

ENERGY RECUPERATION



# FREETIME<sup>®</sup>

## RANGE

Self-regulating dual flow air handling unit with rotating heat exchanger, very high efficiency (>80%), high recovery efficiency, compact. Econologic<sup>®</sup> solution  
Air flow 100 to 3 500 m<sup>3</sup>/h





ERP2018  
CALADAIR RESPECT

bluetech  
MADE BY CALADAIR



## APPLICATIONS

- ◇ Self-regulating ventilation and energy recovery, very high efficiency and high recovery efficiency in tertiary sector and industrial installations.
- ◇ Efficiency greater than **80 %** (EN308), compatible with **RT2012+** with the **ERP 2009/125/EC** directive.
- Air filter, temperature control.
- ◇ One-piece unit, compact, stitching on the top, plug and play and interactive (except SEASON model).

## RANGE

- With 6 models available, the **FREETIME®** range handles air flows from 100 to 3 500 m<sup>3</sup>/h.

The **FREETIME®** range is available in 4 different versions :

**SEASON:** unit to use in tempered climate zones, intended for air circulation in buildings with energy recovery, bypass summer/winter mode, adjustable air flow by potentiometer.

**FIRST:** self-regulating unit to use in tempered climate zones with active temperature management for optimal energy consumption and climatic comfort.

**PREMIUM BC:** Same as FIRST version, but equipped with hot water heater for exterior temperatures until -20°C.

**PREMIUM BE:** Same as FIRST version, but equipped with an electric heater for exterior temperatures until -20°C.

## CONFIGURATION

- Double-skin 10/10ths panels.
- ◇ Insulation : 25 mm high-density M0 A2-S1 mineral wool (T3 and L1 class for airtightness of the building envelope as specified by EN1886) for the 500 and 800 models, 50 mm high-density M0 A1 mineral wool (T3 and L1 class for airtightness of the building envelope as specified by EN1886) for the 1500, 2000, 2700 et 3500 sizes.
- External surface : RAL 7035 coated steel with protective film.
- Internal surface : galvanised steel.
- ◇ Circular connectors with lip joints to guarantee sealing system (ATEC CSTB no. 13-224-12). Top-plugged connectors.
- Feet mounted in the body to fix them to the floor.
- ◇ Electrical components and controls grouped in “EASY” technique compartment. Access via opening panels for ease of maintenance. Fixed rapid-access panel on top containing lockable proximity switch, potentiometers (SEASON version) and power cableguide.
- ◇ Access to filters and internal components via hinged (charnières) on locked doors.
- Soundproof panel on ventilator fan ensures comfortable noise level.

## MOTOVENTILATORS

- ◇ Plug fans.
- ◇ High-efficiency, direct-drive DC motors with electronic **on/EC** thermal protection and variable speed built-in. **EC** technology is an ecological® solution that guarantees low energy consumption (**RT2012**) for the management, monitoring and control of the operating point (flow adjustment between 10 and 100%). Low noise level for the best acoustic comfort.

# DOUBLE FLOW UNIT **FREETIME®**

DESCRIPTION

## EXCHANGER

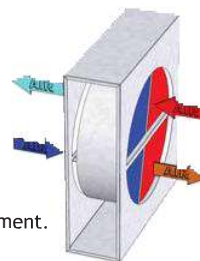
- High-efficiency, **variable-speed** rotating aluminium exchanger (except **SEASON**). Exchanger in rigid frame, assembled on sliding rails to ease a removal or maintenance. ease of removal and maintenance. Rotary air exchangers - air products by Klingenburg, which is a member of the **Eurovent** certification program for AARE units.
- ◇ Over 80% efficiency (**EN 308**).
- The exchanger's variable speed enables improved performance from the **FREETIME®** unit, particularly in mid-season.
- ◇ The exchanger includes a rotary speed detector connected to the **EASY** controller to indicate operational status (dry contact in **SEASON** version).



INTEGRATED EXCHANGER

## FILTERS

- ◇ As standard, the **FREETIME®** unit has a high-efficiency (large filtration surface) **F7** opacimetric filter for fresh air and a **G4** gravimetric filter for extracted air.
- Filters are always fitted upstream from components to ensure that they are protected.
- Assembled on sliding rails for ease of replacement.



## EQUIPMENT, EXTRAS AND FUNCTIONALITY

- ◇ The **FIRST** and **PREMIUM** versions are fitted as standard with an “EASY” controller, which can communicate via MODBUS, BACNET or WEB (select protocol on website). EASY control is integrated into the unit and meets the requirements of our **BLUETECH®** concept, which guarantees optimal operation of the **FREETIME®** unit, that fulfills with every French (RT2012) and European (ErP) requirements and contributes through its efficiency to active building management (EN15232). It includes a touchscreen remote control with an interface and user screen for the main functions (temperature control, restart, fault, etc.) and a maintenance interface to access to general settings (remote control until 100 m away).
- Internal clocks ensuring double flow operation, which are programmable on Caladair's website (except **SEASON**).
- Weekly timer, weekend and public holiday timer (excluding **SEASON**).
- ◇ Pressure sensor detects dirty fresh air filter and notifies faults to control panel (dry contact in **SEASON** version).
- Pressure sensor checks air flow at each fan and notifies faults to control panel (dry contact in **SEASON** version)
- ◇ Lockable proximity switch integrated on the top panel.
- ◇ The **EASY** controller (except **SEASON**) ensures the optimal operation and performance of the **FREETIME®** unit via its integrated temperature sensors :
  - **Outside air sensor**
  - **Building ambient air temperature (on extraction) sensor**
  - **Injected air sensor**

EASY control enables optimal energy input from fresh air and ensures the following ecological® functions :

- **FREE COOLING:** Mainly in summer, if the exterior temperature is lower than the interior temperature and the **FREETIME®** unit (excluding **SEASON**) is in cooling mode, the rotating exchanger slows and runs adaptively until stopping completely in order to bring cool air from outside into the building. If this operation is not enough to reach the temperature instruction, the cooling unit will start up.
- **FREE HEATING:** Mainly in mid-season, if the exterior temperature is higher than the interior temperature and the **FREETIME®** unit (excluding **SEASON**) is in heating mode, the rotating exchanger slows and runs adaptively until stopping completely in order to bring warm air from outside into the building. If this operation is not enough to reach the temperature instruction, the heating unit will start up.



- **COLD RECOVERY:** In summer or in mid-season, if the exterior temperature is higher than the interior temperature and the **FREETIME®** unit (excluding **SEASON**) is in cooling mode, the rotating exchanger starts and runs adaptively until reaching its nominal speed, in order to prevent warm exterior air from entering directly. If this operation is not enough to reach the set point temperature, the cooling unit will start up.

In the **SEASON** version, the cold recovery mode will be active when the exterior temperature reaches 24 °C (adjustable).

- **HEAT RECOVERY :** In winter or mid-season, if the exterior temperature is lower than the interior temperature and the **FREETIME®** unit (excluding **SEASON**) is in heating mode, the rotating exchanger starts and runs adaptively until reaching its nominal speed, in order to prevent cold exterior air from entering directly. If this operation is not enough to reach the temperature instructions, the heating unit will start up.

In the **SEASON** version, the heat recovery mode will be active when the exterior temperature is lower than 18 °C (adjustable).

- **NIGHT COOLING :** The night cooling function (except **SEASON**) allows the building's interior temperature to be lowered according to climate conditions over the preceding 24 hours. Thus, between midnight and 7am (period is adjustable) the night cooling function activates if the exterior temperature has exceeded 22 °C (adjustable) during the day (between 6am and 10pm). Night cooling operates if the exterior temperature is between 10 et 18 °C (adjustable) and the extraction temperature is higher than 18 °C (adjustable).

✦ In addition, this function includes a ventilation instruction specific to the selected air flow in **FIRST** and **PREMIUM** versions equipped of the **EASY** controller.

**FIRE SAFETY:** As standard, the **FREETIME®** unit (excluding **SEASON**) includes a fire safety device that can control the injection and extraction fans in 5 different modes, available via the settings (function to be activated on website).

“Stop”: Shuts down the unit completely.

“Run”: Starts up or runs the unit at high speed; the fire safety function will take priority over all other alarms.

“Auto”: Runs the unit according to the on-site settings (Stop/Slow/Fast).

“Run Injection”: Starts up or runs the injection fans at high speed (extraction stopped).

“Run Extraction”: Starts up or runs the extraction fans at high speed (injection stopped).

Whichever mode is selected, the **EASY** control screen will display “Fire Alarm” when this function is activated.

The **FREETIME®** unit also includes an “External Stop” digital port which allows a manual controller to be connected on site.

In this case, the external controller takes priority over any fire safety activated by any of the 5 modes listed above.

## AIR FLOW MODULATION

✦ 6 air flow options to guarantee optimal energy consumptions (RT2012, EN15232).

**SEASON:** Each fan's rotation speed can be adjusted using potentiometers plugged and wired to the unit's top panel.

- In the **FIRST** and **PREMIUM** versions, the **EASY** controller can pilot fans in the following modes :

**ECO:** Rotation speed of each fan can be adjusted by altering the two flows (low-speed/high-speed) in the **EASY** controller.

**LOBBY®:** air flow at **CONSTANT PRESSURE**, adjustable for each fan (**FIRST** and **PREMIUM**).

**DIVA®:** Proportional flow adjustment of each fan according to CO<sub>2</sub> level. Sensor integrated into the unit's extraction duct.

**MAC2®:** **CONSTANT FLOW** modulation of each fan (low & high speed) excluding 500 and 800 models. Pressure transmitters integrated into the unit.

**QUATTRO®:** **CONSTANT FLOW** modulation of each fan according to CO<sub>2</sub> level (excluding 500 and 800 models). Pressure transmitters and CO<sub>2</sub> sensor (in extraction duct) integrated into the unit. Low speed, high speed and CO<sub>2</sub> (ppm) can be adjusted on site by the **EASY** controller.

## INSTALLATION

- ✦ Indoor for closet or machine room.
- ✦ Compact design, plugged connectors via circular with seal for easy, quick, airtight and economical installation (no adapters).

## CLIMATE VERSIONS

✦ The **FREETIME®** unit includes the **PREMIUM BC** (integrated hot water heat) and **PREMIUM BE** (integrated electric heating) ensuring optimal use in winter until -20 °C (excluding **SEASON**).

These functionalities are automatically managed by the “**EASY**” controller.

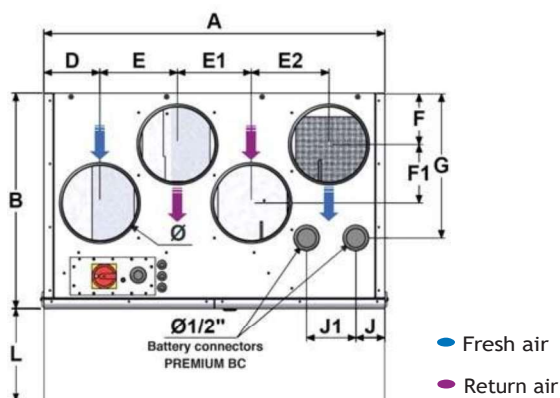
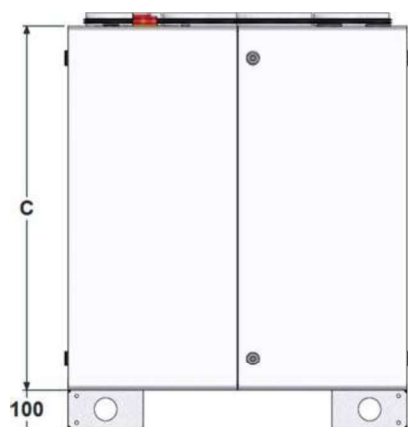
✦ Additionally, and ensuring climatic comfort in all seasons and on the **FREETIME®** unit (excluding **SEASON**) can be linked to a cooling or dehumidifying module:

- The **COMBIBOX CONCEPT®** cold water (CBX-BF) module on all versions and can be used for changeover on the **FIRST** version.
- Direct expansion module CBX-DX to R410A.
- Dehumidification module only on the **FIRST** version.
- ✦ The “**EASY**” controller integrated into the **FREETIME®** unit enables management of these thermal modules.
- ✦ The dehumidification function (to be activated on site) consists in linking the **FREETIME®** unit to a **COMBIBOX CONCEPT®** module equipped with a cooling unit (water or cold DX only) plus a heating unit (water or electric). In this case, the controller will automatically manage the hot or cold supply necessary for dehumidification while maintaining an optimal operating temperature. When in cooling mode, temperature management takes priority over dehumidification.

Versions	COMBIBOX CONCEPT® EXTERNAL MODULE							
	HEATING		REFRESH Cold Only		DEHUMIDIFYING Cold + Warm			
	Electric	Water	Water	R410A	Water/Water	Water/Elec	R410A/Water	R410A/Elec
<b>SEASON</b>	-	-	-	-	-	-	-	-
<b>FIRST</b>	-	-	CBX-BF	CBX-DX	CBX-FH	CBX-FE	CBX-DXH	CBX-DXE
<b>PREMIUM BE</b>	✓	-	CBX-BF	CBX-DX	-	-	-	-
<b>PREMIUM BC</b>	-	✓	CBX-BF	CBX-DX	-	-	-	-



FREETIME® model	∅	A	B	C	D	E	E1	E2	F	F1	G	J	J1	L	SEASON FIRST	PREMIUM BE PREMIUM BC
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg
<b>500</b>	200	900	570	970	145	205	195	205	135	155	385	75	130	520	130	135
<b>800</b>	250	1080	700	1090	170	235	240	260	160	235	485	75	180	650	170	175
<b>1500</b>	315	1400	750	1140	230	315	310	315	210	190	585	100	230	720	225	232
<b>2000</b>	355	1500	830	1220	250	335	330	335	230	230	660	100	230	770	270	278
<b>2700</b>	400	1610	920	1420	270	345	345	375	250	290	755	100	230	820	345	355
<b>3500</b>	450	1730	1085	1420	300	365	370	400	275	390	795	100	305	980	420	432



FREETIME® model	Electrical power (W)	Usage temp. (°C / °C)	Protection index Class	Thermal cutout *	SEASON/FIRST & PREMIUM BC		PREMIUM BE	
					Power supply voltage (V / Ph / Hz)	Protection current (A)	Power supply voltage (V / Ph / Hz)	Protection current (A)
<b>500</b>	2 x 169 W	-20 / 60	IP54 / B	PTI	230 / 1 / 50	3,8	230 / 1 / 50	14,7
<b>800</b>	2 x 220 W	-20 / 60	IP44 / B	PTI	230 / 1 / 50	4,1	230 / 1 / 50	20,4
<b>1500</b>	2 x 750 W	-20 / 40	IP54 / B	PTI	230 / 1 / 50	7,6	230 / 1 / 50	30,4
<b>2000</b>	2 x 750 W	-20 / 40	IP54 / B	PTI	230 / 1 / 50	7,6	400 /3+N / 50	18,5
<b>2700</b>	2 x 1000 W	-20 / 50	IP54 / B	PTI	400 /3+N / 50	4,3	400 /3+N / 50	23,8
<b>3500</b>	2 x 1000 W	-20 / 50	IP54 / B	PTI	400 /3+N / 50	4,3	400 /3+N / 50	28,1

\*PTI: Integrated thermal cutout





- The “Lp4m dB(A)” curves indicate the sound pressure level measured at 4m, in free field conditions, with hemispherical distribution on a reflecting plane, disconnecting the exterior “fresh air intake” and “stale air expulsion” ducts and connecting the interior “fresh air injection” and “stale air extraction” ducts.
- To obtain the overall sound pressure level Lp dB(A), at a given 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

**NOTA:** Tolerance =  
Global Values + / - 3 dB(A)  
Acoustic spectra +/- 5 dB(A)

- The “LW fresh air injection dB(A)” curves indicate overall sound power emitted at the “fresh air injection” duct.
- To obtain the “LW fresh air injection dB(A)” sound power spectrum at the “fresh air injection” duct, add the values below to the “LW fresh air injection” sound power taken from the curves.

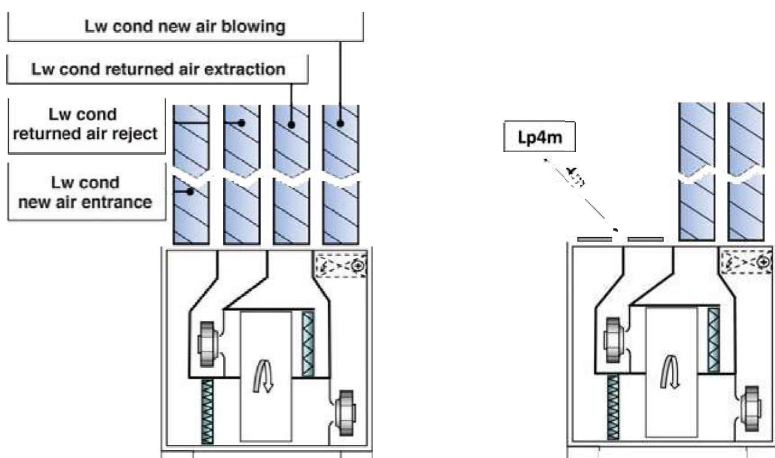
Downstream acoustic spectrum weighting function “Lw cond blower dB(A)” Indicated on the curves								
Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Weighting FREETIME 500 dB(A)	-22	-14	-9	-6	-6	-8	-12	-12
Weighting FREETIME 800 dB(A)	-18	-8	-7	-7	-7	-9	-16	-20
Weighting FREETIME 1500 dB(A)	-20	-11	-6	-8	-6	-9	-14	-19
Weighting FREETIME 2000 dB(A)	-20	-15	-9	-8	-6	-6	-13	-17
Weighting FREETIME 2700 dB(A)	-23	-14	-8	-9	-5	-7	-11	-15
Weighting FREETIME 3500 dB(A)	-26	-18	-12	-10	-4	-6	-10	-13

- The “LW stale air extraction dB(A)” curves indicate overall sound power radiated at the “stale air extraction” and “fresh air injection” ducts.
- To obtain the “LW stale air extraction dB(A)” sound power spectrum at the “stale air extraction” and “fresh air injection” ducts, add the values below to the “LW stale air extraction” sound power taken from the curves.

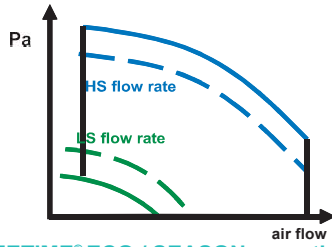
Upstream acoustic spectrum weighting function “Lw cond extraction dB(A)” Indicated on the curves								
Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Weighting FREETIME 500 dB(A)	-33	-24	-13	-7	-5	-5	-12	-15
Weighting FREETIME 800 dB(A)	-22	-12	-7	-5	-6	-10	-16	-24
Weighting FREETIME 1500 dB(A)	-21	-14	-7	-6	-6	-8	-13	-21
Weighting FREETIME 2000 dB(A)	-26	-19	-8	-5	-6	-8	-12	-20
Weighting FREETIME 2700 dB(A)	-26	-16	-7	-6	-8	-6	-12	-18
Weighting FREETIME 3500 dB(A)	-30	-19	-9	-7	-7	-5	-10	-16

- To obtain the “NSC4 dB(A)” sound pressure (sound level measured at 4m, in free field conditions, with hemispherical distribution, placing the appliance on the floor on a reflecting plane, with its inlet and outlet ducts connected to ducts having the same sound insulation properties), add the value from the table below to the “Lp4m” value read from the curves.

Acoustic weighting for the value NSC 4 dB (A) depending on the Lp4m value indicated on the curve					
FREETIME 500	FREETIME 800	FREETIME 1500	FREETIME 2000	FREETIME 2700	FREETIME 3500
-18	-18	-19	-20	-20	-21

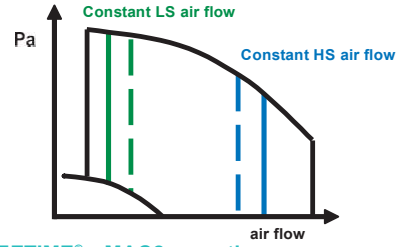


**NOTA:** the curves are created on the basis of new air (Static Pressure) all pressure gauges connected (configuration D in accordance with regulation NF EN 13141-4)



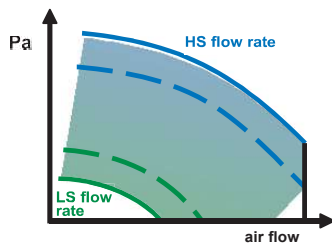
**FREETIME® ECO / SEASON operation**

1 or 2 air flows as required (Low Speed(LS)/High speed(HS)) per fan  
Except SEASON, 1 flow adjustable by potentiometer



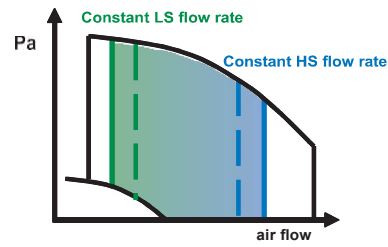
**FREETIME® + MAC2 operation**

Optional 1 or 2 CONSTANT air flows by fan (except FREETIME® 500 and 800)



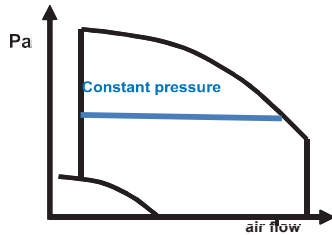
**FREETIME® + DIVA operation**

PROPORTIONAL ventilation between two air flows (LS/HS) by fan



**FREETIME® + QUATTRO operation**

PROPORTIONAL ventilation between two CONSTANT air flows by fan (except FREETIME® 500 and 800)



**FREETIME® + LOBBY® operation**

CONSTANT PRESSURE ventilation by fan



Touchscreen (EXCEPT SEASON) with user interfaces and screen and / or maintenance interface (Up to 100 m)



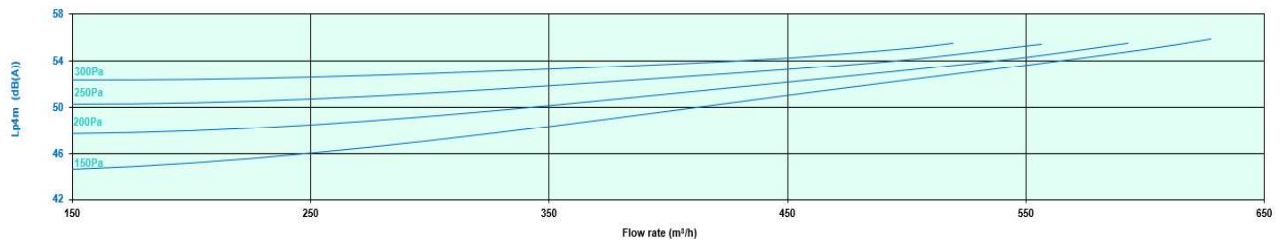
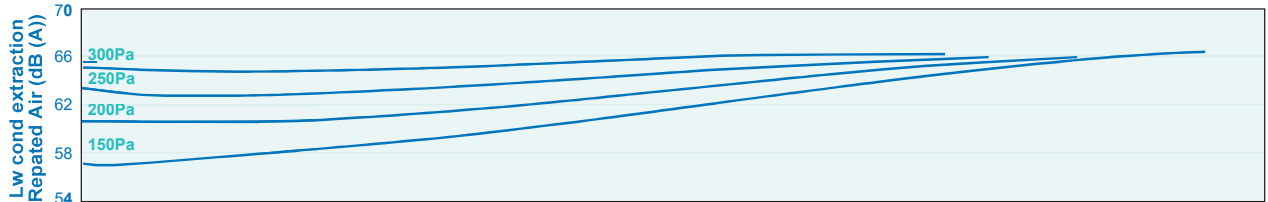
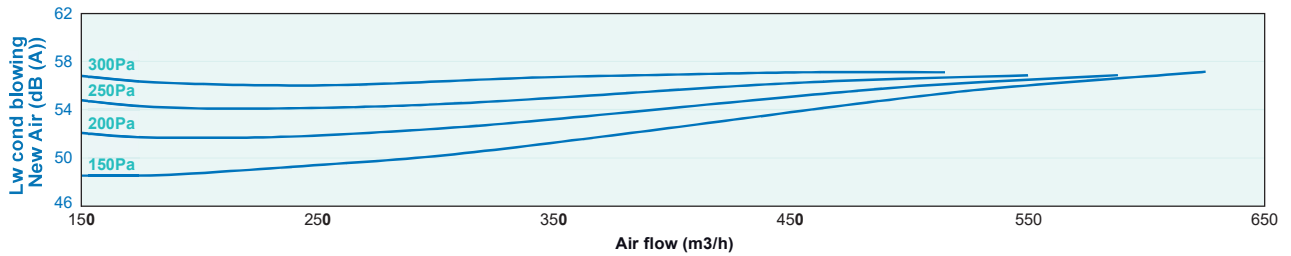
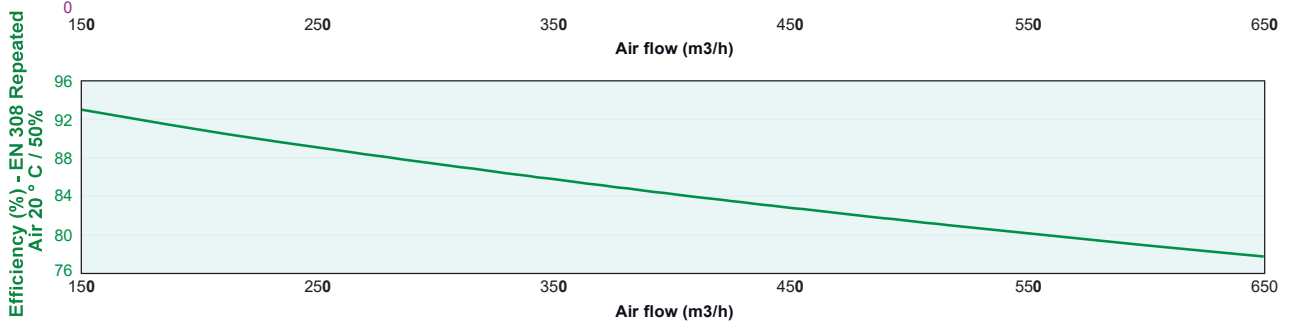
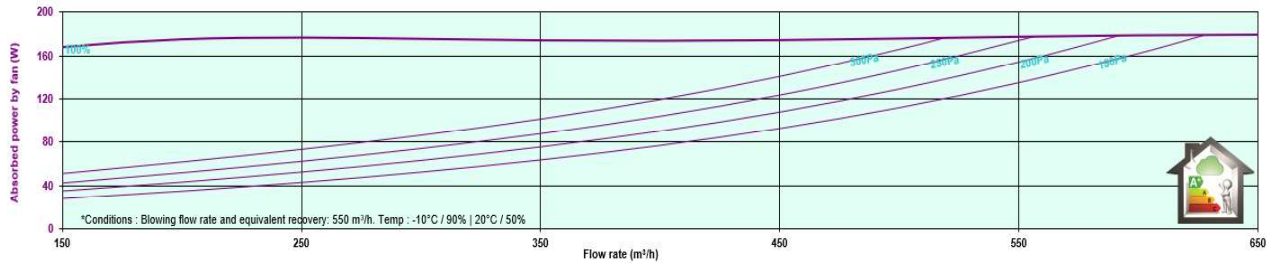
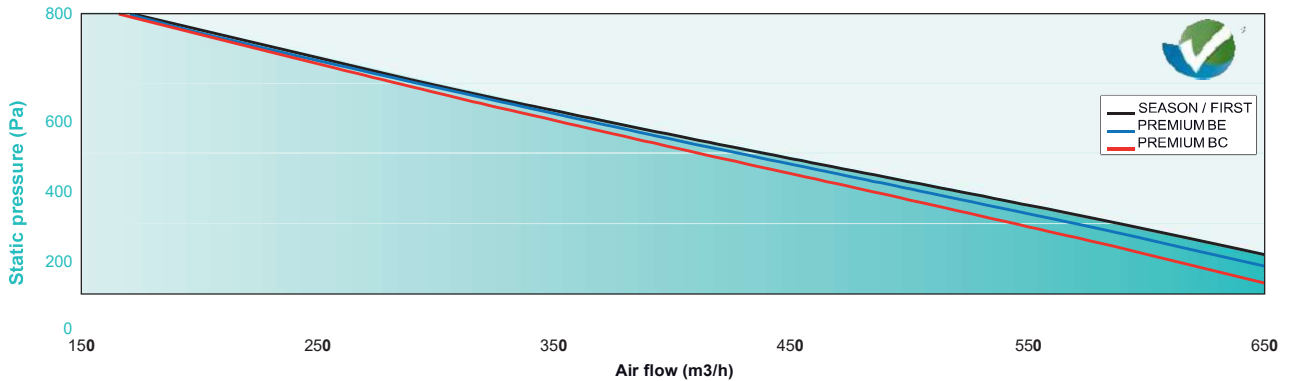
**ECONOLOGICAL SOLUTIONS®**



EQUIPMENT	SEASON	FIRST	PREMIUM BE	PREMIUM BC
Low-consumption EC fans	●	●	●	●
Fresh air filter, opacimetric F7	●	●	●	●
Extraction filter, gravimetric G4	●	●	●	●
High-efficiency (>80 %) rotating exchanger, EUROVENT certified	●	●	●	●
Variable-speed exchanger	●	●	●	●
Double skin 50 mm RAL7035 (except 500 & 900 = 25 mm)	●	●	●	●
Circular connectors with lip joints (ATEC CSTB no. 13-224-12)	●	●	●	●
Touchscreen remote control (up to 100m)	-	●	●	●
Control protocols - MODBUS or BACNET via RS485 or TCP/IP or WEB (select in menu)	-	●	●	●
Control fan speed (LO - HI) using EASY controller	-	●	●	●
Fan speed adjustment potentiometers	●	-	-	-
Supply temperature sensor	-	●	●	●
Extraction temperature sensor	-	●	●	●
Exterior temperature sensor	●	●	●	●
Frost protection thermostat on water heating unit	-	-	-	●
Safety thermostat on electric heating unit	-	-	●	-
Exchanger rotation sensor	●	●	●	●
Lockable proximity switch	●	●	●	●
Power cable guide	●	●	●	●
FUNCTIONS	SEASON	FIRST	PREMIUM BE	PREMIUM BC
Self-regulating electric heating unit	-	-	●	-
Self-regulating water heating unit	-	-	-	●
Optimised free cooling	-	●	●	●
Optimised free heating	-	●	●	●
Managed night cooling (night-time overventilation)	-	●	●	●
Optimised cold recovery	-	●	●	●
Thermostatic control of cold recovery (adjustable)	●	-	-	-
Optimised heat recovery	-	●	●	●
Thermostatic control of heat recovery (adjustable)	●	-	-	-
Supply temperature management (air legislation)	-	●	●	●
Ambient temperature management (extraction)	-	●	●	●
Weekly timer	-	●	●	●
Weekend and public holiday timer	-	●	●	●
Dirty fresh air filter pressure sensor	●	●	●	●
Airflow monitoring pressure sensors (injection & extraction)	●	●	●	●
Fire safety with 5 available modes	-	●	●	●
Managed COMBIBOX CONCEPT® cooling module (water or R410A)	-	●	●	●
Managed COMBIBOX CONCEPT® dehumidification module	-	●	●	●
FACTORY-FITTED OPTIONS	SEASON	FIRST	PREMIUM BE	PREMIUM BC
LOBBY®: air flow at CONSTANT PRESSURE	-	○	○	○
DIVA®: proportional flow adjustment by CO <sub>2</sub> level	-	○	○	○
MAC2: CONSTANT FLOW adjustment	-	○	○	○
QUATTRO EC: proportional adjustment by CO <sub>2</sub> level between 2 CONSTANT FLOWS	-	○	○	○
ON-SITE OPTIONS	SEASON	FIRST	PREMIUM BE	PREMIUM BC
COMBIBOX CONCEPT® cooling module (water or R410A)	-	◆	◆	◆
COMBIBOX CONCEPT® dehumidification module	-	◆	◆	◆
Changeover chip for switching hot/cold	-	◆	◆	◆
LON protocol communications	-	◆	◆	◆
Ambient temperature control via touchscreen remote control	-	◆	◆	◆
WONDEROOM zone controller communicating automatically with the FREETIME®	-	◆	◆	◆

- : Standard equipment or functions.
- : OPTIONAL equipment or functions. Supplied assembled and cabled at the factory
- ◆ : OPTIONAL equipment or functions. Supplied unassembled

**FREETIME® 500**







## FREETIME® 500

### Hot water coil - PREMIUM BC

Water inlet temp. (°C/°C)	Air inlet temp. (°C)	Air flow (m³/h)	100	200	300	400	500	600
<b>80/60</b>	11	Motor(kW)/Airoutlettemp(°C)	<b>1,6 / 56,7</b>	<b>2,6 / 48,7</b>	<b>3,4 / 43,9</b>	<b>4,0 / 40,5</b>	<b>4,6 / 38</b>	<b>5,1 / 36</b>
		Water flow(l/h)/DP water (kPa)	69 / 1,3	113 / 3,2	148 / 5,2	177 / 7,3	202 / 9,2	225 / 11,2
<b>80/60</b>	15	Motor(kW)/Airoutlettemp(°C)	<b>1,5 / 57,6</b>	<b>2,4 / 50</b>	<b>3,1 / 45,6</b>	<b>3,8 / 42,4</b>	<b>4,3 / 40,1</b>	<b>4,8 / 38,2</b>
		Water flow(l/h)/DP water (kPa)	64 / 1,2	105 / 2,8	137 / 4,6	164 / 6,4	188 / 8,1	209 / 9,8
<b>60/50</b>	11	Motor(kW)/Airoutlettemp(°C)	<b>1,2 / 45</b>	<b>1,9 / 39,2</b>	<b>2,5 / 35,7</b>	<b>3,0 / 33,3</b>	<b>3,5 / 31,4</b>	<b>3,9 / 29,9</b>
		Water flow(l/h)/DP water (kPa)	101 / 2,8	168 / 6,9	220 / 11,4	265 / 15,8	303 / 20,2	337 / 24,5
<b>60/50</b>	15	Motor(kW)/Airoutlettemp(°C)	<b>1,1 / 45,9</b>	<b>1,8 / 40,6</b>	<b>2,3 / 37,4</b>	<b>2,8 / 35,2</b>	<b>3,2 / 33,5</b>	<b>3,5 / 32,1</b>
		Water flow(l/h)/DP water (kPa)	92 / 2,3	152 / 5,8	200 / 9,5	240 / 13,2	275 / 16,9	306 / 20,5
<b>45/40</b>	11	Motor(kW)/Airoutlettemp(°C)	<b>0,8 / 35,2</b>	<b>1,4 / 31,2</b>	<b>1,8 / 28,8</b>	<b>2,2 / 27,0</b>	<b>2,5 / 25,7</b>	<b>2,8 / 24,7</b>
		Water flow(l/h)/DP water (kPa)	143 / 5,4	239 / 13,7	315 / 22,6	379 / 31,7	435 / 40,6	485 / 49,4
<b>45/40</b>	15	Motor(kW)/Airoutlettemp(°C)	<b>0,7 / 36,1</b>	<b>1,2 / 32,6</b>	<b>1,6 / 30,5</b>	<b>1,9 / 21,3</b>	<b>2,2 / 27,8</b>	<b>2,4 / 26,9</b>
		Water flow(l/h)/DP water (kPa)	125 / 4,3	208 / 10,7	274 / 17,6	330 / 24,6	378 / 31,5	421 / 38,3

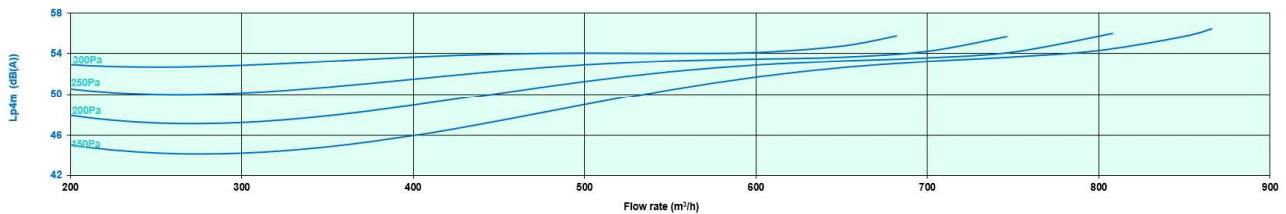
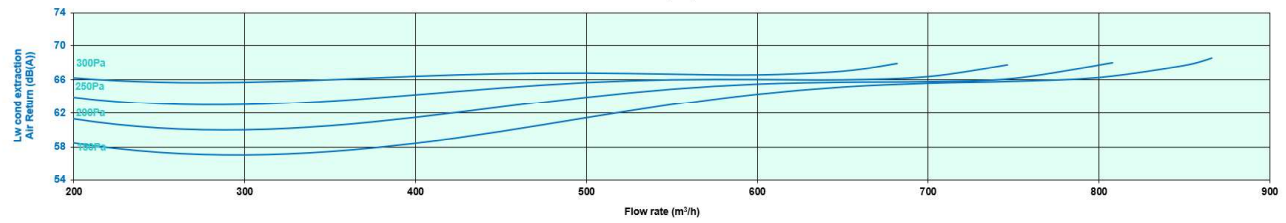
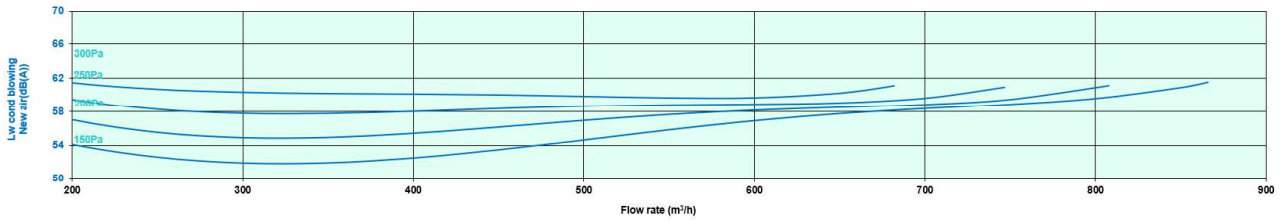
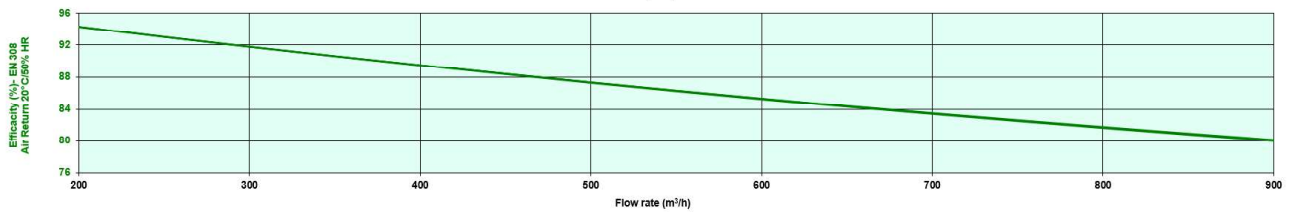
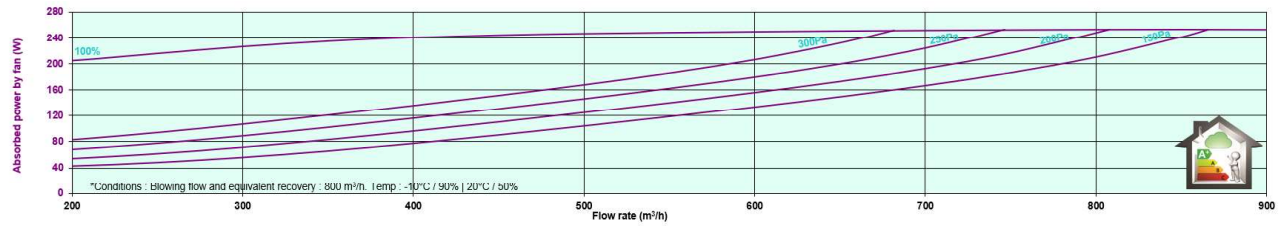
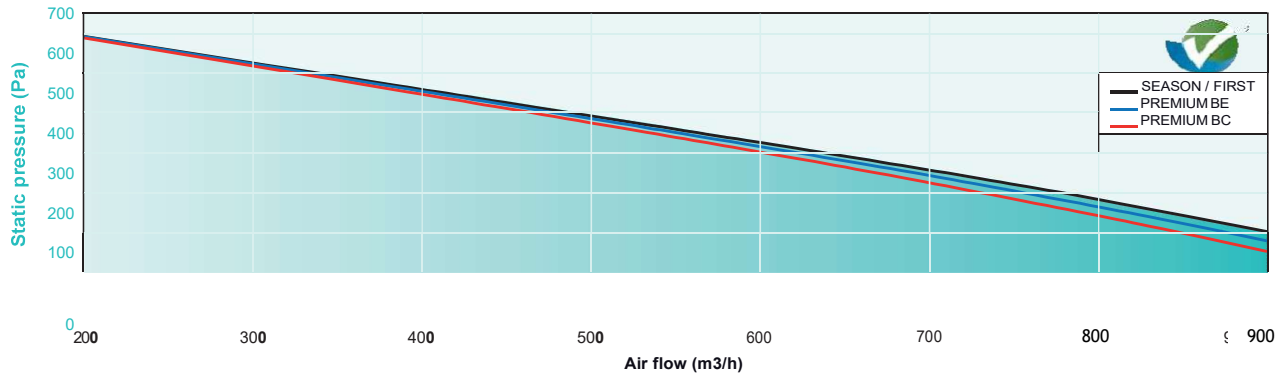
## FREETIME® 500

### Electric coil - PREMIUM BE

Fresh air Air flow (m³/h)	0°C	-5°C	0°C	-5°C	-10°C	-15°C	-20°C
Air flow (m³/h)	500	500	500	500	500	500	500
Version	FIRST-SEASON		PREMIUM BE				
			Heating coil				
Total power kW	-		2,5				
Temp. °C on output from the unit	16,2	15,3	31,2	30,3	29,3	28,3	27,3



**FREETIME<sup>®</sup> 800**





## FREETIME® 800

### Hot water coil - PREMIUM BC

Water inlet temp. (°C/°C)	Air inlet temp. (°C)	Air flow (m³/h)	200	300	400	500	600	700	800
<b>80/60</b>	11	Motor(kW)/Airoutlettemp(°C)	3,0 / 54,8	4,0 / 50	4,9 / 46,7	5,6 / 44	6,3 / 41,9	7 / 40,1	7,6 / 38,6
		Waterflow(l/h)/DPwater(kPa)	131 / 1	175 / 1,6	214 / 2,3	247 / 3	278 / 3,8	306 / 4,5	331 / 5,2
<b>80/60</b>	15	Motor(kW)/Airoutlettemp(°C)	2,8 / 55,7	3,7 / 51,3	4,5 / 48,2	5,2 / 45,7	5,9 / 43,7	6,5 / 42,1	7 / 40,7
		Waterflow(l/h)/DPwater(kPa)	122 / 0,8	163 / 1,4	199 / 2	230 / 2,7	258 / 3,3	284 / 3,9	307 / 4,5
<b>60/50</b>	11	Motor(kW)/Airoutlettemp(°C)	2,2 / 43,6	3,0 / 40,3	3,7 / 37,8	4,3 / 35,9	4,8 / 34,3	5,3 / 33	5,7 / 31,9
		Waterflow(l/h)/DPwater(kPa)	194 / 2,1	261 / 3,5	319 / 5,1	370 / 6,6	416 / 8,2	459 / 9,8	498 / 11,4
<b>60/50</b>	15	Motor(kW)/Airoutlettemp(°C)	2,0 / 44,6	2,7 / 41,5	3,3 / 39,3	3,9 / 37,6	4,3 / 36,1	4,8 / 35	5,2 / 33,9
		Waterflow(l/h)/DPwater(kPa)	176 / 1,7	237 / 2,9	289 / 4,2	335 / 5,5	377 / 6,9	415 / 8,2	450 / 9,5
<b>45/40</b>	11	Motor(kW)/Airoutlettemp(°C)	1,6 / 34,3	2,2 / 32,0	2,6 / 30,3	3,1 / 28,9	3,5 / 27,8	3,8 / 26,9	4,1 / 26,1
		Waterflow(l/h)/DPwater(kPa)	276 / 4,1	372 / 7,0	456 / 10,1	530 / 13,3	597 / 16,5	659 / 19,8	715 / 23
<b>45/40</b>	15	Motor(kW)/Airoutlettemp(°C)	1,4 / 35,3	1,9 / 33,3	2,3 / 31,8	2,7 / 30,6	3 / 29,6	3,3 / 28,8	3,6 / 28,1
		Waterflow(l/h)/DPwater(kPa)	240 / 3,2	324 / 5,4	397 / 7,8	461 / 10,3	519 / 12,8	572 / 15,3	621 / 17,8

## FREETIME® 800

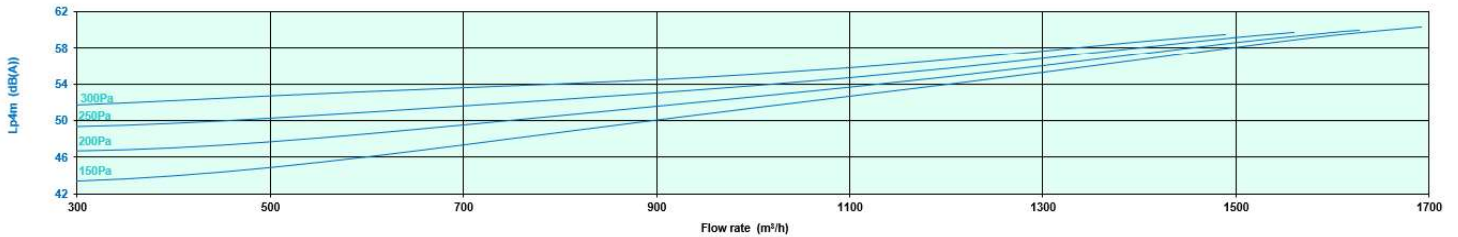
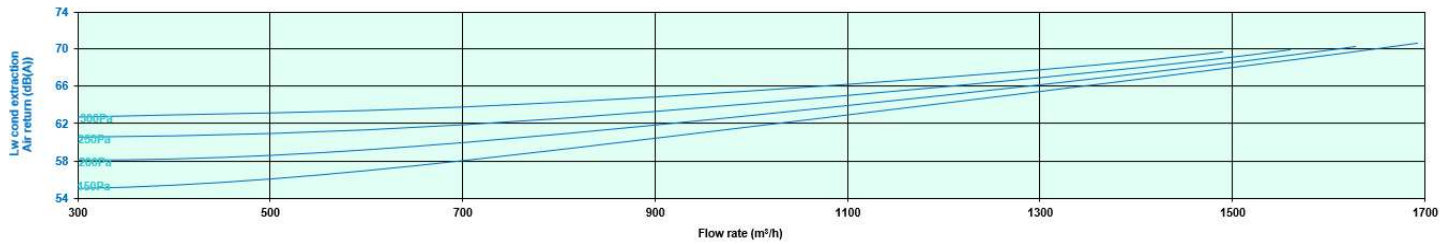
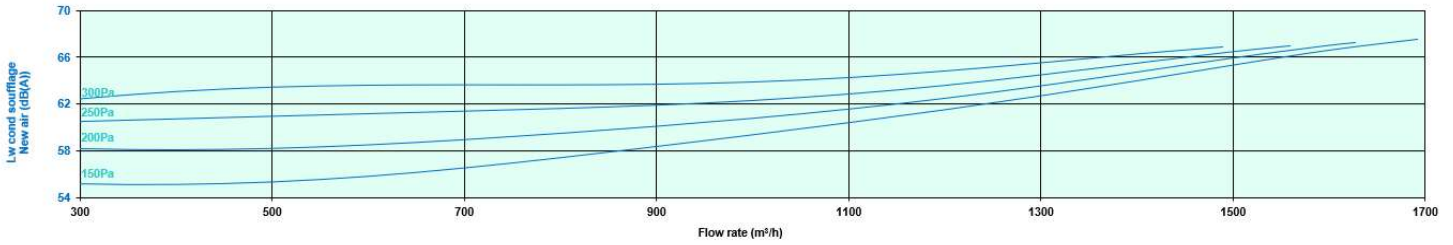
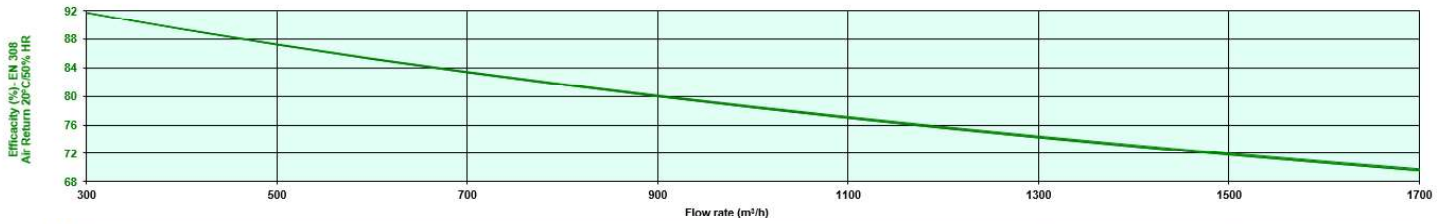
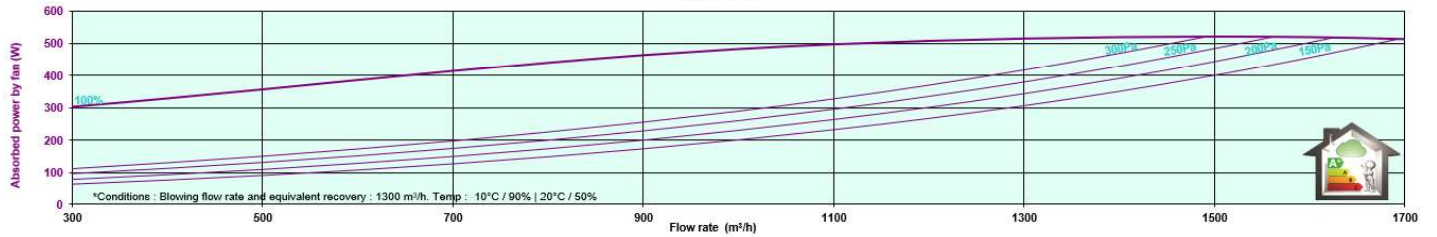
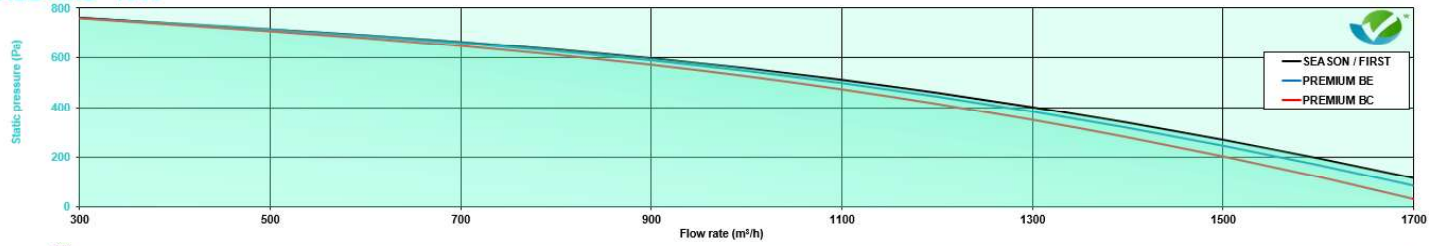
### Electric coil - PREMIUM BE

Fresh air Air flow (m³/h)	0°C 800	-5°C 800	0°C 800	-5°C 800	-10°C 800	-15°C 800	-20°C 800
Version	FIRST-SEASON		PREMIUM BE				
			Heating coil				
Total power kW	-		3,75				
Temp.°C on output from the unit	16,4	15,5	30,5	29,6	28,7	27,7	26,8



**FREETIME® 1500**

**FREETIME® 1500**



Flow rate (m3/h)



### FREETIME® 1500

### Hot water coil - PREMIUM BC

Water inlet temp. (°C/°C)	Air inlet temp. (°C)	Air flow (m³/h)	500	700	900	1100	1300	1500	1700
<b>80/60</b>	11	Motor (kW)/Air outlet temp (°C)	6,4 / 48,6	8 / 44,6	9,4 / 41,7	10,7 / 39,4	11,8 / 37,5	12,8 / 36	13,7 / 34,6
		Water flow(L/h)/DP water (kPa)	281 / 1,9	352 / 2,9	413 / 3,9	467 / 4,9	516 / 5,8	561 / 6,8	601 / 7,7
<b>60/50</b>	15	Motor (kW)/Air outlet temp (°C)	6 / 49,9	7,5 / 46,2	8,8 / 43,5	9,9 / 41,3	10,9 / 39,6	11,9 / 38,1	12,7 / 36,9
		Water flow(L/h)/DP water (kPa)	261 / 1,7	327 / 2,5	384 / 3,4	434 / 4,2	479 / 5,1	520 / 5,9	558 / 6,7
<b>45/40</b>	11	Motor (kW)/Air outlet temp (°C)	4,8 / 39,2	6,1 / 36,3	7,1 / 34,2	8,1 / 32,5	8,9 / 31,1	9,7 / 29,9	10,4 / 29
		Water flow(L/h)/DP water (kPa)	419 / 4,1	527 / 6,3	620 / 8,5	702 / 10,7	777 / 12,9	845 / 15,1	907 / 17,2
<b>45/40</b>	15	Motor (kW)/Air outlet temp (°C)	4,4 / 40,6	5,5 / 37,9	6,5 / 36	7,3 / 34,4	8,1 / 33,2	8,8 / 32,1	9,4 / 31,2
		Water flow(L/h)/DP water (kPa)	380 / 3,5	477 / 5,3	561 / 7,1	636 / 8,9	703 / 10,7	764 / 12,5	821 / 14,3
<b>45/40</b>	11	Motor (kW)/Air outlet temp (°C)	3,5 / 31,2	4,4 / 29,2	5,1 / 27,7	5,8 / 26,5	6,5 / 25,5	7 / 24,7	7,6 / 24
		Water flow(L/h)/DP water (kPa)	599 / 8,3	755 / 12,7	889 / 17,2	1009 / 21,7	1118 / 26,2	1217 / 30,6	1308 / 35
<b>45/40</b>	15	Motor (kW)/Air outlet temp (°C)	3 / 32,6	3,8 / 30,8	4,5 / 29,5	5,1 / 28,5	5,6 / 27,6	6,1 / 26,9	6,6 / 26,3
		Water flow(L/h)/DP water (kPa)	521 / 6,4	656 / 9,8	773 / 13,3	876 / 16,7	970 / 20,2	1056 / 23,6	1134 / 26,9

### FREETIME® 1500

### Electric coil - PREMIUM BE

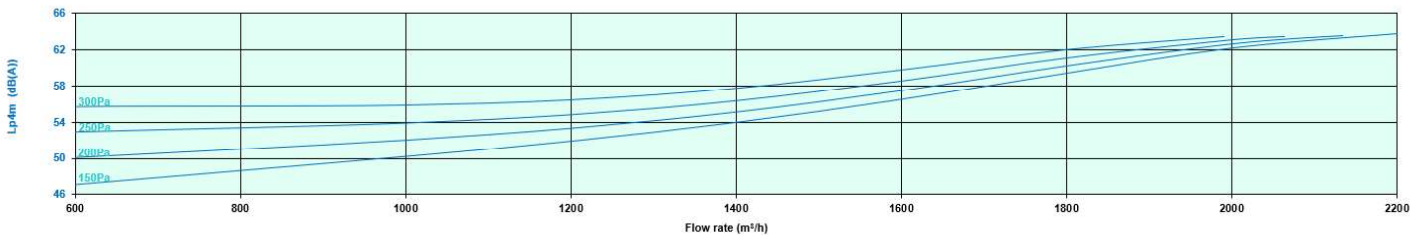
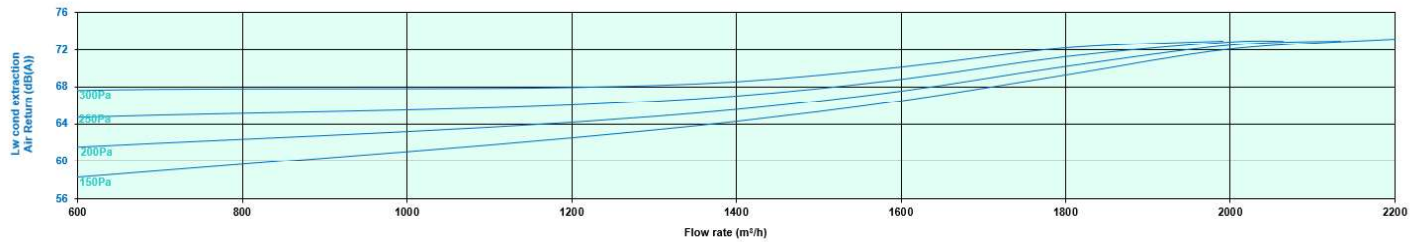
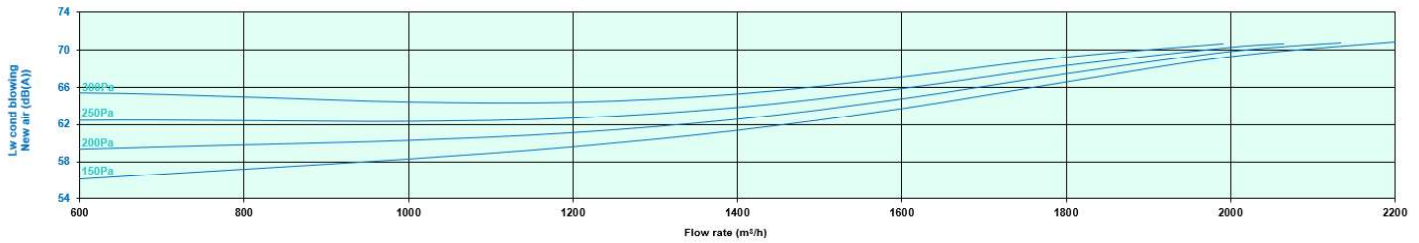
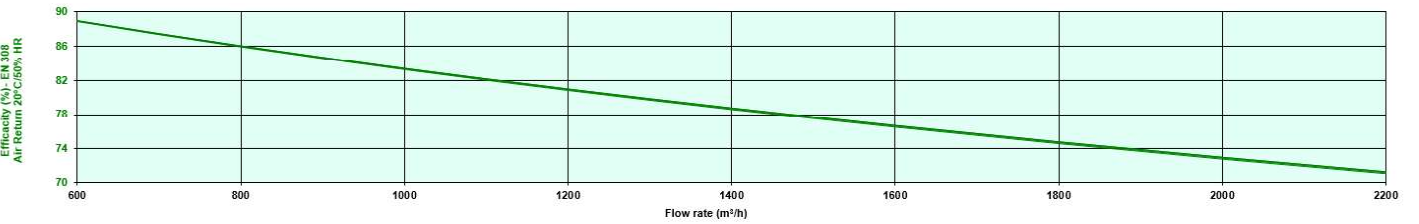
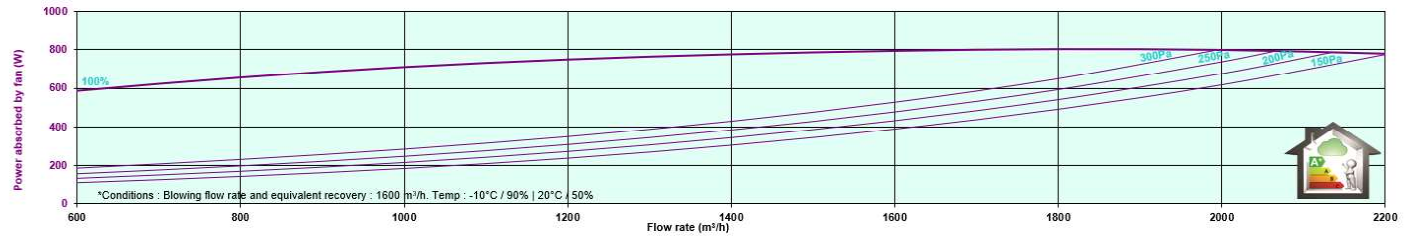
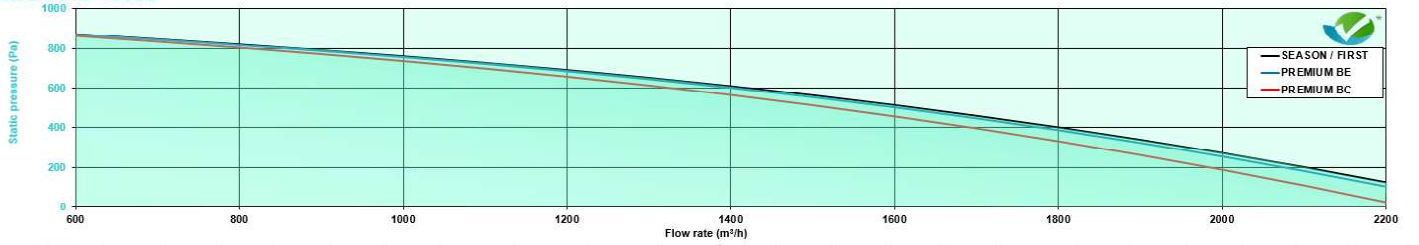
Fresh air Air flow (m³/h)	0°C 1500	-5°C 1500	0°C 1500	-5°C 1500	-10°C 1500	-15°C 1500	-20°C 1500
Version	FIRST-SEASON		PREMIUM BE				
			Heating coil				
Total power kW	-		5,25				
Temp.°C on output from the unit	14,5	13,1	25,0	23,6	22,2	20,8	19,4



**ECONOLOGICAL SOLUTIONS®**



**FREETIME® 2000**



Flow rate (m3/h)



## FREETIME® 2000

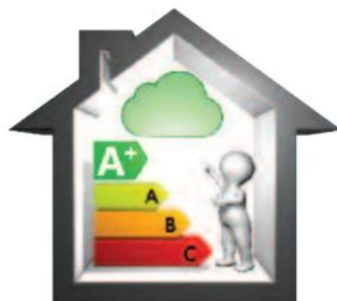
### Hot water coil - PREMIUM BC

Water inlet temp. (°C/°C)	Air inlet temp. (°C)	Air flow (m³/h)	800	1000	1200	1400	1600	1800	2000
<b>80/60</b>	11	Motor(kW)/Air outlet temp (°C)	9,4 / 45,3	10,8 / 42,6	12,1 / 40,5	13,3 / 38,8	14,4 / 37,3	15,4 / 36	16,3 / 34,9
		Water flow(L/h)/DP water (kPa)	411 / 4,1	474 / 5,4	530 / 6,6	582 / 7,8	630 / 9	674 / 10,2	715 / 11,4
<b>80/60</b>	15	Motor(kW)/Air outlet temp (°C)	8,7 / 46,9	10 / 44,4	11,2 / 42,4	12,3 / 40,8	13,3 / 39,4	14,3 / 38,2	15,1 / 37,2
		Water flow(L/h)/DP water (kPa)	382 / 3,6	440 / 4,7	493 / 5,8	541 / 6,8	585 / 7,9	626 / 8,9	664 / 10
<b>60/50</b>	11	Motor(kW)/Air outlet temp (°C)	7 / 36,7	8,1 / 34,8	9,1 / 33,3	10 / 32	10,9 / 30,9	11,6 / 29,9	12,4 / 29,1
		Water flow(L/h)/DP water (kPa)	612 / 9	709 / 11,7	794 / 14,4	873 / 17,2	945 / 19,9	1012 / 22,6	1075 / 25,2
<b>60/50</b>	15	Motor(kW)/Air outlet temp (°C)	6,4 / 38,3	7,4 / 36,6	8,3 / 35,2	9,1 / 34	9,8 / 33	10,5 / 32,1	11,2 / 31,4
		Water flow(L/h)/DP water (kPa)	555 / 7,5	642 / 9,8	719 / 12	791 / 14,3	856 / 16,6	917 / 18,8	973 / 21
<b>45/40</b>	11	Motor(kW)/Air outlet temp (°C)	5,1 / 29,5	5,9 / 28,1	6,6 / 27	7,2 / 26,1	7,9 / 25,4	8,4 / 24,7	8,9 / 24,1
		Water flow(L/h)/DP water (kPa)	875 / 17,9	1013 / 23,5	1138 / 29,1	1252 / 34,7	1358 / 40,2	1455 / 45,7	1546 / 51,1
<b>45/40</b>	15	Motor(kW)/Air outlet temp (°C)	4,4 / 31,1	5,1 / 29,9	5,7 / 29	6,3 / 28,2	6,8 / 27,5	7,3 / 26,9	7,8 / 26,4
		Water flow(L/h)/DP water (kPa)	761 / 13,9	881 / 18,2	990 / 22,5	1089 / 26,8	1180 / 31,1	1264 / 35,3	1343 / 39,4

## FREETIME® 2000

### Electric coil - PREMIUM BE

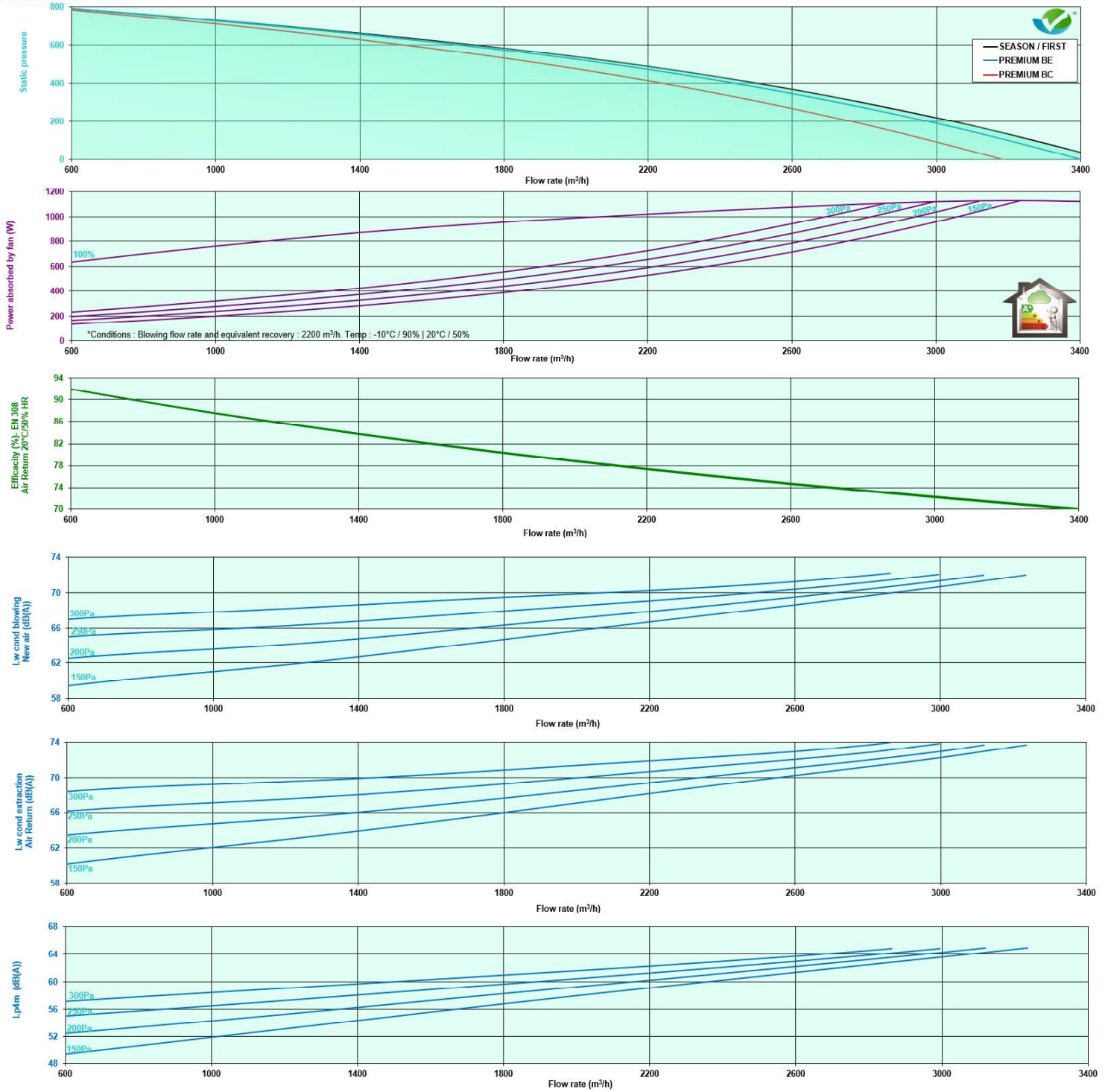
Fresh air Air flow (m³/h)	0°C 2000	-5°C 2000	0°C 2000	-5°C 2000	-10°C 2000	-15°C 2000	-20°C 2000
Version	FIRST-SEASON		PREMIUM BE				
			Heating coil				
Total power kW	-		10,5				
Temp. °C on output from the unit	14,7	13,4	30,5	29,2	27,8	26,5	25,1



AIR CONTROL SOLUTIONS®

**FREETIME® 2700**

**FREETIME® 2700**





## FREETIME® 2700

### Hot water coil - PREMIUM BC

Water inlet temp. (°C/°C)	Air inlet temp. (°C)	Air flow (m³/h)	600	1000	1400	1800	2200	2600	3000
<b>80/60</b>	11	Motor(kW)/Airoutlettemp(°C)	8,1 / 50,5	11,4 / 44,5	14,1 / 40,5	16,4 / 37,7	18,4 / 35,5	20,2 / 33,8	21,8 / 32,3
		Water flow(l/h)/DP water (kPa)	355 / 1,9	501 / 3,7	620 / 5,5	720 / 7,2	808 / 9	887 / 10,6	957 / 12,3
<b>60/50</b>	15	Motor(kW)/Airoutlettemp(°C)	7,5 / 51,7	10,6 / 46,1	13,1 / 42,4	15,3 / 39,8	17,1 / 37,8	18,8 / 36,1	20,3 / 34,8
		Water flow(l/h)/DP water (kPa)	330 / 1,7	466 / 3,2	575 / 4,8	669 / 6,3	750 / 7,8	823 / 9,3	888 / 10,7
<b>45/40</b>	11	Motor(kW)/Airoutlettemp(°C)	6,1 / 40,6	8,6 / 36,2	10,7 / 33,3	12,4 / 31,2	14 / 29,6	15,4 / 28,3	16,6 / 27,2
		Water flow(l/h)/DP water (kPa)	527 / 4,2	749 / 8,1	929 / 12	1083 / 16	1218 / 19,9	1338 / 23,8	1446 / 27,5
<b>45/40</b>	15	Motor(kW)/Airoutlettemp(°C)	5,5 / 41,8	7,8 / 37,8	9,7 / 35,2	11,3 / 33,3	12,7 / 31,9	13,9 / 30,7	15 / 29,7
		Water flow(l/h)/DP water (kPa)	478 / 3,5	679 / 6,7	841 / 10	980 / 13,3	1102 / 16,5	1210 / 19,7	1308 / 22,8
<b>45/40</b>	11	Motor(kW)/Airoutlettemp(°C)	4,4 / 32,2	6,2 / 29,1	7,7 / 27,1	9 / 25,6	10,1 / 24,5	11,1 / 23,5	12,1 / 22,8
		Water flow(l/h)/DP water (kPa)	752 / 8,4	1072 / 16,3	1334 / 24,4	1557 / 32,6	1753 / 40,6	1928 / 48,5	2086 / 56,2
<b>45/40</b>	15	Motor(kW)/Airoutlettemp(°C)	3,8 / 33,4	5,4 / 30,8	6,7 / 29	7,8 / 27,7	8,8 / 26,7	9,7 / 25,9	10,5 / 25,2
		Water flow(l/h)/DP water (kPa)	654 / 6,5	932 / 12,5	1158 / 18,8	1352 / 25	1521 / 31,2	1673 / 37,2	1809 / 43,1

## FREETIME® 2700

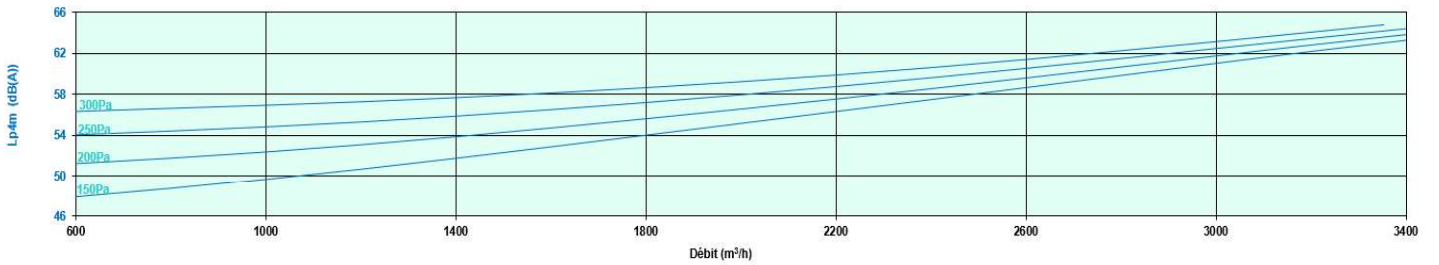
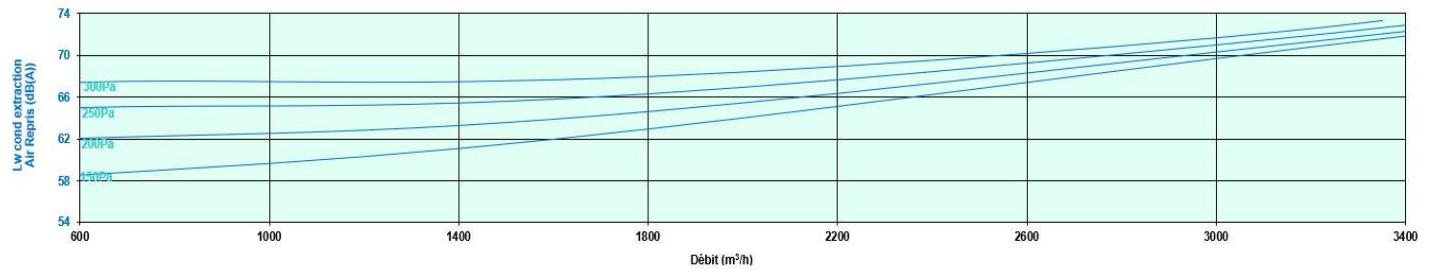
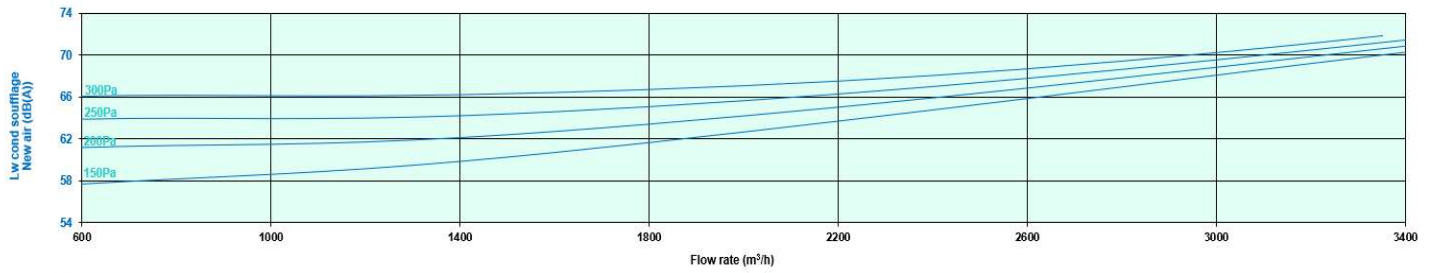
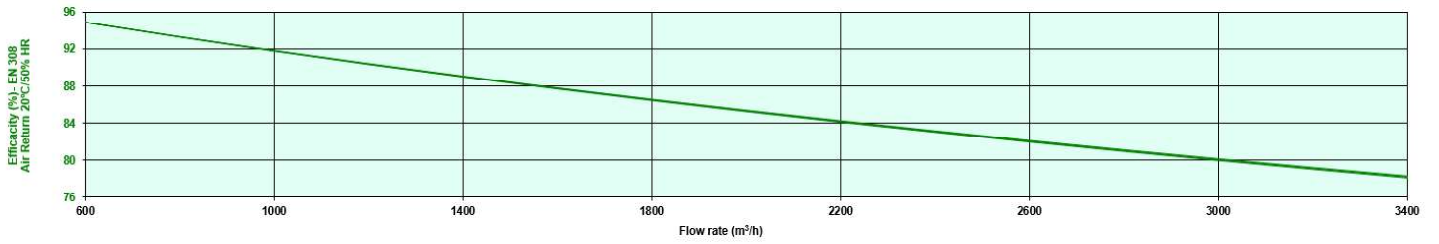
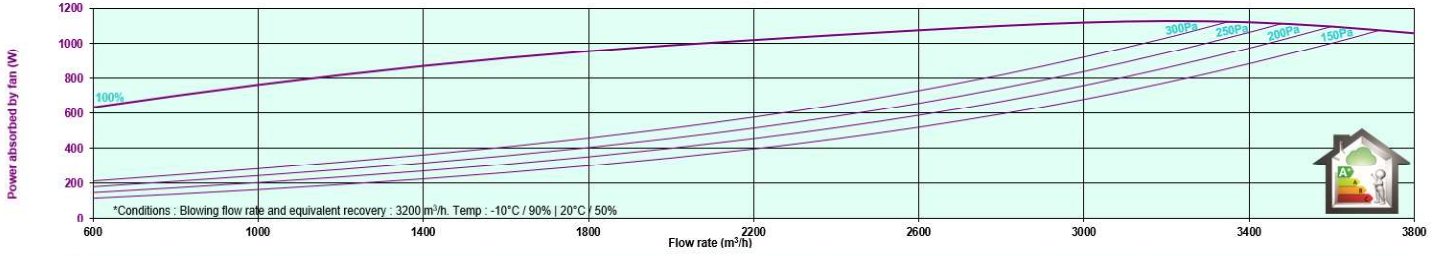
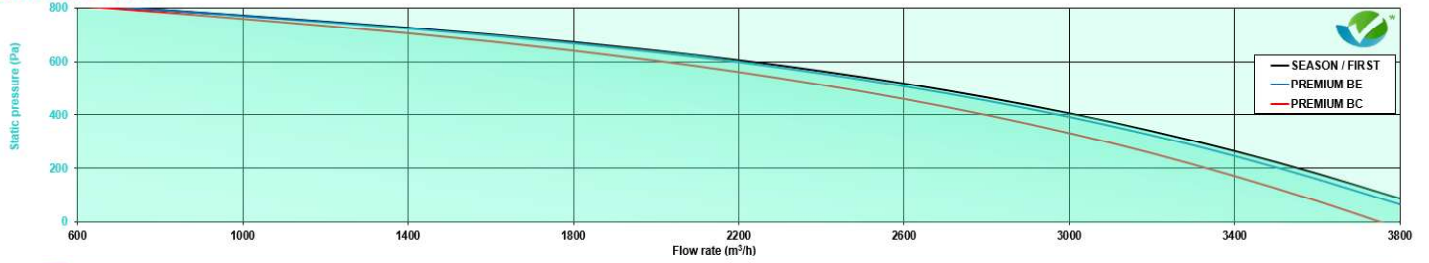
### Electric coil - PREMIUM BE

Fresh air Air flow (m³/h)	0°C 2700	-5°C 2700	0°C 2700	-5°C 2700	-10°C 2700	-15°C 2700	-20°C 2700
Version	FIRST-SEASON		PREMIUM BE				
			Heating coil				
Total power kW	-		13,5				
Temp.°C on output from the unit	14,9	13,7	29,9	28,7	27,4	26,1	24,7



**FREETIME® 3500**

**FREETIME® 3500**







## FREETIME® 3500

### Hot water coil - PREMIUM BC

Water inlet temp. (°C/°C)	Air inlet temp. (°C)	Air flow (m³/h)	1000	1400	1800	2200	2600	3000	3400
<b>80/60</b>	11	Motor(kW)/Air outlet temp(°C)	12,7 / 48,3	15,9 / 44,3	18,7 / 41,4	21,1 / 39,1	23,3 / 37,2	25,3 / 35,7	27,1 / 34,3
		Water flow(L/h)/DP water (kPa)	558 / 2,5	683 / 3,7	819 / 5	925 / 6,2	1021 / 7,4	1108 / 8,6	1188 / 9,8
<b>60/50</b>	15	Motor(kW)/Air outlet temp(°C)	11,9 / 49,7	14,8 / 45,9	17,4 / 43,2	19,6 / 41,1	21,6 / 39,6	23,5 / 37,9	25,2 / 36,7
		Water flow(L/h)/DP water (kPa)	519 / 2,2	649 / 3,2	761 / 4,3	859 / 5,4	948 / 6,5	1029 / 7,5	1103 / 8,6
<b>45/40</b>	11	Motor(kW)/Air outlet temp(°C)	9,6 / 38,9	12 / 36	14,1 / 33,9	15,9 / 32,2	17,6 / 30,8	19,2 / 29,7	20,6 / 28,7
		Water flow(L/h)/DP water (kPa)	830 / 5,3	1042 / 8,1	1225 / 10,9	1387 / 13,6	1533 / 16,4	1666 / 19,1	1788 / 21,8
<b>45/40</b>	15	Motor(kW)/Air outlet temp(°C)	8,7 / 40,3	10,9 / 37,7	12,8 / 35,7	14,4 / 34,2	16 / 33	17,3 / 31,9	18,6 / 31
		Water flow(L/h)/DP water (kPa)	753 / 4,5	945 / 6,7	1110 / 9,1	1256 / 11,4	1388 / 13,7	1508 / 15,9	1619 / 18,1
<b>45/40</b>	11	Motor (kW)/Air outlet temp (°C)	6,9 / 31	8,6 / 29	10,2 / 27,5	11,5 / 26,3	12,7 / 25,3	13,8 / 24,5	14,9 / 23,8
		Water flow(L/h)/DP water (kPa)	1185 / 10,6	1491 / 16,2	1756 / 21,8	1991 / 27,5	2203 / 33,1	2396 / 38,7	2574 / 44,1
<b>45/40</b>	15	Motor (kW)/Air outlet temp (°C)	6 / 32,5	7,5 / 30,7	8,8 / 29,3	10 / 28,3	11,1 / 27,4	12 / 26,7	12,9 / 26,1
		Water flow(L/h)/DP water (kPa)	1032 / 8,2	1297 / 12,5	1527 / 16,9	1730 / 21,2	1914 / 25,6	2081 / 29,8	2235 / 34

## FREETIME® 3500

### Electric coil - PREMIUM BE

Fresh air Air flow (m³/h)	0°C	-5°C	0°C	-5°C	-10°C	-15°C	-20°C
	3500	3500	3500	3500	3500	3500	3500
Version	FIRST-SEASON		PREMIUM BE				
			Heating coil				
Total power kW	-		16,5				
Temp.°C on output from the unit	15,7	14,6	29,8	28,7	27,1	26,4	25,3



**• SECURITY AND CONTROL****PRESSOSTAT  
FOULING ref. DEP**

Return air Filter (IP54)

**MANOMETER  
WITH LIQUID J  
ref. MANO****SMOKS ALARM  
ref. CDAD**

Cabinet (IP54)

**BOX RELEASE  
ref. BD**TBTS 24 or 48Vcc  
CASE (IP67)**• INSTALLATION****FLEXIBLE SLEEVE ref. MTS M0**Fire classification: M0  
Male diameters (supply) / Female (Central side)**CIRCULAR REGISTER  
ref. RC4A**Frost protection or isolation. Waterproof class 4  
Ø 200 to 450**• RÉGULATION****REGULATOR OF ZONE  
MONOFUNCTION ref. SYSTEM TOP**Zone Control All Or Not to associate with versions  
LOBBY® flow modulation rate (constant pressure).**MONOFUNCTION ZONE  
REGULATOR ref. DIVA SYSTEM**Modulation zone controller to associate with  
LOBBY versions flow modulation rate (constant  
pressure).**MONOFUNCTION ZONE REGULATOR ref.  
WONDEROOM**To associate with the modulation versions of LOBBY  
(constant pressure). Besides the zone management, the  
regulator communicates with FREETIME unit which  
permits to manage the free-cooling / night-cooling  
parameters.**• MODULATION FLOW****DEPORTED  
COMMAND  
ref. POT VF**Potentiometer only for  
SEASON (IP54)**COMMANDED  
OUTSTRIP COMFORT  
ref. CDC1V2**On/off/PV/GV 2 Ventilators  
CASE (IP54)**COMMANDED  
OUTSTRIP COMFORT  
ref. CDC2V2**STOP /PV/GV 2 Ventilators  
CASE (IP54)**COMMANDED  
OUTSTRIP  
COMFORT  
ref. CDC PVGV2**PV/GV 2 Ventilators CASE  
(IP54)**PRESENCE  
DETECTOR  
ref. 360 TOR SA**ON/OFF or  
PV/GV(SEASON  
incompatible version)**CLIMATIC****THERMOSTAT REVERSER  
SUMMER/WINTER  
ref. CHANGEOVER PAD**

For versions FIRST + CBX-BF used in changeover

**DUCT HUMIDITY SENSOR  
ref. HR 010 SG**

Signal 0-10V (SEASON incompatible version)

**DUCT HUMIDITY SENSOR  
ref. HR 010 SA**

Signal 0-10V (SEASON incompatible version)

**DIRECT EXPANSION MODULE  
R410A ref. CBX DX**Installation in ducts (to see chapter  
AIR TREATMENT for descriptions).  
SEASON incompatible version**DESHUMIDIFICATION MODULE ref  
CBX**Installation in girdle (see AIR TREATMENT chapter  
for descriptions). Non compatible with SEASON  
version.**ELECTROVALVE KIT ref. KEE IP44**Installation in girdle (see AIR TREATMENT chapter  
for descriptions). Non compatible with SEASON  
version.