



Heat recovery units with heating battery $\leq 2400 \text{ m}^3/\text{h}$ (counterflow) type Neotime Premium

High efficiency heat recovery unit up to 85%. The range includes 5 sizes and 2 types for flow rates from 100 to 2400 m³/h. Each **Neotime Premium** model comes with 2 adjustable flow rates as standard.

The **Neotime Premium** is a self-regulating unit either equipped with an electric battery or with a water battery type change-over and an extensive control module. The unit is only suitable for an indoor installation.

Brand

- R-COVERY by ZEHNDER CALADAIR

Application

- Automatic ventilation and high efficiency heat recovery of air in non residential and industrial applications
- Air filtration, temperature control
- Compact monoblock ventilation unit, with plug & play energy-saving control system (EN 15232)

Composition

- Double skinned panels with high-density mineral wool insulation 25 mm (M0), fire class A2-S1
- Outer layer: prelacquered steel plate in light grey (RAL 7035) with protection sheet
- Inner layer: galvanized steel plate 10/10
- Access panel for access to all internal elements
- Corner pieces for ceiling mounting
- Round connections with lip sealing for all models
- Appropriate for indoor installation, ceiling mounting
- Condensation tray and drain 1/2"
- Built-in 100% Bypass, motorised and auto regulating
- Built-in regulation with external display IP65
- Integrated FREE-COOLING and NIGHT-COOLING function
- Built-in temperature sensors (4)
- Built-in clock for operation between two flow rates
- Built-in week clock and public holidays
- Safety switch
- Pressure switch on inlet filter F7
- Pressure switch on each fan
- Standard Modbus or Bacnet available
- Only available in left execution (see configuration)

Fan

- Direct driven EC motor with electronic commutation (EC) with high efficiency, thermal protection and integrated speed control
- The EC technology ensures limited energy consumption by managing and controlling the operating point (regulation from 10 to 100%)
- Low noise level for a better acoustic comfort

Exchanger

- Static counter-flow heat exchanger made of seawater resistant aluminium
- Efficiency >85% (EN308)

I.10

Heat recovery units

Neotime Premium

- Non residential
- Counterflow heat exchanger
- R-COVERY by ZEHNDER CALADAIR
- $Q_v \leq 2400 \text{ m}^3/\text{h}$
- Horizontal
- Heat recovery unit with efficiency $\geq 85\%$



Filter

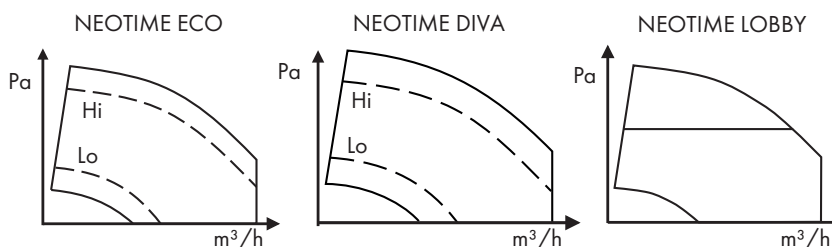
- Filters are placed directly in front of the components for optimal protection
- Mounted on sliding rails with lip sealing to ensure efficient air tightness
- **Neotime Premium** basic configuration with a **F7** - ISO 16890 ePM1 55% - (inlet air) filter and a **M5** - ISO 16890 ePM10 50% - (exhaust air) filter, thickness 48mm
- **F7** high efficiency filter: 10x higher filtration surface than a gravimetric filter and 2.5x longer life span

Versions

- **Neotime Premium BE**: ventilation group with an integrated electrical post-heating battery
- **Neotime Premium CO**: ventilation group with an integrated water battery as a change-over coil (cooling OR heating)

Options

- **ECO**[®]: adjusting the speed of the fans by entering 2 air flow rates (high – low flow) in the regulation
- **LOBBY**[®]: Constant pressure for each fan for use with e.g. VAV boxes
- **DIVA**[®]: Proportional modulating flow rate (between a set min. and max. flow rate) of each fan according to a built-in CO2 measurement.



Certification

- The device is tested according to NBN EN 308: www.epbd.be
- Efficiency of the heat exchanger of more than 85% (EN308), in accordance with RT2012 and ErP 2009/125/EC directives
- EUROVENT classifications according to EN1886 and EN13053
- Standard construction with double skinned panels of 25mm
- Mechanical strength class: D2
- Air tightness: Class L1
- Conductivity: T3
- Thermal bridge factor: TB2
- Filter leakage class: F9
- Exterior panel made of lacquered steel 10/10
 - Finish RAL7035 - 25µm, gloss 40%, film 80µm
 - Primer RAL7032 - 5µm
- Inner panel made of galvanized steel 10/10
- Insulation: high density 25mm mineral wool, class A2-S1 (M0)

Accessories

- Airtight control valves, type **AKH**
- Galvanised canopy with grille, type **UT**
- **Controllers for Neotime Premium up to serial number 225190:**
 - **E3-DSP** controller mounted on the unit as standard
 - Remote controller available as an option
 - **E3-DSP** remote display (up to 100 metres, to be provided by the installer) with 3-metre **EDSP-K3** or 10-metre **EDSP-K10** Belden cable
 - **ED Touch** digital controller for units type GTDHR/V, Hexamotion(-S), Freetime(-S), Silvertop, Neotime (First and Premium)
 - Cable 4-wire 24 Vdc (Corrigo C+/GO) of 10 rmt included
- **Controllers for Neotime Premium from serial number 225191:**
 - **Easy 5.0** controller mounted on the unit as standard
 - Master touch screen controller
 - **EDT2** remote controller available as an option
 - Touch screen controller for end user

Other available products

- Neotime First

Text for tender

See downloads

Order example

Neotime 600 Premium BE ECO

Explanation

Neotime = type of heat recovery unit

600 = size (600-900-1300-1800-2500)

Premium = Premium execution

BE = with electrical battery

CO = with change-over water battery

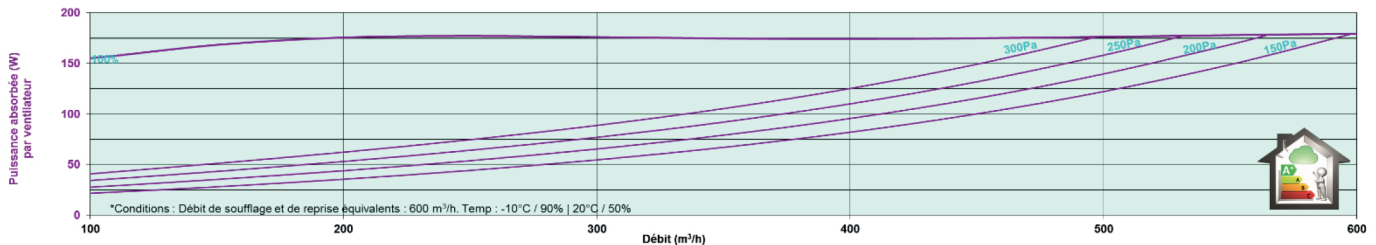
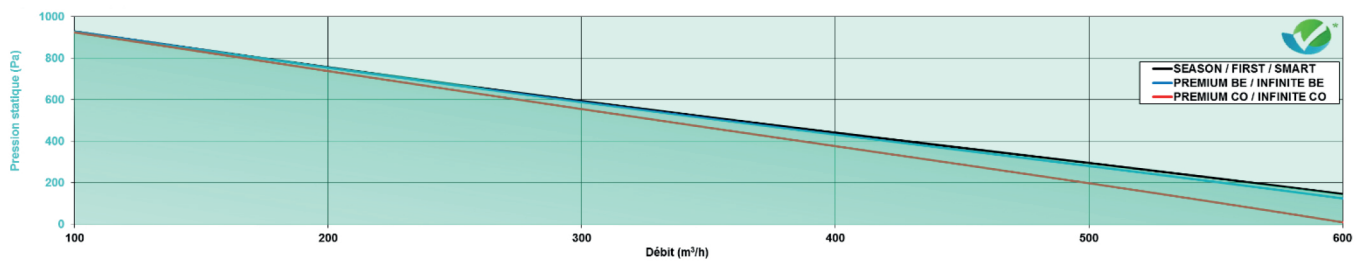
ECO = ECO EC regulation

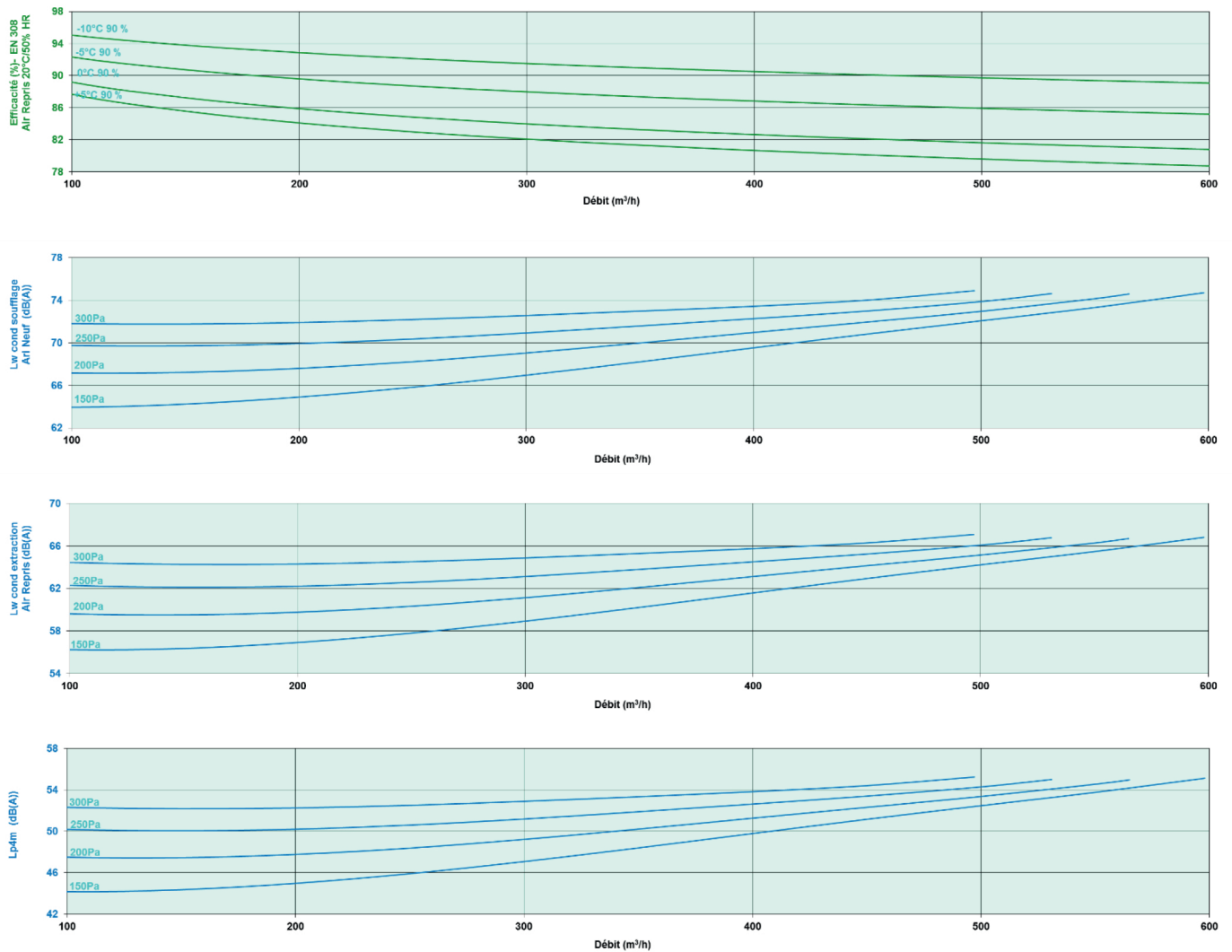
D = DIVA EC regulation

L = LOBBY EC regulation

Selection curves

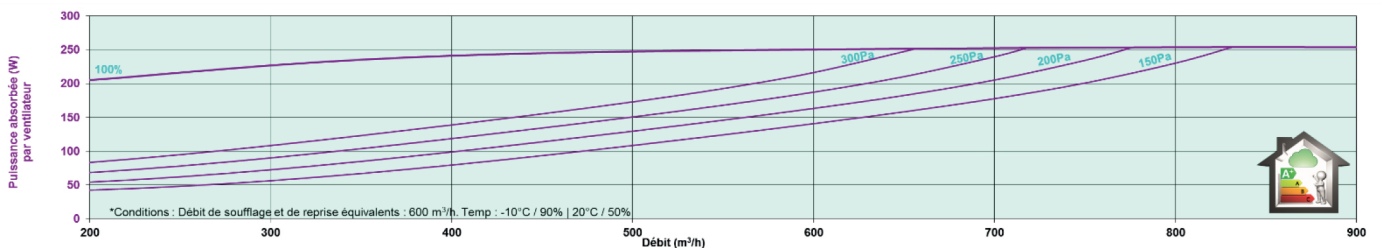
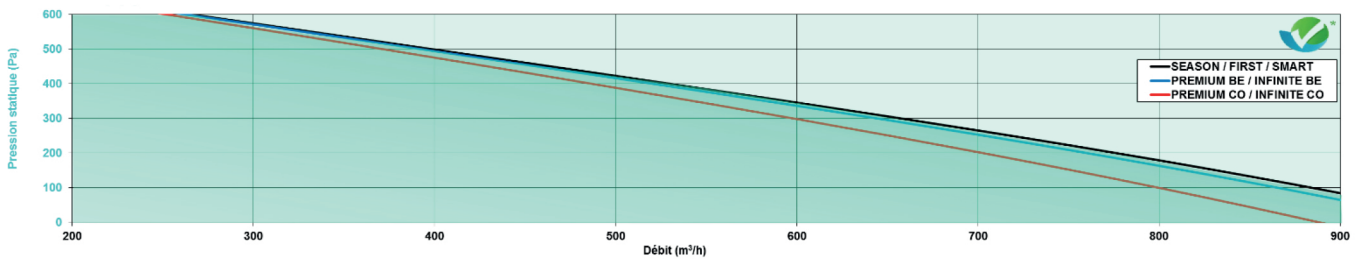
Neotime 600

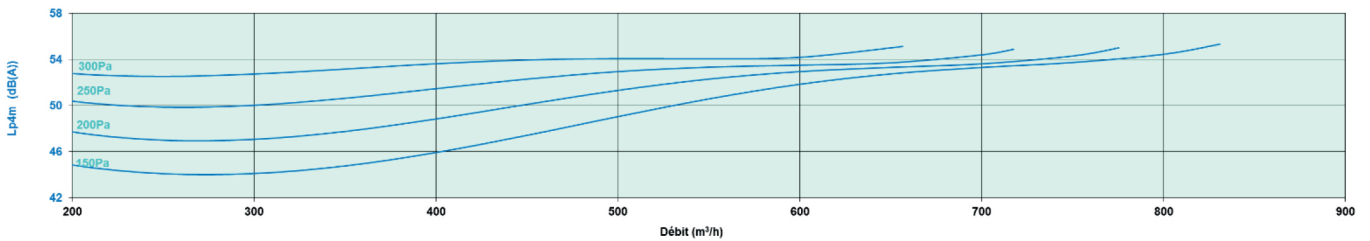
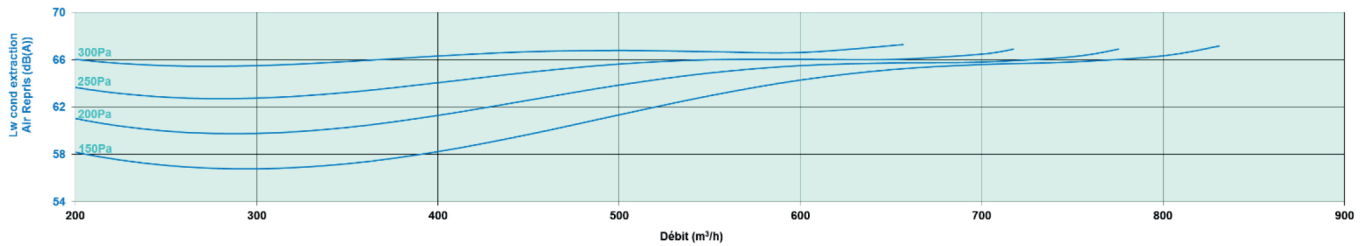
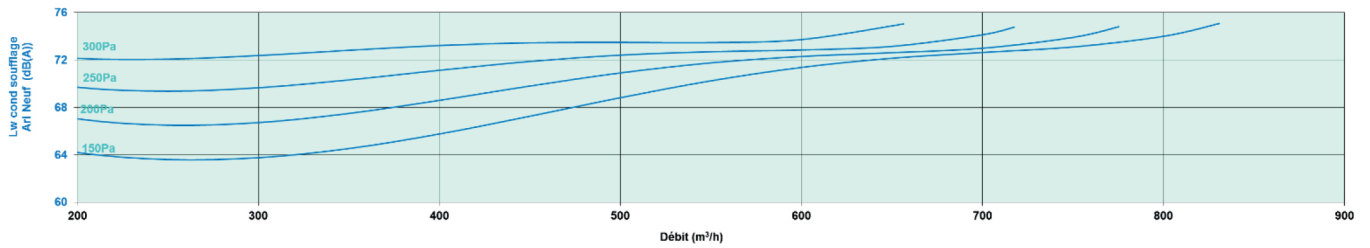
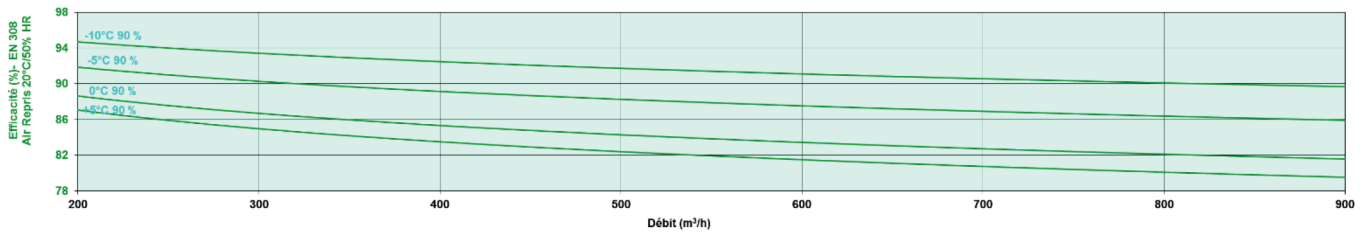




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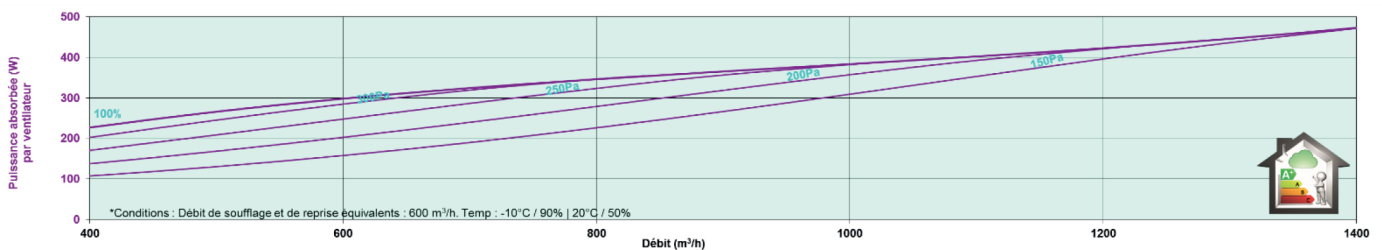
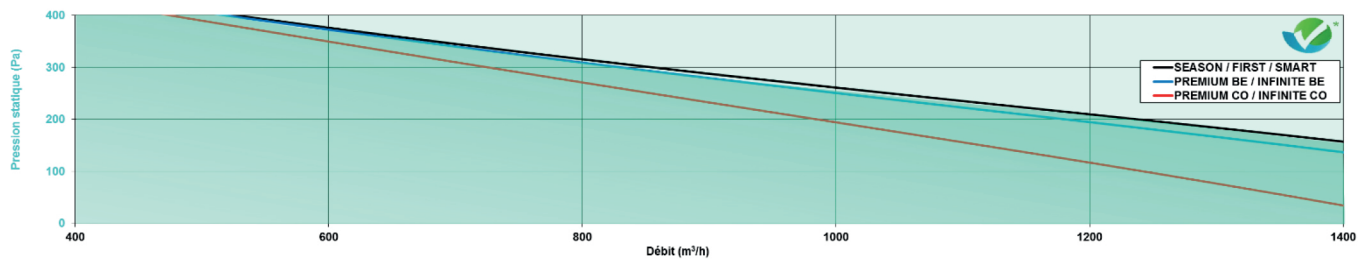
Neotime 900

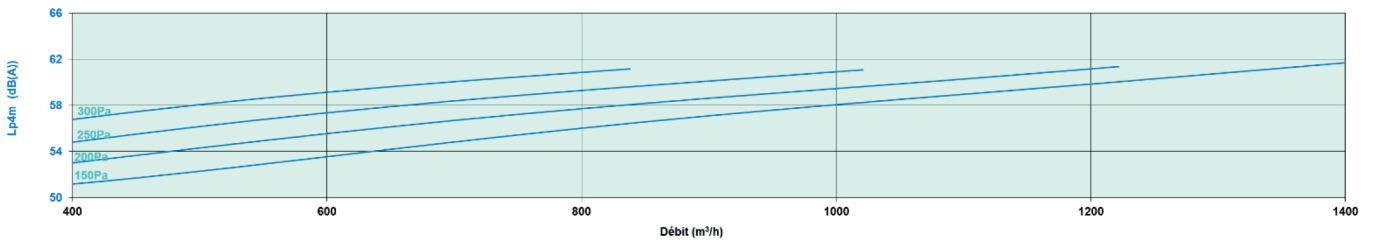
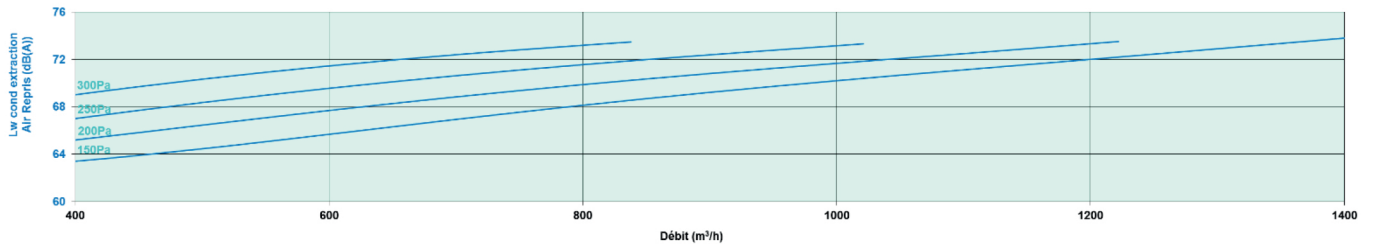
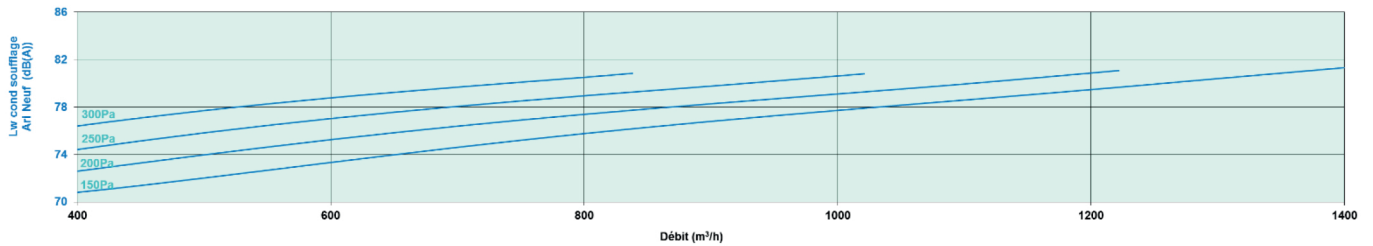
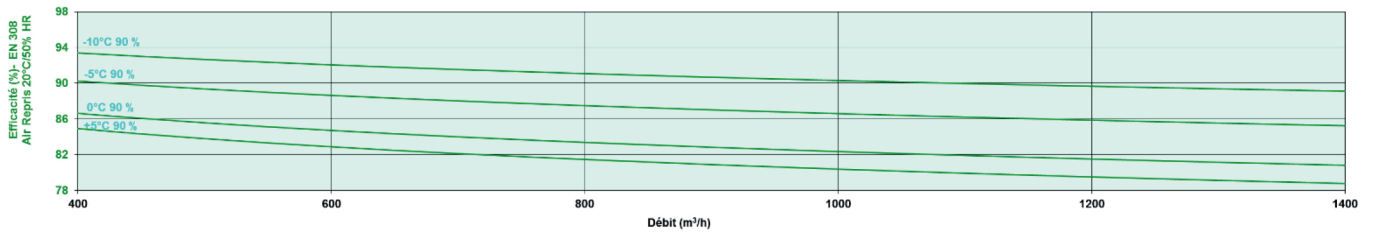




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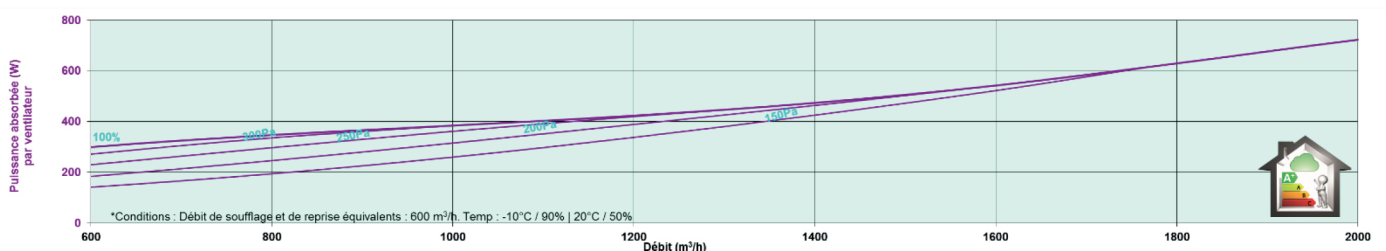
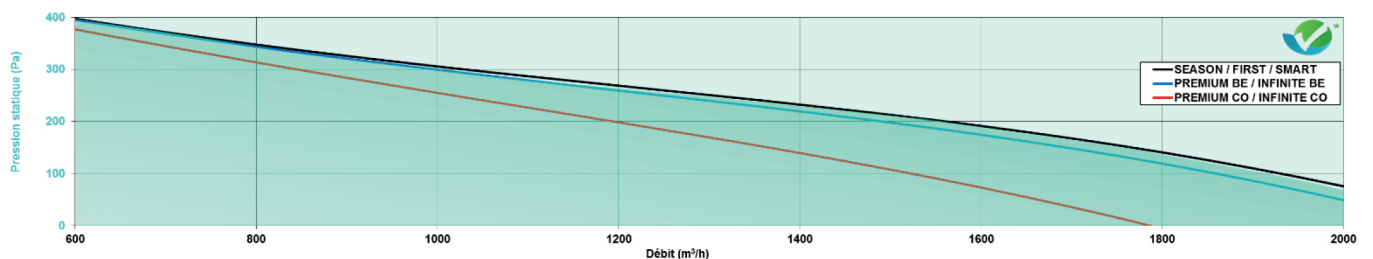
Neotime 1300

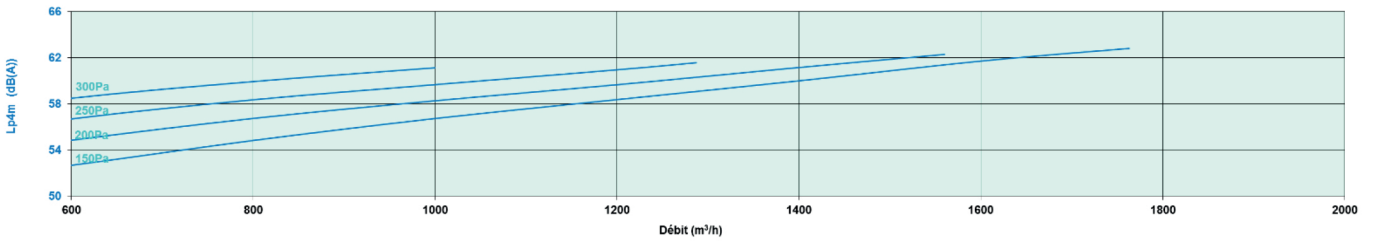
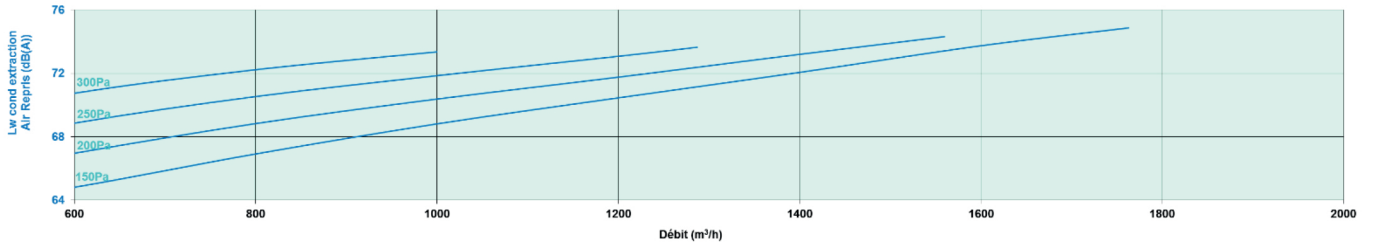
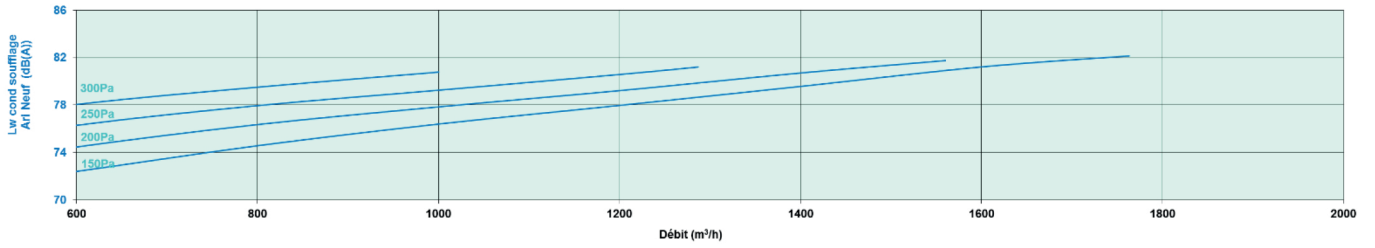
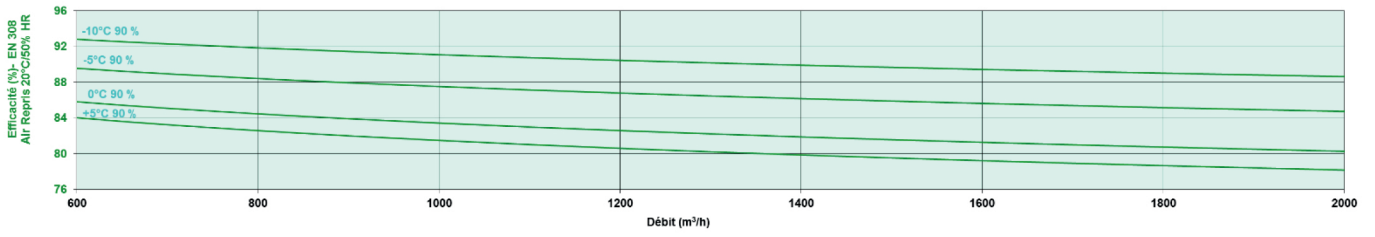




Selection curves

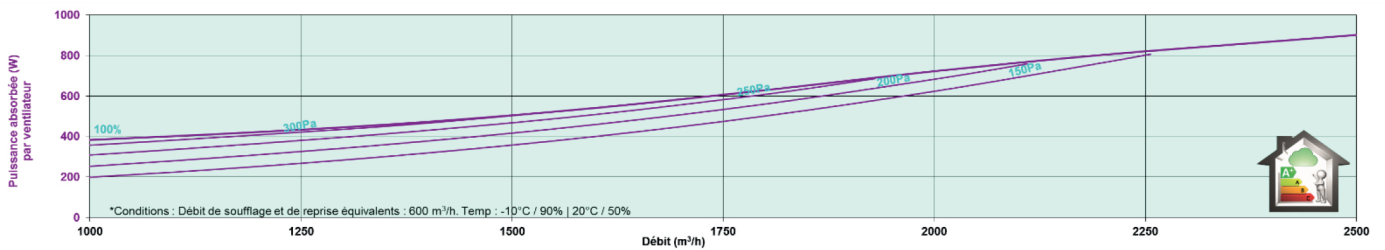
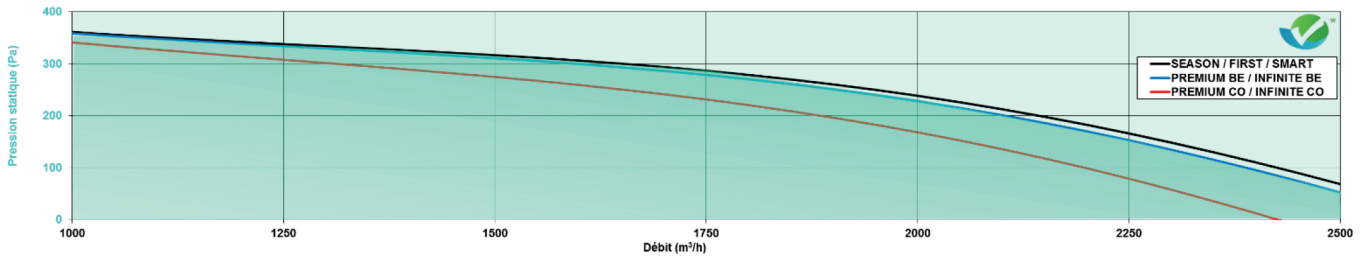
Neotime 1800

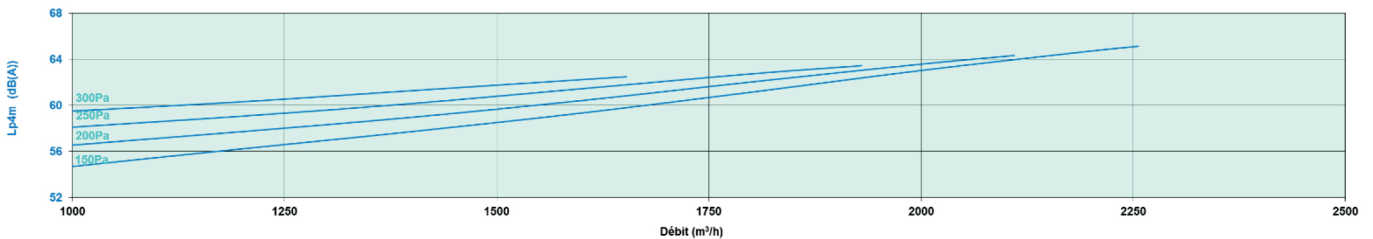
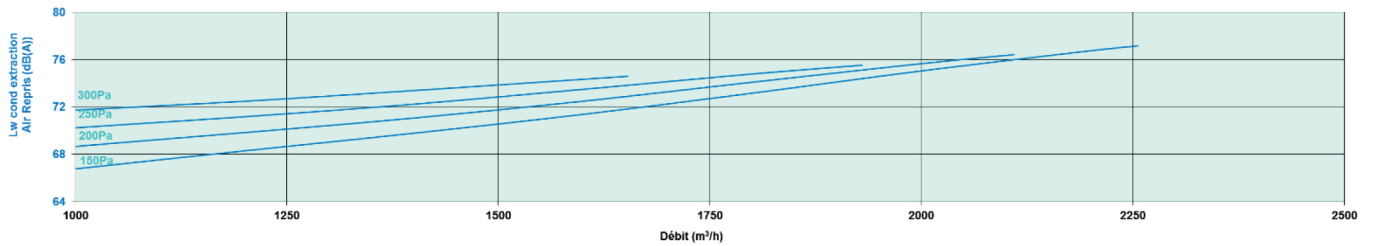
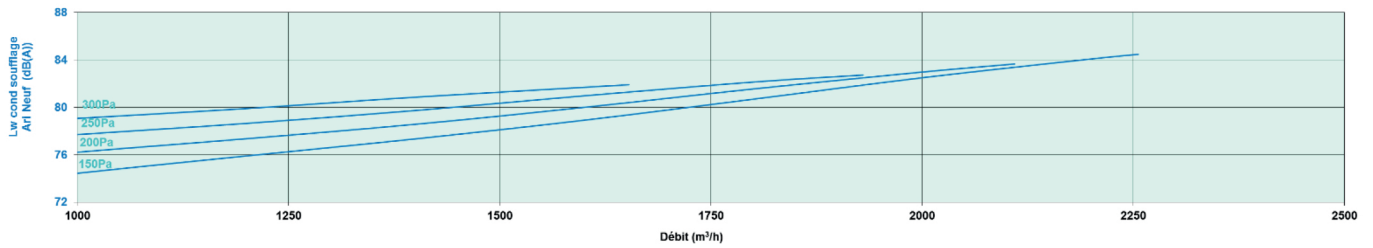
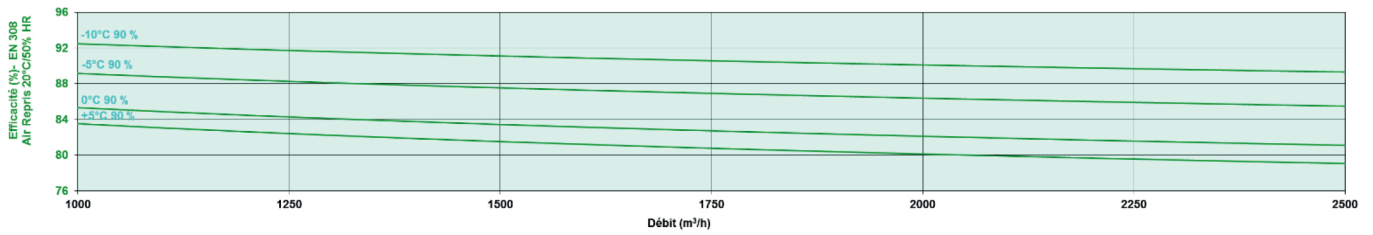




Selection curves

Neotime 2500





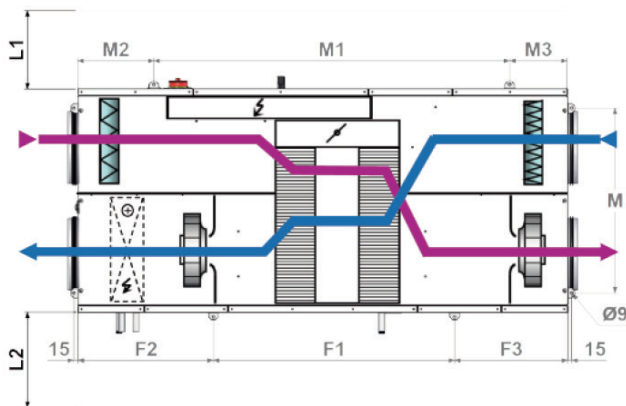
- Q [m³/h] = Flow rate
- Pst [Pa] = Static pressure
- P_{bat} [Pa] = Pressure loss batteries
- BE = Electrical battery
- BC = Hot water battery
- BF = Chilled water battery
- DX = Direct expansion
- P_{ab} [W] = Absorbed power per fan
- η [%] - EN 308 (20°C / 50%) = Efficiency
- Lwa pu = Sound power level in duct motor side
- Lwa ex = Sound power level in duct filter side
- Lpa @ 4m = Sound pressure level at 4m in free field with mounted inlet and outlet flanges

	Technical data						
	P [W]	T [°C/°C]					
					PREMIUM CO/BE [V/Ph/Hz]	PREMIUM CO [A]	PREMIUM BE [A]
600	2 x 169	-20 / 60	IP54/B	PTI	230/1/50	2.8	8.2
900	2 x 220	-20 / 60	IP44/B	PTI	230/1/50	3.4	11
1300	2 x 400	-20 / 60	IP44/F	PTI	230/1/50	8.6	19.5
1800	2 x 400	-20 / 40	IP44/F	PTI	230/1/50	8.6	24.9
2500	2 x 400	-20 / 40	IP44/F	PTI	230/1/50	8.6	31.4

Battery

For more info, see downloads

Horizontal configurations - side by side flow - top view



- Verse lucht → Air neuf
- Afvoerlucht → Air repris

The Neotime Premium is **only** available in a **left** execution, viewed from the top of the device, following the direction of the air flow.

Dimensions																						
	Ø	A	B	C	D	E	F1	F2	F3	G	G1	G2	J	K	M	M1	M2	M3	T	T1	PREMIUM BE	PREMIUM CO
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	[kg]
600	250	1700	780	330	160	370	-	-	-	150	50	145	170	645	640	-	-	-	1/2"	1/2"	130	135
900	315	2020	965	415	210	460	-	-	-	150	50	145	250	760	770	-	-	-	1/2"	1/2"	195	200
1300	355	2190	1220	415	195	600	795	735	660	430	50	425	250	860	950	1170	510	510	1/2"	1/2"	270	275
1800	400	2270	1220	495	245	600	915	725	630	430	50	425	330	885	950	1110	580	580	1/2"	1/2"	290	295
2500	400	2395	1740	495	245	910	840	785	770	430	50	425	330	985	1350	1235	580	580	3/4"	1/2"	400	405

