EVERKIT®
RANGE

Collective double flux kit
Flow rate 500 to 4200 m³/h

05

Collective double flux kit

EC MOTOR (continuous current) Flow rate 500 à 4200 m³/H

Certified unit CTICM C4 – 400°C-1/2H
PV n° 11F516
High efficiency insufflation station
high output, self-regulating
Econological® solution

APPLICATION

- Designed for extraction and insufflation with energy recovery, very high energy efficiency (yields exceeding 90% - EN308-) in environments and ERP requiring low and medium flow rates in continuous pressure mode (**LOBBY®**).
- Kit PLUG and PLAY, communicating in **MODBUS RS485** (EN 15232, active building management) self-regulating at continuous pressure (**LOBBY®** mode).
- Comfort (extraction of stale air) and smoke extraction/ fire safety **C4** approved.
  Permanent **C4, 400°C-1/2H** unit functioning in line with article CH43 installation principle.
- Econological® solution in accordance with **RT2012** and Directive **2009/125/EC** requirements.

RANGE

- The **EVERKIT®** range covers flow rates from 500 to 4200 m3/h and is on offer in 3 sizes, 1500, 3000 and 5000, each available in 4 Versions, enabling installation in any region:

  FIRST : Double flux kit without additional heater for installation in a temperate climate.

  SMART : Double flux kit with compensating electric defrosting battery for external temperatures as low as -20°C.

  PREMIUM : Double flux kit with electric heating (**BE**) or hot water (**BC**) battery for external temperatures as low as -10°C.

  INFINITE : Double flux kit with electric pre-heating battery and electric heating (**BE**) or hot water (**BC**) battery for heating in external temperatures as low as -20°C.

COLLECTIVE DOUBLE FLUX KIT PRINCIPLE

Functioning and comfort:

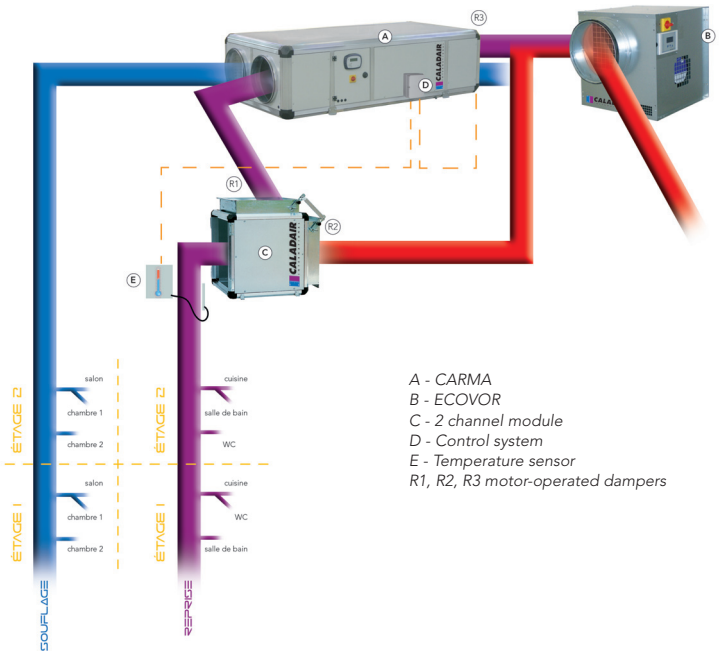
- Perpetual air-flow.
- Perpetual intake via the C4 unit (intake is through the double flux station).
- R1 and R3 open/ R2 closed.

Functioning and smoke extraction:

- Detection via duct temperature sensor in the top of each riser.
- Perpetual air-flow (safety shunt).
- Perpetual intake via the C4 unit (Bypasses the double flux station during smoke extraction).
- R1 and R3 closed/ R2 open
- **Nota :** on-off servomotor fitted dampers with return spring => damper in smoke extraction position whenever electrical supply is cut.

CONSTITUTION

The **EVERKIT®** range is composed of: 1 high efficiency, self-regulating double flux station without return fan fitted with a discharge isolation damper for smoke extraction function regulation 1 very low energy consumption C4 unit, 400°C-1/2H ensuring the perpetual extraction of stale air or smoke extraction 1 duct temperature sensor to be positioned in the top of each riser. (option) 1 module 2 motor-operated valves 1 control system (Hardwiring mounted on the station)



A - CARMA
B - ECOVOR
C - 2 channel module
D - Control system
E - Temperature sensor
R1, R2, R3 motor-operated dampers

The high efficiency double flux station is composed of:

- ▲ An aluminium structure fitted with thermal break secured by spacers built-in to the structure (TB2 class in accordance with EN1886).
- Reinforced polyamide edges.
- 10/10e double-skin panels.
- ▲ Insulation: 50mm M0 high density mineral wool (Class T3 and L1 for building envelope air-tightness in accordance with EN1886).
- External face: RAL 7035 pre-lacquered metal with protective film.
- Internal face: galvanised metal.
- ▲ Circular branch connections with lip seals to guarantee networks remain airtight (ATEC CSTB N° 13-224-V2).
- Crimped brackets as part of the structure to enable floor or ceiling mounting (except model 5000).
- ▲ "EASY" technical compartment grouping electrical and regulating components. Access via lockable, hinged door integrating the LCD display IP65 command panel into the facade as well as the proximity switch.
- ▲ Internal parts accessed by removable panel safety key
- Condensate drain pan and discharge.
- ▲ 100% internal bypass, motor-operated and self-regulating (air law RT2012).
- Plug fan.

▲ DC Direct-drive motor with electronic Commutation (**EC**) with high energy efficiency, built-in thermal overload protection and variable speed.
EC technology is an econological® solution guaranteeing low energy consumption (RT2012) for the management, control and regulation of the operating point (flow regulation between 10 and 100%). Low noise levels for superior acoustic comfort.

- High-efficiency counterflow static heat exchanger with aluminium plates, AAHE certified by EUROVENT

▲ Efficiency greater than 90% (EN 308) during functioning:

- New air: -10°C/ 90% - Return Air 20°C/ 50 %.
- Automatic defrosting via bypass opening and eventual modulation of the new air flow in **FIRST** and **PREMIUM**, versions, and by electric, self-regulating battery in **SMART** and **INFINITE** versions.

▲ In standard, the double flux station accesses an F7 high efficiency opacimetric filter (large filter surface) for new air and a G4 gravimetric filter for extracted air.

- Relative to the components, filters are always mounted upstream in order to ensure protection.
- Mounted on sliding rails fitted with lip seals to ensure efficient airtightness.

The perpetual C4, 400°C-1/2H extraction unit is fitted with:

- Removable access panels.
- Bird-protection grid.
- Two circular branch connections with double lip seals to guarantee network airtightness (ATEC CSTB N° 13-224-12).
- A proximity switch on the unit facade.

▲ An LCD IP54 unit control panel.

- Networked MODBUS RS485 regulation factory programmed in LOBBY® mode, perpetual pressure.
- The unit integrates an air flow failure relay function. This setting entails the following information:

  Failure: signalled following detection of pressure below 80 Pa. Mistral 60 S: a 60 second delay on the failure contact in order to avoid false alarms.

  Indicator light: this available contact enables the connection of a green indicator light denoting unit functioning.

▲ DC Direct-drive motor with high-performance electronic commutation (**EC**) (in accordance with ErP 2009/125/EC, 2nd phase, 2015).

- THigh performance, epoxy treated reaction turbine.

The 2 motorised channel module comprises:

An aluminium structure.

- Reinforced polyamide edges. Screw-mounted removable panels.
- 10/10e double-skin panels (class 2 as per 1886). Face External pre-lacquered RAL 7035 with protective film. 25 mm M0 high density mineral wool insulation.

  Internal face in galvanised metal.

▲ Crimped brackets as part of the structure to enable rapid mounting

▲ Module fitted as standard with a suction panel and two back-flow panels mounted on the dampers with circular connections and lip seals to guarantee network airtightness (ATEC CSTB N°13-224-V2).

- Class 4 counter-direction, profiled blade dampers with steel mechanism.

Mounted linkage fitted with on-off servomotor with return spring guided by the control panel.

- The temperature sensor comprises:

  IP65 waterproof housing.

  Fixed level sensor thread at 70°C.

  Sensor fitted in a steel sleeve.
- The control panel is:
- Mounted and wired to the double flux station.
- Polycarbonate RAL 7035, IP65 waterproof housing.
- Cable joint openings to maintain the protection level.
- Terminal block to connect the 2 channel servomotor, the temperature sensor, the isolation damper positioned at the station discharge collector.
- Electric power supply via the double flux station.

INSTALLATION

- The **EVERKIT®** range can be installed both in and outdoors. For outdoor installation provide roofing for the double flux station and the 2 channel module, the other equipment being designed as standard for outdoor installation.

▲ Floor or ceiling assembly (except the double flux station model 5000).

- Numerous installation configurations (vertical, horizontal).

REGULATION, COMFORT FUNCTIONS AND SMOKE EXTRACTION

- The **EVERKIT®** range double flux station is fitted as standard with "EASY" regulation, integrated into the display Panel on the IP65 facade for in or outdoor installation, **MODBUS**, **BACNET** or **WEB** networking (choice of language can be activated on the site). Option of associating an LCD remote control function (100m to 1km with repeater) or a remote touch control function with interface and user screens to manage principal functions (temperature control, failure...) as well as a maintenance interface enabling the access of general parameters (control function available up to 100m).

▲ 100% bypass, built-in to the station, fitted with servomotors that are automatically guided by integrated regulation ensuring the **FREE-COOLING** function.

▲ Perpetual pressure air-flow modulation (**LOBBY®**) to guarantee optimal energy consumption (**RT2012, EN 15232**).

- Temperature sensors (x4) integrated into the station: blowing, Intake, bypass defrosting, external temp. and for **SMART** and **INFINITE** Versions there is a sensor for the defrosting battery.
- Built in frost protection thermostat (THA) ensuring the protection of the cooling battery in **PREMIUM/INFINITE BC** versions.
- A built-in, manually reset safety thermostat (THS) ensures the protection of the electric batteries for defrosting (**SMART/INFINITE**) and for heating (**PREMIUM/INFINITE BE**).
- Weekly timer and holiday timer.

▲ The pressure switch filters new with return air on command.

- The pressure switch controls air flow at the fan blower with return settings on the command panel.
- The **C4, 400°C-1/2H** extraction unit is comes with factory settings regulation in perpetual pressure mode (**LOBBY®**) which can be adjusted from the integrated command panel. With a simple user interface it indicates setpoint and feedback values regarding network pressure..

▲ Thanks to the double flux station and unit networked control, in comfort mode, the maintenance company can remotely manage the good working order of the system and the filter contamination information. In the event of fire, unit regulation enables this situation to be identified, information which can be relayed to the relevant emergency services.

▲ In the event of fire, information can be accessed on the control panel via the temperature sensor positioned in the top of each building column, the station extraction damper can be closed and steps taken through the 2 channel module in order to bypass the extraction network, which is normally open in comfort mode from the station towards the 400°C-1/2 unit extraction network.

CLIMATE OPTION

The collective double flux kit can be set up for summer comfort as a cooling module either coupled directly to the station on the blowing function or integrated into the blowing network (circular panel interconnection with double lip joint optionally available). The cooling module is available either in a cold water (CBXBF) or direct expansion system (CBX DX).

CONFIGURATIONS AND REFERENCES

The collective double flux kit is available in different installation configurations.
The collective double flux kit is available in the different installation configurations below. The C4, 400°C-1/2H unit is installed in all positions with intake and discharge at 90°C.

EVERKIT® 1500	L	FIRST	--
①	②	③	④

① Models
EVERKIT 1500 = 1500 m³/h max
EVERKIT 3000 = 3000 m³/h max
EVERKIT 5000 = 5000 m³/h max

② Installation configuration of the turbofan power plant
Horizontal (except EVERKIT® 5000) : L and P
Vertical : W and Y

③ Climatic(s) equipment(s) included to the central
FIRST : battery not included
SMART : electric defrosting battery
PREMIUM : electric heating battery
INFINITE : pre-heating/ defrosting battery and heating battery

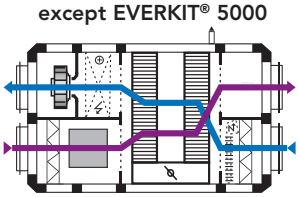
④ Heating mode
-- : none
BE : self-regulating electric heating
BC : hot water heating

Configurations

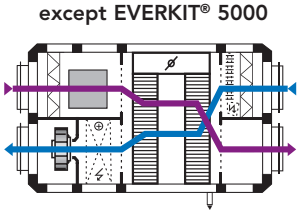
HORIZONTAL MOUNTING FLOWS SIDE BY SIDE

(View from above)

Configuration L
except EVERKIT® 5000



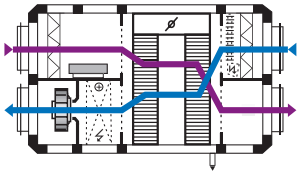
Configuration P
except EVERKIT® 5000



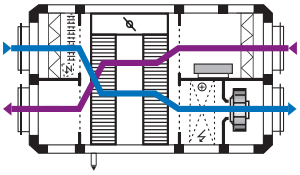
VERTICAL MOUNTING FLOWS SUPERIMPOSED

(View from access side)

Configuration W



Configuration Y



➡ Fresh air ➡ Return air

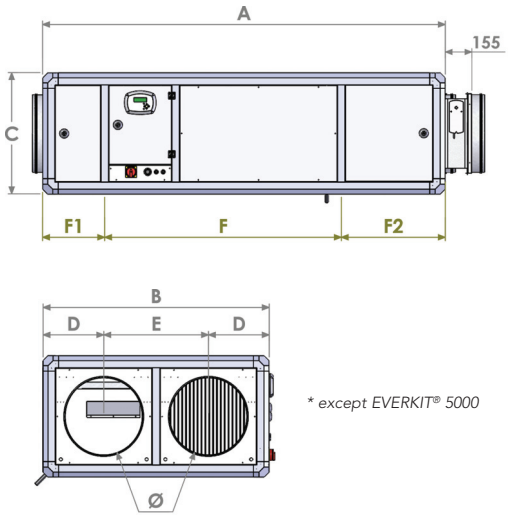
ELECTRICAL CHARACTERISTICS EVERKIT®

Model	Equipement	Elec. motor power. (W)	Use Temp. (°C/°C)	Protector sign/ Classe	Thermal Protec.*	FIRST PREMIUM BC		INFINITE BC-SMART		PREMIUM BE			INFINITE BE		
						Supply power (V/Ph/Hz)	Protection intensity (A)	Supply power (V/Ph/Hz)	Protection intensity (A)	Supply power (V/Ph/Hz)	Electric Bat.power (kW)	Protection intensity (A)	Supply power (V/Ph/Hz)	Electric Bat. power (kW)	Protection intensity (A)
EVERKIT 1500	Power plant	480	-20/40	IP54/B	PTI	230/1/50	2,2	400/3+N/50	9,8	230/1/50	3,75	18,5	400/3+N/50	5,25	17,5
	Box	360	-20/40	IP54/F	PTI	230/1/50	1,9	-	-	-	-	-	-	-	-
EVERKIT 3000	Power plant	1000	-20/55	IP54/B	PTI	400/3+N/50	1,6	400/3+N/50	13,5	400/3+N/50	6,75	11,4	400/3+N/50	6,75	23,3
	Box	650	-20/40	IP54/F	PTI	230/1/50	3,5	-	-	-	-	-	-	-	-
EVERKIT 5000	Power plant	1700	-20/40	IP54/B	PTI	400/3+N/50	2,6	400/3+N/50	28,6	400/3+N/50	6,75	12,3	400/3+N/50	6,75	38,3
	Box	1200	-20/40	IP54/F	PTI	400/3/50	2,7	-	-	-	-	-	-	-	-

** PTI : Integrated thermal protection*

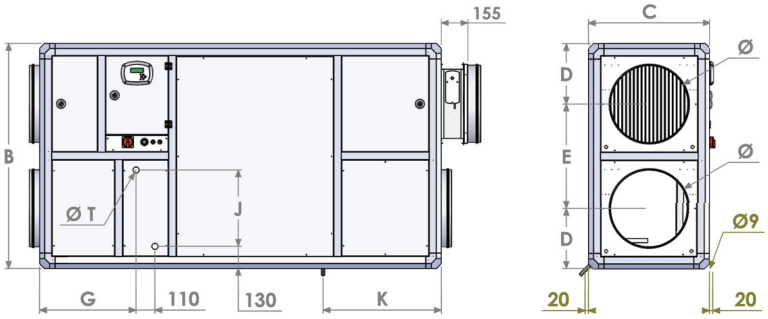
DIMENSIONS CHARACTERISTICS EVERKIT®

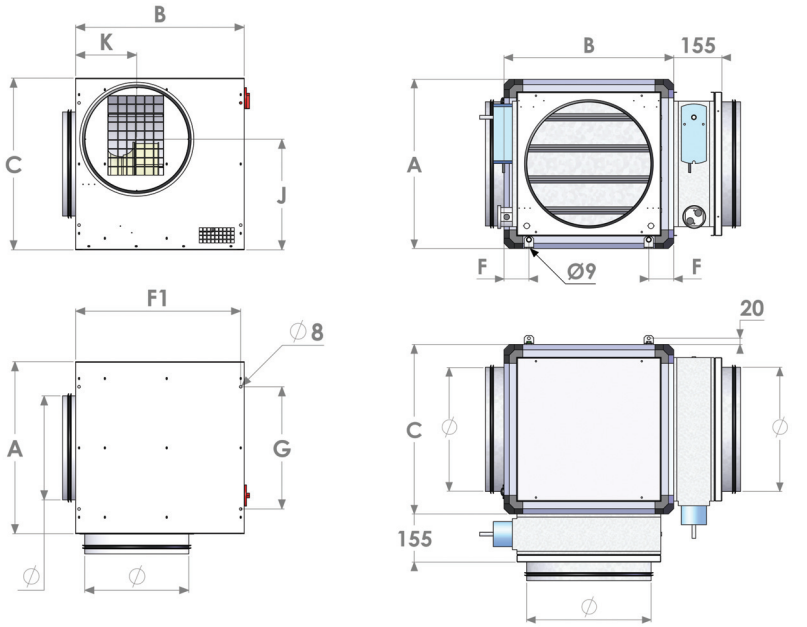
HORIZONTAL MOUNTING*



** except EVERKIT® 5000*

VERTICAL MOUNTING





Model	Equipement	Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	F1 mm	F2 mm	G mm	J mm	K mm	FIRST kg	SMART kg	PREMIUM kg	INFINITE kg
EVERKIT 1500	Power plant	400	2230	1115	605	305	505	1261	362	607	565	345	690	289	292	294	297
	Box	315	520	510	520	390	___	___	490	___	370	335	185	35	35	35	35
	Two-ways module	400	545	545	545	___	___	80	___	___	___	___	___	41	41	41	41
EVERKIT 3000	Power plant	500	2625	1515	805	405	705	1520	450	655	640	545	740	523	527	533	537
	Box	450	650	565	650	550	___	___	545	___	450	410	240	50	50	50	50
	Two-ways modules	500	745	745	745	___	___	80	___	___	___	___	___	66	66	66	66
EVERKIT 5000	Power plant*	630	2970	1715	1030	455	805	1677	535	758	685	645	840	687	694	702	709
	Box	500	730	670	730	650	___	___	650	___	550	460	290	63	63	63	63
	Two-ways module	630	845	845	970	___	___	100	___	___	___	___	___	81	81	81	81

** Available only in vertical configuration*

The Lp4m dB(A) curves correspond to a 4m level of acoustic pressure in a hemispherical free field over a reflecting plane, with the "new air intake" and "air return discharge" sides not associated, and "blown new air" and "extracted intake air" sides associated.
To achieve the overall acoustic pressure Lp dB(A), at a certain distance, add the values below to Lp4m.

Distance (m)	1,5	3	4	5	7	10
Distance weighting dB(A)	9	3	0	-2	-5	-8

The curves for "Lw new blown air cond dB(A)" correspond to the overall acoustic power emitted on the "new blown air" side.
To achieve the sound power spectrum "Lw cond new blown air dB(A)", add the values below to the acoustic power "Lw new blown air cond" read on the curves.

① Lw new blown air condition in dB(A) Frequence	63 [Hz]	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Global
EVERKIT 1500	-31	-19	-11	-8	-5	-5	-12	-19	0
EVERKIT 3000	-38	-30	-14	-11	-5	-4	-9	-13	0
EVERKIT 5000	-38	-31	-14	-11	-5	-5	-8	-13	0

To achieve the sound power spectrum "Lw new air intake cond dB(A)", add the values below to the acoustic power "Lwnew blown air cond" read on the curves.

② Lw New air intake condition in dB(A) Frequence	63 [Hz]	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Global
EVERKIT 1500	-30	-22	-17	-15	-15	-17	-23	-30	-9
EVERKIT 3000	-44	-34	-19	-18	-21	-18	-23	-27	-12
EVERKIT 5000	-43	-36	-19	-18	-21	-18	-23	-26	-12

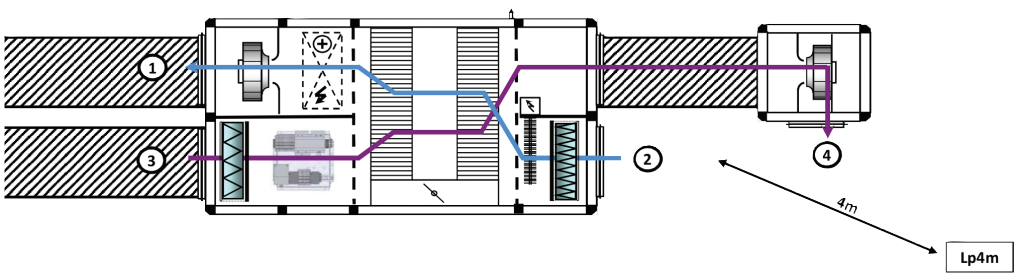
The curves for "Lw air intake extraction cond dB(A)" correspond to the overall acoustic power emitted on the "air intake extraction" side.
To achieve the sound power spectrum "Lw cond air intake extraction dB(A)", add the values below to the acoustic power "Lw air intake extraction cond" read on the curves.

③ Lw Air intake extraction condition in dB(A) Frequence	63 [Hz]	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Global
EVERKIT 1500	-22	-7	-8	-9	-6	-9	-13	-24	0
EVERKIT 3000	-23	-9	-6	-5	-10	-10	-16	-24	0
EVERKIT 5000	-19	-8	-12	-4	-8	-9	-15	-24	0

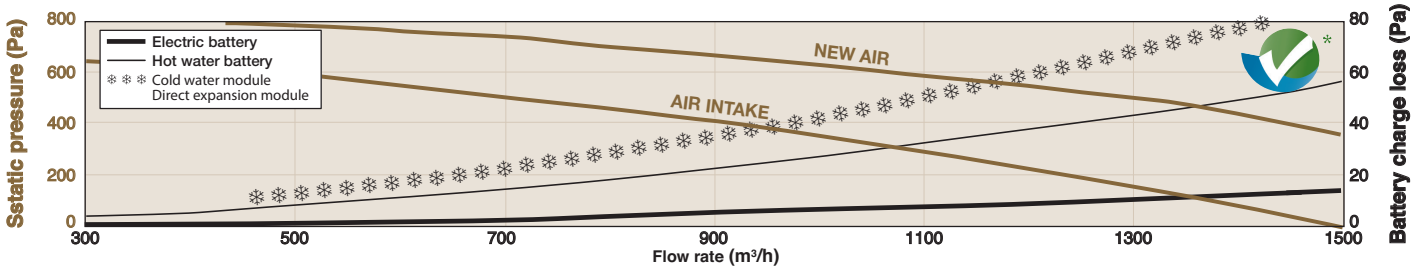
To achieve the sound power spectrum "Lw intake air discharge cond dB(A)", add the values below to the acoustic power "Lw intake air discharge cond" read on the curves.

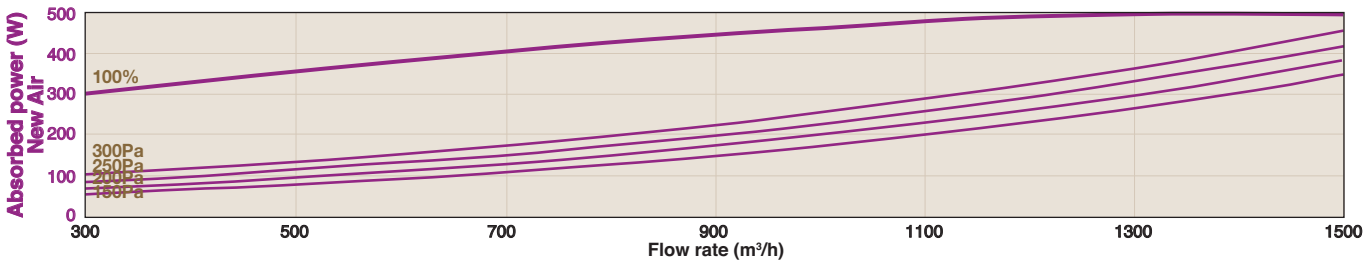
④ Lw Air intake extraction condition in dB(A) Frequence	63 [Hz]	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Global
EVERKIT 1500	-23	-2	0	0	4	5	1	-8	10
EVERKIT 3000	-23	-7	1	0	2	1	-3	-12	8
EVERKIT 5000	-15	-6	0	0	3	1	-4	-13	8

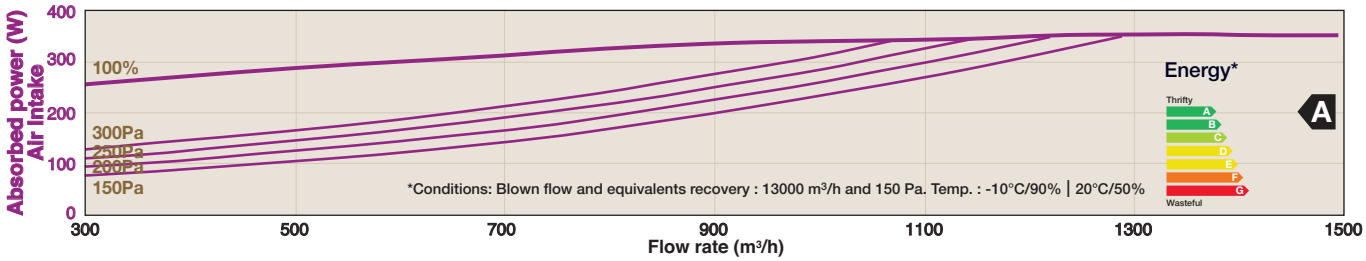
Tolerance : Overall values +/- 3 dB(A)
Acoustic spectrum +/- 5 dB(A)

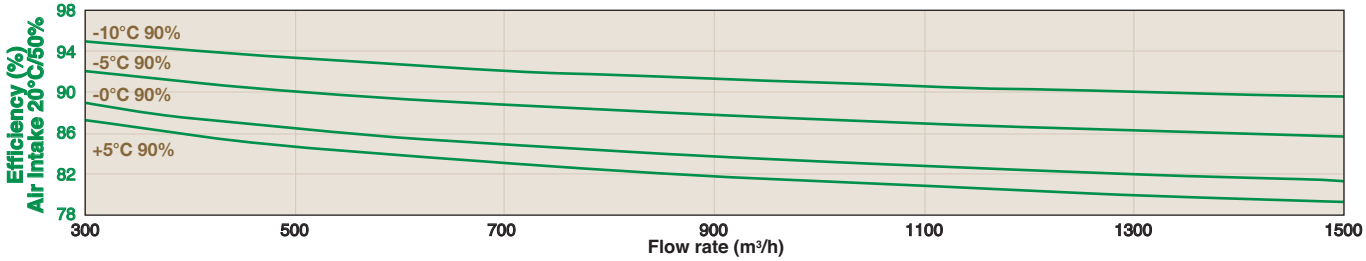


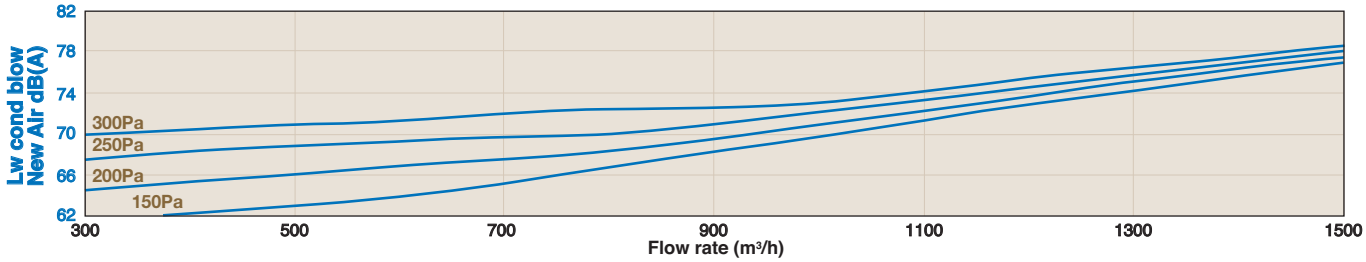
EVERKIT® 1500

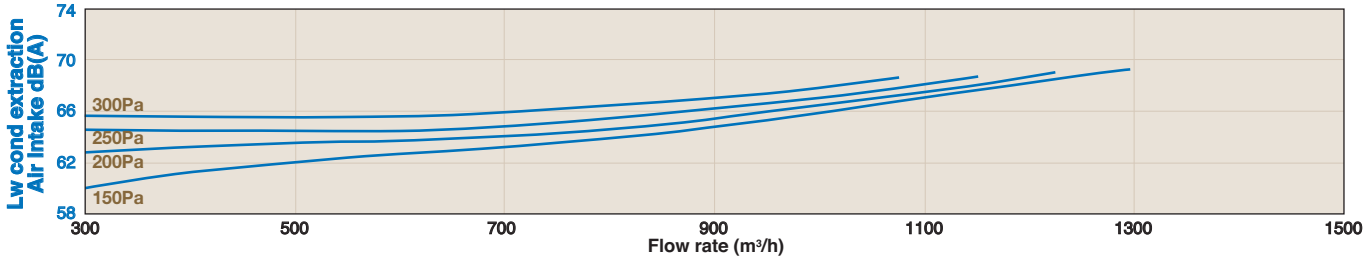


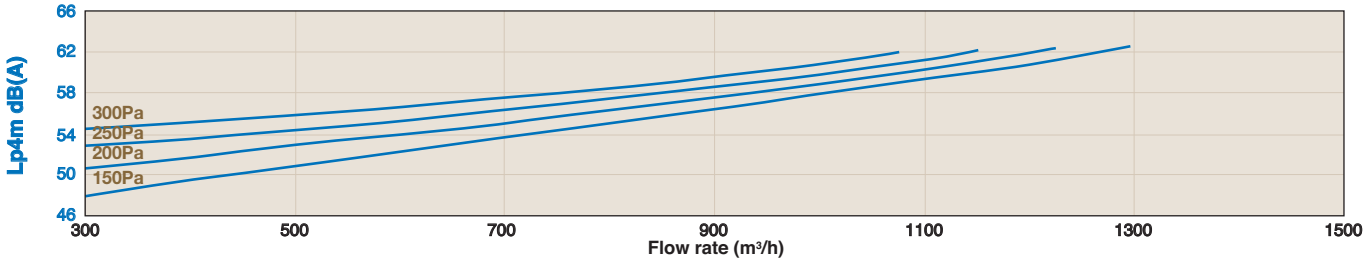




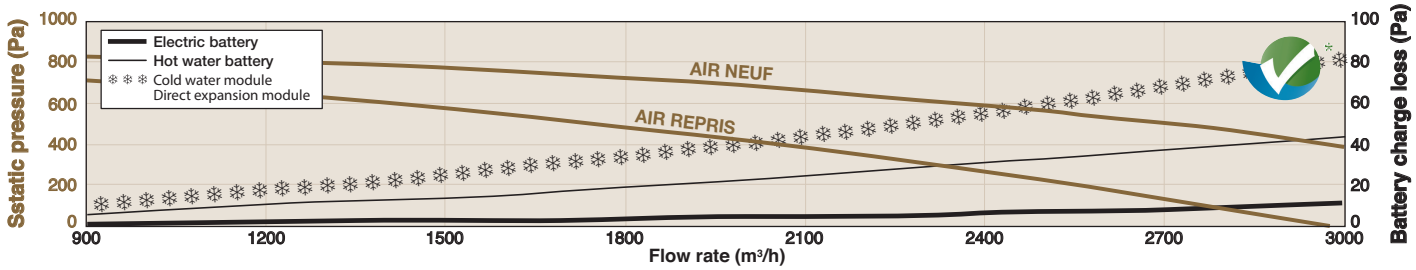


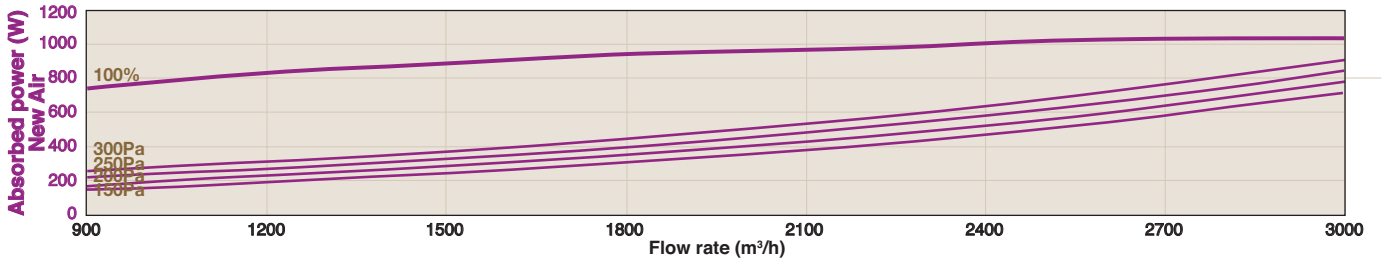


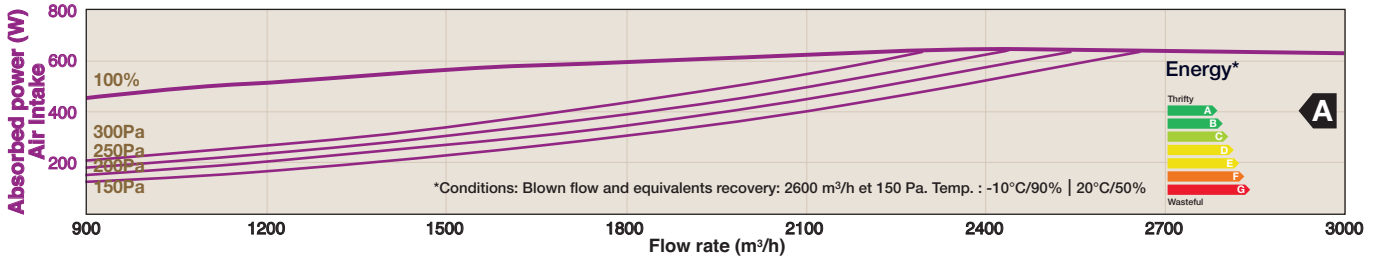


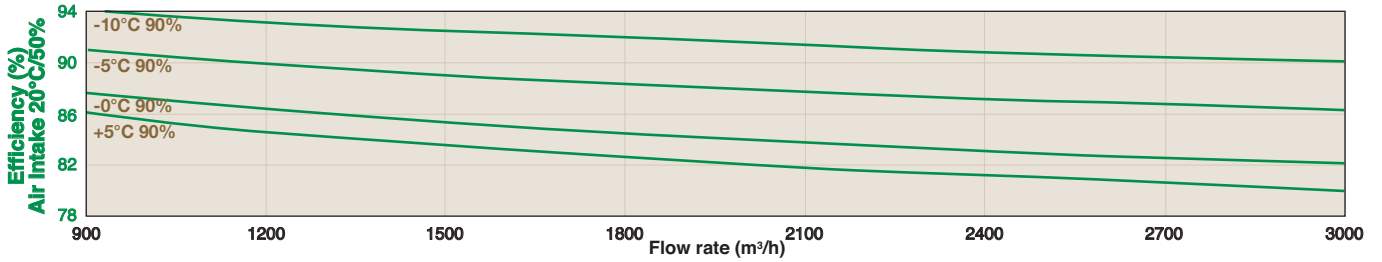


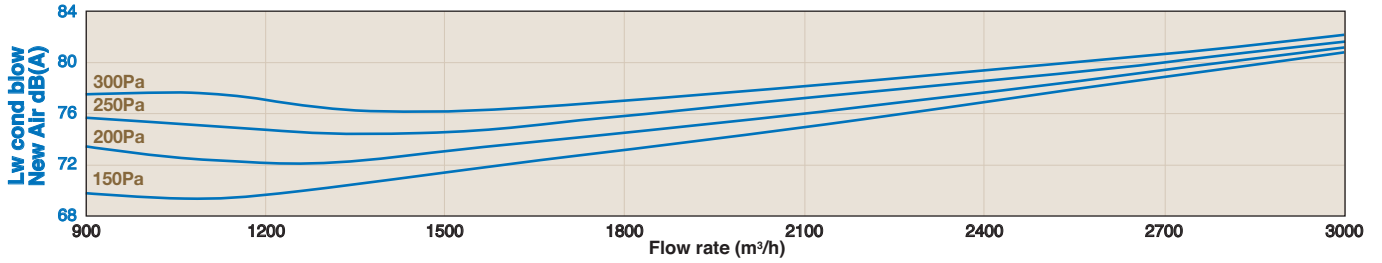
EVERKIT® 3000

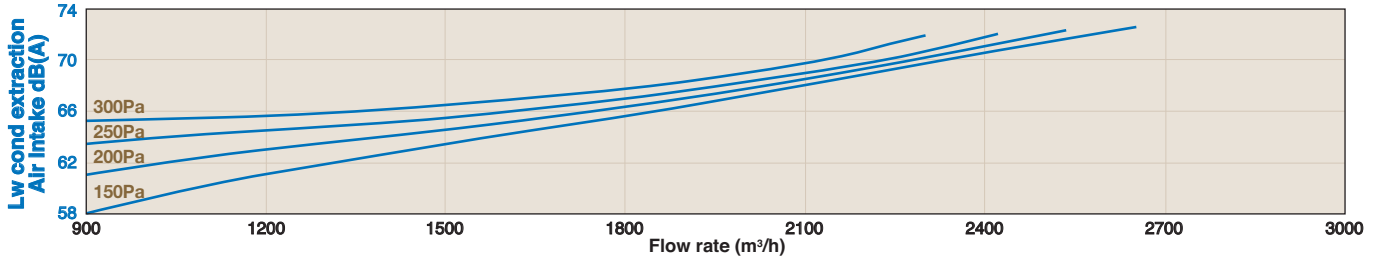


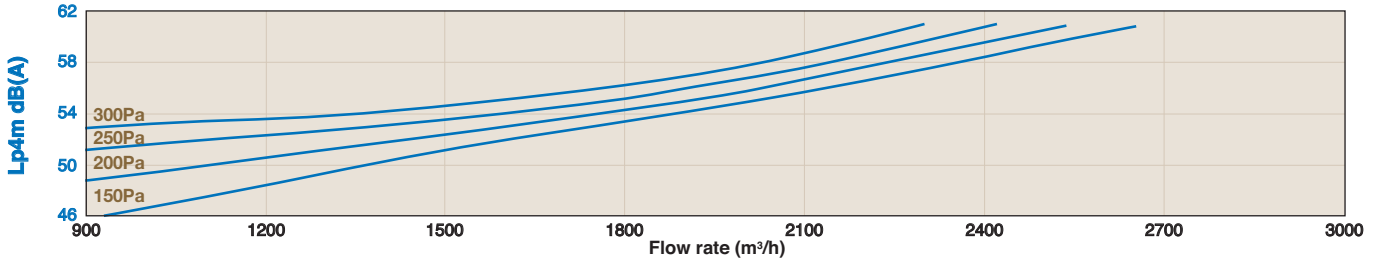




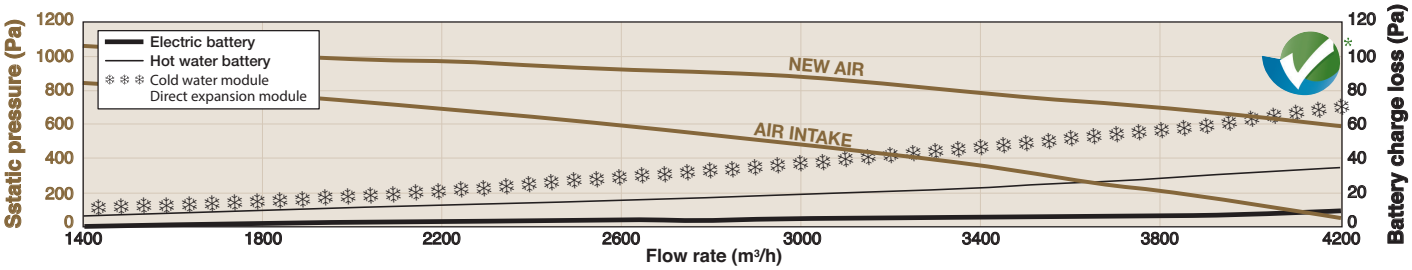


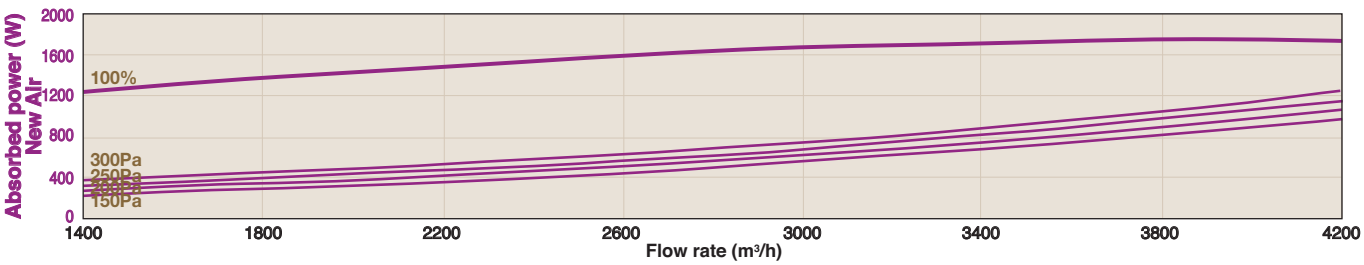


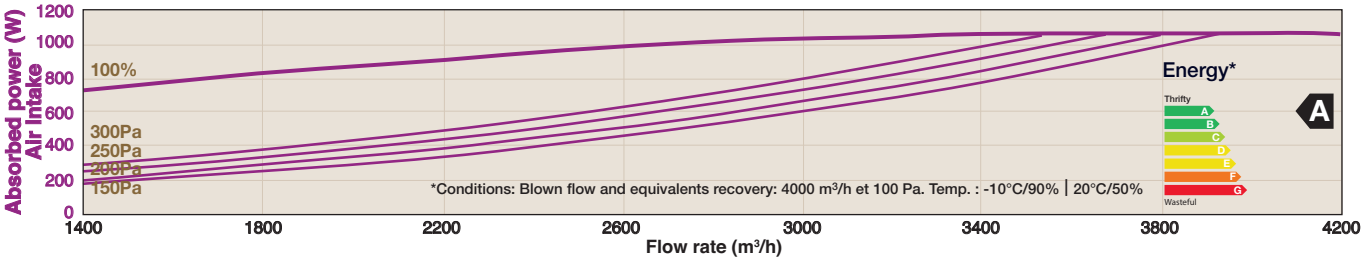


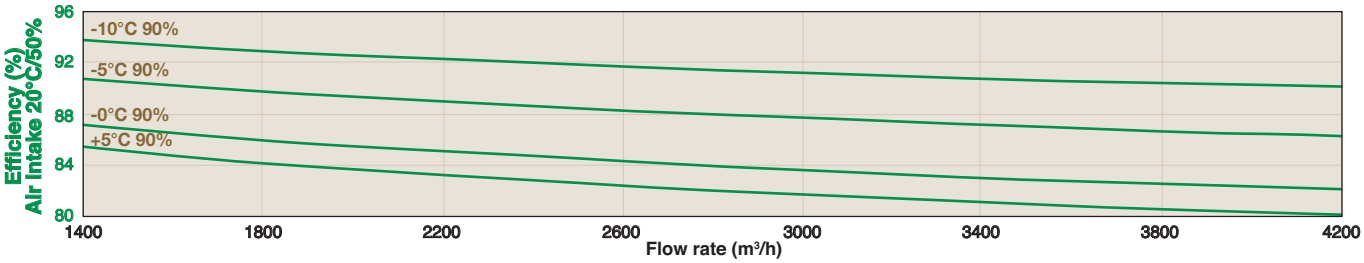


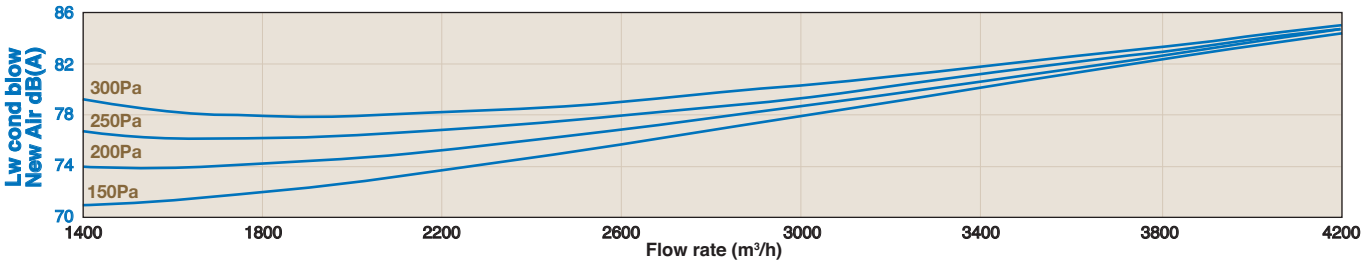
EVERKIT® 5000

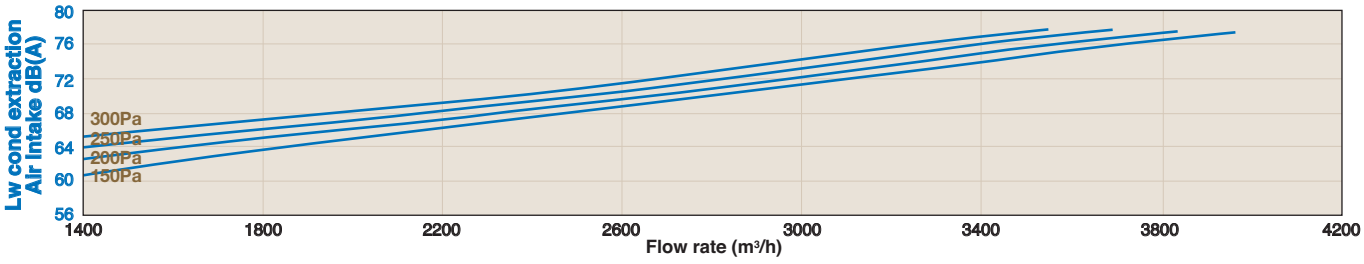


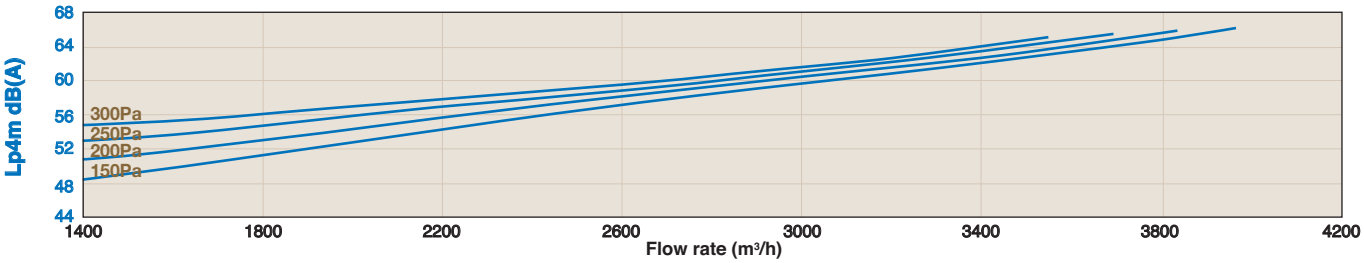












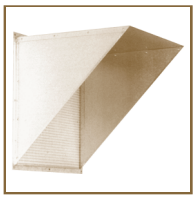
RAIN COVER réf. DPC

For station outdoor assembly EVERKIT®. RAL 7035 pre-lacquered metal.

CHAMFERED DUCT TERMINATION WITH MESH ref. BBG

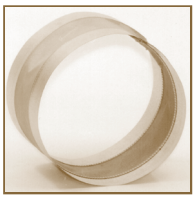
Function: rain and bird protection for the horizontal discharge (HH) from units located externally.

Diameter of branch connections: 315, 450 and 500 mm.



RAIN HOOD ref. AGC

With safety and bird protection mesh for EVERKIT® units.



FLEXIBLE MO SLEEVE ref. MTS MO

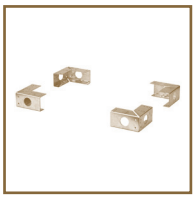
Function: circular connection to ventilation system.

Diameter of branch connections: 160 to 800 mm.

FLAT COVER FOR VERTICAL DISCHARGE ref. CP

Function: rain protection for units with vertical discharge (HV) installed outside.

Diameter of branch connections: 315, 450 and 500 mm.



SUPPORT LEGS réf. PCB (set of 4 legs for the EVERKIT station 1500 et 3000, 6 for EVERKIT 5000)

To raise your stations out of the water. Height 90 mm.

SOLENOID VALVE KIT

Set of 3-way valves, threaded couplings (3) and 0-10V valve motor for **PREMIUM** and **INFINITE BC**.

Available in IP41 (interior fitting) or IP54 (exterior fitting).