ECONIZER™

RANGE

C4 - 400° C - 1/2 hrs
Very low consumption CMV/Collective extraction units
Air flow 50 to 11,000 m^3/h

Models 600 to 1 800

Models 2600 to 11 000

Bluetech™ CALADAIR ECONOLOGIC SOLUTION
Softwair.fr™ CALADAIR MATRIX SOLUTION
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ERP2018 Bluetech
CALADAIR RESPECT CALADAIR ECONOLOGIC SOLUTION

C4 EXTRACTION UNIT
DESCRIPTION

ECONIZER™

Ventilation unit
EC MOTOR (direct current)
Air flows from 50 to 11,000 m³/h

Communicant MODBUS RS485
CTICM C4 - 400° C - 1/2 hrs approved
PV n° EFR-15-002420 (models 600 to 1 800)
PV n°EFR-19-002623 (models 2 600 to 11 000)
CSTB technical notification
for Hygro A, Hygro B and Hygro Gaz
Econological solution™

APPLICATION

- Intended mainly for air extraction in houses and public assembly buildings requiring low and average air flows.
- C4, 400°C 1/2 h certified 50 Hz and 60 Hz.

▲ **ECONIZER™** units fitted with the EC motor (direct current) fulfil the requirements of directive ErP 2009/125/EC (2nd phase, 2018).
▲ Equipped with a potentiometer, **ECONIZER™** units enable a mode of operation adapted to the installation needs.

RANGE

- Composed by 8 models, the range covers air flows from 50 to 11,000 m3/h.

INSTALLATION

- Can be installed indoors or outdoors.
- Its cubic shape adapts to all intake/discharge combinations to 90° (models 2600 to 11000).

▲ The technical rear panel gathers the local power switch and the potentiometer. Easy access to all internal components through the technical panel, for an easy maintenance.

CONSTRUCTION

- Unit: galvanized steel sheet. Amply dimensioned, it offers powerful air handling and acoustic performance characteristics.
- Fan and motor acces by removable panel.
- Bird protection grid on discharge.
- Two circular connections with double lip seal for watertight connections (ATEC CSTB No. 13-224-V2).
- Fixed connection panels for the models 600 to 1800.
- Removable connection panels for the models 2600 to 11000.
- Local padlockable switch on front panel.

▲ IP54 potentiometer, on the front.

- Gaz pressure switch (option non-mounted).

MOTOR FAN

▲ Direct drive EC motor with high efficiency electronic commutation with 0-10V signal control, a specific profile turbine (models 600 to 1800) and a reaction turbine (models 2600 to 11000).

- Forward wheel with high efficiency specific profile and low noise level up to model 1800. High efficiency backward wheel, epoxy-treated (3000 and 5000).

- The association, in the **ECONIZER™** unit, the EC motor and a coilprofile ensures very high performance to very low power **econological™ solution** of the RT2012 and the requirements of the 2018 phase of the Ecodesign Directive ErP 2009/125 / EC.

FIELD APPLICATIONS ECONIZER™

Applications	Legislation	Models
Housing ventilation for small buildings	Approved 400°C - 1/2h	600 to 11 000
Ventilation of cover car parks in small residential buildings	Article 89 of 31 January 1986 decree Résistance 400°C – 2h	2 600 to 11 000
Smoke extraction, trafic and stairwells in residential buildings	Articles 37 and 38 of 31 January 1986 decree Résistance 400°C – 2h	2 600 to 11 000
Ventilation of residential tall buildings	Article G4A4 of 30 December 2011 decree Résistance 400°C – 2h	2 600 to 11 000

ELECTRIC CHARACTERISTICS ECONIZER™

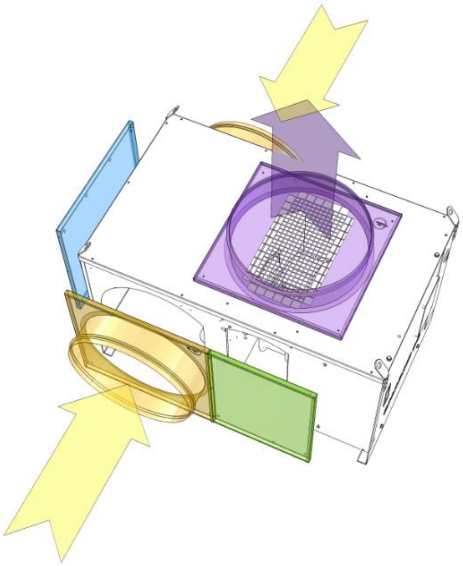
ECONIZER™ models	Electric motor power (W)	Temp. Use (°C / °C)	Protection rate / Class	Thermal protection*	Alimentation voltage (V / Ph / Hz)	Protection intensity (A)
ECONIZER™ 600	101 W	-20 / 50	IP44 / F	PTI	230 / 1 / 50	0,8
ECONIZER™ 1000	150 W	-20 / 50	IP44 / F	PTI	230 / 1 / 50	1,2
ECONIZER™ 1800	320 W	-20 / 50	IP44 / F	PTI	230 / 1 / 50	1,4
ECONIZER™ 2600	680 W	-20 / 40	IP54 / F	PTI	230 / 1 / 50	2,3
ECONIZER™ 4200	680 W	-20 / 40	IP54 / F	PTI	230 / 1 / 50	3,5
ECONIZER™ 6800	1900 W	-20 / 40	IP54 / F	PTI	230 / 1 / 50	6,4
ECONIZER™ 9100	2900 W	-20 / 40	IP54 / F	PTI	400 / 3 / 50	3,2
ECONIZER™ 11000	2900 W	-20 / 40	IP54 / F	PTI	400 / 3 / 50	3,5

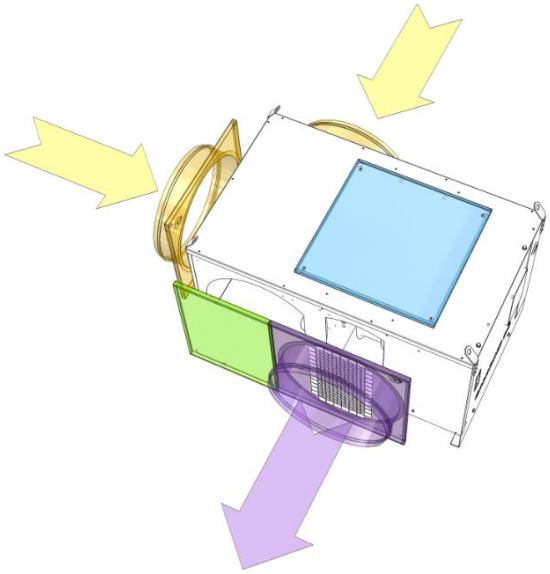
** PTI : Integrated Thermal Protection*

CONFIGURATIONS ECONIZER™

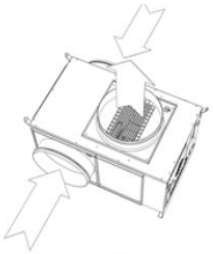
Modular configurations (models 2 600 to 11 000):

The unit is delivered in this configuration :

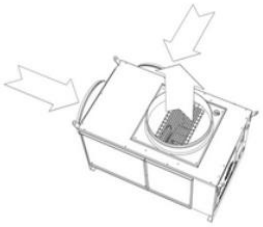




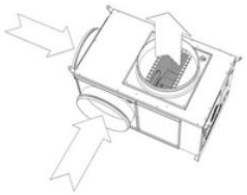
POSSIBILITY OF MODIFYING THE UNIT WITHOUT ADDITIONAL OPTION



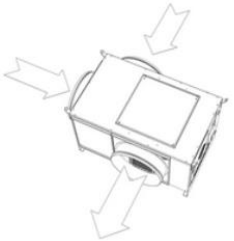
Basic configuration:
Vertical exhaust and double 180° intake.



Double 90° intake and vertical exhaust.

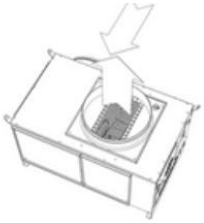


Double 90° intake and vertical exhaust.

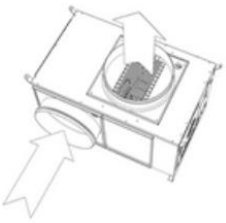


Double 90° intake and horizontal exhaust.

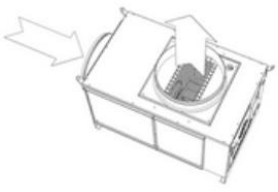
WITH THE USE OF A QUICK-RELEASE CAP (NOT SUPPLIED)



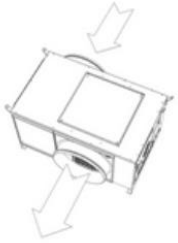
90° intake and vertical exhaust.



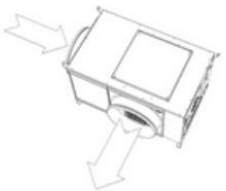
90° intake and vertical exhaust.



On line intake and vertical exhaust.



On line intake and exhaust.

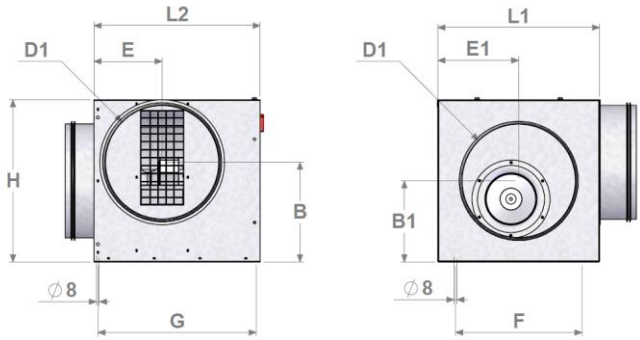


Intake and horizontal exhaust at 90°.

DIMENSION CHARACTERISTICS ECONIZER™

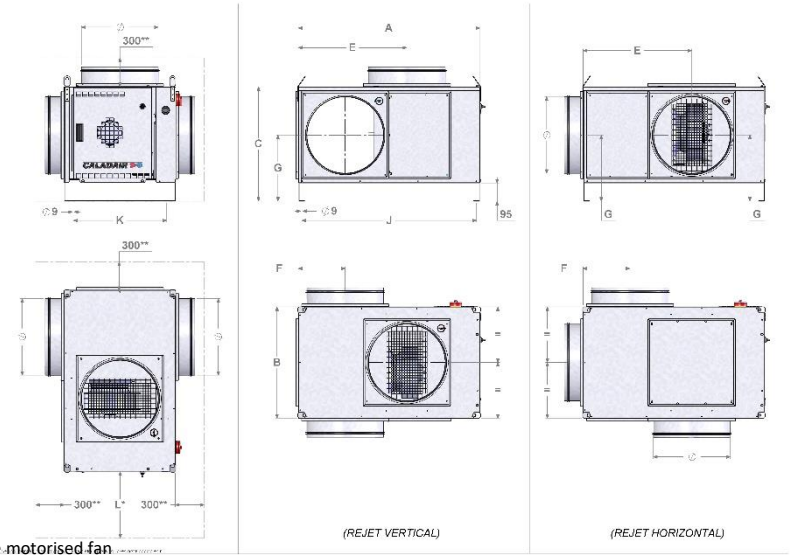
- ECONIZER™ 600 – 1000 – 1800 (fixes connection panels) :

ECONIZER™ models	CONNECTIONS	UNIT DIMENSIONS				EXHAUST POSITION			MOUNTING		WEIGHT
	D1	L1	L2	H	B	E	B1	E1	F	G	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
600	250	370	425	370	225	150	185	185	280	405	18
1000	315	450	460	450	275	190	225	225	350	440	24
1800	355	555	485	555	360	200	275	275	400	465	34



- ECONIZER™ 2600 – 4200 – 6800 – 9100 – 11000 (removable panels) :

ECONIZER™ models	Ø	A	B	C	E	F	G	J	K	L*	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
2600	400	945	580	600	565	245	345	910	485	350	70
4200	500	1085	680	700	685	295	395	1050	585	375	85
6800	630	1265	790	830	840	365	460	1230	690	460	140
9100	710	1375	890	910	935	405	500	1340	795	510	180
11000	800	1495	980	1000	1035	445	545	1455	885	520	215



*Minimum space required to remove the motorised fan
**Minimum space required for disassembly of peripheral elements and tool access (does not include the space necessary for accessibility for intervention)

The values "Lp4m dB (A)" (◯) shown on the curves correspond to the sound pressure level at 4 m hemispherical free field on a reflective surface, rejection not connected a subwoofer **ECONIZER™**.

The values "LWA cond suction dB (A)" (☐) shown on the curves correspond to the total sound power level radiated into the suction of a **ECONIZER™** 's duct.

For the acoustic spectrum of sound power "LWA cond suction dB (A)" suction side, add the following values to the sound power level "LWA cond suction dB (A)" mentioned on the curves (☐).

Weighting acoustic function of upstream suction cond LWA dB(A) ☐ shown on the curves								
Frequency	**63Hz**	**125Hz**	**250Hz**	**500Hz**	**1000Hz**	**2000Hz**	**4000Hz**	**8000Hz**
ECONIZER™ 600 dB(A)	-29	-16	-4	-8	-10	-8	-11	-21
ECONIZER™ 1000 dB(A)	-26	-13	-6	-12	-6	-7	-8	-16
ECONIZER™ 1800 dB(A)	-26	-13	-7	-8	-6	-8	-9	-17
ECONIZER™ 2600 dB(A)								
ECONIZER™ 4200 dB(A)								
ECONIZER™ 6800 dB(A)				Laboratory validation in progress				
ECONIZER™ 9100 dB(A)								
ECONIZER™ 11000 dB(A)								

For the sound level the global sound power level radiated into the duct to discharge "cond refoulemet LwA dB (A)", apply the following weightings: ECONIZER™: LWA cond refoulemet dB (A) = Lp4m (◯) + 20.

To get the sound pressure level Lp dB (A), hemispherical free field, at a distance, unit floor standing on reflective surface, connected to the suction side, not connected discharge side, add the following values to Lp4m dB (A)◯) indicated on the curves.

Weighted Lp at various distances depending on Lp4m (◯)						
Distance (m)	**2 m**	**3 m**	**4 m**	**5 m**	**7 m**	**10 m**
Weighting distance dB(A)	6	2	0	-2	-5	-8

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

Acoustic spectrum +/- 5 dB(A)

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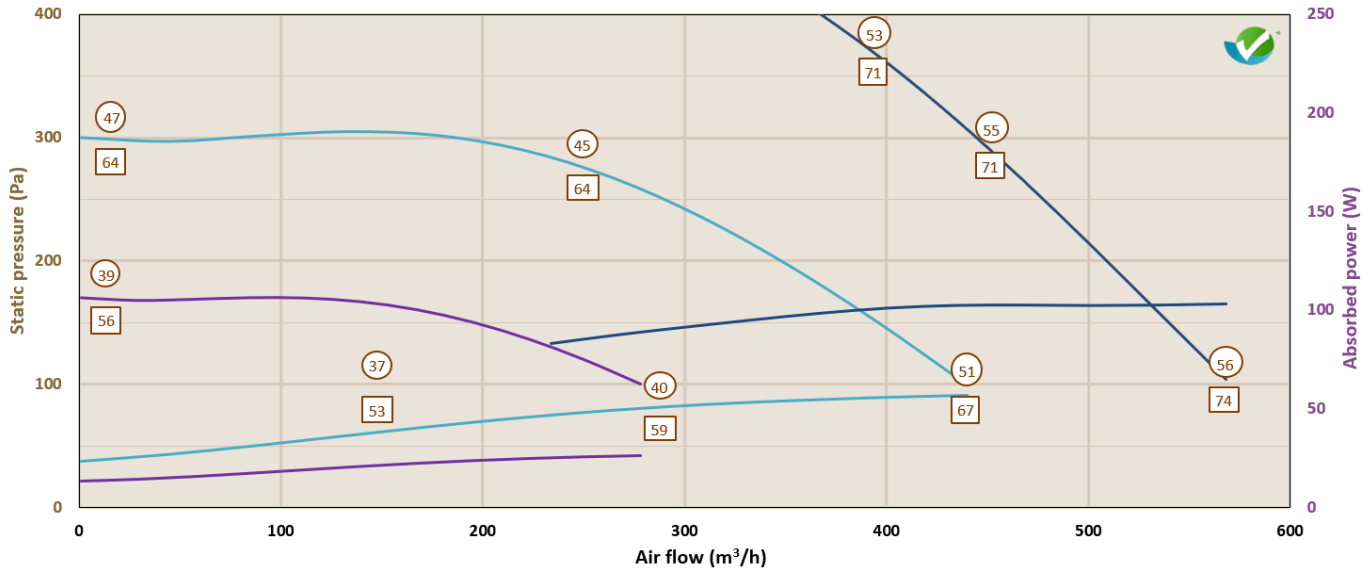
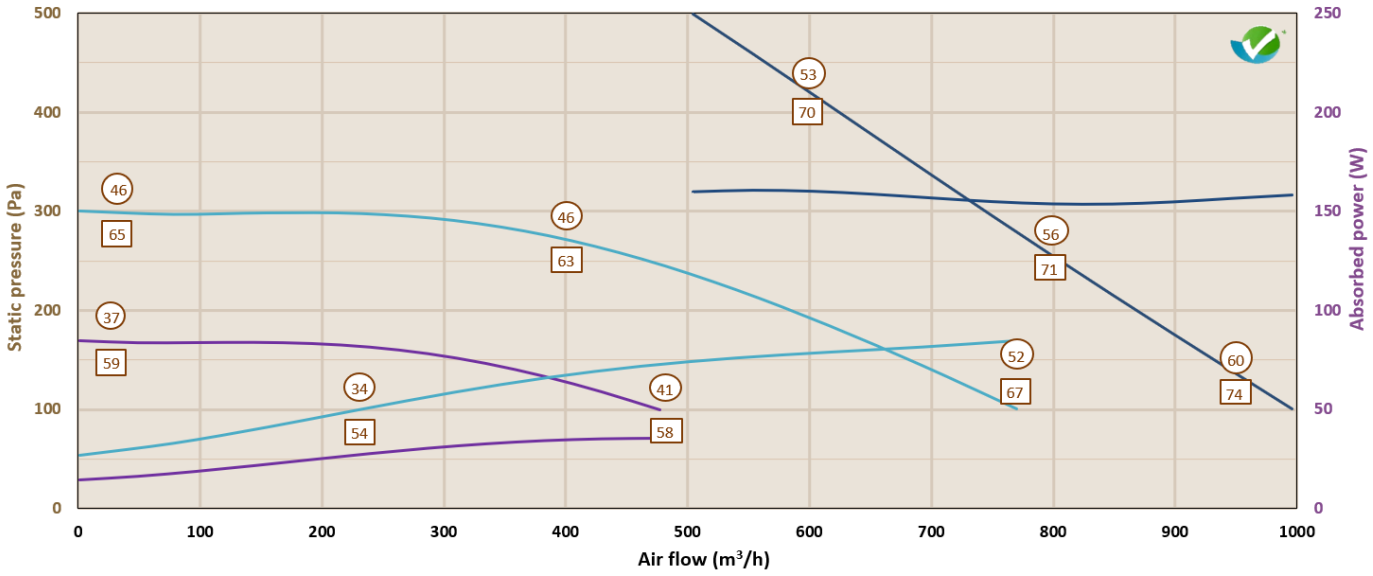
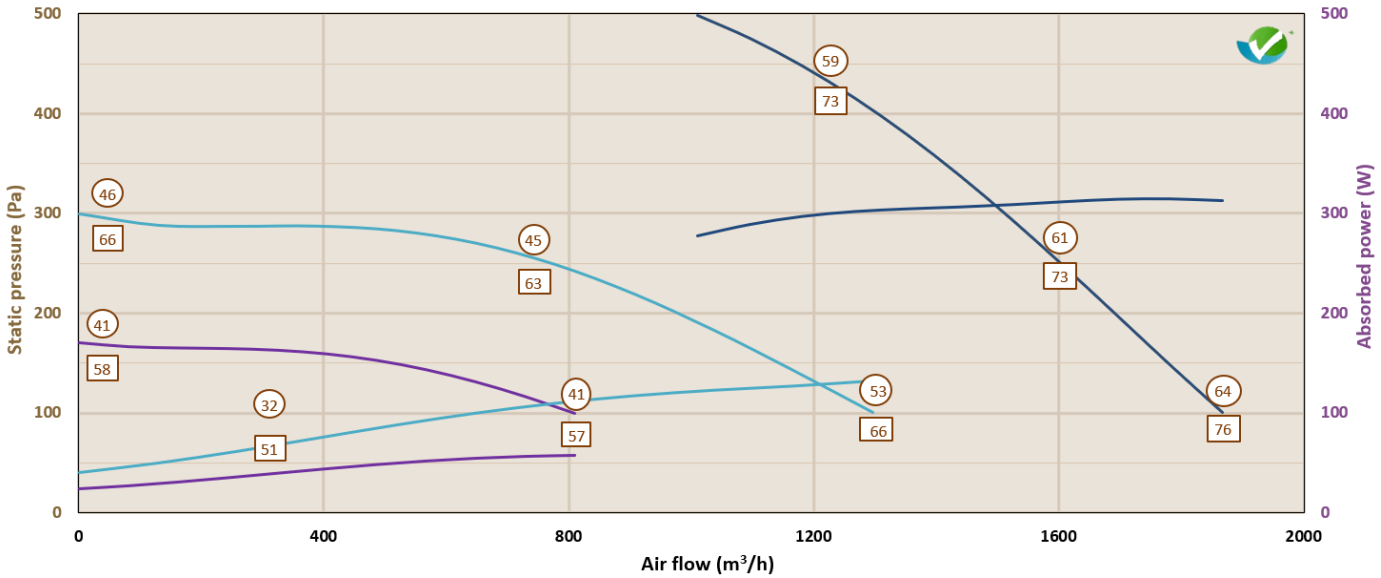
ECONIZER™ 600



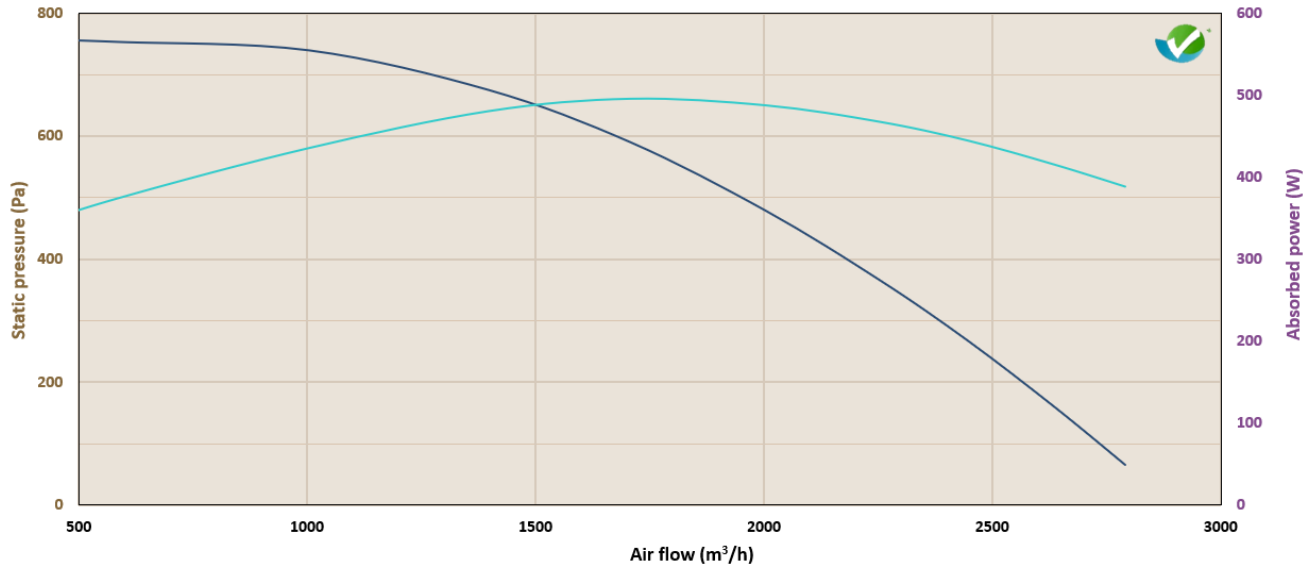
ECONIZER™ 1000



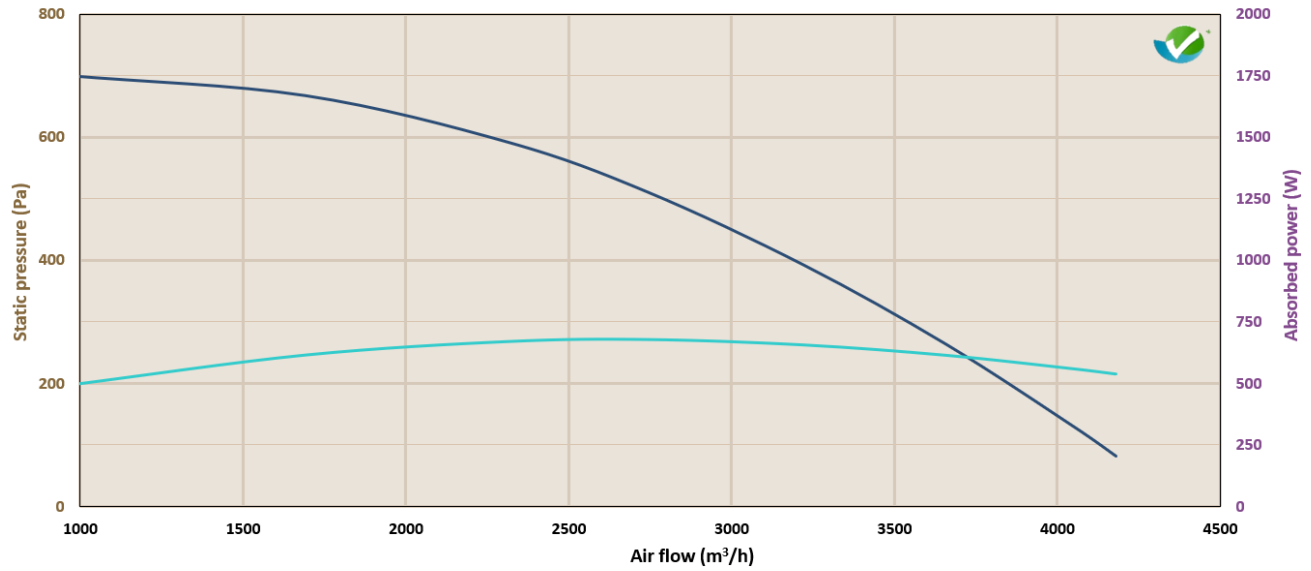
ECONIZER™ 1800



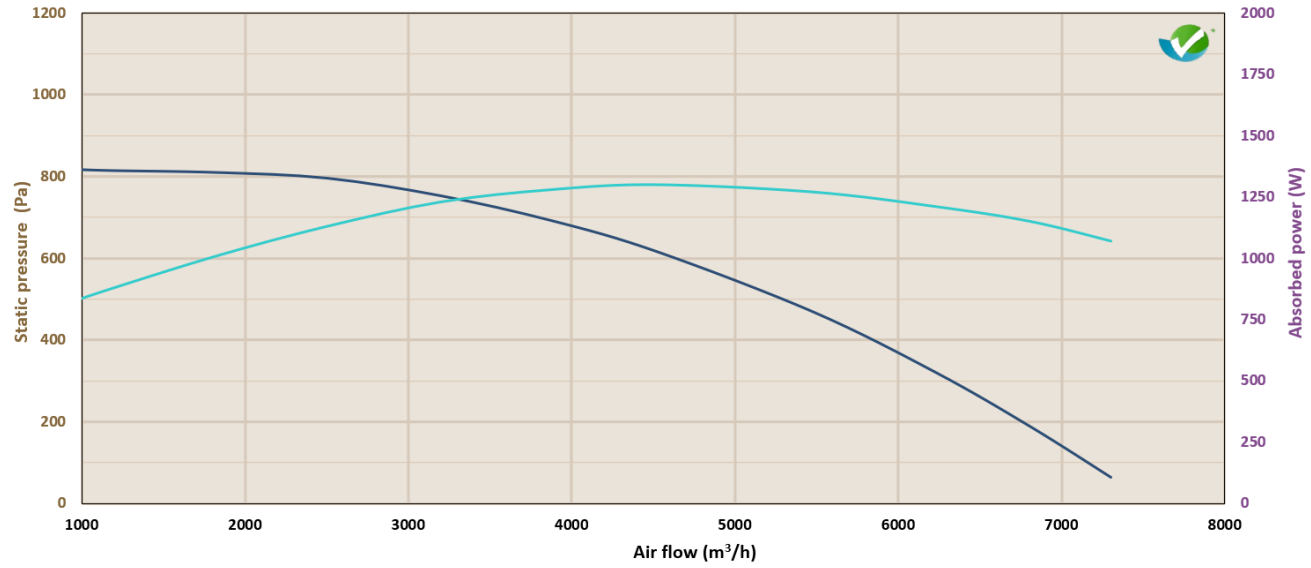
ECONIZER™ 2600



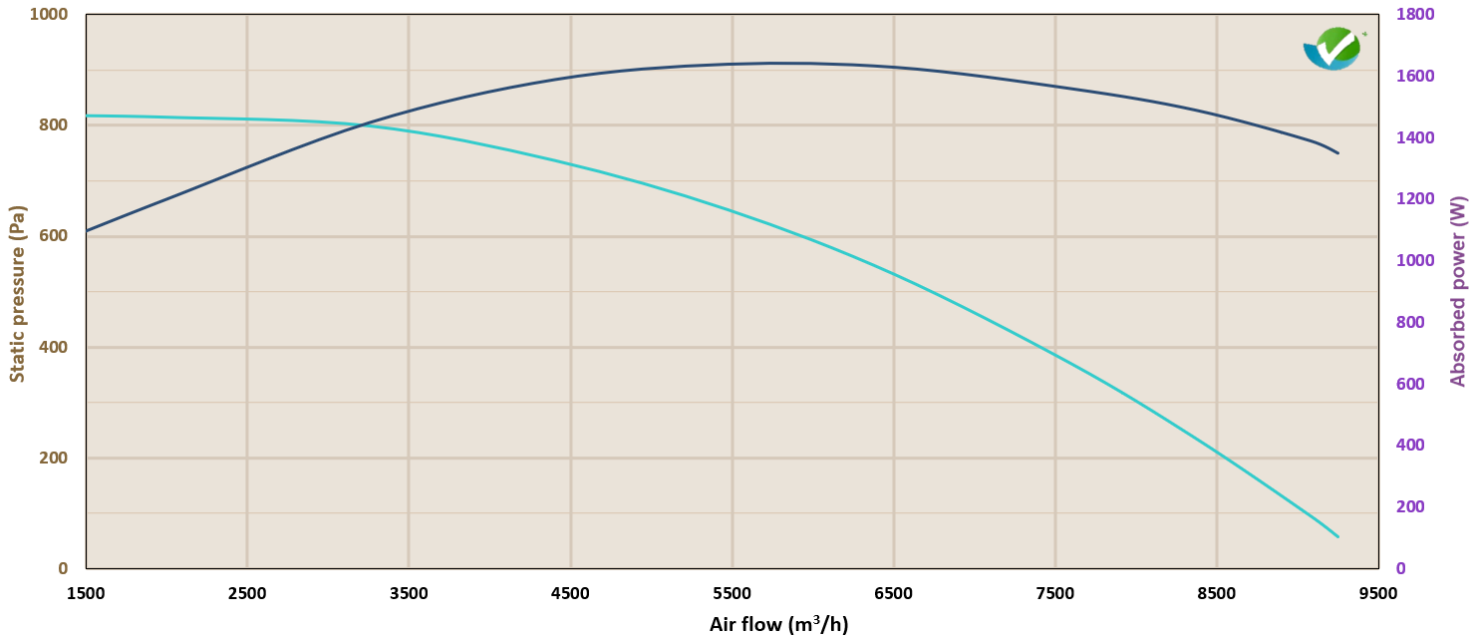
ECONIZER™ 4200



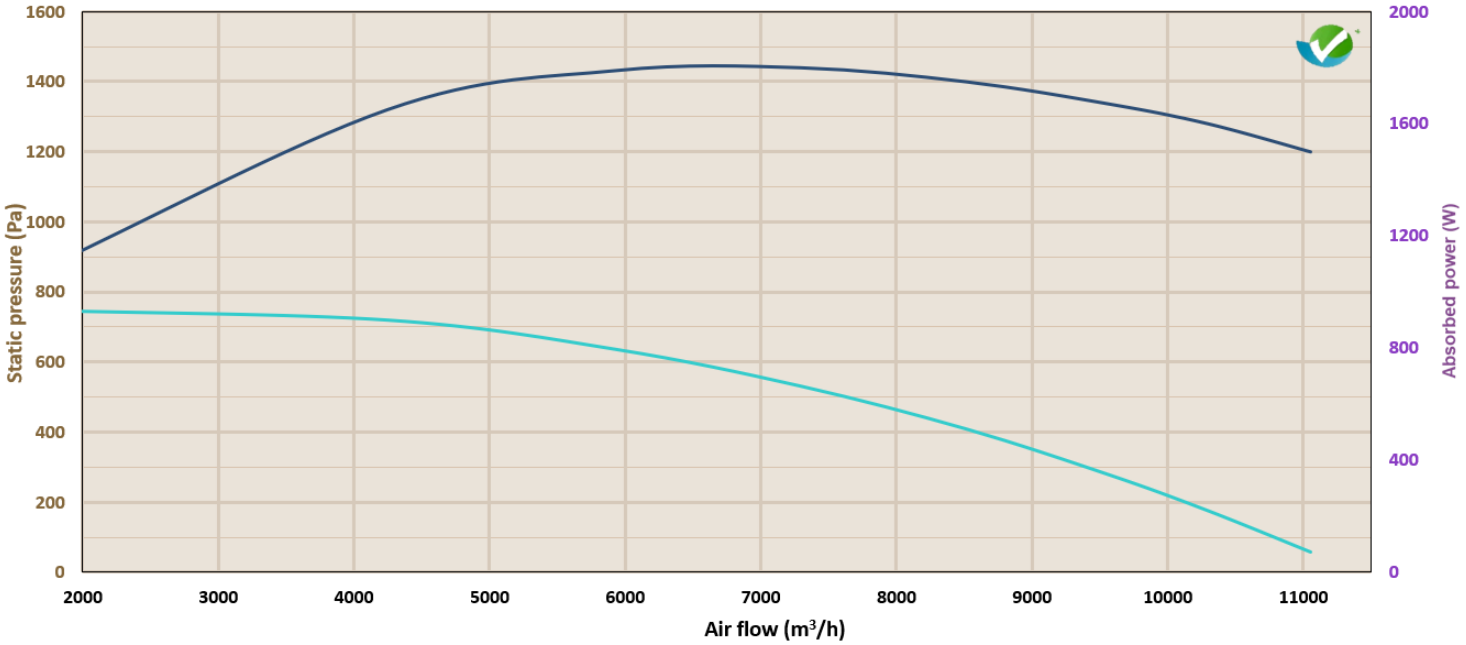
ECONIZER™ 6800



ECONIZER™ 9100



ECONIZER™ 11000



NOTA : The curves are made with a suction connection connected and the unit reject not connected (configuration C NF N 13141-4).

The curves above are provisional.