

- Inline duct fan
- Circular
- Mixed flow
- EC 400 V



Inline duct fans with EC motor type ETALINE EC

Compact mixed flow duct fan with energy saving EC-motor

Application

- **ETALINE** fans are especially built for use with round ducts. The diameter of the duct is not exceeded by the fan housing, the **ETALINE** fan can be used in small spaces.
- Thanks to the special design of the three dimensional blades of the rotor and the stator, these blades are driven correctly, thanks to which the pressure profile on the surface of the blades is realised more efficiently and with considerably less energy losses. The efficient stator will convert the energy losses (dynamic pressure) into useable energy (static pressure). This combination results in a duct fan with the highest efficiency in its category, whereby the **ETALINE** fans cut operational costs enormously.
- Thanks to the fact that the motor is integrated in the stator's hub, out of the air stream, the **ETALINE** fans can be used for slightly polluted air.
- The EC technology (Electronic commutation) is an intelligent technology, which prevents the fan from slipping by using the internal electronic regulation, and assures that the motors is always running with the optimal tension. This EC technology also assures an efficient usage of energy, which means that the energy consumption is much lower in comparison with AC motors.
- The **ETALINE EC** fan is equipped with an energy efficient EC motor, which means that it saves up to 35% in comparison with an **ETALINE** AC motor.
- The EC technology enables an easy regulation of velocity. This means that the energy consumption of the **ETALINE EC** will be many times lower in comparison with the AC motor even for part load.
- The **ETALINE** fans are used for ventilation in offices, schools, parkings, industrial applications,...

Composition

- The compact housing is equipped with a mounting base
- The housing is made of seawater-resistant aluminum
- The helico-centrifugal turbine and stator are made of seawater-resistant aluminum
- Helico-centrifugal turbine with guide vanes for high efficiency
- EC motor with lifetime-lubricated ball bearings
- Control module included
- Internal electronic temperature monitoring

- Insulation class F Motor protection class: IP55

Accessories

- Potentiometer, type **ESCP010**
- Fitting clamp, type **BMK**
- Protection grille, type **BSV-S**

Text for tender

The fan is of the mixed flow type. Motors can be controlled by means of an integrated EC controller. The fan is equipped with a 230V 1ph speed controllable motor or a 400V 3ph speed controllable motor, depending on the type. The fans can be fitted in any position. Air flow up to 20.000 m³/h. Housing supplied with mounting brackets. Housing made out of galvanized steel (size 250mm-355mm) or seawater resistant aluminium (size 400mm-710mm). Motor equipped with thermal protection.

CAIROX, type **ETALINE EC**

Order example

ETALINE 400 EC K 01 + ESCP010

ETALINE = type of fan

400 = diameter

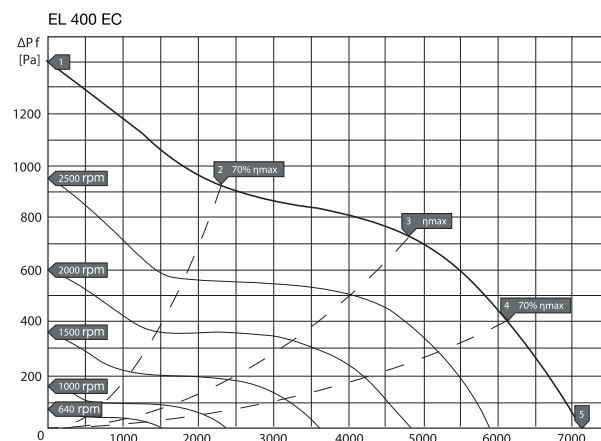
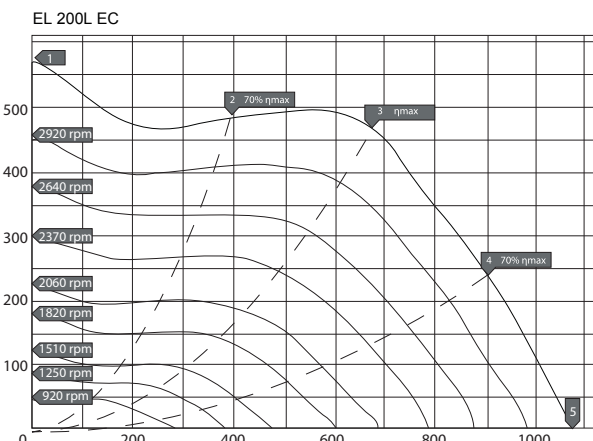
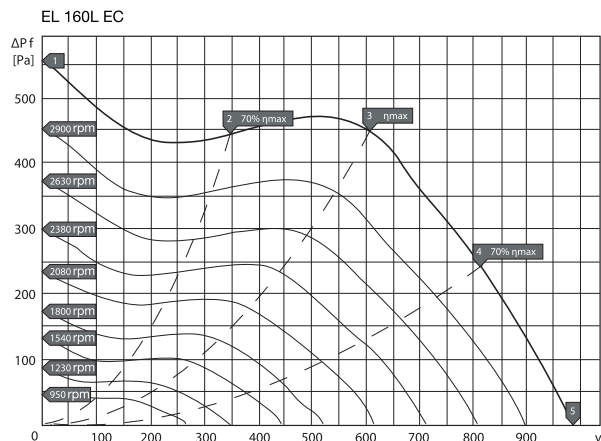
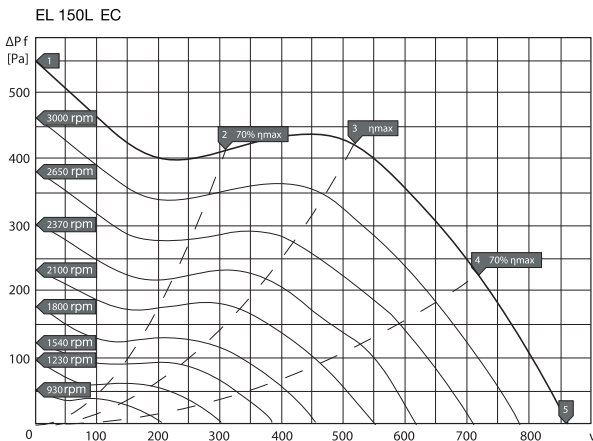
EC = EC motor

K 01 = tversion

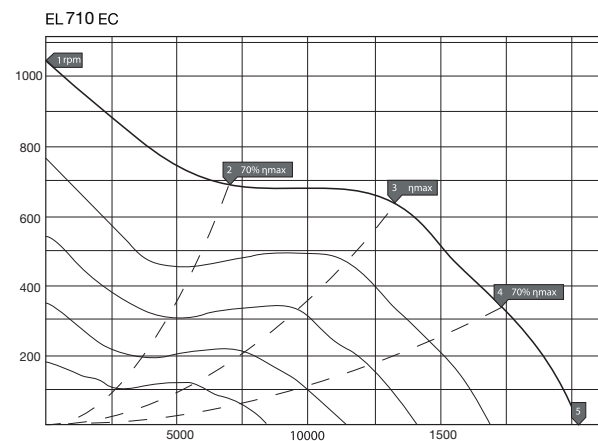
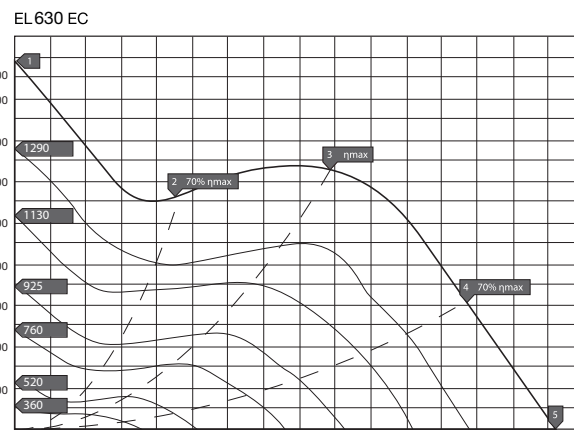
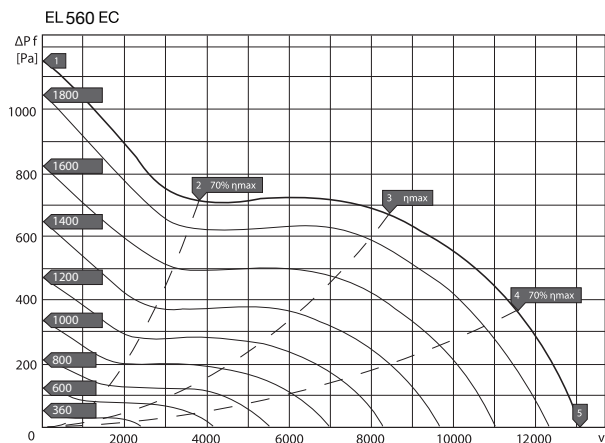
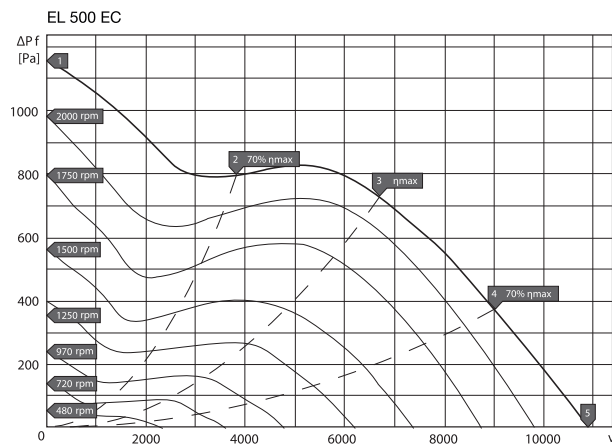
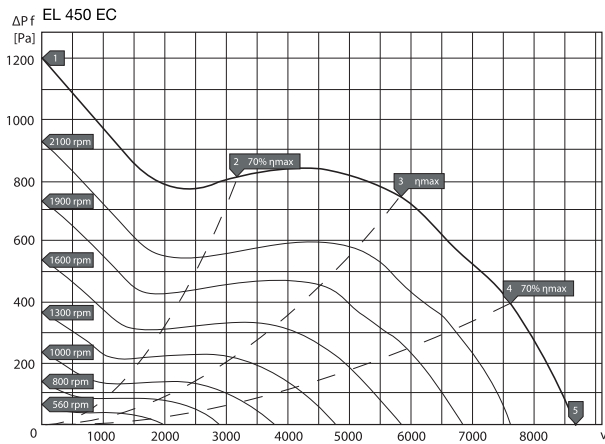
ESCP010 = potentiometer

	Air performance data									
	Q [m³/h]									
	50Pa	100Pa	150Pa	200Pa	250Pa	300Pa	400Pa	500Pa	600Pa	700Pa
ETALINE 400 EC K 01	7214	7111	7000	6876	6741	6595	6270	5889	5468	5112
ETALINE 450 EC K 01	7390	7275	7125	6945	6725	6475	5940	5400	1400	947
ETALINE 500 EC K 01	10100	9875	9500	9350	9000	8750	8200	7425	6375	2000
ETALINE 560 EC K 01	11300	11000	10725	10400	10050	9675	8650	6900	2520	1800
ETALINE 630 EC K 01	14850	14500	14150	13850	13500	13100	12275	11350	3025	2325
ETALINE 710 EC K 01	20325	19925	19500	19000	18650	18250	17290	16475	15350	5275

Selection curves



Selection curves

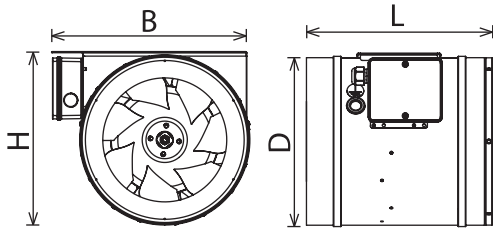


Technical data

	U [V]	P [W]	I [A]	η_t [%]	T _m [°C]	T _u [°C]	T _o [°C]	n [rpm]	Lwa [dB(A)]		
									Lwa 5	Lwa 6	Lwa 2
ETALINE 400 EC K 01	1 x 230	1637	11.8	63.6	40	40	-20	3000	93	97	88
ETALINE 450 EC K 01	1 x 230	1144	8.2	69.2	60	60	-20	2100	88	93	85
ETALINE 500 EC K 01	3 x 400	2085	3.18	69.3	40	40	-20	2100	91	96	86
ETALINE 560 EC K 01	3 x 400	1642	2.43	64.1	60	60	-20	1750	90	94	83
ETALINE 630 EC K 01	3 x 400	2414	3.7	71.3	60	60	-20	1500	88	92	83
ETALINE 710 EC K 01	3 x 400	3950	6	69.5	60	60	-20	1500	92	97	85

- η_t = Maximum total efficiency
- T_m = Maximum air temperature
- T_u = Maximum ambient temperature
- T_o = Minimum operating temperature
- Lwa 2 = Casing sound power level
- Lwa 5 = Sound power level @inlet
- Lwa 6 = Sound power level @outlet

- The sound power levels are measured according to DIN 45635 part 2 & 38



	Dimensions				
	B [mm]	D [mm]	L [mm]	H [mm]	[kg]
ETALINE 400 EC K 01	427	403	416	432	16.5
ETALINE 450 EC K 01	478	453	467	467	18.2
ETALINE 500 EC K 01	523	504	515	512	24.8
ETALINE 560 EC K 01	539	564	582	573	28.6
ETALINE 630 EC K 01	659	634	654	643	45.2
ETALINE 710 EC K 01	738	714	732	723	51.5