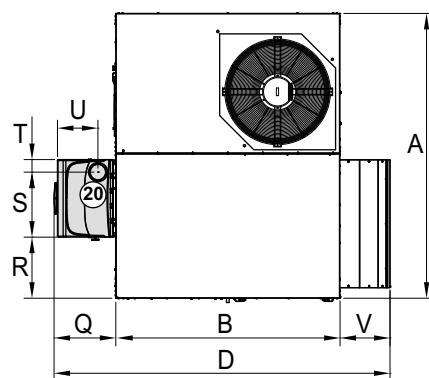
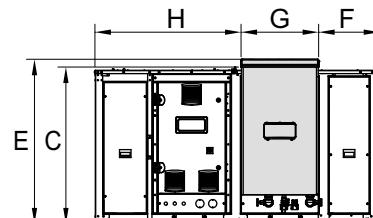
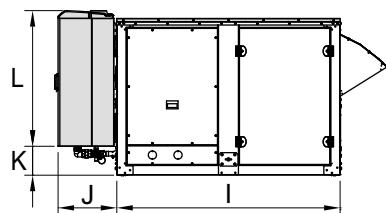
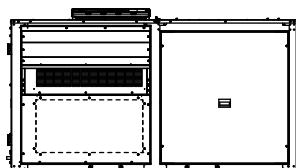
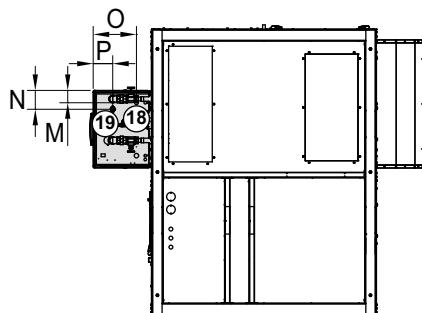


Dimensions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Ñ	O	P	Q	R	S	T	U	V	W	X	Y	Z
0200 to 0240 (mm)	2933	2129	892	2738	1934	2796	2001	750	822	719	101	1219	155	85	619	207	50	470	165	131	1229	1909	2713	110	1307	0	1809
0280 to 0380 (mm)	3586	2129	925	3391	1934	3450	2001	752	855	752	198	1491	155	85	704	126	50	470	165	131	1570	1909	3366	110	1250	766	1809

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS WITH GAS BOILER

**PJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CS assembly and gas burner**



- (18) Boiler drainage Ø 25mm  
**Important:** Siphon minimum height 300mm
- (19) Gas supply 1" M
- (20) Flue outlet (flue connection):  
Condexa PRO 40 / 50 / 70: Ø 80mm

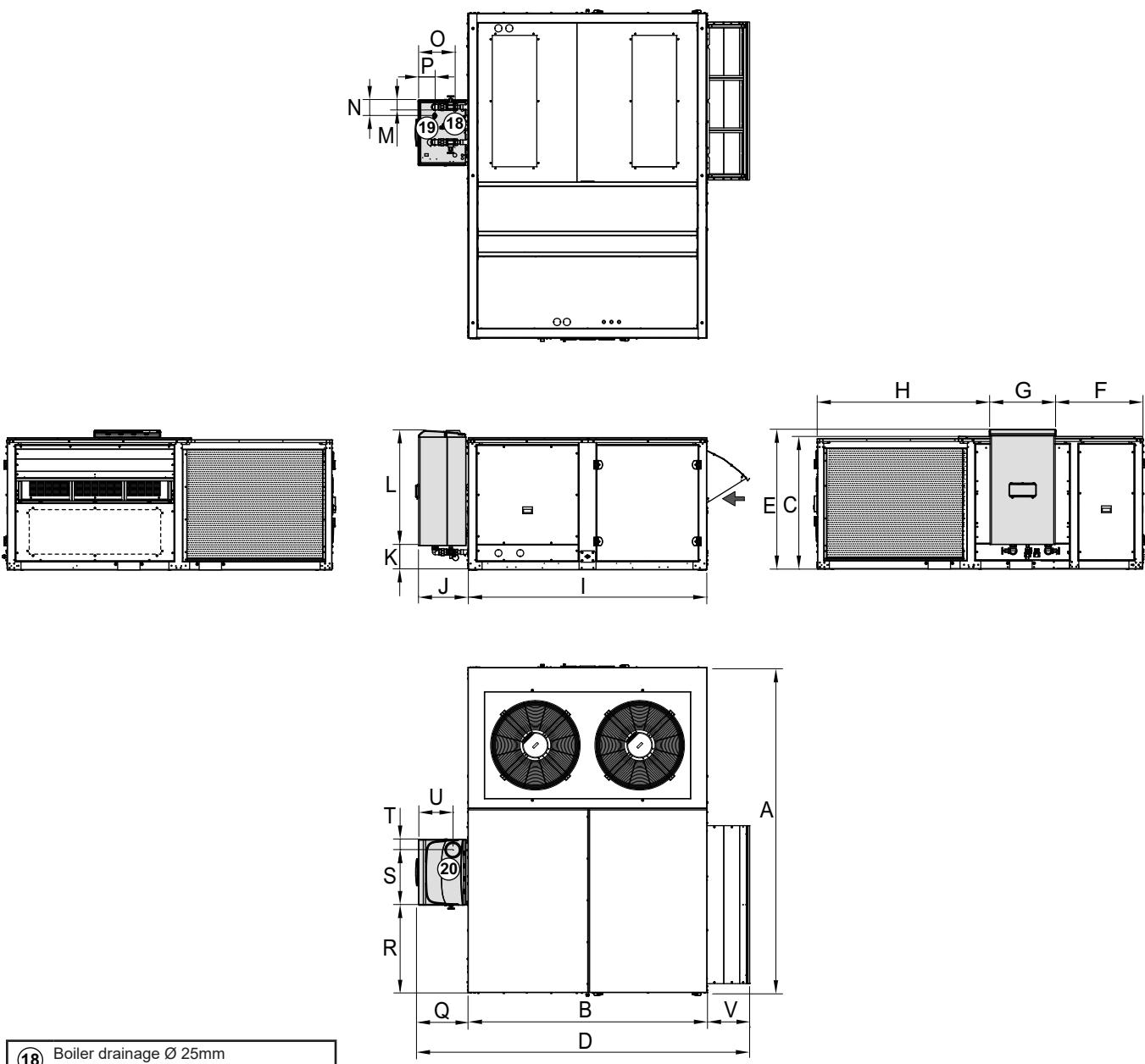
**Important:** The flue of the gas boiler is not supplied with the unit. Its design and installation is the responsibility of the installer and must comply with all the directives and regulations in force in the installation location.

Dimensions	L x W x H			D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	A	B	C																			
0090 to 0190 (mm)	2.225	1.750	1.230	2.624	1.286	477	606	1.141	1.744	459	226	1.060	96	147	338	157	482	477	508	98	316	392

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS WITH GAS BOILER

**PJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CS assembly and gas burner**



- (18) Boiler drainage Ø 25mm  
Important: Siphon minimum height 300mm
- (19) Gas supply 1" M
- (20) Flue outlet (flue connection):  
Condexa PRO 50 / 70: Ø 80mm  
Condexa PRO 100: Ø 110 mm

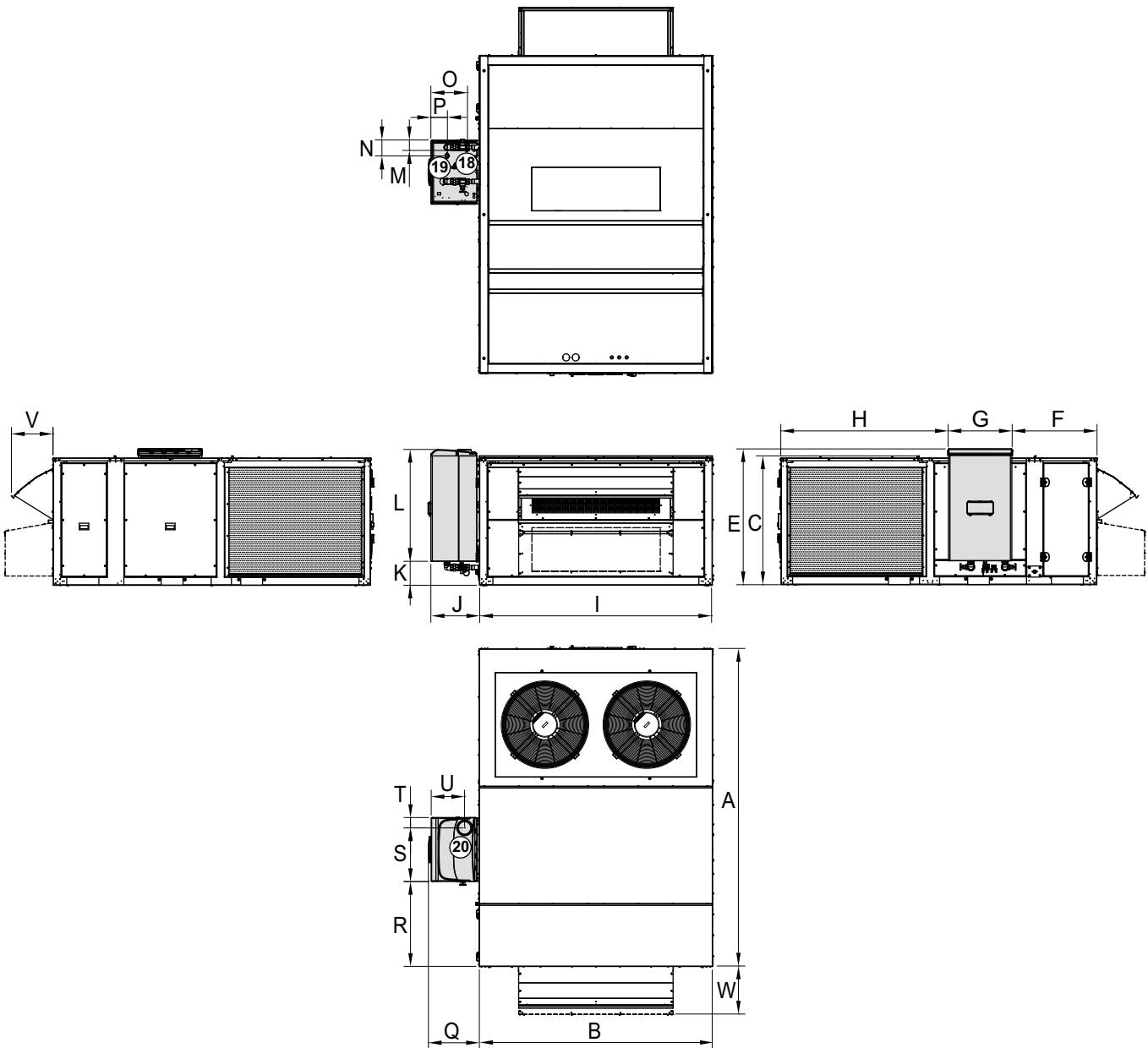
**Important:** The flue of the gas boiler is not supplied with the unit. Its design and installation is the responsibility of the installer and must comply with all the directives and regulations in force in the installation location.

	L x W x H			D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Dimensions	A	B	C																			
0200 to 0240 (mm)	3.000	2.200	1.230	3.074	1.286	803	606	1.584	2.195	459	226	1.060	96	147	338	157	482	803	508	98	316	392
0280 to 0380 (mm)	3.650	2.200	1.230	3.074	1.286	1.183	606	1.858	2.195	459	226	1.060	96	147	338	157	482	1.183	508	98	316	392

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS WITH GAS BOILER

**PJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, TS assembly and gas burner**



**18** Boiler drainage Ø 25mm  
Important: Siphon minimum height 300mm

**19** Gas supply 1" M

**20** Flue outlet (flue connection):  
Condexa PRO 50 / 70: Ø 80mm  
Condexa PRO 100: Ø 110 mm

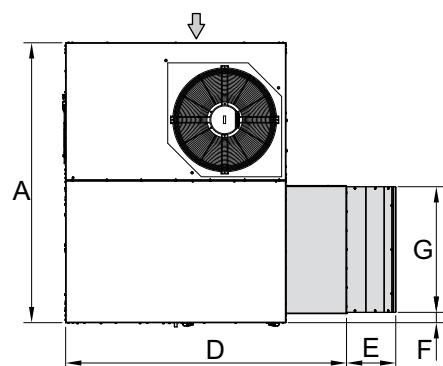
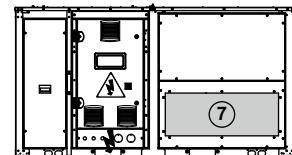
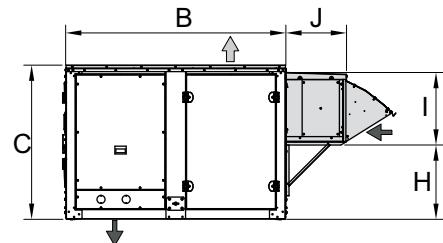
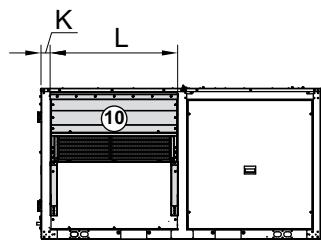
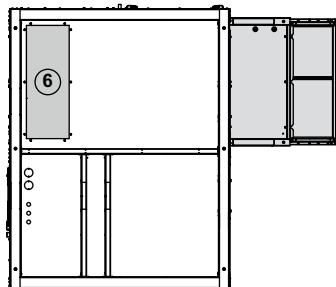
**Important:** The flue of the gas boiler is not supplied with the unit. Its design and installation is the responsibility of the installer and must comply with all the directives and regulations in force in the installation location.

	L x W x H			D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Dimensions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
<b>0200 to 0240 (mm)</b>	3.000	2.200	1.230	2.682	1.286	803	606	1.584	2.195	459	226	1.060	459	226	1.060	157	482	803	508	98	316	392	452
<b>0280 to 0380 (mm)</b>	3.650	2.200	1.230	2.682	1.286	1.373	606	1.699	2.195	459	226	1.060	459	226	1.060	157	482	1.373	508	98	316	392	--

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS WITH PREHEATING MODULE

**PJ - 0090 / 0120 / 0140 / 0160 / 0180 / 0190, CF assembly and preheater module**



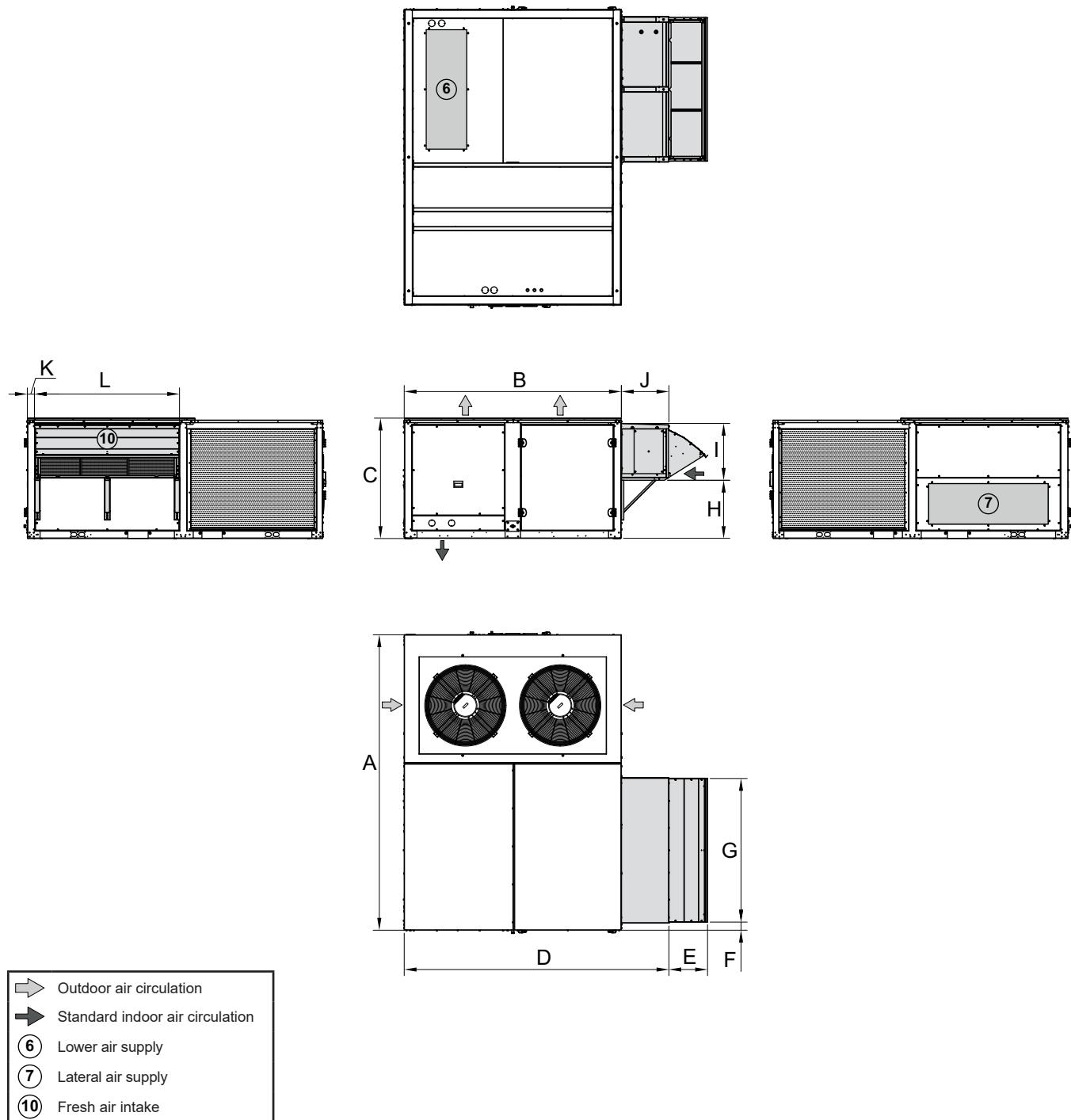
- ➡ Outdoor air circulation
- ➡ Standard indoor air circulation
- ⑥ Lower air supply
- ⑦ Lateral air supply
- ⑩ Fresh air intake

Dimensions	L x W x H			D	E	F	G	H	I	J	K	L			
	A	B	C	2.225	1.750	1.230	2.232	391	82	998	591	577	482	73	1.013
<b>0090 to 0190 (mm)</b>															

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.

## DIMENSIONAL DRAWINGS WITH PREHEATING MODULE

**PJ - 0200 / 0220 / 0240 / 0280 / 0320 / 0360 / 0380, CF assembly and preheater module**



Dimensions	L x W x H			D	E	F	G	H	I	J	K	L
	A	B	C									
0200 to 0240 (mm)	3.000	2.200	1.230	2.682	391	82	1.455	591	577	482	72	1.470
0280 to 0380 (mm)	3.650	2.200	1.230	2.682	391	82	1.835	591	577	482	72	1.850

Note: Drawings without scale. Refer to the certified dimensional drawings available on request, when designing an installation.



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Ref. : NA20757A

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