

Zehnder Néotime™

Technical specification

always the best climate

Application

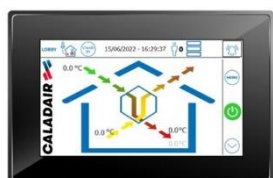
Self-regulating heat recovery unit, high efficiency and performance, for tertiary and industrial applications such as offices, schools, care homes, shopping malls, catering facilities, multi-family housing, etc.

Monobloc unit, compact and extra-flat for installation in false ceilings or in technical room.

All internal components are factory mounted and programmed according to the chosen configuration. It's our PLUG&PLAY - SET& FORGET™ concept !

Aluminum counterflow heat exchanger with over 90% efficiency (EN308), compliant ErP Directive 2009/125/EC and with French regulation RE2020.

Air filtration and temperature management for optimal comfort and IAQ.



Benefits for the user

- Versatile use: ideal for installation in false ceilings thanks to its flat design. Can also be mounted lying flat on the floor.
- Integrated condensates drain tray for heat exchanger and CO coil.
- Optimal inside air quality thanks to ePM1 filter 55% [F7] for fresh air and ePM10 filter 50% [M5] for extract air.
- Silent operation is ensured by double-skinned panels with high-density thermal insulation (25 mm mineral wool). Thermal class T3 and airtightness class L1 in accordance with EN 1886.
- User interfaces installed as standard with remoting possibility. Flexible and easy connection to BMS with on-board communication protocols (Modbus, BACnet and Web)
- Eurovent (N°21.03.72) and VDI 6022 certified solution, compliant with the requirements of the ErP 2018 directive

Range

The Néotime™ range is available in 5 sizes which cover airflows from 250 m³/h to 2 400 m³/h and in 5 versions :

FIRST : unit used for temperate climatic zones, with dynamic temperature management to optimize energy consumption and comfort.

SMART : unit equipped with an electric preheater for outdoor temperature compensation down to -10°C.

PREMIUM : unit equipped with a heating coil, either electric (BE) or water changeover (CO).

INFINITE : unit equipped as standard with an electric preheater and a heater for outdoor temperatures down to -20°C.

SEASON : unit used for temperate climatic zones, designed for air renewal in buildings with energy recovery, summer/winter bypass function, airflow adjustment by potentiometer.

Airflow modulation

4 airflow modulation solutions with EASY 5.0 control ensure optimum energy consumption (RE 2020, EN 15232).

ECO : 2 speed settings (LS/HS) per fan.

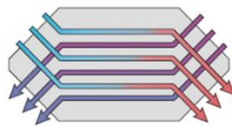
MAC 2 : 2 constant airflows.

DIVA : proportional fan speed modulation on CO₂ levels.

LOBBY : constant pressure airflow modulation on each fan.

Counterflow heat exchanger

High efficiency counterflow aluminum plate heat exchanger.



Eurovent-certified in accordance with the AAHE program, efficiency over 90% (EN 308).

Automatic frost prevention via 100% self-regulating and modulating internal bypass (except SEASON, On/Off), via self-regulating electric preheater for SMART and INFINITE versions, and possible fresh airflow modulation (included controller option).

Constitution

The Néotime™ range features the self-supporting Eurovent certified AIRSLIM™ model box (L1/D2/T3/TB3/F9) in accordance with EN1886.

- 10/10th double-skin panels and 25 mm of M0 (A2-S1) high-density 60 kg/m³ mineral wool insulation.
- Exterior panels in RAL 9007 coated steel with protective film and interior in galvanized steel
- Unit fitted as standard with dual seal round spigot on intake and outlet panels to guarantee network sealing. Complaint with French CSTB ATE_x n°13-224-V2).
- EASY 5.0 technical cabinet (electrical and control components) accessible from a opening panel for easy maintenance. Solid panel with lockable main power cut-off switch, power cable pass-through and integrated potentiometers (SEASON version).
- Access to filters via access hatches and via removable panels for other interior components.
- Condensate drain tray are inclined and removable for installation of the unit without inclination.
- 100% internal bypass, self-regulating and modulating, except SEASON which is equipped with thermostat for summer/winter by-pass management and with on/off switch.

Filtres

As standard, the Néotime™ unit features factory-mounted filters that ensure an optimal indoor air quality.

Fresh Air

ePM1 filter 55% [F7]

Extracted Air

ePM10 filter 50% [M5]

Filters are always mounted on slides for easy replacement, and ahead for components protection.

Fan motor

DC motor with high-efficiency electronic commutation (EC), thermal protection and integrated speed control. EC technology is an eco-friendly™ solution which brings low energy consumption and allows operating point monitoring, managing and controlling (airflow modulation from 10 to 100%). Low noise level for greater acoustic comfort.

Equipment and functions

The FIRST SMART, PREMIUM and INFINITE versions are supplied as standard with an EASY 5.0 control system, communicating via MODBUS, BACNET or WEB (choice of language can be activated on site). It includes a PG 5.0 touchscreen control (IP54 protection class) for simple and direct access to parameters and functions.

EASY 5.0 can be optionally fitted with an USER room remote touch control EDT2, featuring a user interface and display for the main functions (temperature control, restart, fault...) (remote control up to 100 m).

- Internal timers for scheduled operation with 2 different airflows, programmable as required on site.
- Weekly and vacation schedule.
- Fresh air filter pressure switch with error feedback on the touchscreen control (dry contact relay for SEASON).
- Airflow pressure switch for each fan, with error feedback on the touchscreen control (dry contact relay for SEASON).
- Lockable main power cut-off switch and power cable pass-through integrated near the extract air duct.

100% internal bypass, equipped with automatically controlled servomotors by the integrated control system, providing FREE-COOLING, FREE-HEATING and NIGHT-COOLING functions. For the SEASON version, the 100% bypass provides summer/winter management in On/Off mode via integrated thermostats.

- **FREE COOLING** : in summer, when the outdoor temperature is lower than the set indoor temperature, the bypass opens progressively until it is fully open. In this way, fresh air is supplied to the building, bypassing the heat exchanger. If this function is not sufficient to reach the set temperature, the optional cooling coil is activated.
- **FREE HEATING** : Mainly in the off-season, when the outside temperature is higher than the set inside temperature, the bypass opens gradually until it is fully open and warm fresh air can be supplied to the building. If this function is not sufficient to reach the set temperature, the optional heating coil is activated.

- **NIGHT COOLING** : the Night Cooling function lowers the building's indoor temperature according to the weather conditions of the last 24 hours. For example, between midnight and 7 a.m. (adjustable time range), the Night Cooling function is activated if the outdoor temperature has exceeded 22°C (adjustable value) during the day (between 6 a.m. and 10 p.m.). The Night Cooling function is activated if the outdoor temperature is between 10 and 18°C (adjustable value) and the extract air temperature is above 18°C (adjustable value).

4 temperature control modes to guarantee optimal energy consumption (RT2012, EN15232).

- **Constant supply air temperature** : Keeps the supply temperature at the setpoint.
- **Supply air temperature adjustable according to outdoor temperatures** : Outdoor conditions considered.
- **Constant extract air temperature** : Extract temperature management acting in cascade on the supply temperature.
- **Extracted air temperature adjustable according to outdoor temperatures** : Outdoor conditions considered.

Fire safety function (except SEASON) to control supply and extract fans according to 5 available modes in the control parameters (function can be activated on site). A pictogram of a fire alarm is displayed on the screen:

- **Stop** : Complete unit shutdown.
- **Continue** : Continuous start-up or operation of the unit without taking time schedules into account.
- **Under normal start/stop conditions** : Maintains the unit according to the schedule and parameters set on site.
- **Supply only** : Start or maintain supply air fan (extract at stop).
- **Extract only** : Start or maintain extract air fan (supply at stop).

Moreover, the Néotime™ features an "External Stop" digital input that enables a manually operated control (to be connected on site). In this case, the external control takes priority over any fire safety activated by one of the 5 modes above.

Installation

The Néotime™ unit has no roof. It must be installed exclusively inside, on the ceiling (with or without a false ceiling).

For maintenance operations, the internal components can be accessed from either side of the unit.

Climatic version

The Néotime™ features finishes to ensure optimal climatic comfort (except SEASON). These features are managed automatically by the "EASY 5.0" control system. The sensors needed to regulate the coils and fans built into the unit are factory-mounted, wired and tested to make the Néotime™ a true PLUG&PLAY - SET& FORGET™ unit:

- Temperature sensors (x4) integrated into the unit: supply, extract, frost prevention by bypass, outdoor temperature and, for SMART and INFINITE versions, a sensor for the electric preheater.
- Integrated anti-frost thermostat (THA) to protect the hot coil on PREMIUM/INFINITE CO. versions.
- Integrated overheating safety thermostat (THS) with manual reset to protect preheater and heating coils on SMART, PREMIUM BE, INFINITE BE and INFINITE CO versions.

The "EASY 5.0" control can manage the CBX-BF and CBX-DX external modules:

- Cold water module (CBX-BF) on all versions and changeover possible on FIRST and SMART versions.
- CBX-DX R410A direct expansion module.

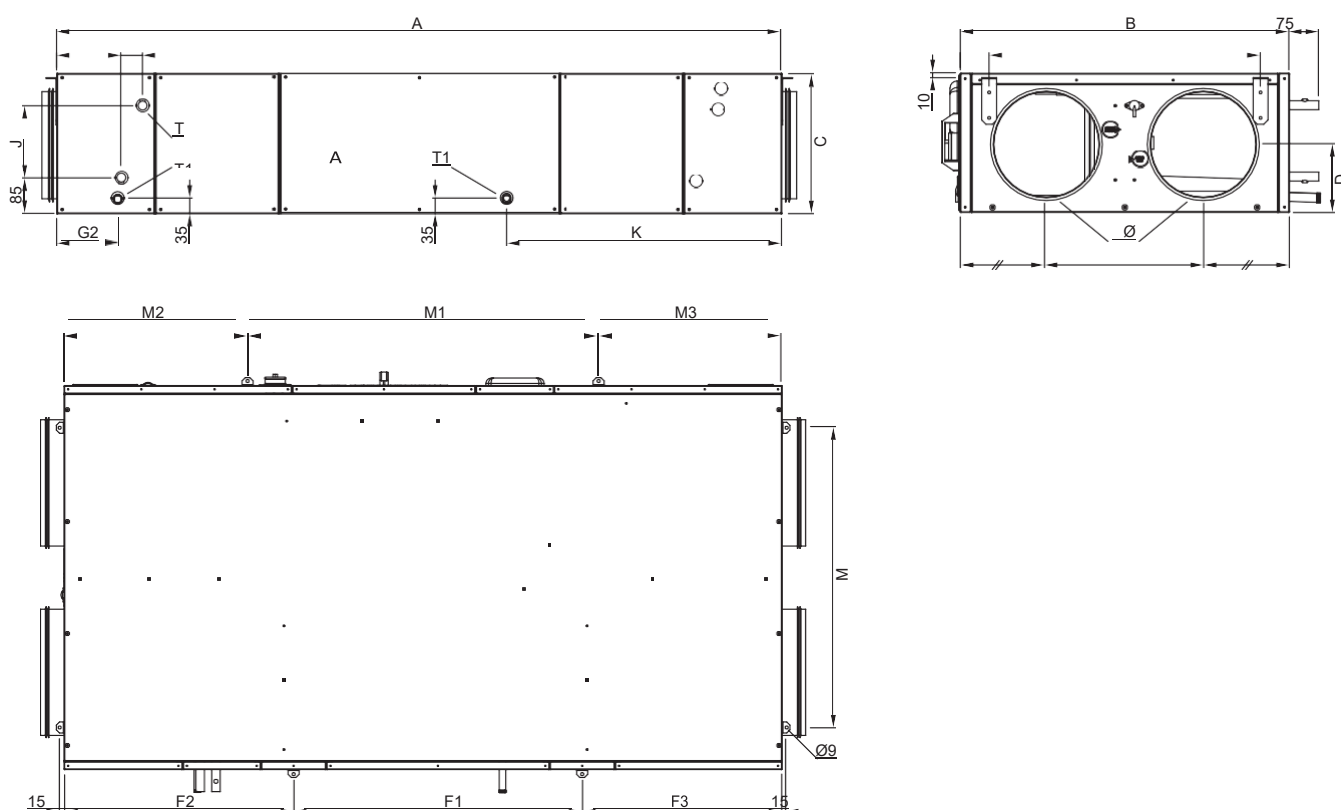


Unit versions with different coils

Zehnder Néotime™	Integrated coil (S)					External module					
	Preheating	Heating		Cooling	Changeover (Hot/Cold)	Heating		Cooling		Changeover (Hot/Cold)	
	Electric	Electric	Water	Water	Water	Water	DX	Water	DX	Water	DX
SEASON	-	-	-	-	-	-	-	-	-	-	-
FIRST	-	-	-	-	-	BC	DXR	BF	DX	BF	DXR
SMART	■	-	-	-	-	BC	DXR	BF	DX	BF	DXR
PREMIUM BE	-	■	-	-	-	-	-	BF	DX		
PREMIUM CO	-	-	■	-	-	-	-	BF	DX	-	-
	-	-	-	■	-	BC	DXR	-	-	-	-
	-	-	-	-	■	-	-	-	-	-	-
INFINITE BE	■	■	-	-	-	-	-	-	-	-	-
INFINITE CO	■	-	■	-	-	-	-	BF	DX	-	-
	■	-	-	■	-	BC	DXR	-	-	-	-
	■	-	-	-	■	-	-	-	-	-	-

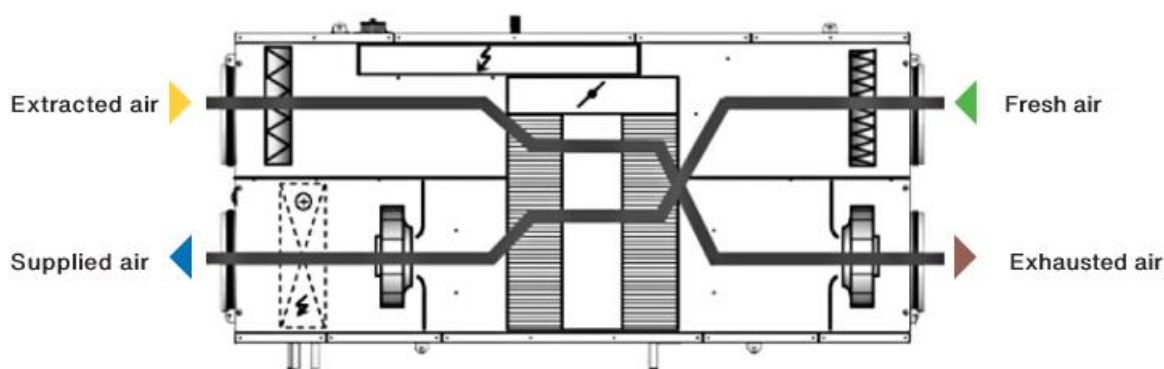
Dimensions characteristics

Zehnder Néotime™	Ø	A	B	C	D	E	F1	F2	F3	G	G1	G2	J	K	M	M1	M2	M3	T	T1	SEASON	FIRST SMART	PREMIUM BE INFINITE BE	PREMIUM CO INFINITE CO
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	kg	kg
600	250	1700	780	330	160	370	-	-	-	150	50	145	170	645	640	-	-	-	1/2	1/2	120	127	130	135
900	315	2020	965	415	210	460	-	-	-	150	50	145	250	760	770	-	-	-	1/2	1/2	180	190	195	200
1300	355	2190	1220	415	195	600	795	735	600	430	50	425	250	860	950	1170	510	510	1/2	1/2	255	265	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	275	285	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	380	390	400	405



Zehnder Néotime™						
Maintenance space (mm)		600	900	1300	1800	2500
Filter access / electrical cabinet	L1	275	375	520	520	690
Fan access	L2	225	320	380	435	435
Fans / heat exchanger / CO coils	L3	470	560	670	670	1020

Mounting and unit version



Electrical characteristics

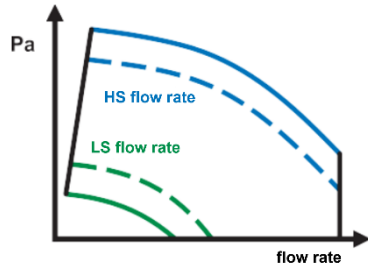
					FIRST, PREMIUM CO, SEASON		INFINITE CO, SMART		PREMIUM BE		INFINITE BE	
Zehnder Néotime™	Motor fan Power	Operation temp.	IP Motor fan /Class	Thermal protection*	Voltage	Protection intensity	Voltage	Protection intensity	Voltage	Protection intensity	Voltage	Protection intensity
	(W)	(°C / °C)			(V/Ph/Hz)	(A)	(V/Ph/Hz)	(A)	(V/Ph/Hz)	(A)	(V/Ph/Hz)	(A)
600	2 x 169	-20 / 60	IP54/B	PTI	230/1/50	2,8	230/1/50	8,2	230/1/50	8,2	230/1/50	13,7
900	2 x 220	-20 / 60	IP44/B	PTI	230/1/50	3,4	230/1/50	14,3	230/1/50	11,0	230/1/50	21,9
1300	2 x 400	-20 / 40	IP44/F	PTI	230/1/50	8,6	230/1/50	23,6	230/1/50	19,5	230/1/50	34,7
1800	2 x 400	-20 / 40	IP44/F	PTI	230/1/50	8,6	230/1/50	24,9	230/1/50	24,9	400/3+N/50	15,1
2500	2 x 400	-20 / 40	IP44/F	PTI	230/1/50	8,6	230/1/50	31,4	230/1/50	31,4	400/3+N/50	19,5

*PTI : Integrated thermal protection

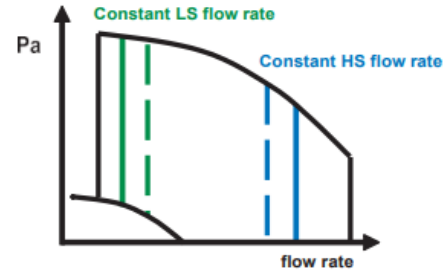
Airflow modulation

The Zehnder Néotime™ unit is equipped as standard with a factory-programmable control, which allows you to configure the following operating modes:

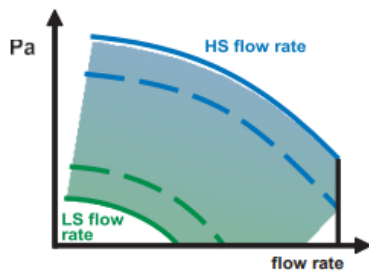
ECO : 2 speed settings (LS/HS) per fan.



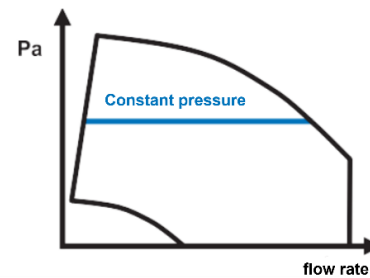
MAC 2 : 2 constant airflows.



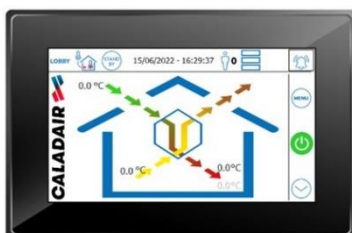
DIVA: proportional fan speed modulation on CO2 levels.



LOBBY : constant pressure airflow modulation on each fan.



EASY 5.0 : MASTER touchscreen control close to the Néotime™ power switch, which can be remote-controlled on the wall (second screen optional) to set clocks, airflows, setpoint temperatures, self-regulating internal bypass, night-cooling, fault(s) control and reading...



EDT2 : USER room remote touch control, temperature setpoint offset, 120 min restart, or information display (fan speed and status, operating mode, external forcing, temperature setpoint, and alarms).



General characteristics

Equipment	SEASON	FIRST	SMART	PREMIUM BE	PREMIUM CO	INFINITE BE	INFINITE CO
Low energy consumption EC motor fans	●	●	●	●	●	●	●
Fresh air filter, ePM1 55 % (F7)	●	●	●	●	●	●	●
Extract air filter, ePM10 50 % (M5)	●	●	●	●	●	●	●
High-efficiency (>90%) counterflow plate heat exchanger, EUROVENT-certified	●	●	●	●	●	●	●
100% internal by-pass	●	●	●	●	●	●	●
Inclined and condensate trays	●	●	●	●	●	●	●
25 mm double skin, RAL9007	●	●	●	●	●	●	●
Dual seal round spigot (ATEC CSTB number 13-224-V2).	●	●	●	●	●	●	●
Communicative control via Modbus in RS485 or TCP/IP, BACnet IP, WEB TCP/IP (selectable)	-	●	●	●	●	●	●
Speed regulation potentiometer	●	-	-	-	-	-	-
Supply air temperature sensor	-	●	●	●	●	●	●
Extract air temperature sensor	-	●	●	●	●	●	●
By-pass frost prevention temperature sensor	●	●	●	●	●	●	●
Outdoor temperature sensor	●	●	●	●	●	●	●
Preheater temperature sensor	-	-	●	-	-	●	●
Water coil anti-frost thermostat (THA)	-	-	-	-	●	-	●
Electric preheater over-heating thermostat	-	-	●	-	-	●	●
Electric heater over-heating thermostat	-	-	-	●	-	●	-
Lockable main power cut-off switch	●	●	●	●	●	●	●
Power cable pass-through	●	●	●	●	●	●	●

● : Equipment or function as standard

■ : Equipment or function as an option. Supplied mounted and wired at the factory

◆ : Equipment or function as an option. Supplied unmounted

Caractéristiques générales

Functions	SEASON	FIRST	SMART	PREMIUM BE	PREMIUM CO	INFINITE BE	INFINITE CO
By-pass frost prevention	●	-	-	-	-	-	-
Frost prevention sequence : by-pass + coils (SMART/INFINITE) + fresh air modulation	-	●	●	●	●	●	●
Self-regulating electric preheater	-	-	●	-	-	●	●
Self-regulating electric heater	-	-	-	●	-	●	-
Self-regulating change-over water coil (hot/cold)	-	-	-	-	●	-	●
100% internal bypass, "all or nothing", automatic summer/winter mode management	●	-	-	-	-	-	-
100% internal bypass, self-regulating and modulating (0-100%)	-	●	●	●	●	●	●
Free Cooling management	-	●	●	●	●	●	●
Night Cooling management	-	●	●	●	●	●	●
Fan overheating prevention	●	●	●	●	●	●	●
Supply air temperature management	-	●	●	●	●	●	●
Extract air temperature management	-	●	●	●	●	●	●
Weekly schedule	-	●	●	●	●	●	●
Holidays and vacation schedule	-	●	●	●	●	●	●
Fresh air filter pressure switch	●	●	●	●	●	●	●
Airflow pressure switch (supply + extract)	●	●	●	●	●	●	●
Fire safety functions following 5 available modes	-	●	●	●	●	●	●

● : Equipment or function as standard

■ : Equipment or function as an option. Supplied mounted and wired at the factory

◆ : Equipment or function as an option. Supplied unmounted

Caractéristiques générales

Airflow modulation options	SEASON	FIRST	SMART	PREMIUM BE	PREMIUM CO	INFINITE BE	INFINITE CO
ECO : 2 speed settings (LS/HS) per fan	-	■	■	■	■	■	■
MAC 2 : 2 constant airflow per fan. Integrated pressure sensor	-	■	■	■	■	■	■
DIVA : proportional modulation for each fan speeds	-	■	■	■	■	■	■
LOBBY : constant-pressure airflow modulation for each fan	-	■	■	■	■	■	■

Further options	SEASON	FIRST	SMART	PREMIUM BE	PREMIUM CO	INFINITE BE	INFINITE CO
Summer / Winter thermostat	-	◆	◆	◆	◆	◆	◆
USER room remote touch control (EDT2)	-	◆	◆	◆	◆	◆	◆
Room temperature management via touchscreen room controller	-	◆	◆	◆	◆	◆	◆

● : Equipment or function as standard

■ : Equipment or function as an option. Supplied mounted and wired at the factory

◆ : Equipment or function as an option. Supplied unmounted

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CALADAIK MATRIX SOLUTION

The information provided in this documentation are general information for the Néotime™ range. All technical performances refer to the nominal airflow of each size. Therefore, it is recommended for your projects to dimension your units using the Softwair selection software, with Eurovent EN1886 certified results.

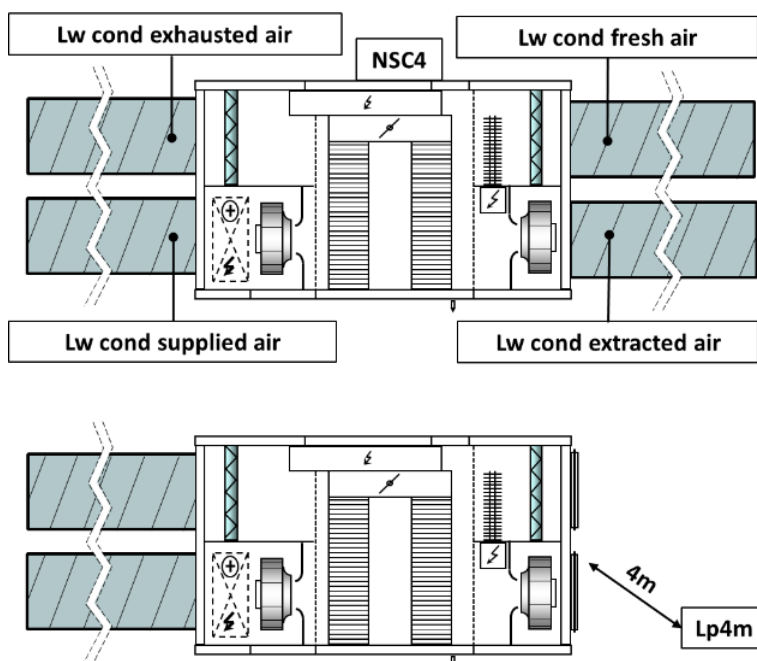
Acoustic characteristics

The L_{p4m} dB(A) curves correspond to the sound pressure level at 4m in a hemispherical open field on a reflecting plan, with the "fresh air" and "exhaust air" sides unconnected, and the "supply air" and "extract air" sides connected.

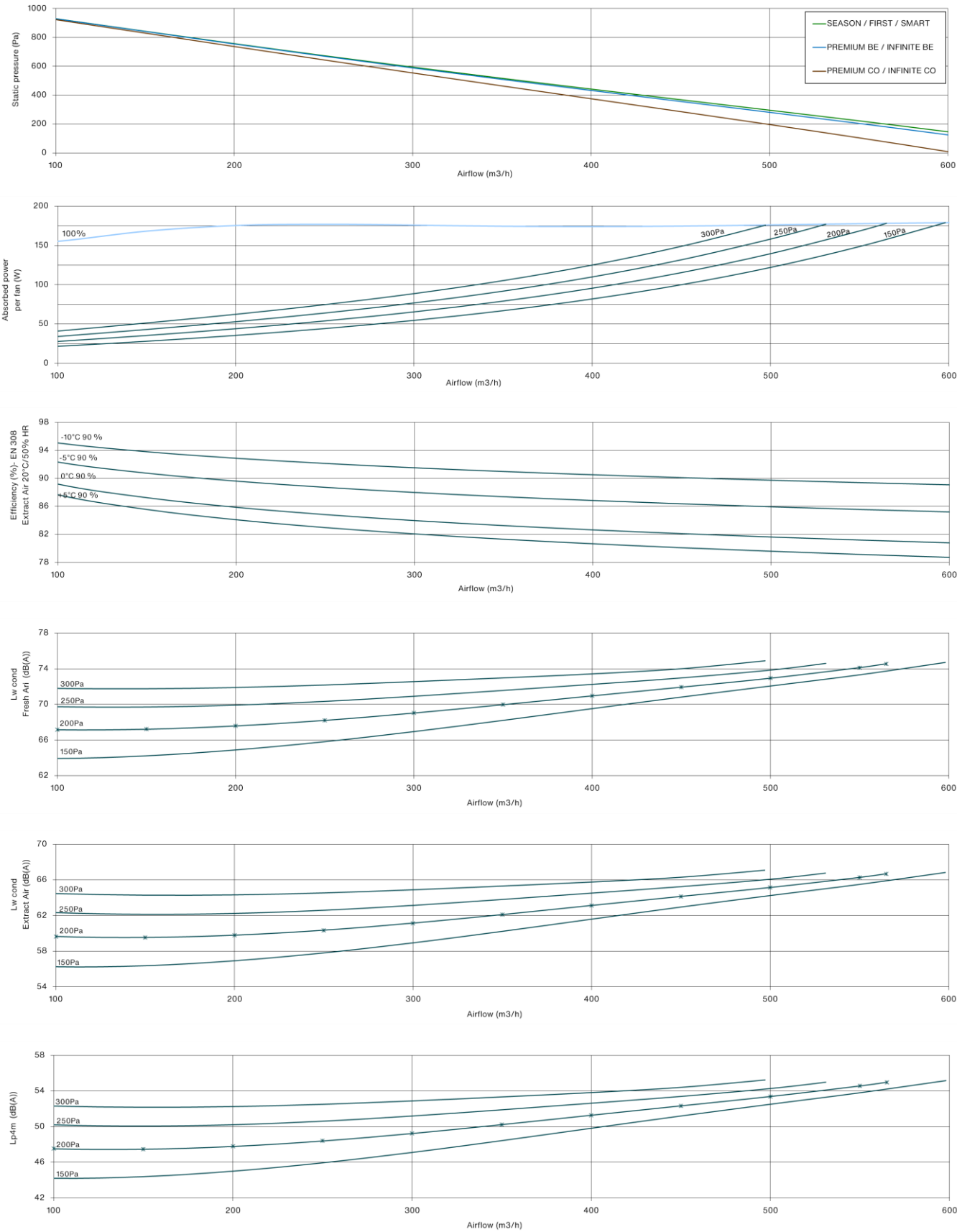
To obtain the global sound pressure level L_p dB(A), at a certain distance, add the values below to L_{p4m} .

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

Tolerance : global value +/- 3 dB(A)
acoustic spectrum +/- 5 dB(A)



Selection curves Zehnder Néotime™ 600



Reversible water coil performance characteristics Zehnder Néotime™ 600

CO for PREMIUM and INFINITE versions				Changeover coil				
Water Temp.	Air entry Temp.	Airflow	100	200	300	400	500	600
°C / °C	°C	m3/h						
80 / 60	11	Power (kW) / Supply air (°C)	1,8 / 65	3,2 / 58	4,3 / 54	5,3 / 50	6,2 / 48	6,9 / 46
		Waterflow (l/h) / Water DP (kPa)	80 / 1	140 / 3	190 / 6	230 / 6	270 / 5	300 / 6
	15	Power (kW) / Supply air (°C)	1,7 / 65	2,9 / 59	4,0 / 55	4,9 / 52	5,7 / 49	6,4 / 47
		Waterflow (l/h) / Water DP (kPa)	70 / 1	130 / 3	170 / 5	210 / 5	250 / 4	280 / 5
60 / 50	11	Power (kW) / Supply air (°C)	1,3 / 51	2,4 / 46	3,2 / 43	4,0 / 41	4,6 / 39	5,3 / 37
		Waterflow (l/h) / Water DP (kPa)	120 / 3	210 / 5	280 / 5	350 / 8	410 / 11	460 / 13
	15	Power (kW) / Supply air (°C)	1,2 / 51	2,1 / 47	2,9 / 44	3,6 / 42	4,2 / 40	4,8 / 39
		Waterflow (l/h) / Water DP (kPa)	110 / 2	190 / 6	250 / 5	310 / 7	370 / 9	410 / 11
45 / 40	11	Power (kW) / Supply air (°C)	1,0 / 39	1,7 / 36	2,3 / 34	2,9 / 32	3,4 / 31	3,8 / 30
		Waterflow (l/h) / Water DP (kPa)	170 / 5	290 / 6	400 / 11	500 / 14	580 / 18	660 / 23
	15	Power (kW) / Supply air (°C)	0,8 / 40	1,5 / 37	2,0 / 35	2,5 / 34	2,9 / 32	3,3 / 31
		Waterflow (l/h) / Water DP (kPa)	140 / 4	260 / 5	350 / 8	430 / 12	500 / 14	570 / 18
7 / 12	32 - 40	Power (kW) / Supply air (°C)	0,9 / 13,2-91	1,6 / 15,4-86	2,1 / 16,8-82	2,5 / 17,8-80	2,9 / 18,5-78	3,3 / 19,2-76
		Waterflow (l/h) / Water DP (kPa)	160 / 5	270 / 6	360 / 10	430 / 15	500 / 16	560 / 20
	27 - 50	Power (kW) / Supply air (°C)	0,7 / 12,7-94	1,2 / 14,5-89	1,6 / 15,6-87	1,9 / 16,4-85	2,2 / 17,0-83	2,4 / 17,4-82
		Waterflow (l/h) / Water DP (kPa)	120 / 3	200 / 6	270 / 6	320 / 9	370 / 11	420 / 13
	25 - 50	Power (kW) / Supply air (°C)	0,5 / 12,6-94	0,9 / 14,1-90	1,2 / 15,0-87	1,3 / 15,6-90	1,5 / 16,2-86	1,7 / 16,8-83
		Waterflow (l/h) / Water DP (kPa)	90 / 2	150 / 5	200 / 6	220 / 7	250 / 5	280 / 7
6 / 11	32 - 40	Power (kW) / Supply air (°C)	1,0 / 12,3-91	1,7 / 14,6-85	2,3 / 16,1-82	2,7 / 17,2-79	3,2 / 18,0-77	3,6 / 18,7-76
		Waterflow (l/h) / Water DP (kPa)	170 / 6	290 / 7	390 / 12	470 / 17	550 / 19	610 / 24
	27 - 50	Power (kW) / Supply air (°C)	0,8 / 11,9-93	1,3 / 13,7-89	1,7 / 14,9-86	2,2 / 15,7-84	2,4 / 16,4-83	2,7 / 16,9-82
		Waterflow (l/h) / Water DP (kPa)	130 / 4	220 / 7	300 / 7	360 / 10	420 / 14	460 / 17
	25 - 50	Power (kW) / Supply air (°C)	0,6 / 11,7-94	1,0 / 13,3-90	1,3 / 14,3-87	1,6 / 15,1-85	1,6 / 15,6-89	1,8 / 16,2-86
		Waterflow (l/h) / Water DP (kPa)	100 / 2	170 / 6	230 / 7	280 / 7	270 / 6	310 / 8

Electric coil performance characteristics Zehnder Néotime™ 600

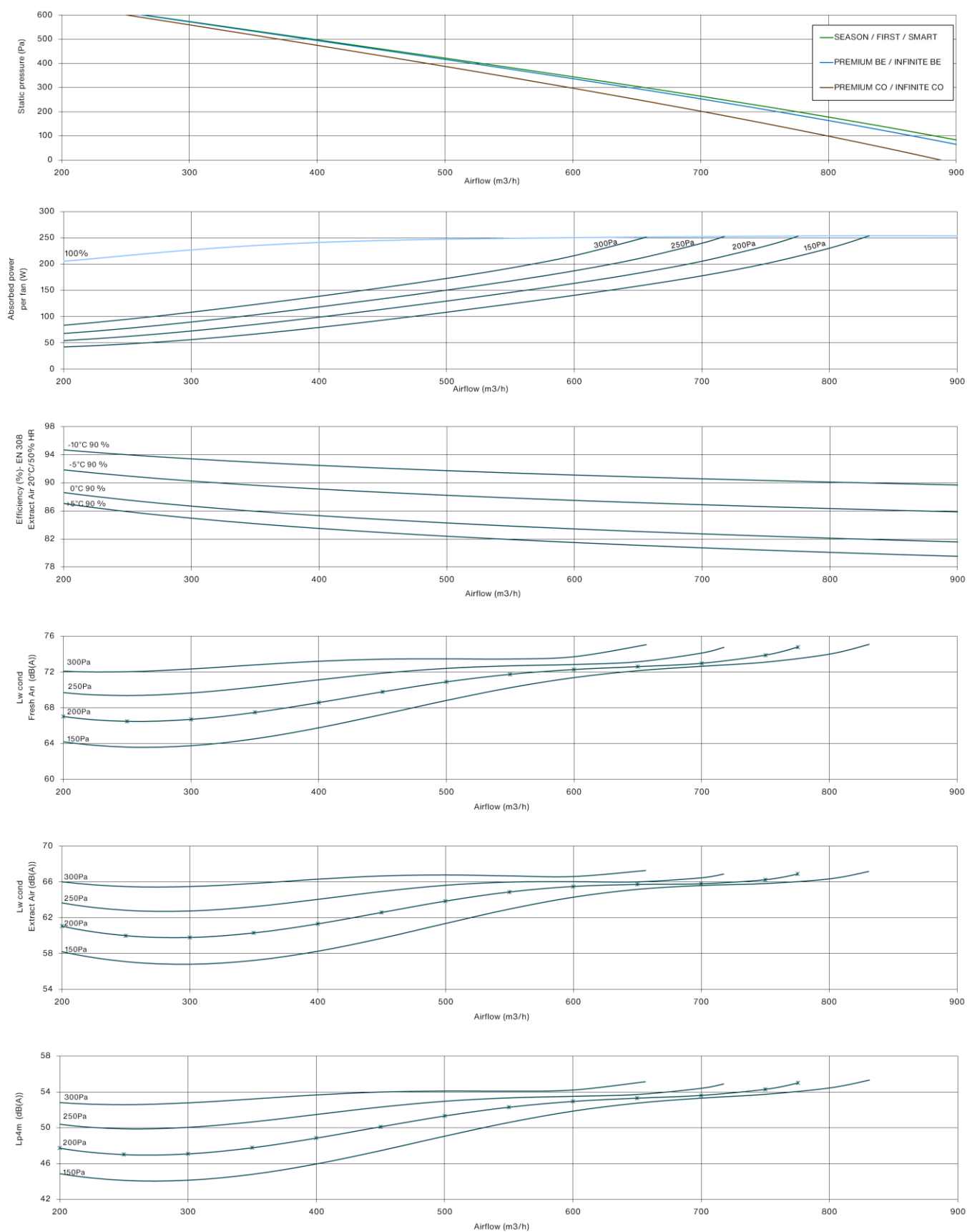
BE pour versions d'appareil						Electric coil						
Fresh airflow	0 °C	-5 °C	-10 °C	-15 °C	-15 °C*	0 °C	-5 °C	-10 °C	-10 °C*	-10 °C	-15 °C	-15 °C*
(m³/h)	600		600			600				600		
Version	FIRST, SEASON		SMART Preheater coil			PREMIUM BE Heater coil				INFINITE BE Preheater + heater coil		
Power (kW)	-		1,25			1,25				1,25 + 1,25		
Outlet temperature (°C)	16,5	15,4	16,3	11,8	17,0	22,8	21,7	16,9	23,6	22,6	18,0	24,8

These data are provided for optimal control configuration according to the outdoor temperatures in question.
Continuous supply temperature of the unit, considering the opening of the self-regulating and modulating bypass to prevent frost on the heat exchanger.

* In the event of a 20% reduction in volumetric airflow.



Selection curves Zehnder Néotime™ 900



Reversible water coil performance characteristics Zehnder Néotime™ 900

CO for PREMIUM and INFINITE versions				Changeover coil			
Water Temp.	Air entry Temp.	Airflow	200	400	600	800	900
°C / °C	°C	m3/h					
80 / 60	11	Power (kW) / Supply air (°C)	3,6 / 65	6,3 / 58	8,5 / 53	10,4 / 50	11,3 / 48
		Waterflow (l/h) / Water DP (kPa)	160 / 4	280 / 3	370 / 6	460 / 8	500 / 7
	15	Power (kW) / Supply air (°C)	3,4 / 65	5,8 / 59	7,9 / 54	9,7 / 51	10,5 / 50
		Waterflow (l/h) / Water DP (kPa)	150 / 3	260 / 3	350 / 5	420 / 7	460 / 8
60 / 50	11	Power (kW) / Supply air (°C)	2,7 / 51	4,7 / 46	6,4 / 43	7,8 / 40	8,5 / 39
		Waterflow (l/h) / Water DP (kPa)	230 / 5	410 / 7	550 / 9	680 / 14	740 / 16
	15	Power (kW) / Supply air (°C)	2,4 / 51	4,2 / 47	5,8 / 44	7,1 / 41	7,7 / 41
		Waterflow (l/h) / Water DP (kPa)	210 / 4	370 / 6	500 / 8	620 / 11	670 / 13
45 / 40	11	Power (kW) / Supply air (°C)	1,9 / 39	3,3 / 36	4,6 / 34	5,6 / 32	6,1 / 31
		Waterflow (l/h) / Water DP (kPa)	330 / 5	580 / 10	790 / 16	980 / 24	1060 / 28
	15	Power (kW) / Supply air (°C)	1,7 / 40	2,9 / 37	4,0 / 35	4,9 / 33	5,3 / 33
		Waterflow (l/h) / Water DP (kPa)	290 / 4	500 / 8	690 / 14	850 / 19	920 / 22
7 / 12	32 - 40	Power (kW) / Supply air (°C)	1,8 / 13,1-90	3,1 / 15,4-85	4,2 / 16,8-81	5,1 / 17,8-79	5,5 / 18,2-78
		Waterflow (l/h) / Water DP (kPa)	320 / 5	540 / 11	720 / 18	870 / 23	940 / 26
	27 - 50	Power (kW) / Supply air (°C)	1,4 / 12,6-93	2,4 / 14,4-89	3,2 / 15,6-86	3,8 / 16,3-84	4,1 / 16,7-83
		Waterflow (l/h) / Water DP (kPa)	240 / 7	410 / 8	540 / 11	660 / 15	710 / 17
	25 - 50	Power (kW) / Supply air (°C)	1,1 / 12,5-93	1,8 / 14,0-89	2,4 / 15,0-86	2,5 / 15,6-90	2,7 / 15,9-88
		Waterflow (l/h) / Water DP (kPa)	190 / 6	310 / 5	410 / 8	430 / 9	470 / 11
6 / 11	32 - 40	Power (kW) / Supply air (°C)	2,0 / 12,3-90	3,4 / 14,7-84	4,5 / 16,2-81	5,5 / 17,2-78	6,0 / 17,7-77
		Waterflow (l/h) / Water DP (kPa)	340 / 6	580 / 12	780 / 19	950 / 27	1020 / 31
	27 - 50	Power (kW) / Supply air (°C)	1,6 / 11,8-93	2,6 / 13,7-88	3,5 / 14,9-86	4,3 / 15,7-84	4,6 / 16,1-83
		Waterflow (l/h) / Water DP (kPa)	270 / 4	450 / 10	600 / 13	730 / 19	790 / 19
	25 - 50	Power (kW) / Supply air (°C)	1,2 / 11,6-93	2,1 / 13,3-89	2,7 / 14,3-86	3,3 / 15,0-84	3,6 / 15,4-83
		Waterflow (l/h) / Water DP (kPa)	210 / 5	350 / 6	470 / 11	570 / 12	610 / 13

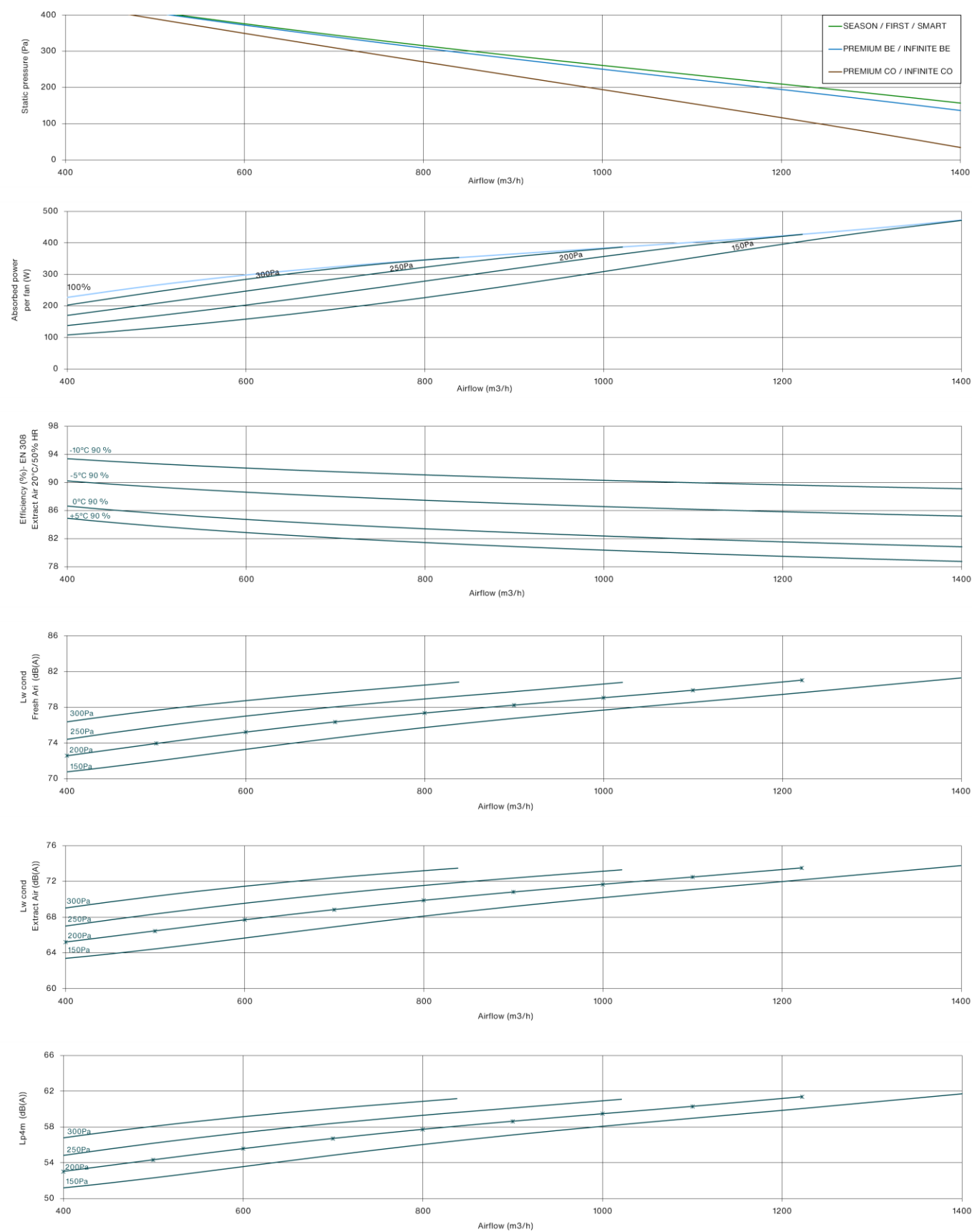
Electric coil performance characteristics Zehnder Néotime™ 900

BE pour versions d'appareil										Electric coil		
Fresh airflow	0 °C	-5 °C	-10 °C	-15 °C	-15 °C*	0 °C	-5 °C	-10 °C	-10 °C*	-10 °C	-15 °C	-15 °C*
(m³/h)	900		900			900				900		
Version	FIRST, SEASON		SMART Preheater coil			PREMIUM BE Heater coil				INFINITE BE Preheater + heater coil		
Power (kW)	-		2,5			1,75				2,5 + 1,75		
Outlet temperature (°C)	16,9	15,5	16,9	13,8	17,6	22,7	21,3	16,4	23,0	22,7	19,7	24,9

These data are provided for optimal control configuration according to the outdoor temperatures in question.
Continuous supply temperature of the unit, considering the opening of the self-regulating and modulating bypass to prevent frost on the heat exchanger.

* In the event of a 20% reduction in volumetric airflow.

Selection curves Zehnder Néotime™ 1300



Reversible water coil performance characteristics Zehnder Néotime™ 1300

CO for PREMIUM and INFINITE versions				Changeover coil			
Water Temp. °C / °C	Air entry Temp. °C	Airflow m3/h	400	600	800	1000	1200
80 / 60	11	Power (kW) / Supply air (°C)	6,8 / 62	9,4 / 58	11,6 / 54	13,7 / 52	15,5 / 50
		Waterflow (l/h) / Water DP (kPa)	300 / 4	410 / 8	510 / 9	600 / 12	680 / 15
	15	Power (kW) / Supply air (°C)	6,4 / 63	8,7 / 58	10,8 / 55	12,7 / 53	14,4 / 51
		Waterflow (l/h) / Water DP (kPa)	280 / 4	380 / 7	480 / 8	560 / 10	630 / 13
60 / 50	11	Power (kW) / Supply air (°C)	5,0 / 49	7,0 / 46	8,7 / 43	10,2 / 42	11,6 / 40
		Waterflow (l/h) / Water DP (kPa)	440 / 9	610 / 12	760 / 19	890 / 23	1010 / 28
	15	Power (kW) / Supply air (°C)	4,6 / 49	6,3 / 47	7,9 / 44	9,3 / 43	10,5 / 41
		Waterflow (l/h) / Water DP (kPa)	400 / 7	550 / 10	690 / 15	810 / 19	920 / 24
45 / 40	11	Power (kW) / Supply air (°C)	3,6 / 38	5,0 / 36	6,2 / 34	7,3 / 33	8,3 / 32
		Waterflow (l/h) / Water DP (kPa)	620 / 14	860 / 22	1080 / 33	1270 / 43	1450 / 54
	15	Power (kW) / Supply air (°C)	3,1 / 38	4,3 / 37	5,4 / 35	6,4 / 34	7,3 / 33
		Waterflow (l/h) / Water DP (kPa)	540 / 11	750 / 19	940 / 26	1110 / 35	1260 / 42
7 / 12	32 - 40	Power (kW) / Supply air (°C)	3,5 / 13,9-87	4,8 / 15,3-84	5,9 / 16,3-81	6,9 / 17,1-79	7,9 / 17,7-78
		Waterflow (l/h) / Water DP (kPa)	610 / 15	830 / 24	1020 / 35	1190 / 45	1350 / 56
	27 - 50	Power (kW) / Supply air (°C)	2,7 / 13,1-91	3,7 / 14,2-88	4,6 / 15,1-86	5,3 / 15,7-84	6,0 / 16,2-83
		Waterflow (l/h) / Water DP (kPa)	470 / 12	640 / 16	780 / 22	910 / 29	1030 / 36
	25 - 50	Power (kW) / Supply air (°C)	2,1 / 12,8-91	2,9 / 13,8-88	3,5 / 14,5-86	4,1 / 15,0-85	4,6 / 15,5-83
		Waterflow (l/h) / Water DP (kPa)	370 / 8	490 / 10	600 / 15	700 / 19	780 / 22
6 / 11	32 - 40	Power (kW) / Supply air (°C)	3,8 / 13,1-87	5,2 / 14,5-83	6,4 / 15,6-81	7,5 / 16,5-79	8,5 / 17,2-77
		Waterflow (l/h) / Water DP (kPa)	650 / 17	890 / 28	1100 / 40	1280 / 51	1450 / 64
	27 - 50	Power (kW) / Supply air (°C)	3,0 / 12,3-90	4,1 / 13,5-88	5,0 / 14,4-86	5,8 / 15,1-84	6,6 / 15,6-83
		Waterflow (l/h) / Water DP (kPa)	510 / 11	700 / 20	860 / 26	1000 / 34	1130 / 41
	25 - 50	Power (kW) / Supply air (°C)	2,4 / 12,0-91	3,2 / 13,1-88	4,0 / 13,8-86	4,6 / 14,4-84	5,2 / 14,9-83
		Waterflow (l/h) / Water DP (kPa)	410 / 10	560 / 13	680 / 19	790 / 22	890 / 28

Electric coil performance characteristics Zehnder Néotime™ 1300

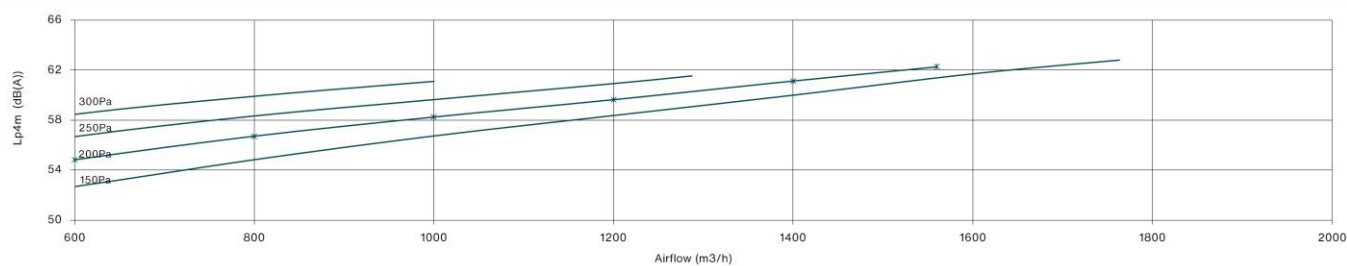
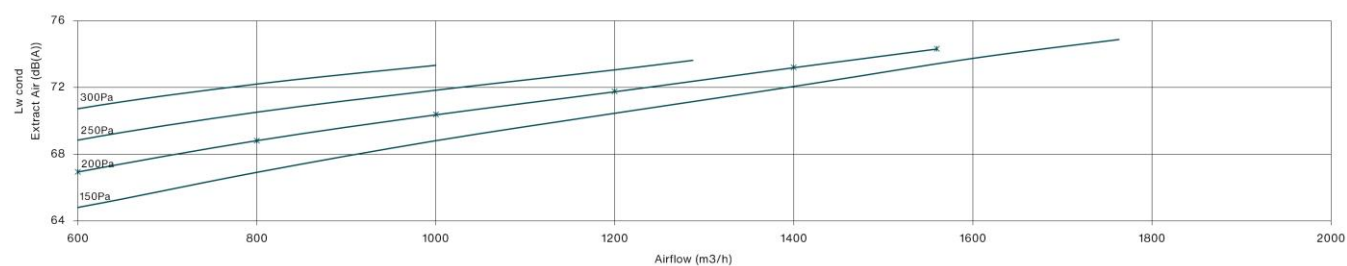
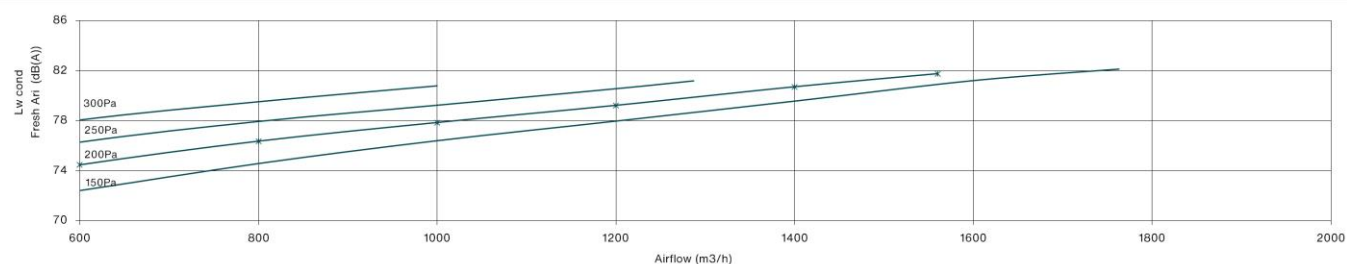
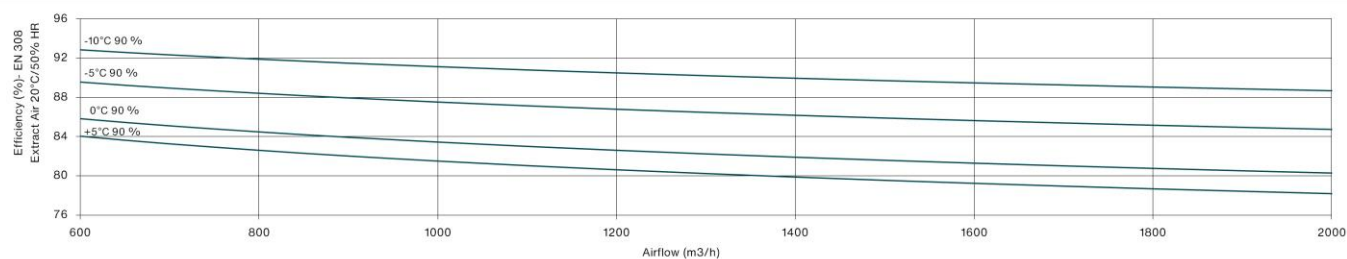
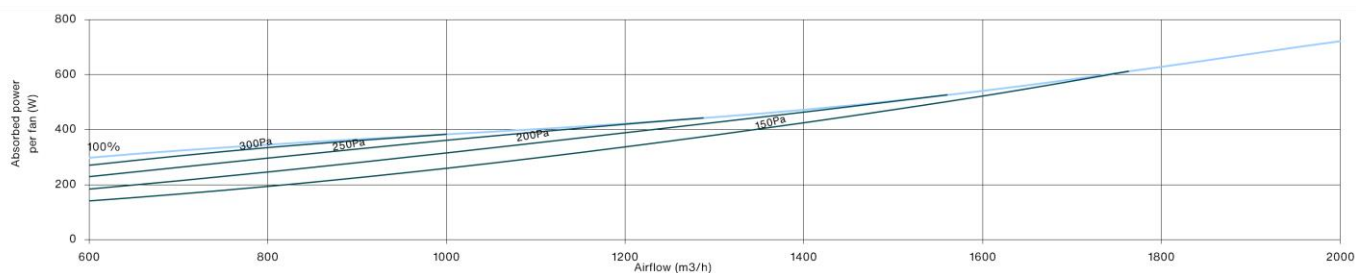
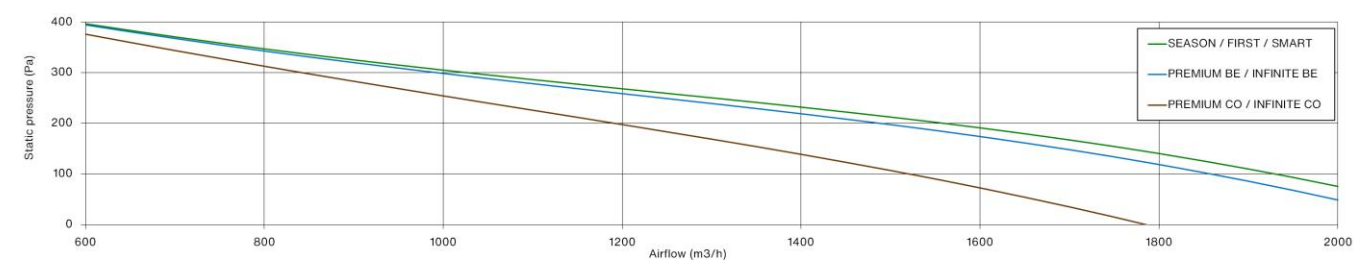
BE pour versions d'appareil										Electric coil		
Fresh airflow	0 °C	-5 °C	-10 °C	-15 °C	-15 °C*	0 °C	-5 °C	-10 °C	-10 °C*	-10 °C	-15 °C	-15 °C*
(m³/h)	1300		1300			1300				1300		
Version	FIRST, SEASON		SMART Preheater coil			PREMIUM BE Heater coil				INFINITE BE Preheater + heater coil		
Power (kW)	-		3,5			2,5				3,5 + 2,5		
Outlet temperature (°C)	16,8	15,4	16,8	13,7	17,5	22,7	21,2	16,4	23,0	22,6	19,5	24,7

These data are provided for optimal control configuration according to the outdoor temperatures in question.

Continuous supply temperature of the unit, considering the opening of the self-regulating and modulating bypass to prevent frost on the heat exchanger.

* In the event of a 20% reduction in volumetric airflow.

Selection curves Zehnder Néotime™ 1800



Reversible water coil performance characteristics Zehnder Néotime™ 1800

CO for PREMIUM and INFINITE versions				Changeover coil				
Water Temp.	Air entry Temp.	Airflow	800	1000	1200	1400	1600	1800
°C / °C	°C	m3/h						
80 / 60	11	Power (kW) / Supply air (°C)	11,5 / 54	13,5 / 51	15,4 / 49	17,1 / 47	18,7 / 46	20,2 / 44
		Waterflow (l/h) / Water DP (kPa)	500 / 2	590 / 3	670 / 4	750 / 5	820 / 4	890 / 4
	15	Power (kW) / Supply air (°C)	10,7 / 55	12,5 / 52	14,2 / 50	15,8 / 49	17,3 / 47	18,7 / 46
		Waterflow (l/h) / Water DP (kPa)	470 / 4	550 / 3	630 / 3	700 / 4	760 / 5	820 / 4
60 / 50	11	Power (kW) / Supply air (°C)	8,6 / 43	10,2 / 41	11,6 / 40	12,9 / 39	14,2 / 37	15,3 / 36
		Waterflow (l/h) / Water DP (kPa)	750 / 5	890 / 4	1010 / 6	1130 / 5	1240 / 6	1340 / 7
	15	Power (kW) / Supply air (°C)	7,8 / 44	902 / 43	10,5 / 41	11,7 / 40	12,8 / 39	13,8 / 38
		Waterflow (l/h) / Water DP (kPa)	680 / 4	800 / 4	920 / 5	1020 / 6	1120 / 7	1210 / 6
45 / 40	11	Power (kW) / Supply air (°C)	6,2 / 34	7,3 / 33	8,4 / 32	9,4 / 31	10,3 / 30	11,1 / 29
		Waterflow (l/h) / Water DP (kPa)	1080 / 6	1280 / 7	1460 / 9	1630 / 9	1780 / 11	1930 / 12
	15	Power (kW) / Supply air (°C)	5,4 / 35	6,4 / 34	7,3 / 33	8,1 / 32	8,9 / 32	9,6 / 31
		Waterflow (l/h) / Water DP (kPa)	940 / 5	1110 / 7	1260 / 7	1410 / 8	1540 / 10	1670 / 9
7 / 12	32 - 40	Power (kW) / Supply air (°C)	5,4 / 16,8-83	6,3 / 17,6-81	7,1 / 18,2-80	7,9 / 18,7-78	8,6 / 19,2-77	7,3 / 19,9-82
		Waterflow (l/h) / Water DP (kPa)	930 / 6	1080 / 7	1220 / 7	1350 / 9	1470 / 10	1250 / 8
	27 - 50	Power (kW) / Supply air (°C)	4,0 / 15,7-87	4,7 / 16,3-86	5,2 / 16,8-85	5,7 / 17,2-83	6,2 / 17,5-83	5,5 / 18,0-87
		Waterflow (l/h) / Water DP (kPa)	690 / 5	800 / 4	890 / 5	980 / 6	1070 / 7	940 / 6
	25 - 50	Power (kW) / Supply air (°C)	2,7 / 14,8-94	3,2 / 15,5-90	3,6 / 16,0-87	4,0 / 16,4-85	4,4 / 16,8-83	4,7 / 17,2-81
		Waterflow (l/h) / Water DP (kPa)	470 / 5	550 / 3	620 / 4	690 / 5	750 / 6	810 / 4
6 / 11	32 - 40	Power (kW) / Supply air (°C)	5,9 / 16,2-83	6,9 / 17,0-81	7,8 / 17,6-79	8,6 / 18,2-78	9,4 / 18,7-77	10,1 / 19,1-76
		Waterflow (l/h) / Water DP (kPa)	1010 / 6	1180 / 7	1330 / 9	1470 / 10	1600 / 10	1720 / 11
	27 - 50	Power (kW) / Supply air (°C)	4,5 / 15,0-87	5,2 / 15,7-86	5,9 / 16,2-84	6,5 / 16,6-83	7,0 / 17,0-82	7,5 / 17,3-81
		Waterflow (l/h) / Water DP (kPa)	770 / 4	890 / 5	1010 / 6	1110 / 8	1200 / 7	1290 / 8
	25 - 50	Power (kW) / Supply air (°C)	3,4 / 14,5-88	4,0 / 15,0-86	3,9 / 15,3-91	4,3 / 15,8-88	4,7 / 16,2-86	5,1 / 16,6-84
		Waterflow (l/h) / Water DP (kPa)	590 / 4	680 / 5	670 / 5	740 / 5	810 / 4	870 / 5

Electric coil performance characteristics Zehnder Néotime™ 1800

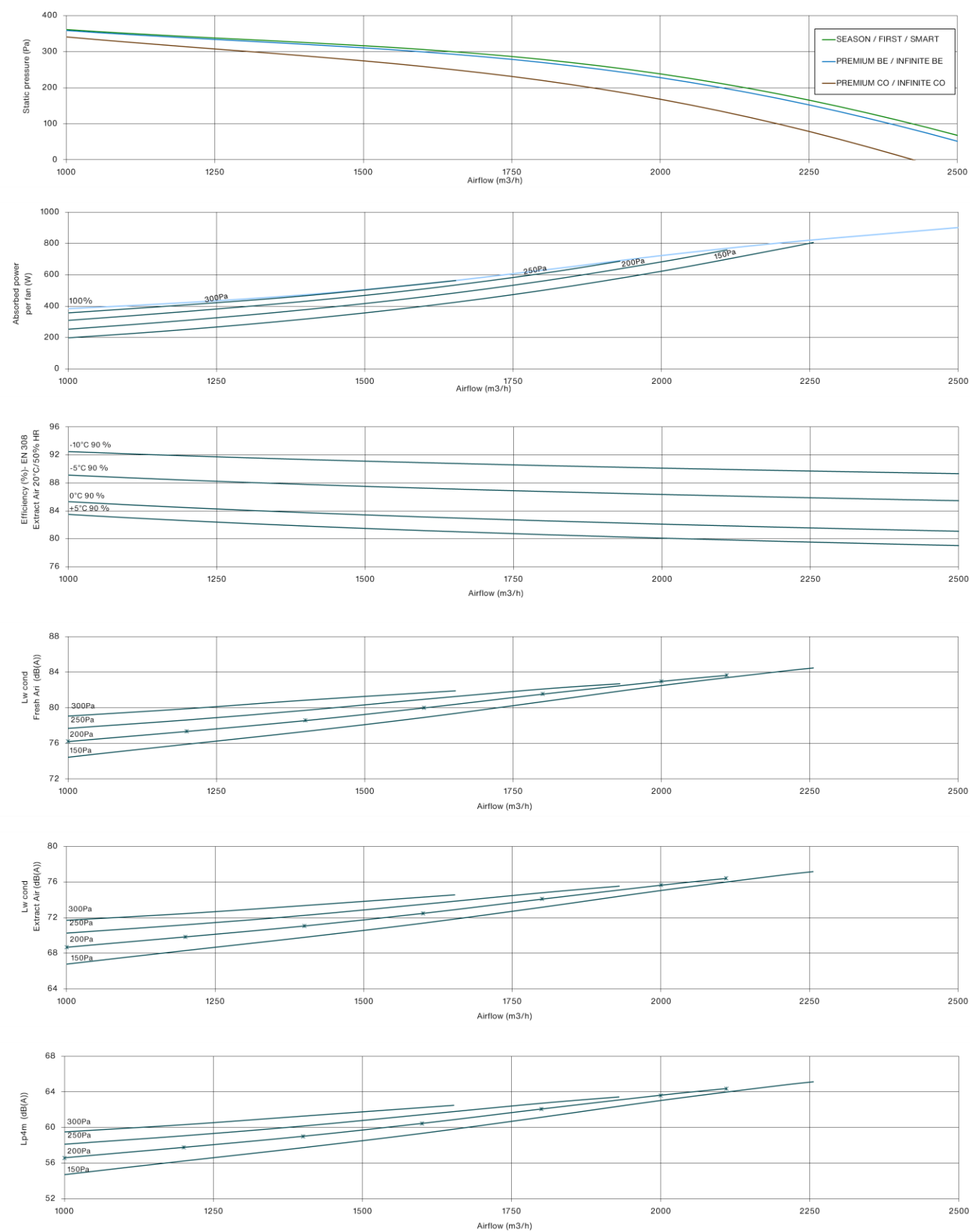
BE pour versions d'appareil										Electric coil		
Fresh airflow	0 °C	-5 °C	-10 °C	-15 °C	-15 °C*	0 °C	-5 °C	-10 °C	-10 °C*	-10 °C	-15 °C	-15 °C*
(m³/h)	1800		1800			1800				1800		
Version	FIRST, SEASON		SMART Preheater coil			PREMIUM BE Heater coil				INFINITE BE Preheater + heater coil		
Power (kW)	-		3,75			3,75				3,75 + 3,75		
Outlet temperature (°C)	16,3	15,6	16,1	11,7	16,7	22,6	21,8	16,8	23,5	22,4	18,0	24,5

These data are provided for optimal control configuration according to the outdoor temperatures in question.

Continuous supply temperature of the unit, considering the opening of the self-regulating and modulating bypass to prevent frost on the heat exchanger.

* In the event of a 20% reduction in volumetric airflow.

Selection curves Néotime™ 2500



Reversible water coil performance characteristics Zehnder Néotime™ 2500

CO for PREMIUM and INFINITE versions				Changeover coil				
Water Temp.	Air entry Temp.	Airflow	1250	1500	1750	2000	2250	2500
°C / °C	°C	m3/h						
80 / 60	11	Power (kW) / Supply air (°C)	19,0 / 56	21,8 / 54	24,4 / 53	26,8 / 51	29,1 / 50	31,2 / 48
		Waterflow (l/h) / Water DP (kPa)	830 / 5	960 / 6	1070 / 7	1180 / 7	1280 / 8	1370 / 9
	15	Power (kW) / Supply air (°C)	17,7 / 57	20,2 / 55	22,7 / 54	24,9 / 52	27,0 / 51	29,0 / 50
		Waterflow (l/h) / Water DP (kPa)	780 / 4	890 / 5	1000 / 6	1090 / 7	1190 / 7	1280 / 8
60 / 50	11	Power (kW) / Supply air (°C)	14,2 / 45	16,3 / 43	18,2 / 42	20,1 / 41	21,8 / 40	23,5 / 39
		Waterflow (l/h) / Water DP (kPa)	1240 / 8	1420 / 10	1590 / 11	1750 / 13	1900 / 15	2050 / 17
	15	Power (kW) / Supply air (°C)	12,9 / 46	14,7 / 44	16,5 / 43	18,2 / 42	19,8 / 41	21,2 / 40
		Waterflow (l/h) / Water DP (kPa)	1120 / 8	1290 / 8	1440 / 10	1590 / 10	1730 / 12	1860 / 14
45 / 40	11	Power (kW) / Supply air (°C)	10,1 / 35	11,6 / 34	13,1 / 33	14,4 / 33	15,7 / 32	16,9 / 31
		Waterflow (l/h) / Water DP (kPa)	1760 / 13	2020 / 17	2270 / 21	2500 / 25	2720 / 27	2930 / 31
	15	Power (kW) / Supply air (°C)	8,8 / 36	10,1 / 35	11,4 / 34	12,5 / 34	13,6 / 33	14,7 / 33
		Waterflow (l/h) / Water DP (kPa)	1530 / 12	1760 / 13	1980 / 16	2180 / 19	2370 / 23	2550 / 26
7 / 12	32 - 40	Power (kW) / Supply air (°C)	9,6 / 15,7-83	10,9 / 16,4-82	12,2 / 16,9-80	13,4 / 17,4-79	14,5 / 17,8-78	15,5 / 18,2-77
		Waterflow (l/h) / Water DP (kPa)	1650 / 14	1880 / 17	2090 / 21	2290 / 25	2480 / 28	2660 / 31
	27 - 50	Power (kW) / Supply air (°C)	7,3 / 14,7-88	8,3 / 15,2-86	9,2 / 15,6-85	10,1 / 16,0-84	10,9 / 16,3-83	11,7 / 16,6-83
		Waterflow (l/h) / Water DP (kPa)	1260 / 10	1430 / 12	1580 / 13	1730 / 15	1870 / 17	2000 / 19
	25 - 50	Power (kW) / Supply air (°C)	5,6 / 14,2-88	6,4 / 14,6-87	7,0 / 15,0-86	7,7 / 15,3-85	7,1 / 15,6-90	7,7 / 15,9-88
		Waterflow (l/h) / Water DP (kPa)	960 / 7	1090 / 9	1210 / 9	1320 / 10	1220 / 9	1310 / 10
6 / 11	32 - 40	Power (kW) / Supply air (°C)	10,3 / 15,1-83	11,8 / 15,7-81	13,2 / 16,3-80	14,4 / 16,8-79	15,6 / 17,3-78	16,8 / 17,7-77
		Waterflow (l/h) / Water DP (kPa)	1770 / 16	220 / 20	2260 / 24	2470 / 29	2680 / 31	2870 / 36
	27 - 50	Power (kW) / Supply air (°C)	8,1 / 14,0-87	9,2 / 14,5-86	10,2 / 15,0-85	11,2 / 15,4-84	12,1 / 15,7-83	13,0 / 16,0-82
		Waterflow (l/h) / Water DP (kPa)	1380 / 12	1580 / 13	1750 / 15	1920 / 18	280 / 21	2220 / 24
	25 - 50	Power (kW) / Supply air (°C)	6,4 / 13,5-88	7,2 / 14,0-86	8,0 / 14,4-85	8,8 / 14,7-84	9,5 / 15-84	10,1 / 15,3-83
		Waterflow (l/h) / Water DP (kPa)	1090 / 9	1240 / 10	1380 / 11	1500 / 13	1620 / 13	1730 / 15

Electric coil performance characteristics Zehnder Néotime™ 2500

BE pour versions d'appareil										Electric coil		
Fresh airflow	0 °C	-5 °C	-10 °C	-15 °C	-15 °C*	0 °C	-5 °C	-10 °C	-10 °C*	-10 °C	-15 °C	-15 °C*
(m³/h)	2500		2500			2500				2500		
Version	FIRST, SEASON		SMART Preheater coil			PREMIUM BE Heater coil				INFINITE BE Preheater + heater coil		
Power (kW)	-		5,25			5,25				5,25 + 5,25		
Outlet temperature (°C)	16,4	15,5	16,2	11,9	16,8	22,7	21,8	17,0	23,7	22,5	18,2	24,7

These data are provided for optimal control configuration according to the outdoor temperatures in question.
Continuous supply temperature of the unit, considering the opening of the self-regulating and modulating bypass to prevent frost on the heat exchanger.

* In the event of a 20% reduction in volumetric airflow.

Options

Climatic



Summer / Winter thermostat ref. PASTILLE CHANGEOVER
For FIRST and SMART versions combined with an external Combibox Concept module



Condensate pump kit ref. PRC ESH10 5ML NON MONTE
Direct connections to EASY controller and overflow safety management.



Kit 3 way valve 24V IP54 ref. DN15
PREMIUM CO /INFINITE CO versions



Circular damper antifreeze 24V ref. RC4A
Frost prevention. Airtight class 4



Chilled water module Combibox ref. CBX BF
Duct installation (see COMBIBOX CONCEPT™ documentation for descriptions). SEASON version not compatible



DX module Combibox R410A ref. CBX DX
Duct installation (see COMBIBOX CONCEPT™ documentation for descriptions). SEASON version not compatible

Controller



Wall touch screen MASTER réf. EASY 5.0
SEASON version not compatible



Wall-mounted touch screen USER ref. EDT2 100ML
SEASON version not compatible

Security and control



Air pressure switch ref. DEP
Extract air filter (IP54)



Liquid manometer J ref. 0-1000 Pa VDI6022 DISPOSITIF



Smoke detection ref. CDAD
(IP54)



Trigger box ref. BD TBTS 24/48 Vcc
24 or 48 Vdc low-voltage box (IP67)

Airflow modulation



Potentiometer 0-10 V ref. POT 230
Potentiometer only for SEASON (IP54)



2 speed comfort remote control ref. CDC 2V2
OFF/LS/HS, 2 fans, box (IP54)



2 speed comfort remote control ref. CDC PVGV2
LS/HS, 2 fans, box (IP54)



Présence sensor ref. 360 TOR SA
ON/OFF or LS/HS
(SEASON version not compatible)



2 speed comfort remote control ref. CDC 1V2
ON/OFF, 2 fans, box (IP54)

Installation



Flexible sleeve ref. MTS M0
Fire Class: M0
Male (network side) / Female (unit side) diameters



Supporting feet réf. PCB JEU DE 4 MONTÉ OU NON MONTÉ



Anti-vibration plot réf. PAV 40-60
Set of 4 (100 mm high). For floor mounting

zehnder


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