CALADAIR

HEXAMOTION™

The best in **compact heat recovery** unit with **ultra-high** energy recovery efficiency and stacked airflows.

+ Compact
+ Hygienic
+ Easy maintenance



BENEFITS

- Self-supporting frame paired with an **EUROVENT-certified L1-D1-T2-TB2-F9** casing (60 mm double skin) for outstanding thermal break performance and unmatched structural rigidity.
- Single, centralized access to controls and **100% removable components**, ensuring fast servicing and simplified hygiene.
- New set of **seals, handles, and ergonomic** hinges for perfect compression, extended durability, and a modern look.
- Full flexibility with a **protective roof kit** and the option to integrate high-efficiency **pocket filters.**
- A solution certified **EUROVENT AHU N° 21.03.072 BLUETECH** and compatible with the hygiene requirements of **VDI 6022 and VDI 3803.**






APPLICATIONS

Shops and neighborhood retail: Enhances the customer experience with clean, refreshed air in a compact, side-by-side airflow design—ideal for maximizing sales floor space while stayinglow-profile.

Healthcare and sensitive settings (nursing homes, clinics, medical offices): Impeccable hygiene and a calm, comfortable atmosphere thanks to a design aligned with VDI 6022 and VDI 3803 standards, paired with high-performance energy recovery for resident comfort.

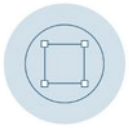
Schools and educational facilities: Better focus thanks to ventilation that's clean and quiet, meeting Indoor Air Quality (IAQ) requirements to support the well-being of students and teachers.

Offices, open-plan workspaces, and meeting rooms: Consistently clean air and optimal thermal comfort—even at peak occupancy—thanks to built-in smart controls that adjust to real-time needsbased on how many people are present.

DESCRIPTION

The Hexamotion is a highly energy-efficient dual flow air handling unit with energy recovery and stacked horizontal airflows, designed for installations where space is limited. Its monobloc design (up to size 45) makes it easy to fit into tight mechanical rooms while ensuring excellent airtightness. It features circular duct connections up to size 27. Beyond this size, rectangular duct connections are provided for simplified air duct installation. The unit uses a high-efficiency rotary heat exchanger and EC motor-driven fans made from composite materials to reduce energy consumption and operating costs. For hygiene, it includes a double-slope stainless-steel condensate pan compliant with VDI 6022 and VDI 3803, supporting healthy indoor air quality and easier maintenance.

CONSTRUCTION



Structure

- Self-supporting frame with thermal break
- Double-skin galvanized steel panels with pre-painted finish, RAL 7035
- High-airtightness assembly (L1) and rigid structure (D1)
- Compact monobloc casing (up to size 45) for easier installation



Insulation

- Thermal and acoustic rock wool insulation, 60 mm thick – density 30 kg/m^3
- High-performance T2 thermal insulation with TB2-certified thermal break
- Maximum reduction of heat loss and sound transmission



Fan motors

- Ultra-low-energy EC motors with high efficiency
- Reaction impellers for quieter operation and lower power draw
- Precise airflow control for optimal energy performance



Heat Exchanger

- Static counterflow aluminum plate heat exchanger
- High heat-recovery efficiency: more than 80% for maximum energy recovery



Controls

- Latest-generation built-in controller – Plug & Play solution
- 5 control modes available (ECO, DIVA, MAC2, QUATTRO, LOBBY) – see section “Airflow modulation”
- Smart control of the bypass, temperatures, and safety protections, including free cooling, free heating, and night cooling functions



Filtration

- Standard: ePM10 50% (M5) flat filter on return air / ePM1 55% (F7) filter on outdoor air
- Optional: Additional ePM1 55% (F7) or ePM1 80% (F9) filters—flat or bag style—for two-stage CLEARDUST™ filtration
- Slide-mounted assembly: Rail system with airtight seals for quick replacement without air leakage.



Roof

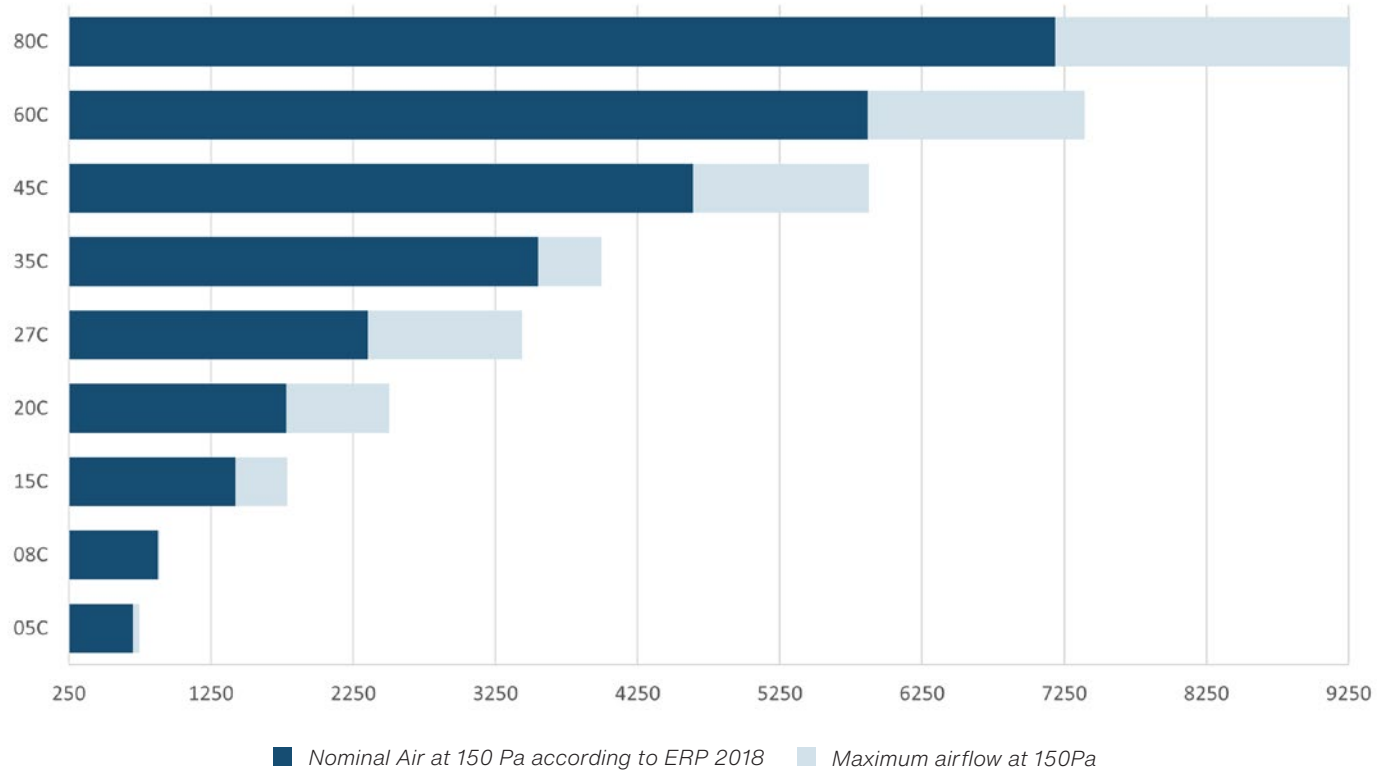
- Dedicated technical roof for outdoor installation
- Enhanced weatherproofing with integrated rainwater drainage
- Optional roof supplied as a kit to be installed on site
- Minimum 3% slope for efficient rainwater runoff
- Sleek design for seamless integration

PRODUCT DESIGNATION

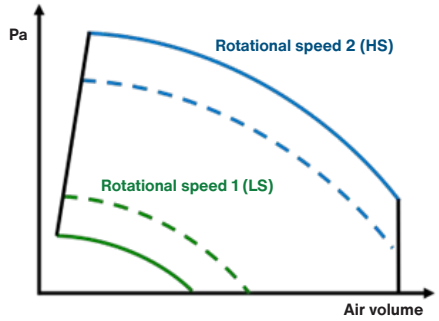
HEXAMOTION 05CSF L SMART LOB

Range	Size	Fan material	Exchanger material	Option	Configuration	Climate version	Airflow control
HEXAMOTION	**05**	**C**omposite	**S**orption wheel	**F**EE module	**L**eft	**SMART**	**LOB**BY
	08	**M**etal			**R**ight	**SEASON**	**QUA**TTRO
	15					**FIRST**	**MAC**2
	20					**PRE**MIUM**BE**	**DIV**A
	27					**PRE**MIUM**CO**	**ECO**
	35					**PRE**MIUM**DX**	
	45						
	60						
	80						

AIRFLOW RANGES

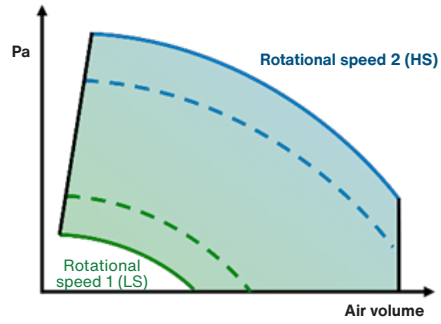


AIRFLOW MODULATION



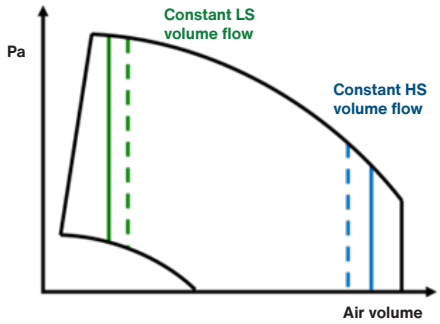
- **Zoning:** Single zone
- **Control:** 2 speeds HS/LS
- **Monitoring:** Timer/Manual

ECO™



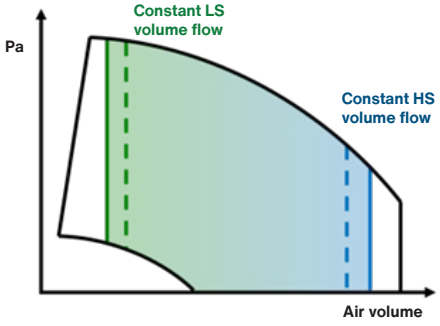
- **Zoning:** Single zone
- **Control:** Air volume modulation
- **Monitoring:** CO_2

DIVA™



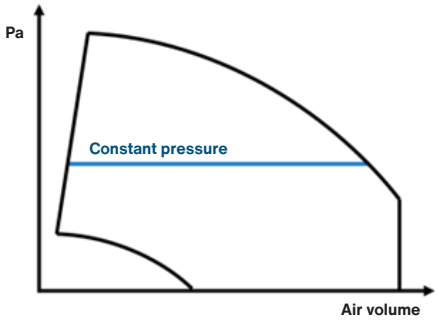
- **Zoning:** Single zone
- **Control:** Constant volume flow
- **Monitoring:** Pressure transmitter

MAC2™



- **Zoning:** Single zone
- **Control:** Variable between 2 constant volume flow
- **Monitoring:** Pressure transmitter + CO_2

QUATTRO™

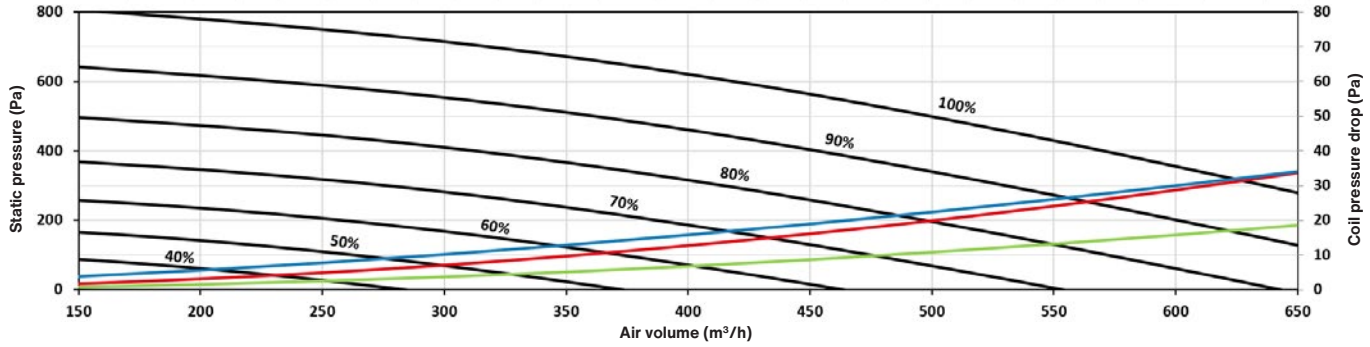


- **Zoning:** Multi-zone
- **Control:** Constant pressure
- **Contrôle:** Pressure transmitter

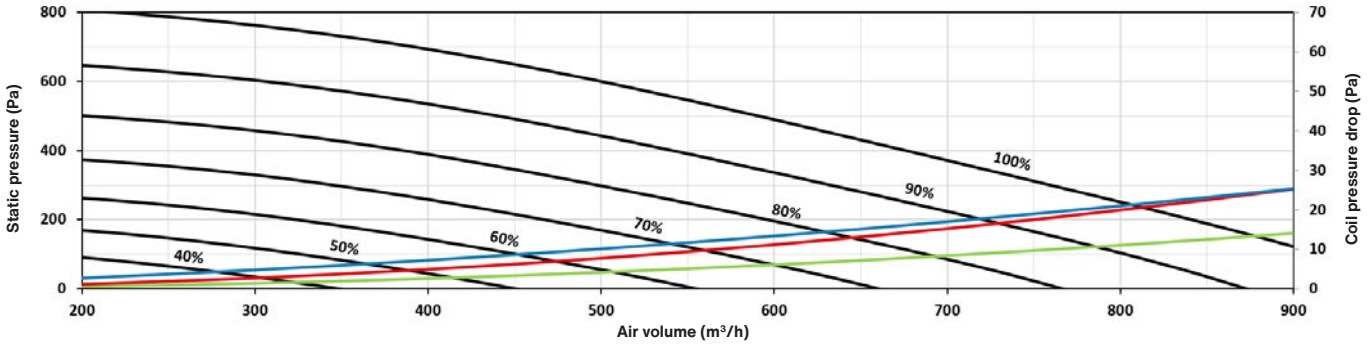
LOBBY™

AIR PERFORMANCE CURVES

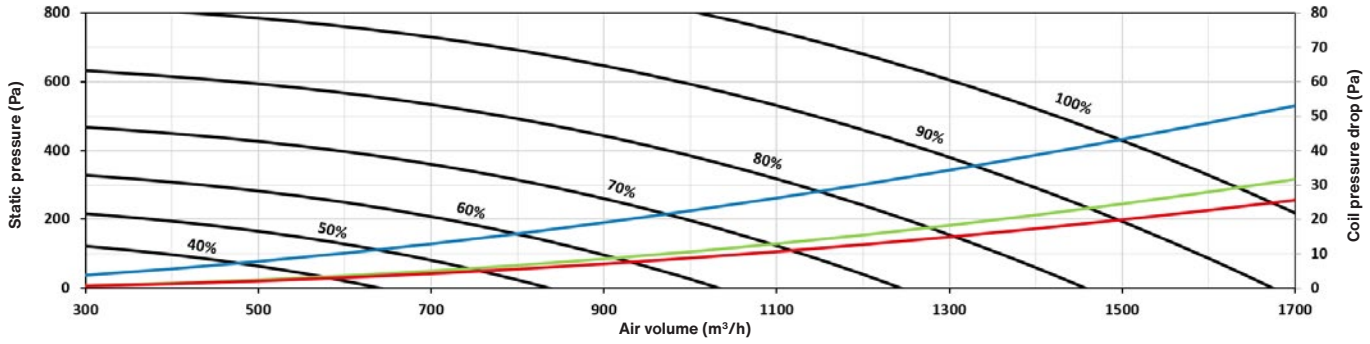
HEXAMOTION 05C



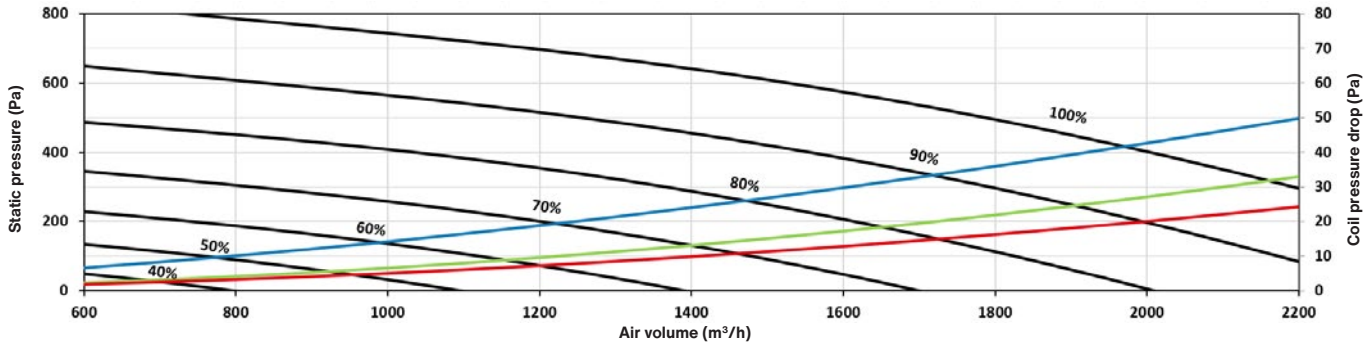
HEXAMOTION 08C



HEXAMOTION 15C

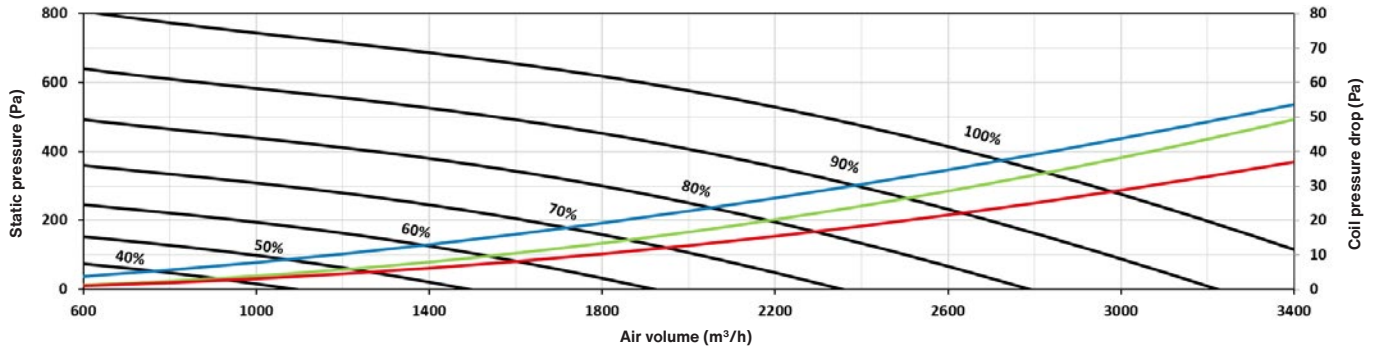


HEXAMOTION 20C

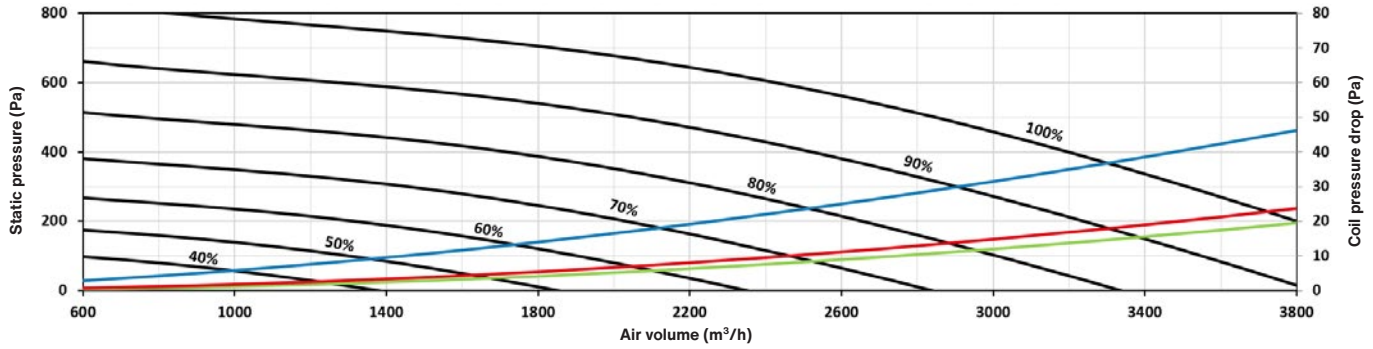


FIRST — BE Electric coil — CO/DX Changeover coil — FEE Module

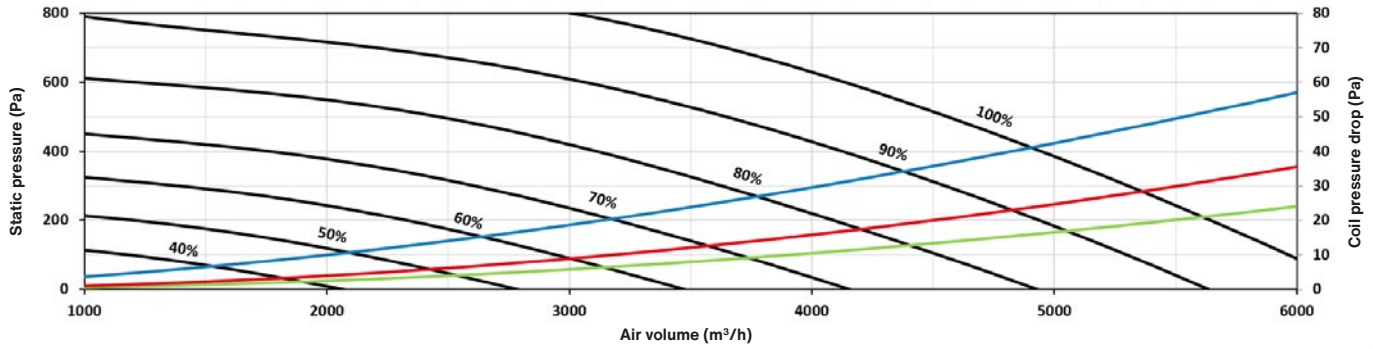
HEXAMOTION 27C



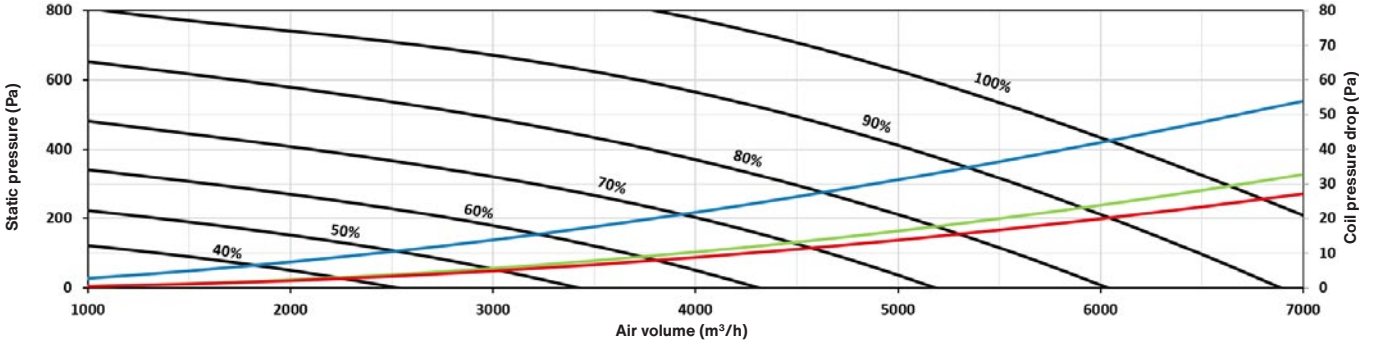
HEXAMOTION 35C



HEXAMOTION 45C

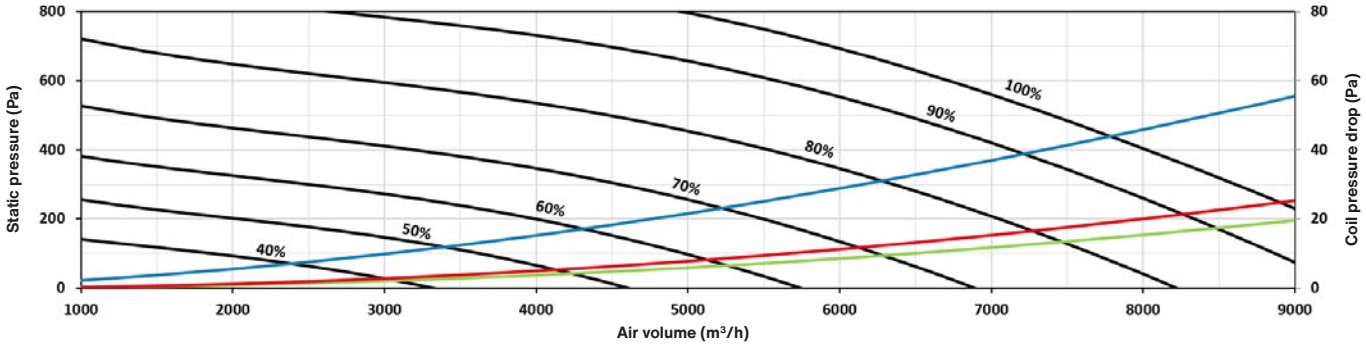


HEXAMOTION 60C



FIRST BE Electric coil CO/DX Changeover coil FEE Module

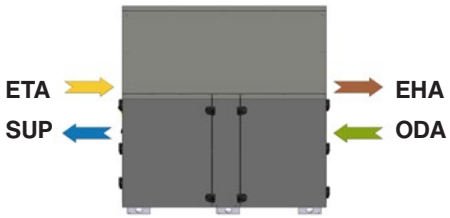
HEXAMOTION 80C



CONFIGURATION

HEXAMOTION 05 to 80

Left version (L)

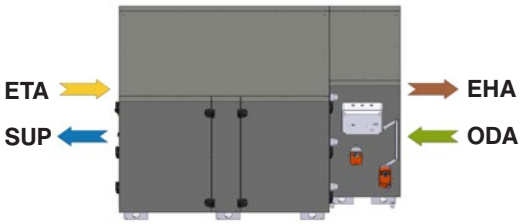


Right version (R)

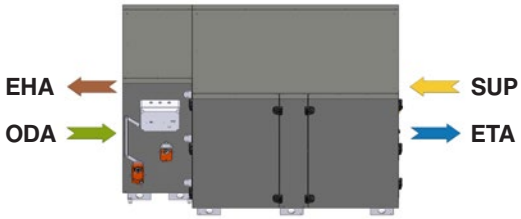


HEXAMOTION 05 to 80 FEE

Left version (L)



Right version (R)



ELECTRICAL SPECIFICATIONS

	Operating temperature	Protection type	Fan material	Smoke detector	Thermal protection class	Motor power
HEXAMOTION 05C	-25°C / 60°C	IP54 / B	Composite		ITP	2x170 W
HEXAMOTION 08C	-25°C / 60°C	IP54 / B	Composite		ITP	2x170 W
HEXAMOTION 15C	-25°C / 45°C	IP54 / B	Composite	Option	ITP	2x500 W
HEXAMOTION 20C	-25°C / 60°C	IP55 / F	Composite	Option	ITP	2x700 W
HEXAMOTION 27C	-25°C / 40°C	IP55 / F	Composite	Option	ITP	2x1000 W
HEXAMOTION 35C	-25°C / 40°C	IP55 / F	Composite	Option	ITP	2x1000 W
HEXAMOTION 45C	-25°C / 50°C	IP55 / F	Composite	Option	ITP	2x1500 W
HEXAMOTION 60C	-25°C / 40°C	IP55 / F	Composite	Option	ITP	2x2000 W
HEXAMOTION 80C	-25°C / 40°C	IP55 / F	Composite	Option	ITP	2x2500 W

*ITP: Integrated thermal protection

	SEASON / FIRST / PREMIUM CO				PREMIUM BE			
	Electrical power	Preheater power	Reheater power	Voltage	Electrical power	Preheater power	Reheater power	Voltage
05C	3,4 A			230V / 1Ph / 50Hz	14,3 A	2,5kW		230V / 1Ph / 50Hz
08C	3,4 A			230V / 1Ph / 50Hz	19,7 A	3,75kW		230V / 1Ph / 50Hz
15C	5 A			230V / 1Ph / 50Hz	9,8 A	5,25kW		400V / 3Ph + N / 50Hz
20C	7,6 A			230V / 1Ph / 50Hz	18,7 A	10,5kW		400V / 3Ph + N / 50Hz
27C	5,2 A			400V / 3Ph + N / 50Hz	24,7 A	13,5kW		400V / 3Ph + N / 50Hz
35C	5,2 A			400V / 3Ph + N / 50Hz	29,1 A	16,5kW		400V / 3Ph + N / 50Hz
45C	5,2 A			400V / 3Ph + N / 50Hz	39,9 A	24kW		400V / 3Ph + N / 50Hz
60C	6,8 A			400V / 3Ph + N / 50Hz	58,8 A	36kW		400V / 3Ph + N / 50Hz
80C	8,4 A			400V / 3Ph + N / 50Hz	77,7 A	48kW		400V / 3Ph + N / 50Hz

WEIGHT

Without FEE module

	FIRST	SEASON	PREMIUM CO	PREMIUM DX	PREMIUM BE
	kg	kg	kg	kg	kg
05C	160	160	167	167	167
08C	188	188	195	195	196
15C	233	233	241	241	242
20C	264	264	273	273	274
27C	320	320	333	333	331
35C	360	360	375	375	372
45C	440	440	463	463	455
60C	259+246*	259+246*	259+272*	259+272*	259+264*
80C	372+302*	372+302*	372+333*	372+333*	372+323*

*Module récupérateur + Module régulation

With FEE module

	FIRST	SEASON	PREMIUM CO	PREMIUM DX	PREMIUM BE
	kg	kg	kg	kg	kg
05C	221	221	228	228	228
08C	267	267	275	275	276
15C	313	313	321	321	321
20C	353	353	362	362	363
27C	418	418	431	431	429
35C	472	472	487	487	484
45C	572	572	595	595	587
60C	259+246+140**	259+246+140**	259+272+140**	259+272+140**	259+264+140**
80C	372+302+155**	372+302+155**	372+333+155**	372+333+155**	372+323+155**

**Module récupérateur + Module régulation + Module FEE

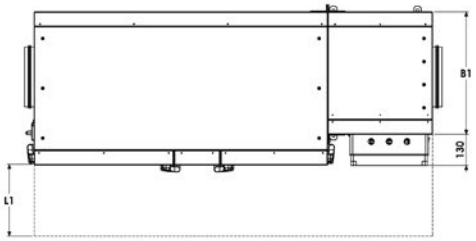
DIMENSIONS

	A	A1	A2	B	B1	C	D	D1	E	E1	E2	J
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
05C	1230		440	640	515	945	270		410	210		165
08C	1250		580	770	620	1020	350		425	240		185
15C	1660		580	770	620	1020	360		420	240		185
20C	1660		580	850	670	1100	380		525	265		180
27C	1720		580	940	760	1295	450		590	310		190
35C	1720		580	1105	925	1295	700	110	400	135	150	190
45C	1940		580	1230	1050	1575	800	150	400	155	205	190
60C	935	1120	580	1430	1155	1575	800	250	500	125	220	200
80C	1035	1220	580	1510	1355	1735	1100	150	600	125	200	200

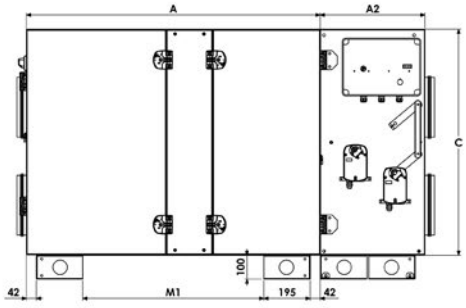
	J1*	J2	J3	K	L1	M	M1	M2	T1*	T2*	Ø
	mm	mm	mm	mm	mm	mm	mm	mm	inch	inch	mm
05C	295			100	620	210	760		1/2"-3/8"	1/2"	250
08C	365			100	700	340	780		1/2"-5/8"	1/2"	315
15C	365			100	790	340	435	560	1/2"-5/8"	1/2"	355
20C	400			100	790	420	435	560	1/2"-3/4"	1/2"	400
27C	510			100	870	510	500	560	1/2"-7/8"	1/2"-5/8"	450
35C	510			100	1030	675	500	560	3/4"-7/8"	3/4"-5/8"	
45C	660-350	420	660	115	1150	800	640	635	1"-3/4"	1"-1/2"	
60C	665-355	425	665	115	1350	995	690	505	1"-7/8"	1"-5/8"	
80C	745-390	470	745	115	1440	1075	790	605	1"-1"1/8	1"-3/4"	

*T1 for PREMIUM CO version (changeover) and T2 for PREMIUM DX version (direct expansion)

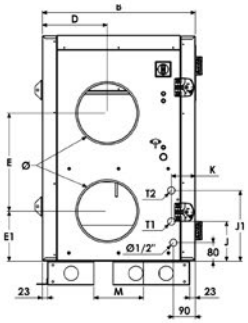
HEXAMOTION LR 05-08 FEE*



Top view

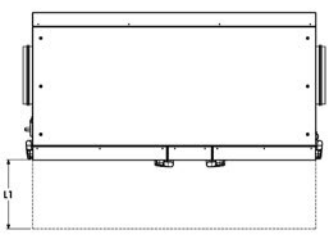


Front view

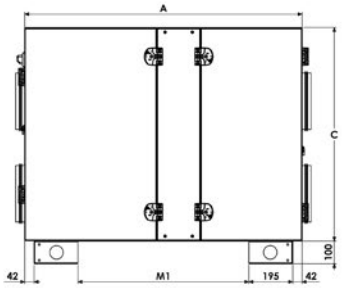


Left view

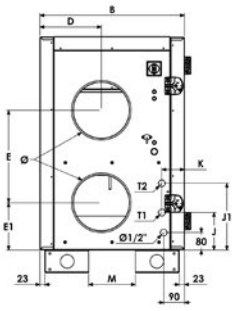
HEXAMOTION LR 05-08*



Top view



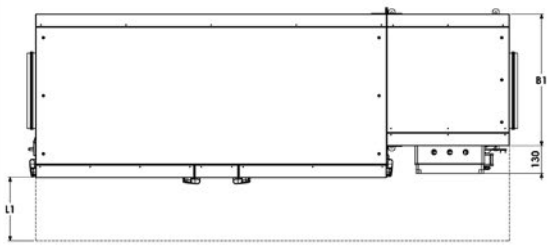
Front view



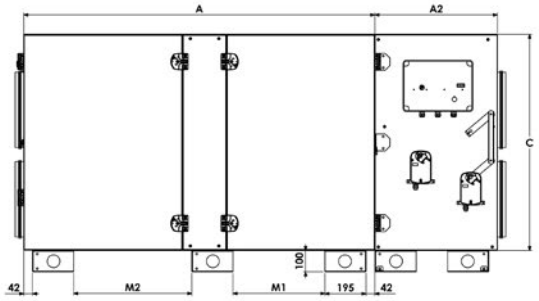
Left view

*Drawings in L configuration

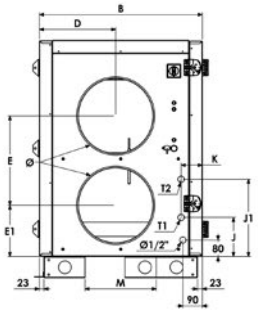
HEXAMOTION LR 15-27 FEE*



Top view

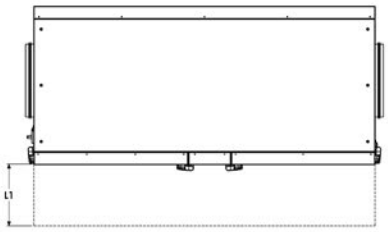


Front view

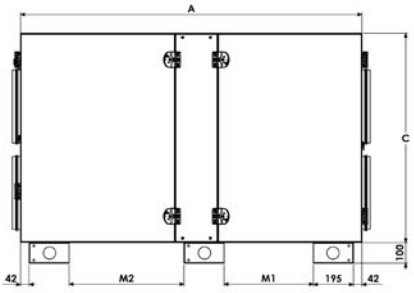


Left view

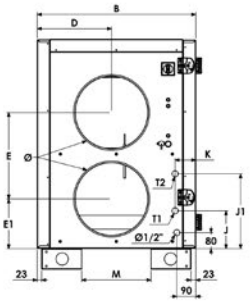
HEXAMOTION LR 15-27*



Top view

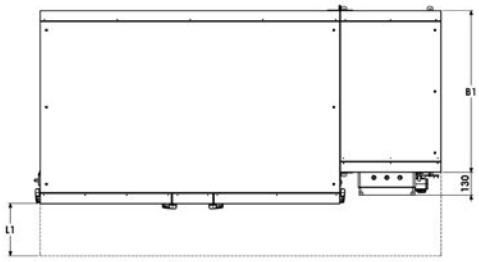


Front view

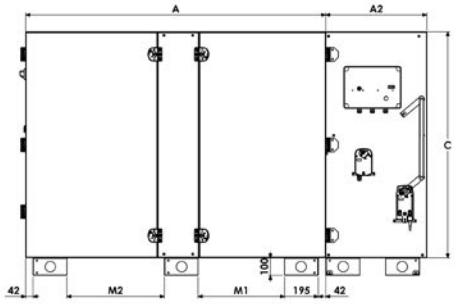


Left view

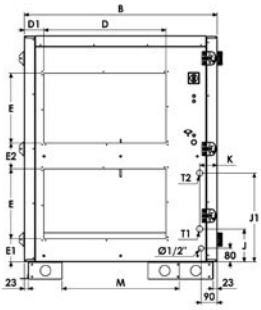
HEXAMOTION LR 35 FEE*



Top view

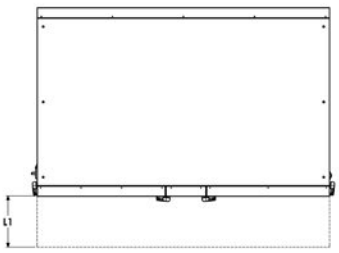


Front view

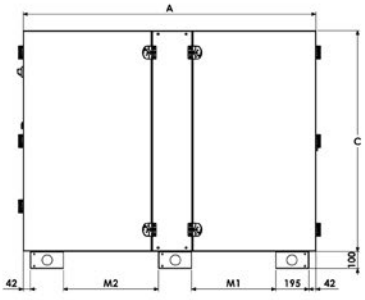


Left view

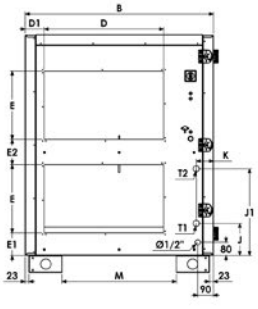
HEXAMOTION LR 35*



Top view



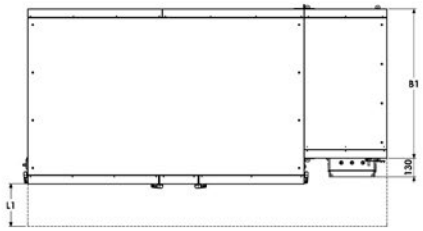
Front view



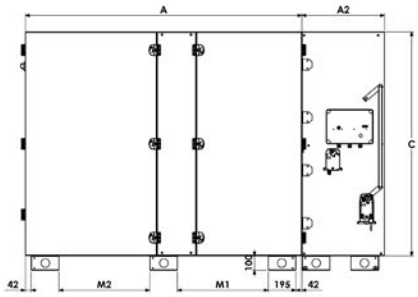
Left view

*Drawings in L configuration

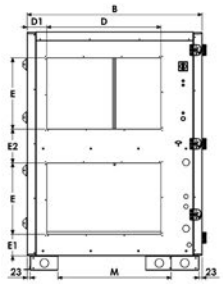
HEXAMOTION LR 45 FEE*



Top view

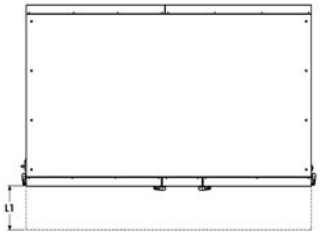


Front view

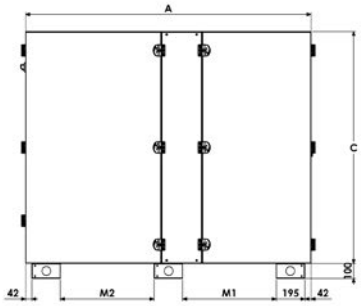


Left view

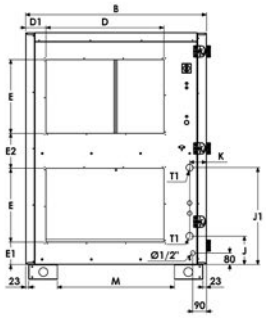
HEXAMOTION LR 45*



Top view

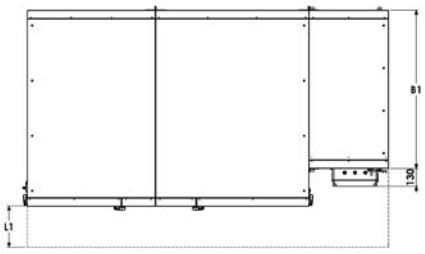


Front view

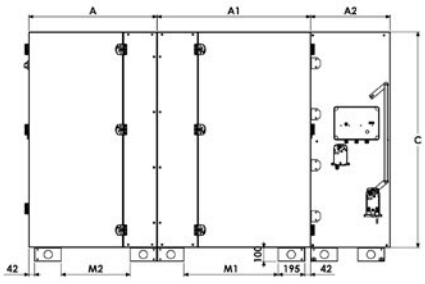


Left view

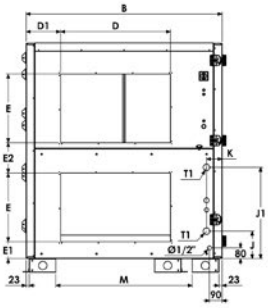
HEXAMOTION LR 60-80 FEE*



Top view

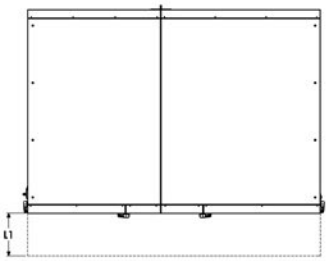


Front view

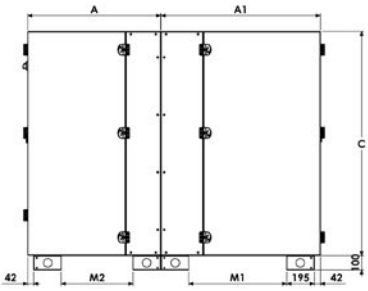


Left view

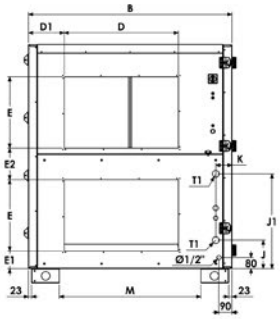
HEXAMOTION LR 60-80*



Top view



Front view



Left view

*Drawings in L configuration

ACCESSIBILITY & MAINTENANCE

1 Roof with a rain barrier

Essential equipment for any outdoor installation.

- **Supplied as a kit:** Option delivered ready to assemble for flexible on-site installation.
- **Weatherproofing:** Complete protection from rain and snow.
- **Protection:** A full-perimeter hood shielding the electrical cabinet and seals.
- **Durability:** UV- and weather-resistant pre-coated galvanized steel.

2 Ergonomic hinges

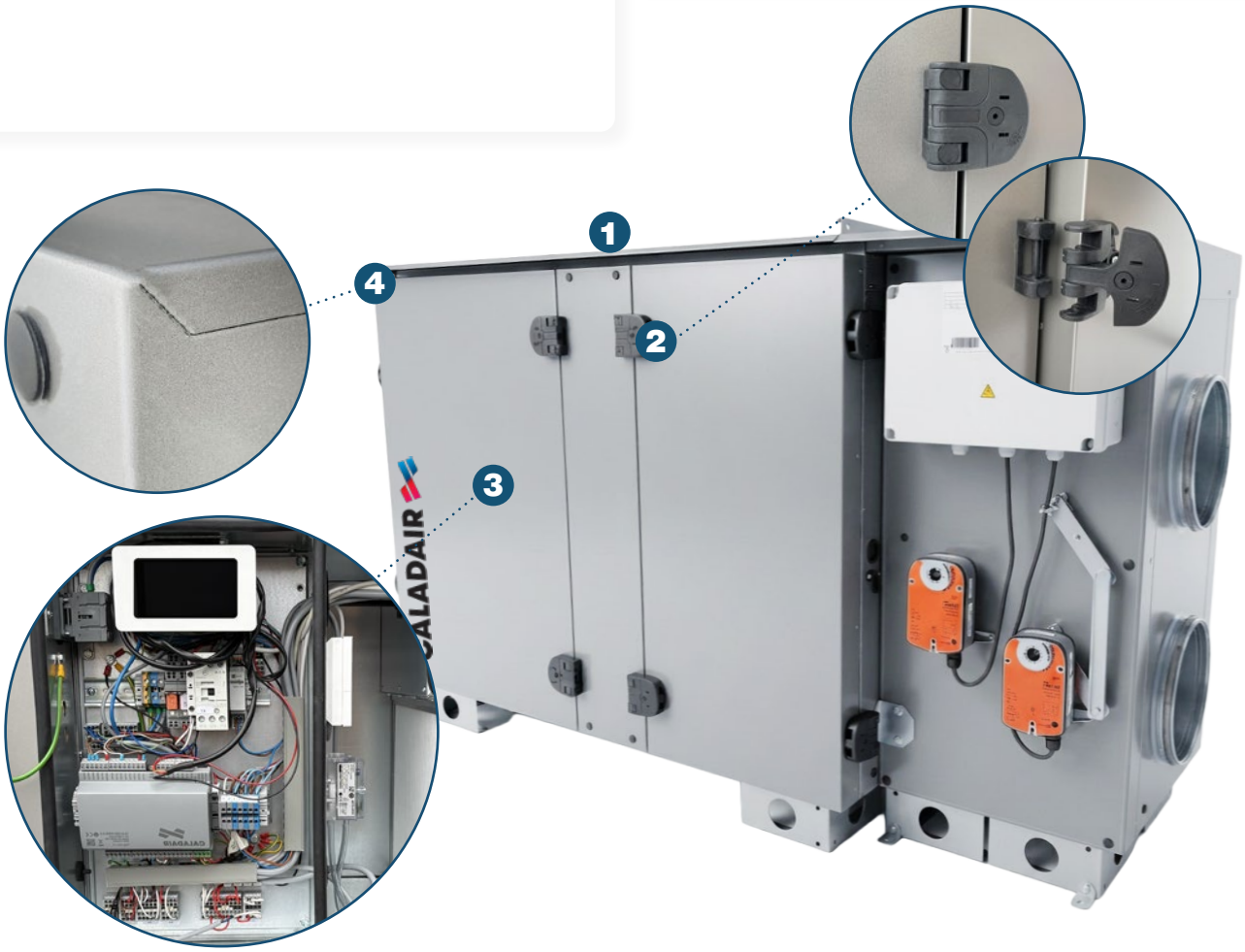
- **Weatherproofing:** Compression closure for an airtight seal.
- **Two opening options:** Full access and maximum clearance for service, plus quick door removal for tight spaces.
- **Rugged:** Reinforced design for smooth, long-lasting operation.
- **Lockable:** Secures access to internal components with a 6-sided key lock.

3 Electrical cabinet & Controls

- **Centralization:** Power and control components grouped in a single integrated enclosure.
- **Direct access:** Access panel for quick, straightforward entry.
- **Plug & Play :** EASY 5.0 controls configured and factory-tested for immediate commissioning.
- **Safety:** Built-in freeze protection.

4 Panel finish

- Reduced thermal bridging for optimized thermal performance.

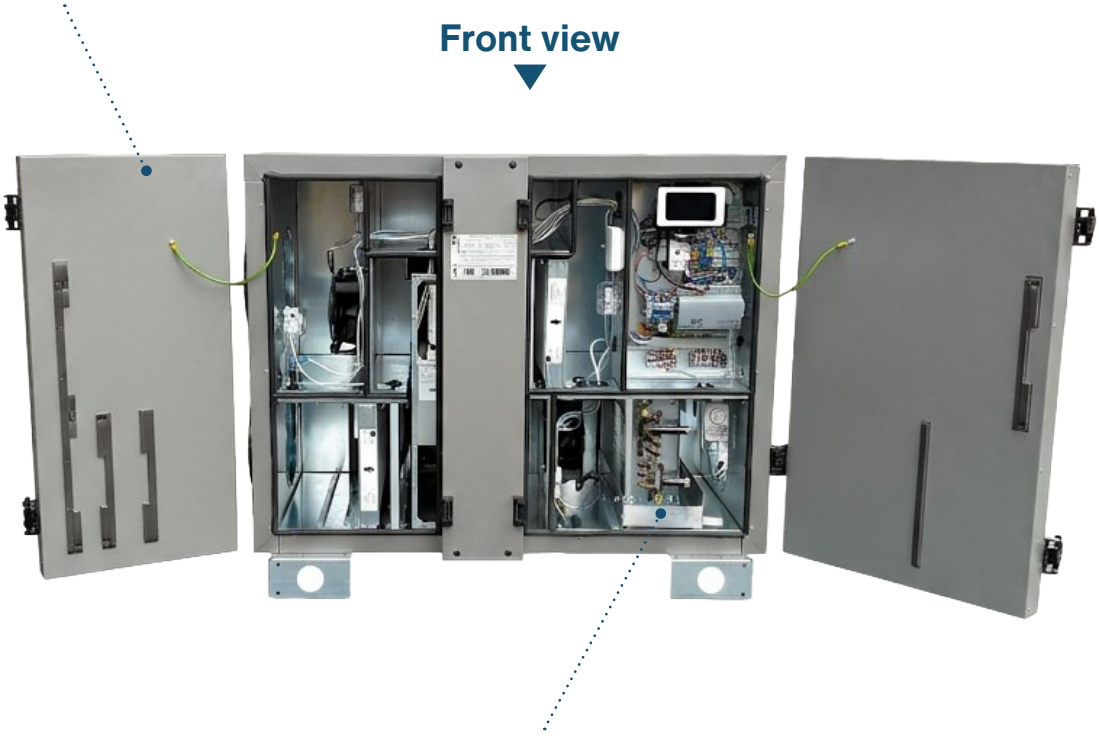


Filters: Quick and easy access for filter replacement on rails, so they can be removed effortlessly—no special tools required.



Direct access: Every component is designed for easy, direct access, helping cut down service time.

Full access: The front doors swing wide on their hinges and can be fully removed to open up the entire work area. The rear panels are completely removable by unscrewing them.



Easy cleaning: The stainless-steel condensate tray clean up quickly and easily to ensure perfect hygiene.

EQUIPMENTS & FEATURES

EASY 5.0 integrated controls

- PG 5.0 color touchscreen interface (IP54)
- Native MODBUS communication via RS485 serial port or IP, plus BACnet and Web
- Full scheduling: daily, weekly, vacation, and holidays
- “Boost” mode available via scheduling or an external command



Commands and control

- Remote control up to 100 m: standard in the control cabinet
- 5 m cable included
- Filter clogging pressure switches and fan monitoring

Smart Comfort Management

- Frost protection including:
  - ▶ *FREE COOLING: using outdoor air during warm weather*
  - ▶ *FREE HEATING: free heat recovery during shoulder seasons*
  - ▶ *NIGHT COOLING: automatic nighttime cooling based on weather conditions*

Safety & Operation

- Fire function, 5 modes available: off, continuous, normal, supply air only, return air only
- Digital “External Stop” input has priority for fire safety and main shutdown

External Controls

- Alarm relay output
- Forced-run input: reduced speed or max speed
- External stop input
- Fire protection input
- Firefighter remote shutdown

SUSTAINABILITY

Designed for disassembly and recycling: The unit is designed to be completely disassembled, making it easier to separate and sort each component at end of life.

Removable panels: Our design makes it easy to separate the sheet metal from the insulation. This step is essential for isolating metals and improving material recycling.

Resource recovery: By simplifying disassembly, we support a circular economy and reduce the overall carbon footprint of our machines.

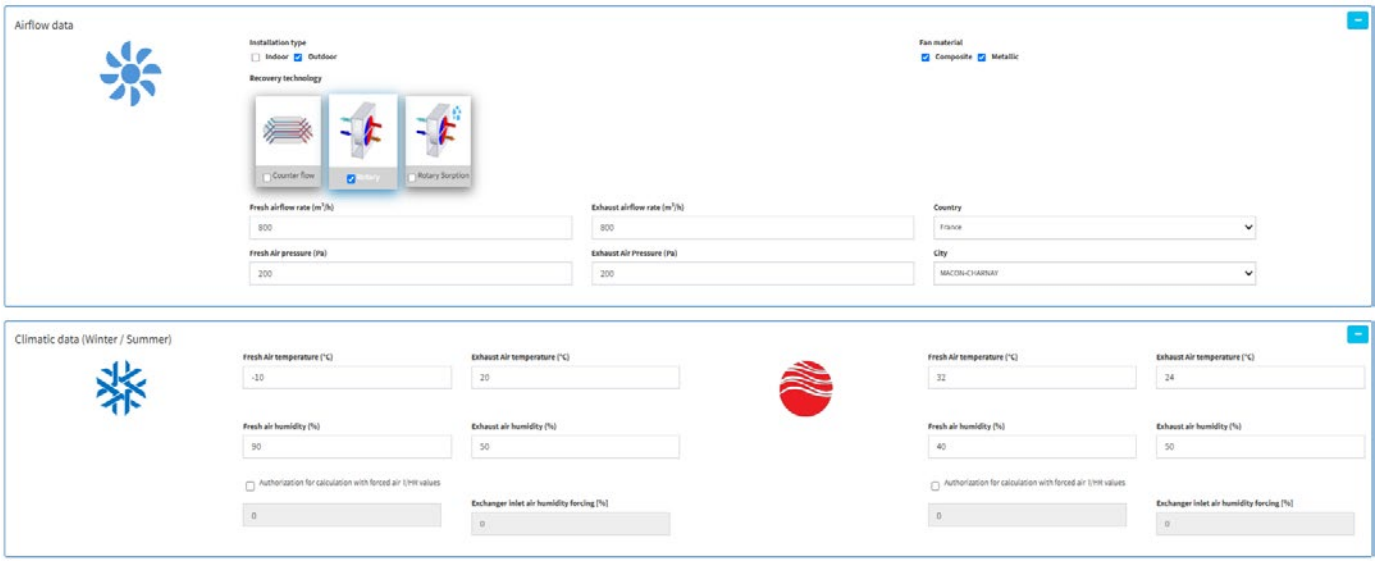
OUR ONLINE PLATFORMS

Save time and ensure accurate selections with Softwair™, Caladair's selection tool designed to support your ventilation and air-treatment projects.

In just a few clicks, you can access the solution that best fits your technical, energy, and regulatory requirements.

Fast & reliable selection

Set your criteria (airflow, pressure, efficiency, acoustics...) and instantly get the best-performing Caladair solution.



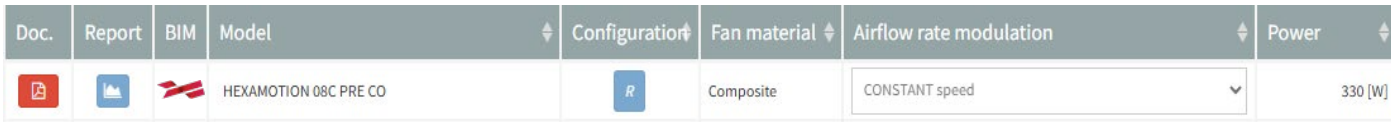
Softwair.fr™

Intuitive & user-friendly interface

Designed for professionals, the platform guides you step by step—without wasting time.

Instant Technical Documents

Download your reports, curves, and sales documentation in a single click.



Access to documentation

With BimGo™, seamlessly integrate Caladair products into your digital models! Find our BIM catalog—available in REVIT and IFC formats—at www.bimobject.com (free access with registration).

Bimgo™

Select configuration (right or left)

Create a detailed selection for the desired operating point

Select airflow control mode (Constant speed, constant airflow, CO2-based constant airflow, CO2-based variable airflow, constant pressure) ECO/MAC2/DIVA/QUATTRO/LOBBY

Continuous automatic updates

Softwair™ continuously incorporates the latest Caladair innovations and product lines. Updates are applied automatically.

Secure space

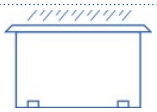
Completely digital, safe entry.

Eurovent Certified

Technical data certified by Eurovent.

ACCESSOIRES & OPTIONS

Trigger box	
Buse biseautée grillagée	
Smoke detection	
Comfort remote control 1V	
Comfort remote control 2V	
Wall-mounted touch screen USER EDT2 **Not installed**	
F7 pocket filter ePM1 55%	
F7 filter ePM1 55%	
F9 FILTER ePM1 80%	
M5 FILTER ePM10 50%	
CH36 compliance kit	
3-way valve kit 24V IP54	
Flexible sleeve	

Liquid manometer J	
Anti-vibration mount	
Potentiometer 0-10V	
Air pressure switch **Not installed**	
24 V anti-frost circular damper	
Motorized damper	
24V actuator	
24V room humidity sensor	
24V duct humidity sensor	
24V occupancy sensor	
Summer/winter changeover thermostat	
Roof **Not installed**	

CALADAIR

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71000 Mâcon

www.caladair.com