



ENVIRONMENTAL
CLIMATE CONTROL
EQUIPMENT & SOLUTIONS



Single flow multifunction dehumidifier - Vertical



www.ett-hvac.com

C O N T E N T S

■ General description.....	<EX>
■ Operating principles.....	4
■ Unit description.....	6
■ Control description.....	7
■ Main options	8

Technical features

■ Standard version 103 - 105 - 106	9
■ External casing (optional) 103 - 105 - 106.....	10
■ Standard version 108 - 110 - 125	14
■ External box (optional) 108 - 110 - 125.....	15

Dimensions

■ Standard version 103 - 105 - 106	11
■ External box (optional) 103 - 105 - 106.....	12
■ Ductable external casing in equipment room (optional) 103 - 105 - 106	13
■ Standard version 108 - 110 - 125	16
■ External box (optional) 108 - 110 - 125.....	17
■ Ductable external casing in equipment room (optional) 108 - 110 - 125	18

Arrangements

■ Arrangements.....	19
---------------------	----

Auxiliaries

■ Hot water coils.....	20
■ Electric heaters.....	22

General description

The **ETT** packaged unit is delivered ready to operate. Its full aluminium structure (frame and casing) ensures an excellent corrosion protection (20-year anti-corrosion guarantee).

Aluminium promotes the REFURBISHING of machines for a second life: Aluminium allows our machines to be refurbished for a second life, unlike a steel structure.

Our technical choices have a major impact on the environment

• DECARBONATION:

ETT is committed to an ambitious approach to reducing Greenhouse Gas Emissions:

- Reducing the energy consumption of our machines
- Fluid refrigerants with low GWP
- Energy monitoring & AI
- Adiabatic cooling
- Development of machine retrofits

• ALUMINIUM: PERFORMANCE AND DURABILITY!

- Lightweight: 3 times lighter than steel
- Corrosion resistant and long lifespan
- Thermal performance
- 100% recyclable indefinitely
- Facilitates the refurbishing of our machines

100% aluminium,
recyclable.

• ECO-DESIGN:

Our technologies are designed with sustainability in mind, reducing their environmental impact throughout their life cycle.

• LOW-POLLUTION MANUFACTURING PROCESS:

- Selective sorting: 80% recovery rate
- No paint or solvents

• END OF MACHINE LIFE:

In compliance with regulations, ETT is a member of the Ecologic eco-organisation for the end-of-life processing of machines, which are 98% recyclable.

Ecologic

• ETT CERTIFICATIONS

- **CSR assessment: ECOVADIS Gold Medal** for our CSR approach



- **Iso 14001 & Iso 9001 certification** for our Quality and Environmental Management system



- **Certificate of competence for handling refrigerants**

- **Membership of the UN Global Compact**

- **Qualiopi certification** for our training centre



As a positive-impact company, ETT contributes to a more sustainable world through our decarbonising products and services.

CE In addition, each unit is delivered with an **certificate of conformity to EU standards** and complies with the following standards:

- Machinery Directive 2006/42/EC - Operator's safety
- Low Voltage Directive (LVD) 2014/35/EU - Electricity
- Electromagnetic Compatibility (EMC) Directive 2014/30/EU
- Regulation (EU) 2016/426 – Gas appliances
- Standard NF EN 60204 -1- Electrical appliances
- Standard EN 378-2 : 2017 – Safety and environmental requirements
- PED Directive 2014/68/EU (in accordance with Articles 2.10, 2.11, 3.4, 5a and 5d of Annex 1) - Pressure equipment
- EcoDesign regulations ErP UE 2281/2016

20-year guarantee
against corrosion
frame - casing



Operating principles

Dehumidification is achieved by the **action of a refrigeration cycle** operating on recycled air. The air goes through the in-line evaporator and condenser.

Air is dried through the cooling process on the evaporator. Heat is transferred from the evaporator to the air-cooled condenser.

Supply air temperature at the condenser outlet is higher than air temperature at the unit inlet because of latent heat recovery and energy supplied by the compressor.

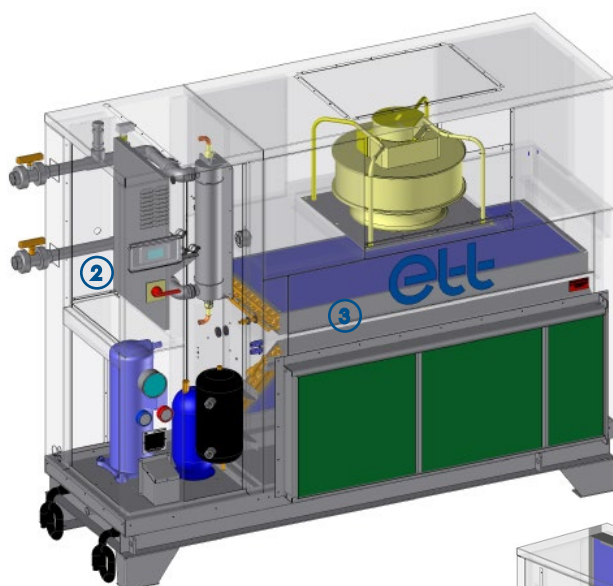
If the room air temperature is sufficient, the heat is transferred to the pool water through a water condenser (optional).

The following operating modes are available:

- > Source: outside air/return air
- > Air dehumidification and heating
- > Air dehumidification and pool water heating (optional water condenser)
- > Air heating only (in multifunction version)
- > Pool water heating only (multifunction version) + optional water condenser
- > Internal air cooling (in multifunction version)

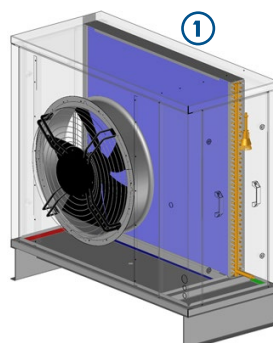
In these modes, the unit can operate:

- > With all recirculated air
- > With recirculated air + fresh air fixed intake



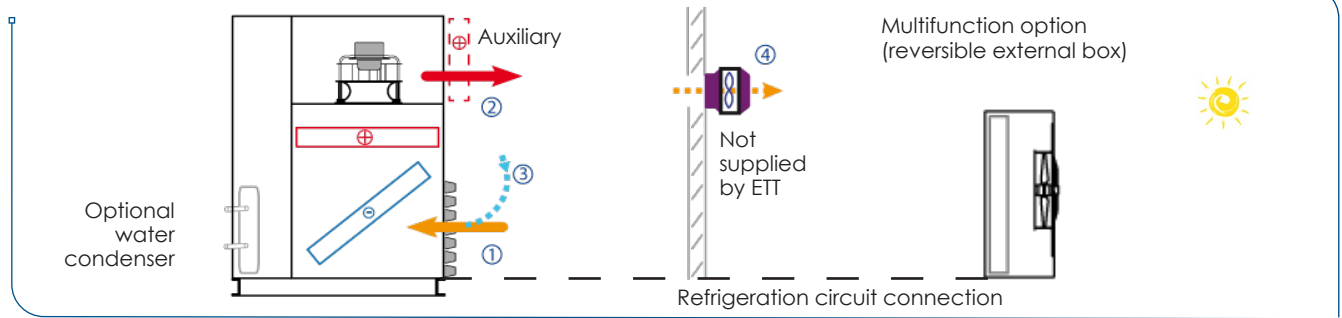
The ETT packaged unit comprises 3 different sections:

- 1 The external section allows thermal exchanges with the environment (multifunction version).
- 2 The separate technical section houses the refrigeration components, the electrical board and the control components.
- 3 An internal section ensures the air change and air treatment.

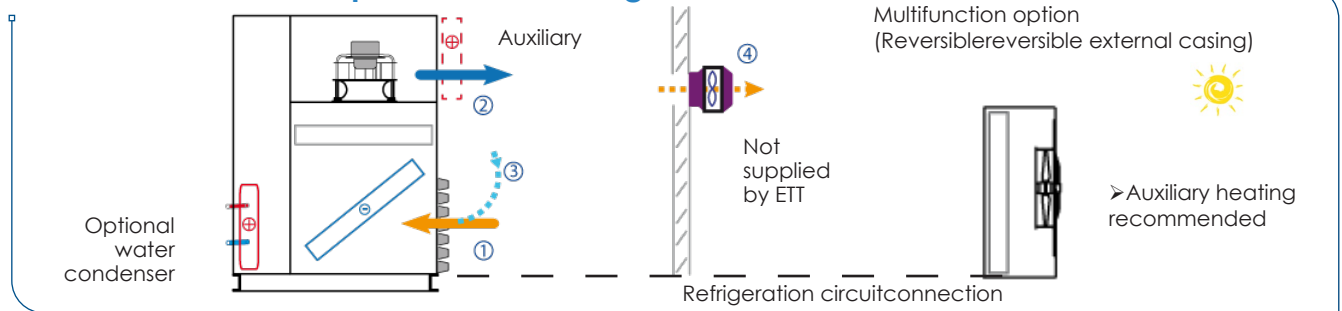


Operating principles

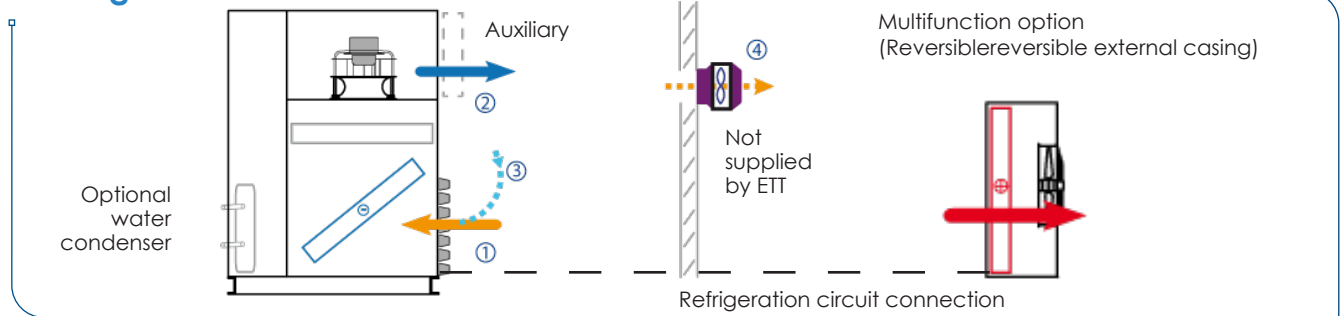
In-line air dehumidification and heating



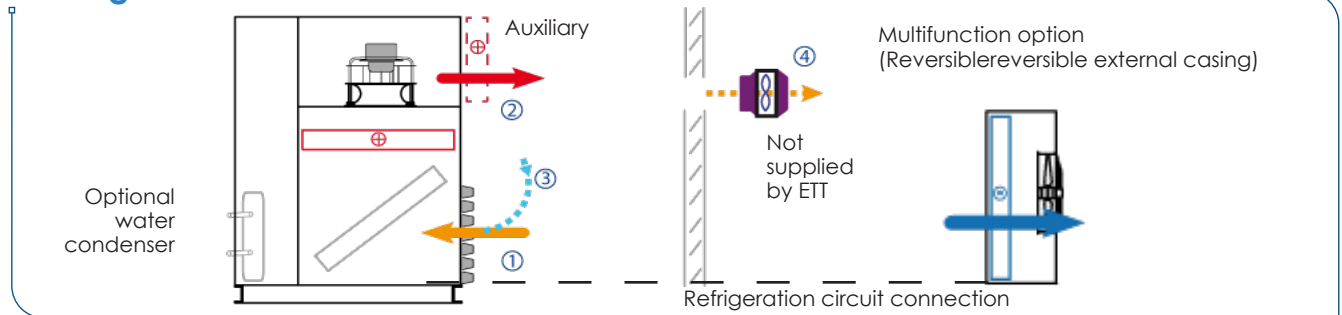
Dehumidification and pool water heating



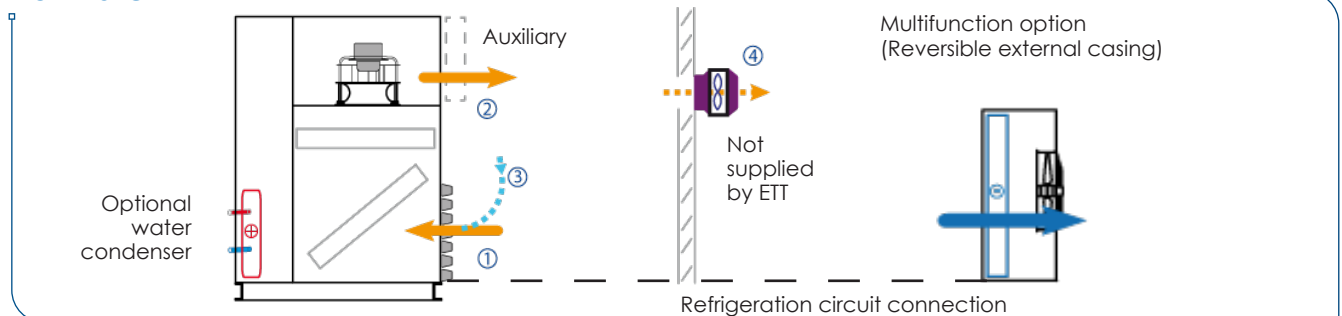
Cooling



Heating



Hot water



① Return air ② Supply air ③ Fresh air by negative pressure ④ Exhaust air

Unit description

Aluminium frame and casing assembly :

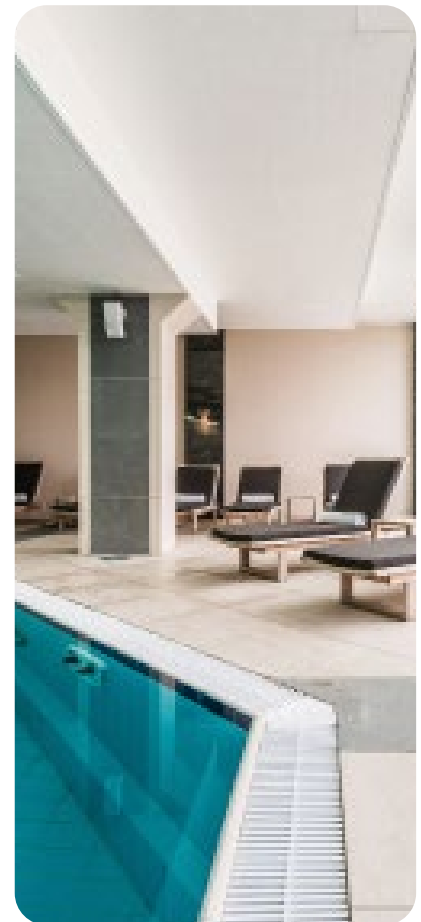
- **Rigid, compact, lightweight packaged unit**, with perfect weather resistance and a 20-year warranty on the entire casing.
- **Watertight floor** with drainage outlets around the unit, connected to rubber traps.
- **Aluminium vertical panels and roof** (AG3).
- A separate **technical section** facilitates unit control and maintenance and allows measurement and adjustment during operation.
- **Access through large** removable panels. Panels are closed with square locks. The removable panels are sealed by compression on a flexible lip seal, ensuring perfect elasticity over time.
- **Internal soundproofing and thermal insulation of side walls** using 25 mm thick M0-rated glass wool, protected by 13/10 thick aluminium sheet for mechanical protection and ease of maintenance.
- **Floor soundproofing and thermal insulation** provided by 100 mm of M0-rated rock wool with double skin.

Energy and thermodynamic assembly:

- **Refrigeration circuits** compliant with the European Pressure Equipment directive (PED 2014/68/EU).
- **R410A type** refrigerant.
- **Direct expansion heat exchangers**, with copper tubes and aluminium fins with vinyl protection, with high heat exchange capacity optimised by an electronic expansion valve, selected for an air speed of less than 2.5 m/s to avoid any risk of condensate being carried away. Exchangers have aluminium frames.
- **Electronic expansion valves.**
- **Optional titanium water/freon condenser** for water treatment by salt electrolysis, with 3-way freon changeover valve for condensation on water.
- **Optional stainless steel 316L water/freon condenser** for chlorine water treatment only, with 3-way freon changeover valve for condensation on water.
- Automatic reset **water flow controller.**
- Anti-acid **filter drier.**
- HP and LP pressure switches.
- Service valves.

Aero set :

- **A set of easily removable eco-design filters** - efficiency 95% ASHRAE gravimetric (ISO Coarse 65% (G4)) in 48 mm pleated media, fouling controlled by pressure switch.
- **Supply air** plug fan. This technology avoids losses due to pulley-belt transmissions
- **The electronically commutated electric motor** allows energy savings by precisely adjusting the air flow rate during commissioning and by reducing the speed of the supply fan when the unit is in air-to-water heat pump only mode.



External exchanger (multifunction version):

With this option, 3 operating modes may be used:

- air reheating only;
- pool water reheating only;
- inside air cooling.

This module includes the following components (given in sequence following air flow path):

- **Direct expansion heat exchanger** (evaporator or condenser depending on operating mode), copper tubes and aluminium fins with high exchange capacity optimised by electronic expansion valve. The exchanger frame is made of aluminium.

- **AC propeller fan** with aluminium case, high-energy aluminium impeller, IP54 motor with reinforced sealing, and a galvanized steel guard, with cataphoresis protection all perfectly weatherproof. This new fan design increases heat exchanger airflow by 13% compared with a conventional solution, while maintaining the same power input. (optional EC motor for flow adjustment according to condensing temperature, acoustic gain).

Control description

Electrical assembly :

- **Electrical board compliant with French standards NF EN C 15-100 and NF EN 60204-01, including:**
 - ✓ **An ETT PLC.**
 - ✓ **Power switch** with lockable external handle for full load cut-off.
 - ✓ **400-230-24 volts** transformer for regulation and control circuits.
 - ✓ **Fault synthesis** with pending dry contact on terminal.
 - ✓ **Numbered terminal blocks** with disconnectable terminals for all transfers or remote controls.
 - ✓ **A terminal block** for compressor load shedding.
 - ✓ **Internal wiring** fully numbered at both ends with numbered rings.
 - ✓ **A breaking** capacity Ik3 of 10 KA basic.
 - ✓ **Circuit-breaker protection** for all components.
 - ✓ **A remote display** on the front panel.



Control assembly :

- **NTC-type temperature sensors.** whose accuracy and reliability have been tested and validated both in the factory and on site.
 - **A humidity sensor** positioned on the return air (optional room sensor).
 - **A BEST type PLC** (Building Energy Saving Technology) specifically developed by ETT for this range of units. Programs are updated annually in order to add functions requested for some applications and to optimise units power consumption.

The microprocessor, the memory and the size of the controllers are adapted to the chosen applications and options by integrating a program set-up in the factory. The controller is in a plastic box that guarantees a high mechanical protection and reduces electrostatic shock threats.
- The PLC performs the following functions, among others:**
- ✓ **On/off by remote contact** or vacancy contact.
 - ✓ **On/off** according to schedule (2 slots per day).
 - ✓ **Fault summary** by dry contact for report to customer system.
 - ✓ **Management of safety devices** (anti-freeze thermostat, smoke detector, HP pressure switch, etc.) and faults.
 - ✓ **Dry contact for forcing air/water heat pump mode.**
 - ✓ **Possibility of managing 2 air temperature setpoints** depending on occupancy (dry contact to be connected by the installer in the electrical cabinet).

Factory settings :

 - Occupancy setpoint: 29°C
 - Vacancy setpoint: 24°C
 - ✓ These 2 setpoints can also be controlled by the **PLC clock**.
 - ✓ With the **multifunction version**, the control system can manage **5 functions** :
 - energy recovery on inside air;
 - energy recovery on pool water;
 - heat rejection on outside air to avoid overheating;
 - outside air/inside air heat pump;
 - outside air/pool water heat pump.
 - ✓ Pool filtration automatic security.
 - ✓ **Basic RS 485 communication.**



Main options

Air handling

- Actuating smoke detector with battery back-up
- Pressure gauge for filters
- EC propeller fan in external box (acoustic gain)
- Analogue air flow controller (AFC), air flow rate indication and measurement
- Supply air damper in duct
- 1 set of spare 48 mm ISO Coarse 65% (G4) filters
- Polypropylene 48 mm ISO ePM1 50% (F7) filters

Thermodynamics

- HP and LP pressure gauges

Thermal exchangers

- External condenser/evaporator with AC propeller fan
- Ducted outdoor condenser/evaporator (technical compartment)
- Titanium water condenser (for salt water chlorinator systems)
- 316 L stainless steel water condenser (for chlorine water treatment only)
- CPVC isolation valves (2) on water condenser
- 2-stage electric heaters (mounted in duct)*
- 2-row hot water coil with frost protection thermostat and vinyl coating (mounted in duct)*
- Progressive 3-way valves
- Mounted stop valves + TA regulating valve on hot water coil inlet

Electrics

- Roof fan with 0-10V control for proportional fresh air introduction
- Total electrical energy metering
- Soft starter on compressor

Installation

- Refrigeration and electrical assembly for the external box

Control

- MODBUS IP, BACNET IP communication
 - myETTVision
 - ETT Control Box (remote touch display)
-

(*) To be mounted by the installer.

Standard version

	DESCRIPTION	Unit	103	105	106
SPECIFICATIONS	Rated air flow rate	m ³ /h	1500	2200	3000
	Min. air flow rate	m ³ /h	1300	1700	2400
	Max. air flow rate	m ³ /h	1700	2400	3300
	IN-LINE DEHUMIDIFICATION				
	Evacuated specific humidity ⁽¹⁾	kg/h	7.4	10.4	11.7
	Rated cooling capacity ⁽¹⁾	kW	11.3	15.7	18.5
	Rated heating capacity ⁽¹⁾	kW	13.5	18.9	22.0
	COOLING AND ENERGY RECOVERY ON HOT WATER (OPTIONAL WATER EXCHANGER)				
	Rated cooling capacity ⁽¹⁾	kW	12.1	16.9	19.5
	Rated heating capacity ⁽¹⁾	kW	13.9	19.5	22.6
ELECTRICAL CONNECTION	Water condenser flow rate for 28/33°C water regime	m ³ /h	2.3	3.2	4.0
	Water-cooled condenser pressure drop	mWC	0.8	1.4	2.1
	Total installed electrical power (excluding options)	kW	6.4	8.6	8.6
FAN	Rated current	A	11.1	14.4	14.7
	Starting current	A	39.6	58.6	68.6
	Absorbed electrical power ⁽¹⁾	kW	0.3	0.5	0.8
GENERAL	SFPv (EN 13779)	kW /(m ³ /s)	0.9	0.8	0.9
	Sound power level on supply air	dB(A)	74	76	80
	Outside sound power level	dB(A)	59	59	62
	Filters efficiency		G4		
	Filters dimensions & number	mm	1 x 595*595*48		
	Internal coil min/max inlet temperature	°C/°C	20 / 33		
	Unit weight ⁽²⁾	kg	309	314	320

(1) For return air at 29°C 60% RH (with 20% fresh air, return air at 28°C 65% RH and outside air at 35°C 40% RH) - available pressure drop 200 Pa

(2) Out of options

External box (optional)

	DESCRIPTION	Unit	103	105	106
TECHNICAL FEATURES	Installed/Absorbed electrical power	kW	0.34 / 0.5		
	Installed/absorbed electrical power (optional EC propeller)	kW	0.22 / 2.8		
	Sound pressure level at 7m, directivity factor: 2 (in free field)	dB(A)	38	38	38
	Sound pressure level at 7m, directivity factor: 2 (in free field) (optional EC propeller)	dB(A)	35	35	35
	Minimum/maximum outside operating temperature with split <12 m	°C	- 15 / 45		
	Overall length	mm	1580		
	Overall depth	mm	1400		
	Overall height	mm	750		
	Max. length between internal and external blocks ⁽¹⁾	m	12		
	Weight	kg	115		
	Connection tubes diameters	RD	2 x 1/2" 1 x 5/8"		

EFFICIENCY ON AIR/ON WATER	AIR HEATING ONLY (OUT OF DEHUMIDIFICATION REQUEST)				
	Rated air flow rate	m³/h	1500	2200	3000
	Rated heating capacity for an outside temperature of +15°C ⁽⁴⁾	kW	11.5	16.1	18.4
	Rated heating capacity for an outside temperature of +7°C ⁽⁴⁾	kW	9.9	13.9	15.8
	Rated heating capacity for an outside temperature of -15°C ⁽⁴⁾	kW	5.7	8.0	9.0
	Compressor absorbed electrical power at +7°C ⁽⁴⁾	kW	2.5	3.5	3.9
	Net COP (including supply air fan and auxiliary) at +7°C ⁽⁴⁾		3.1	3.1	3.1
	AIR COOLING ONLY (OUT OF DEHUMIDIFICATION REQUEST)				
	Rated cooling capacity for an outside temperature of +35°C ⁽²⁾	kW	11.4	15.4	17.6
	Rated cooling capacity for an outside temperature of +35°C ⁽³⁾	kW	10.0	13.4	15.2
	Compressor absorbed power ⁽²⁾	kW	2.3	3.5	4.1
	Net EER (including supply air fan and auxiliary) ⁽²⁾	kW	4.2	3.9	3.8
	WATER HEATING ONLY (OUT OF DEHUMIDIFICATION REQUEST)				
	Water-cooled condenser flow rate	m³/h	2.3	3.2	4
	Rated heating capacity for a water inlet temperature of +28 °C and an outside temperature of +15 °C	kW	12.4	17.4	19.4
	Rated heating capacity for a water inlet temperature of +28 °C and an outside temperature of +7 °C	kW	10.4	14.6	16.3
	Compressor absorbed power at +7°C	kW	1.9	2.7	3.3
	Net COP (including auxiliary and external fan) at +7 °C		4.4	4.5	4.3
	CPVC connection diameter	RD	Ø50		

(1) For other lengths, please consult the factory.

As the thermodynamic capacities in in-line dehumidification mode, in air heating only mode and in water heating only mode cannot be combined, it is recommended to use an air make-up and a water heater (external + auxiliary).

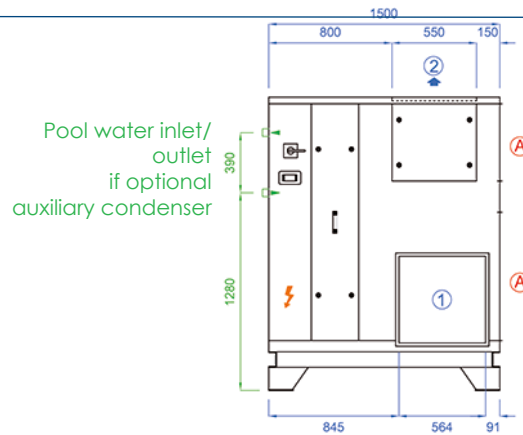
(2) For return air at 29°C 60% RH, 200 Pa available pressure drop.

(3) For return air at 26°C 50% RH, 200 Pa available pressure drop.

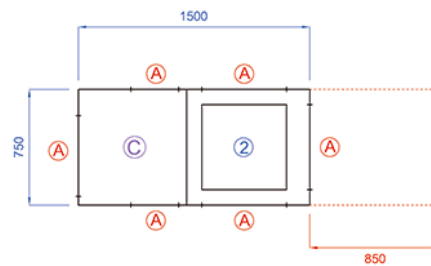
(4) For return air at 28°C 65% RH, 20% fixed fresh air flow rate, 800 Pa available pressure drop

Standard version

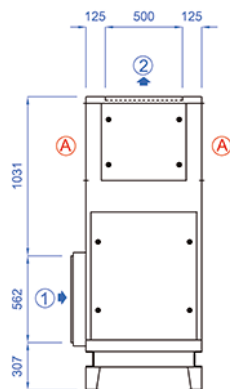
Front view



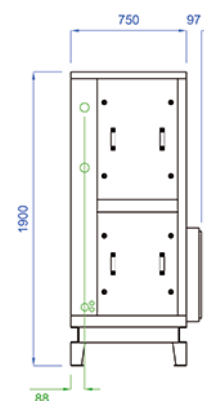
Top view



Side view (Air stream)



Supply air side view: (Technical section)

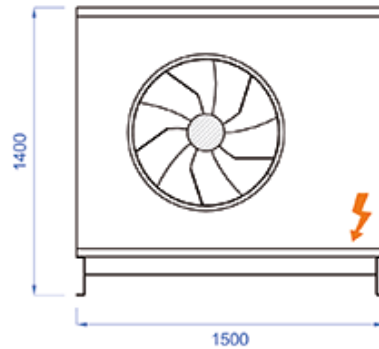


- ① Return air
- ② Supply air
- (A) Access
- ⚡ Power supply
- (C) Technical section

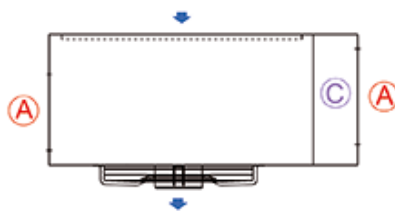
Nota: The filter tray is supplied disassembled to fit through standard doors*
 Allow a minimum clearance of 600 mm around the unit.
 Only one side can be against a wall.
 (*) Installation by the installer

External box (optional)

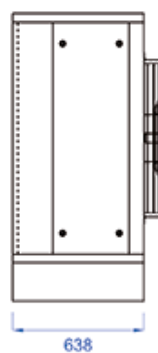
Front view



Top view



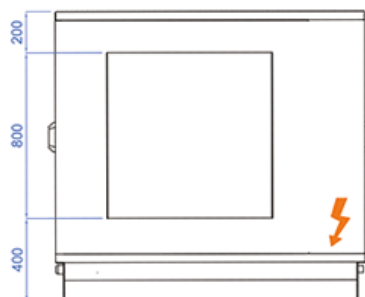
Side view



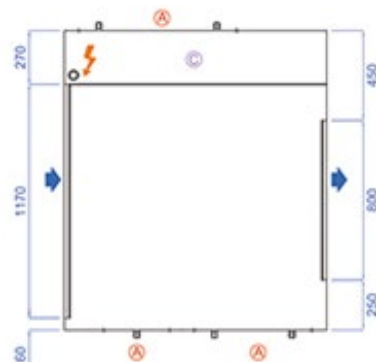
- Ⓐ Access
- ⚡ Power supply
- Ⓒ Technical section
- Provide a maintenance zone of 500 mm around the technical housing

Ductable external box in technical room (optional)

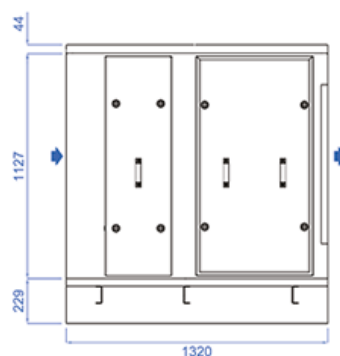
Front view



Top view



Side view



- Ⓐ Access
- ⚡ Power supply
- Ⓢ Technical section
- Provide a maintenance zone of 500 mm around the technical housing

Standard version

	DESCRIPTION	Unit	108	110	125
SPECIFICATIONS	Rated air flow rate	m ³ /h	5000	6000	7500
	Min. air flow rate	m ³ /h	3300	5300	6500
	Max. air flow rate	m ³ /h	5300	6500	8000
	IN-LINE DEHUMIDIFICATION				
	Evacuated specific humidity ⁽¹⁾	kg/h	16.6	21.1	23.8
	Rated cooling capacity ⁽¹⁾	kW	27.3	33.6	39.0
	Rated heating capacity ⁽¹⁾	kW	31.9	39.4	45.7
	COOLING AND ENERGY RECOVERY ON HOT WATER (OPTIONAL WATER EXCHANGER)				
	Rated cooling capacity ⁽¹⁾	kW	28.1	34.8	40.0
	Rated heating capacity ⁽¹⁾	kW	32.4	40.2	46.4
	Water-cooled condenser capacity at 28/33°C	m ³ /h	5.5	7.0	8.0
	Water-cooled condenser pressure drop	mWC	1.4	2.2	2.7
ELECTRICAL CONNECTION	Total installed electrical power (excluding options)	kW	12.8	14.4	16.1
	Rated current	A	21.7	24.5	27.5
	Starting current	A	108.4	135.4	146.4
FAN	Absorbed electrical power ⁽¹⁾	kW	1.0	1.2	1.8
	SFPv (EN 13779)	kW /(m ³ /s)	0.7	0.7	0.9
GENERAL	Sound power level on supply air	dB(A)	78	80	84
	Outside sound power level	dB(A)	62	63	65
	Filters efficiency		G4		
	Filters dimensions & number	mm	2 x 595*595*48 + 1 x 592*287*48		
	Internal coil min/max inlet temperature	°C/°C	20 / 33		
	Unit weight ⁽²⁾	kg	415	424	425

(1) For return air at 29°C 60% RH (with 20% fresh air, return air at 28°C 65% RH and outside air at 35°C 40% RH) - available pressure drop 200 Pa

(2) Out of options

External box (optional)

TECHNICAL FEATURES	DESCRIPTION	Unit	108	110	125
	Installed/absorbed electrical power	kW	1.53 / 1.7		
	Installed/absorbed electrical power (optional EC propeller)	kW	1.05 / 2.8		
	Sound pressure level at 7m, directivity factor: 2 (in free field)	dB(A)	51	51	51
	Sound pressure level at 7m, directivity factor: 2 (in free field) (optional EC propeller)	dB(A)	45	45	45
	Minimum/maximum outside operating temperature with split <12 m	°C	- 15 / 45		
	Overall length	mm	1580		
	Overall depth	mm	1400		
	Overall height	mm	750		
	Max. length between internal and external blocks ⁽¹⁾	m	12		
	Weight	kg	115		
	Connection tubes diameters	RD	2 x 5/8" 1 x 7/8"		

EFFICIENCY ON AIR/ON WATER	AIR HEATING ONLY (OUT OF DEHUMIDIFICATION REQUEST)				
	Rated air flow rate	m³/h	5000	6000	7500
	Rated heating capacity for an outside temperature of +15°C ⁽⁴⁾	kW	26.0	31.8	36.3
	Rated heating capacity for an outside temperature of +7°C ⁽⁴⁾	kW	22.0	27.1	31.1
	Rated heating capacity for an outside temperature of -15°C ⁽⁴⁾	kW	12.5	15.4	17.8
	Compressor absorbed electrical power at +7°C ⁽⁴⁾	kW	4.5	5.8	6.7
	Net COP (including supply air fan and auxiliary) at +7°C ⁽⁴⁾		3.1	3.1	3.1
	AIR COOLING ONLY (OUT OF DEHUMIDIFICATION REQUEST)				
	Rated cooling capacity for an outside temperature of +35°C ⁽²⁾	kW	25.8	31.0	35.2
	Rated cooling capacity for an outside temperature of +35°C ⁽³⁾	kW	22.4	27.1	30.5
	Compressor absorbed power ⁽²⁾	kW	5.5	7.1	8.7
	Net EER (including supply air fan and auxiliary) ⁽²⁾	kW	3.6	3.6	3.4
	WATER HEATING ONLY (OUT OF DEHUMIDIFICATION REQUEST)				
	Water-cooled condenser flow rate	m³/h	5.5	7.0	8.0
	Rated heating capacity for a water inlet temperature of +28 °C and an outside temperature of +15 °C	kW	26.9	33.1	37.6
	Rated heating capacity for a water inlet temperature of +28 °C and an outside temperature of +7 °C	kW	22.5	27.7	31.5
	Compressor absorbed power at +7°C	kW	4.1	5.2	6.1
	Net COP (including auxiliary and external fan) at +7 °C		3.8	3.9	3.9
	CPVC connection diameter	RD	Ø50		

(1) For other lengths, please consult the factory.

As the thermodynamic capacities in in-line dehumidification mode, in air heating only mode and in water heating only mode cannot be combined, it is recommended to use an air make-up and a water heater (external + auxiliary).

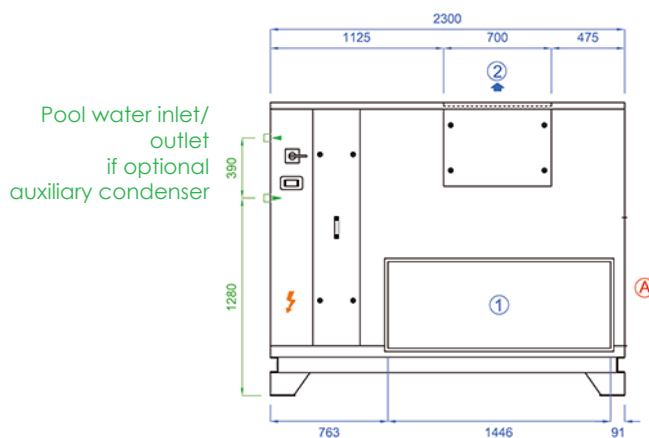
(2) For recovery conditions of 29°C / 60% RH, 200 Pa available pressure drop

(3) For recovery conditions of 26°C / 50% RH, 200 Pa available pressure drop

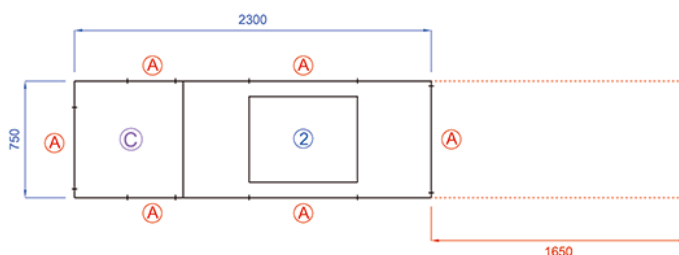
(4) For return air at 28°C 65% RH, 20% fixed fresh air flow rate, 800 Pa available pressure drop

Standard version

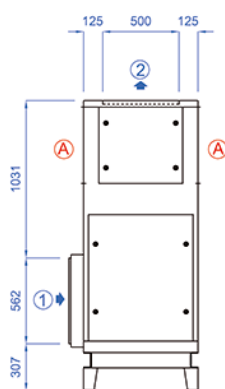
Front view



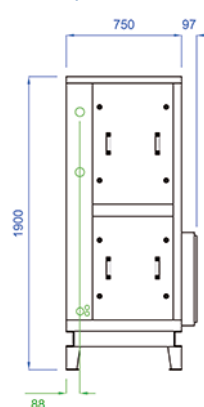
Top view



Side view
(Air stream)



Supply air side view:
(Technical section)

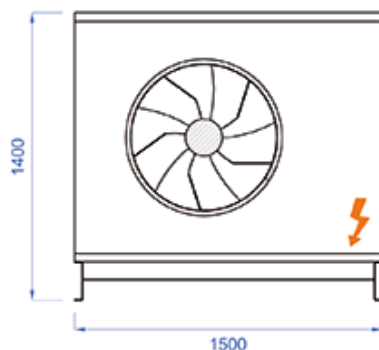


- ① Return air
- ② Supply air
- (A) Access
- ⚡ Power supply
- Technical section

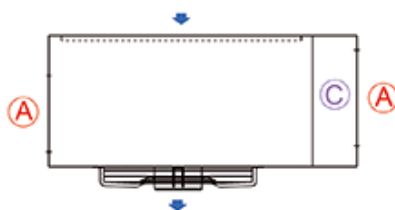
Nota: The filter tray is supplied disassembled to fit through standard doors*
Allow a minimum clearance of 600 mm around the unit.
Only one side can be against a wall.
(*) Installation by the installer

External box (optional)

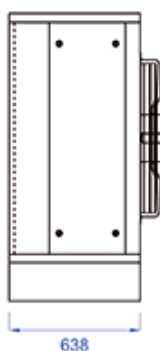
Front view



Top view



Side view



Ⓐ Access

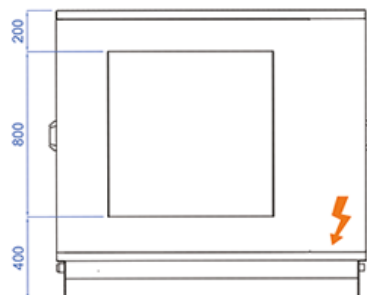
⚡ Power supply

Ⓒ Technical section

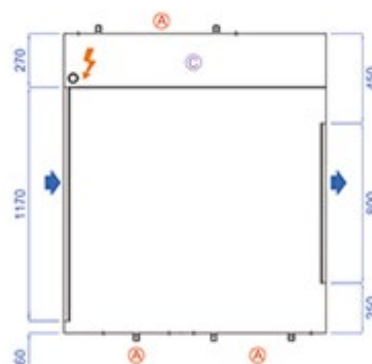
- Provide a maintenance zone of 500 mm around the technical housing

Ductable external box in technical room (optional)

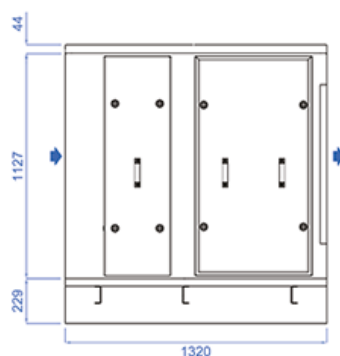
Front view



Top view



Side view

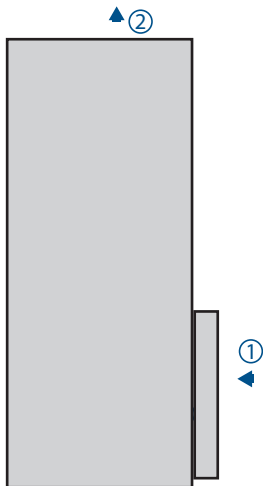


- Ⓐ Access
- ⚡ Power supply
- Ⓒ Technical section
- Provide a maintenance zone of 500 mm around the technical housing

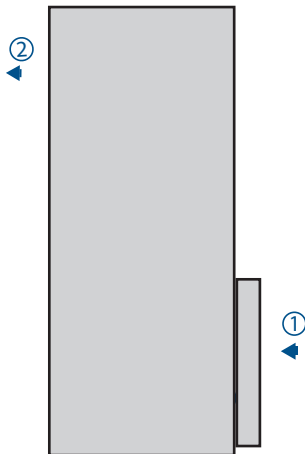
Airflow arrangements

Note: Please specify when placing the order.

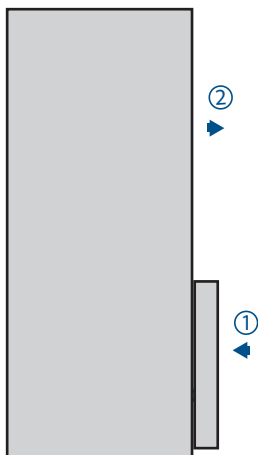
Arrangement A



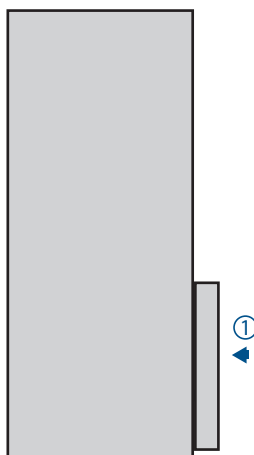
Arrangement B



Arrangement C



Arrangement D (for 103 - 105 - 106 only)



① Return ② Supply air ③ Filters tray

Auxiliary: Hot water coils

2-stage hot water coils

The high exchange capacity hot water coil includes copper pipes and aluminium fins with vinyl coating. The exchanger frame is made of aluminium.

• Connections and weights

	Unit	103	105	106	108	110	125
Customer connection diameter	mm	20/27	20/27	20/27	26/34	26/34	26/34
Weight of coil + 3WV (empty)	kg	10.4	10.4	10.4	18.5	18.5	18.5
Water volume	dm ³	4	4	4	7	7	7

• Capacities for +28°C air inlet temperature

		Unit	103	105	106	108	110	125
Water regime 90/70°C	Max. power	kW	12.6	15.7	18.4	31.3	34.4	38.6
	Max. flow rate	m ³ /h	0.6	0.7	0.8	1.4	1.5	1.7
	Valve + coil pressure drop	mWC	0.9	1.2	1.6	3.4	4.0	5.0
Water regime 80/60°C	Max. power	kW	9.9	12.2	14.4	24.8	27.3	30.5
	Max. flow rate	m ³ /h	0.4	0.5	0.6	1.1	1.2	1.4
	Valve + coil pressure drop	mWC	0.7	0.9	1.1	2.2	2.6	3.2

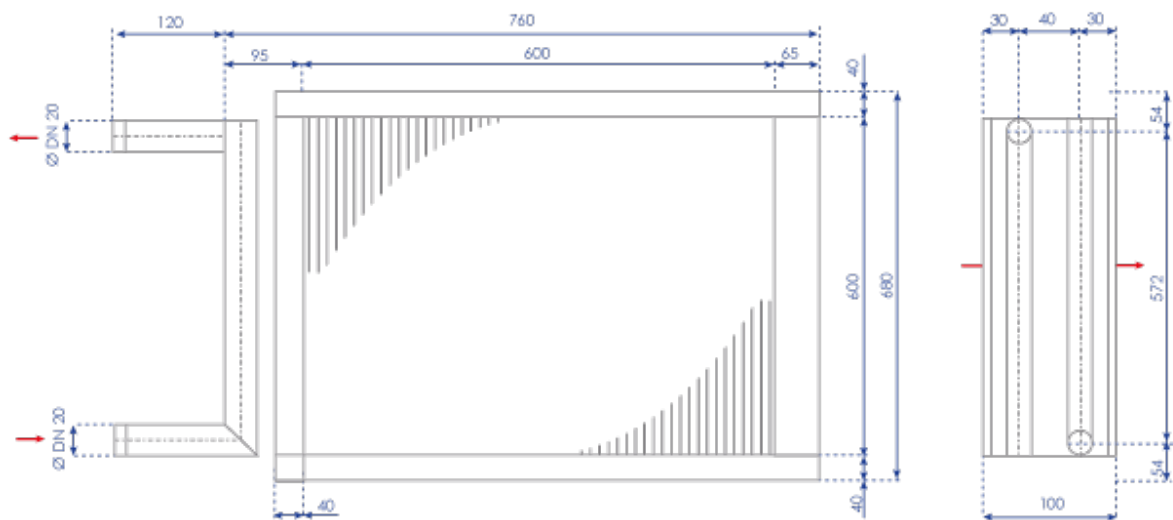
Optional stop valves on outlet and regulating TA valves on inlet.

		Unit	103	105	106	108	110	125
Water regime 90/70°C	TA valve and stop valve pressure drop (opened by 3 turns)	mWC	0.3	0.4	0.6	0.5	0.6	0.7
Water regime 80/60°C	TA valve and stop valve pressure drop (opened by 3 turns)	mWC	0.2	0.3	0.4	0.4	0.4	0.5

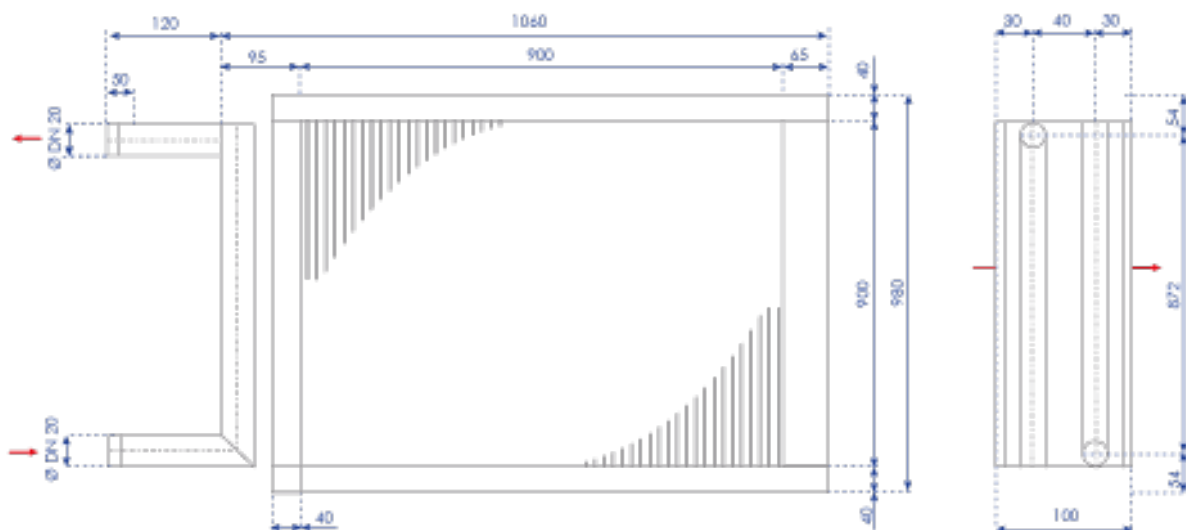
Note: The hot water coil is to be installed in the duct and is supplied separately (to be fitted by the installer).

Auxiliary: Hot water coils

Hot water coil dimensions for OCTO+ 103 - 105 - 106

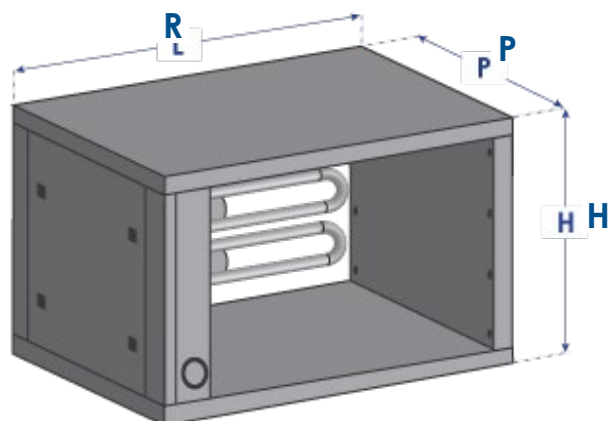


Hot water coil dimensions for OCTO+ 108 - 110 - 125



Auxiliary: Electric heaters

Schematic diagram



Note: The electric heaters box contains two stages of electric heaters with a safety fire thermostat (not shown on the 3D view).

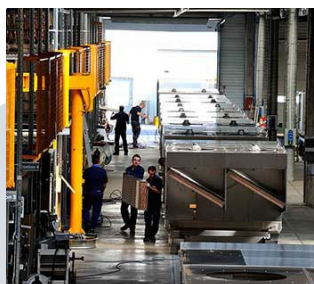
Total capacity (kW)	1 st stage	2 nd stage	Length x Depth x Height						Weight (kg)
			103	105	106	108	110	125	
6	3	3							17.4
9	4.5	4.5							18.3
12	6	6							19
15	7.5	7.5							23.6
18	9	9	-						24
21	12	9	-	-					29

400V/50Hz 3-phase power supply + earth without neutral

Note: Auxiliary coils are to be placed in duct in a box delivered separately (to be mounted by the installer).

• Increase in supply air temperature (°C) at rated flow rate

Total capacity (kW)	103	105	106	108	110	125
6	12	8	6	4	3	2
9	19	13	9	6	5	4
12	25	17	12	7	6	5
15	-	21	16	9	8	6
18	-	-	19	11	9	7
21	-	-	-	13	11	9



Reference : MARK-BRO_02-EN_F

ETT - Route de Brest - BP26
29830 Ploudalmézeau - France
Tel.: +33 (0)2 98 48 14 22
Export Contact: +33 (0)2 98 48 00 70
ETT Services: +33 (0)2 98 48 02 22

www.ett-hvac.com