

## CHELYS SIGILA EEC



SILENT MIXFLOW FAN FOR DUCT WITH EEC MOTOR

### CONSTRUCTIVE FEATURES:

- In-line fan made of steel coated with black polymer. Designed for installation in circular ducts.
- Thermal and acoustic insulation of 50mm thick rock wool. The internal perforation of the housing provides noise attenuation in a wide frequency band thanks to the use of noise absorbing material.
- Conical turbine with special blade profile to increase the speed of air flow and pressure.
- The combination of a diffuser, a specially designed impeller and flow guide blades at the outlet of the fan allow an optimal distribution of the air flow to achieve a high capacity and a higher air pressure without generating excessive noise.
- Internal housing and turbine made of durable, high-quality ABS plastic.
- External connection box completely sealed.
- Housing with mounting brackets for quick installation on floor, walls or ceiling. The ducts can be mounted at any angle with respect to the fan axis.
- Control of the fan by 0-10 V signal, while the regulation of the performance is based on the feedback of temperature, smoke and other sensors, as well as other adjustments of vital parameters. As the control signal changes, the EC fan adjusts the speed to supply the exact amount of air required by the ventilation system. The maximum fan speed does not depend on the frequency of the power grid, which allows compatibility with 50 Hz and 60 Hz networks.
- High efficiency (EC) electronically commutated DC motors (90%). IP protection index X4.
- Minimum and maximum working temperature in continuous: -25 to 60°C.

## Accessories



### APPLICATIONS

Designed for duct installation.

The CHELYS SIGILA EEC system offers the most versatile installation range on the market, as a result of its multiple possible assembly combinations. It can be used in a large number of small and medium ventilation facilities for air renewal in:

- Libraries.
- Bathrooms and changing rooms.
- Commercial offices.
- Extraction in domestic kitchens after the extraction hood.
- or Schools.
- Waiting rooms.
- Commercial premises.

## Technical data

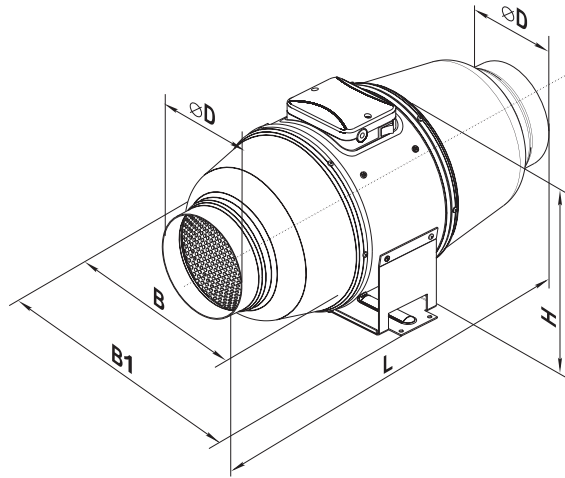
### Single-phase motor

Code	Model	R.P.M.	Rated I. (A) 230V	Rated power kW	Max. Airflow w m3/h	Sound db (A)**	Weight t	Connect. diagram
507991000EC	CHELYS SIGILA 100 EEC	3018	0,29	0,032	310	36	4,90	1
507991200EC	CHELYS SIGILA 125 EEC	3036	0,39	0,045	470	42	4,80	1
507991500EC	CHELYS SIGILA 150 EEC	3018	0,53	0,065	600	35	6	1
507991600EC	CHELYS SIGILA 160 EEC	3018	0,53	0,065	600	35	6	1
507992000EC	CHELYS SIGILA 200 EEC	2880	0,99	0,14	1.110	42	8,60	1
507992500EC	CHELYS SIGILA 250 EEC	2784	1,35	0,197	1.510	44	12,50	1
507993150EC	CHELYS SIGILA 315 EEC	2508	2	0,306	2.010	46	19,80	1

**Notes:**

\*\* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

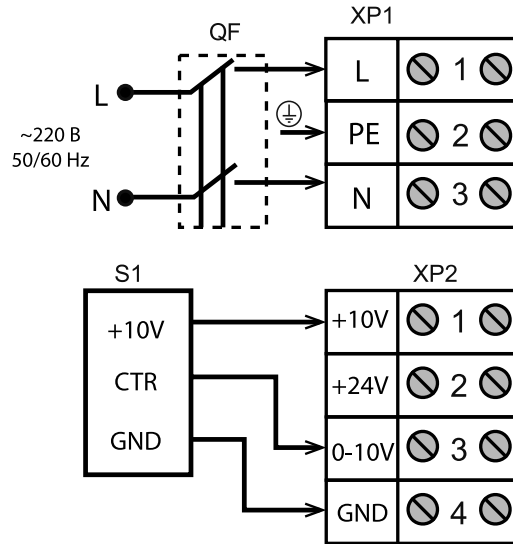
## Dimensions



Model	B	B1	D	H	L
CHELYS SIGILA 100 EEC	215	332	98	247	505
CHELYS SIGILA 125 EEC	215	332	123	247	474
CHELYS SIGILA 150 EEC	247	372	147	265	580
CHELYS SIGILA 160 EEC	247	372	157	265	580
CHELYS SIGILA 200 EEC	293	392	198	311	558
CHELYS SIGILA 250 EEC	358	451	248	379	664
CHELYS SIGILA 315 EEC	432	527	313	455	782

## Wiring diagram

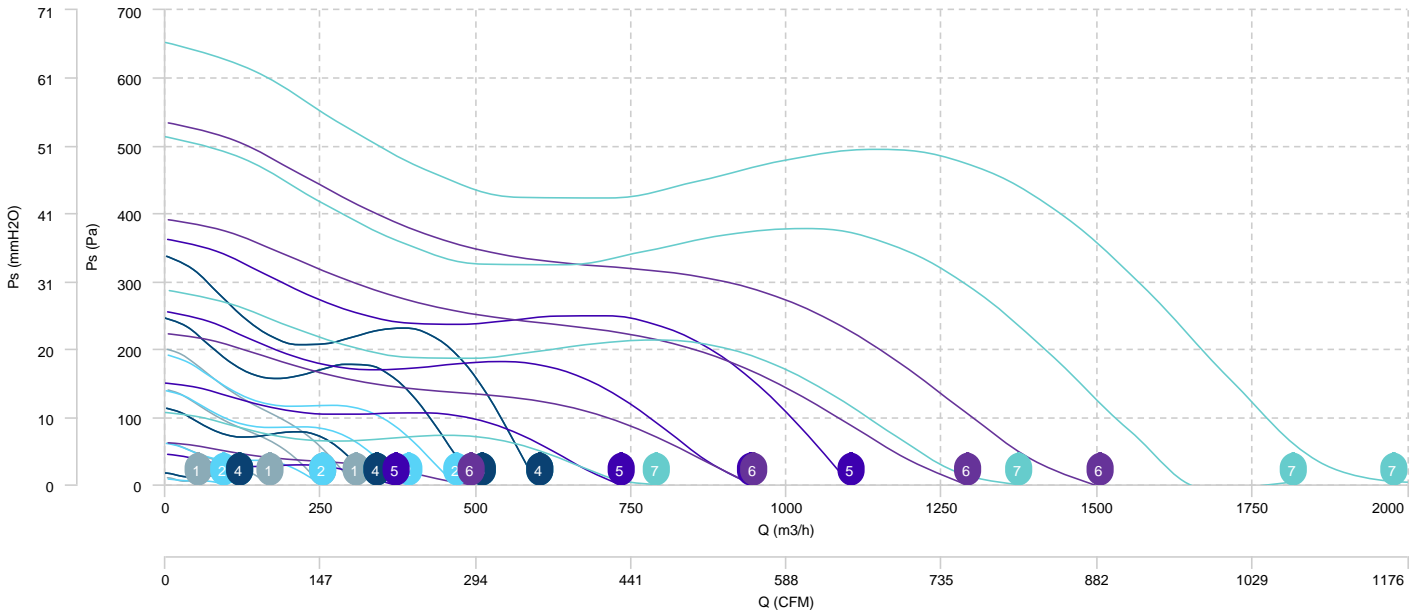
DIAGRAM N° 1



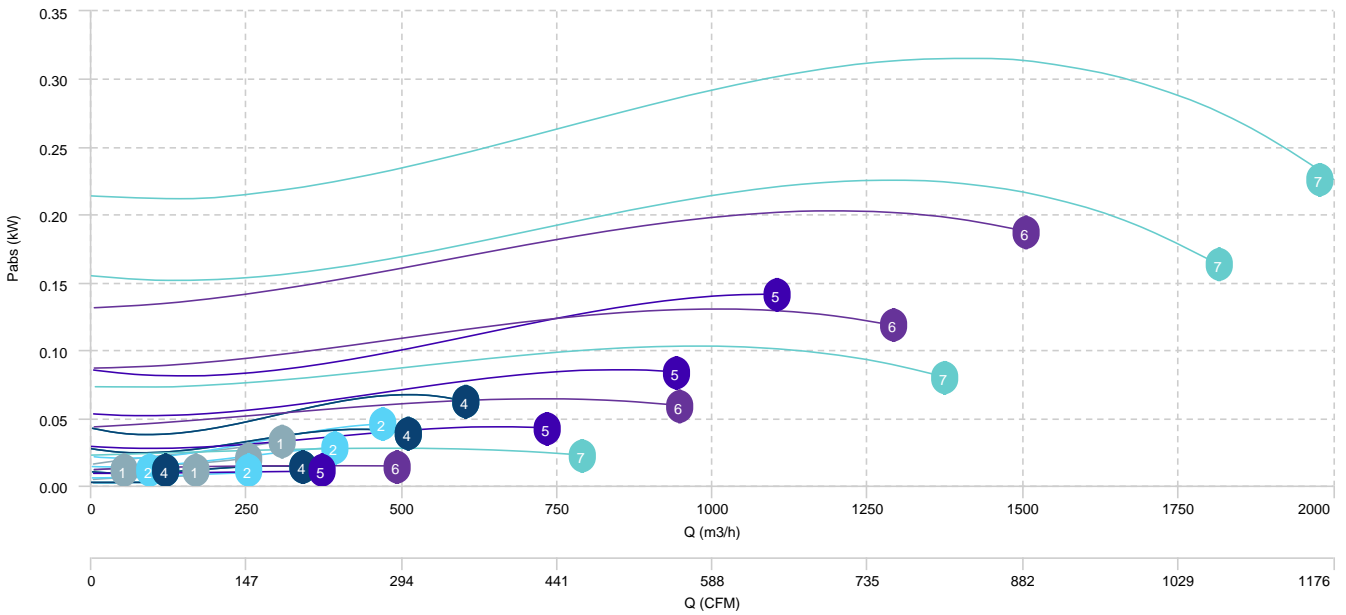
# CHARACTERISTIC CURVE

1	CHELYS SIGILA 100 EEC	2	CHELYS SIGILA 125 EEC	3	CHELYS SIGILA 150 EEC	4	CHELYS SIGILA 160 EEC
5	CHELYS SIGILA 200 EEC	6	CHELYS SIGILA 250 EEC	7	CHELYS SIGILA 315 EEC		

## AIR FLOW - PRESSURE



## AIR FLOW - ABSORBED POWER



## Sound data

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
CHELYS SIGILA 100 EEC	Inlet	46	59	59	42	37	34	31	23	62
	Outlet	46	57	45	42	38	31	26	20	57
	Radiated	39	45	51	55	43	42	32	23	57
CHELYS SIGILA 125 EEC	Inlet	51	65	65	46	41	38	34	25	68
	Outlet	52	65	51	48	43	35	30	23	65
	Radiated	50	53	57	61	50	49	38	29	63
CHELYS SIGILA 200 EEC (-0.096910013008056 RPM)	Inlet	32	42	52	58	58	57	56	50	63
	Outlet	37	45	54	59	61	59	58	53	65
	Radiated	26	38	48	56	51	48	43	32	58
CHELYS SIGILA 315 EEC	Inlet	41	55	64	65	70	65	63	55	72
	Outlet	52	61	67	75	71	69	67	62	77
	Radiated	33	48	58	60	63	57	50	38	66

**Notes:**

\* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$