



Range of cylindrical cased axial fans fitted with aluminium impellers and manufactured from high grade rolled galvanised steel and protected against corrosion by cataforesis primer and black polyester paint finish. Fited with 2 contra rotating complementary impellers manufactured from die-cast aluminium. All models are supplied with pre-wired wiring junction box located on the outside of the fan casing for easy wiring access. Available with single or three phase 4 poles motors.

#### Motors

All the motors are IP65, Class F insulation (1), equipped with thermal protection. Single phase motors are variable voltage [Excepted TCBBX2/4-630]. Three phase motors suitable for inverter control. Electrical supplies:  
Single phase 230V-50Hz (Capacitor located inside the wiring terminal box)  
Three phase 230/400V-50Hz.  
(1) Working temperatures from -40°C up to 70°C.



#### Contra rotating: High pressure

Contra rotating system with two complementary impellers allowing the duplication of the pressure with the same air volume.



#### Corrosion resistance

Rolled steel casings and motor support protected by cataforesis primer and black polyester paint finish. Stainless steel screws.



#### Terminal box

Wiring terminal box with cable gland PG-11.

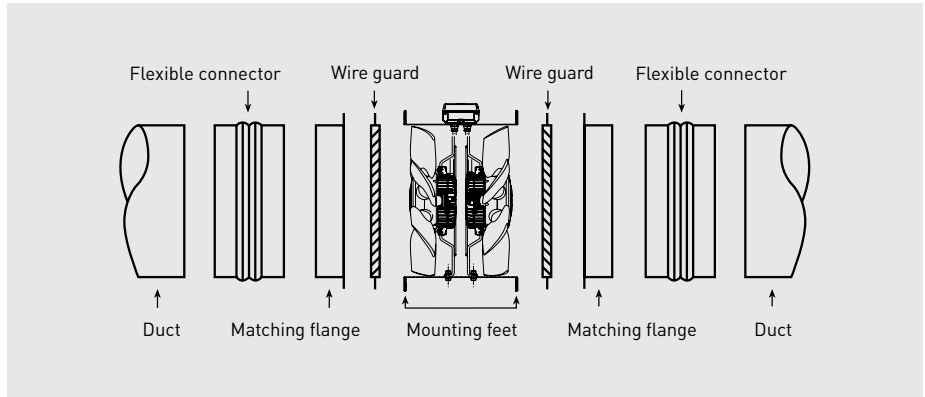


#### Impeller dynamically balanced

Impellers are dynamically balanced, according to ISO 1940 standard, giving vibration free operation.



MOUNTING ACCESSORIES



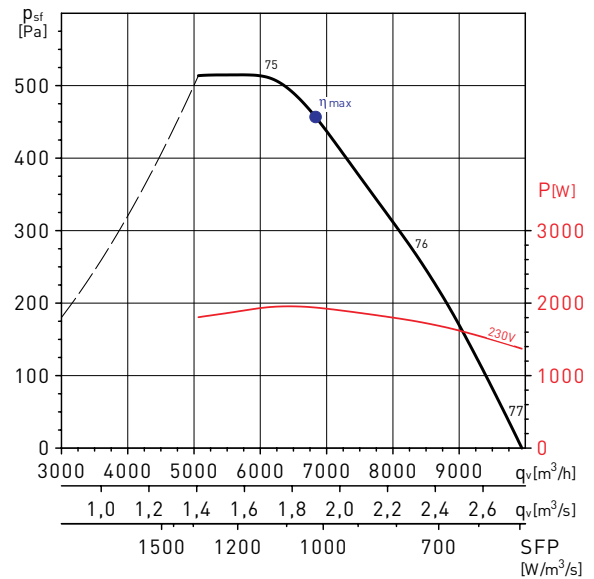
PERFORMANCE CURVES TCBBx2 / TCBTx2

- $q_v$ : Air volume in  $m^3/h$  and  $m^3/s$ .
- $p_{st}$ : Static pressure in Pa.
- SFP: Specific fan power in  $W/m^3/s$ .
- P: Input power in W.
- Measurement category: C or D depending on the models.
- Efficiency category: Static or Total depending on the models.
- Fan tested with inlet bellmouth.
- Fan efficiency without VSD.
- Air flow data in accordance with ISO 5801.
- Sound pressure level dB(A), measured in a free field distance equal to 3 times the diameter, with a minimum of 1,5 m.

- MC** Measurement category
- EC** Efficiency category
- VSD** Speed control: supplied with the fan
- SR** Specific ratio
- $\eta$ [%]** Efficiency
- N** Efficiency grade
- [kW]** Absorbed power
- [ $m^3/h$ ]** Air volume
- [Pa]** Static pressure
- [RPM]** Speed

EXAMPLE CURVE

TCBBx2/4-500

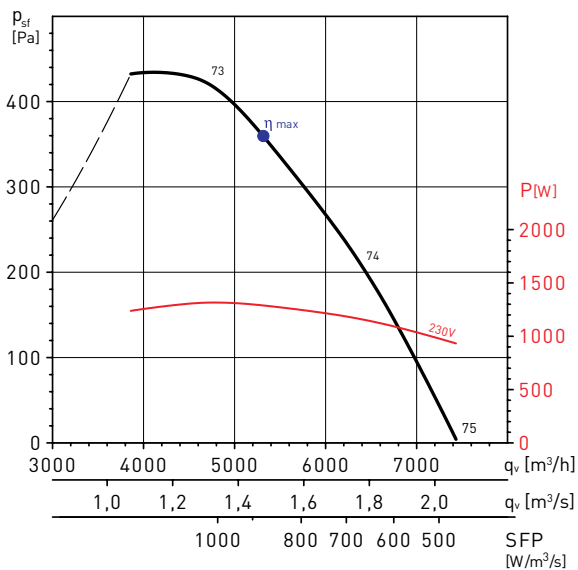


MC*	EC*	VSD*	SR*	$\eta$ [%]*	N*	[kW]	[ $m^3/h$ ]	[Pa]	[RPM]
C	Static	No	1	45,1	49,6	1,957	6383	498	1394

\* See example curve.

PERFORMANCE CURVES – 4 POLE MOTOR

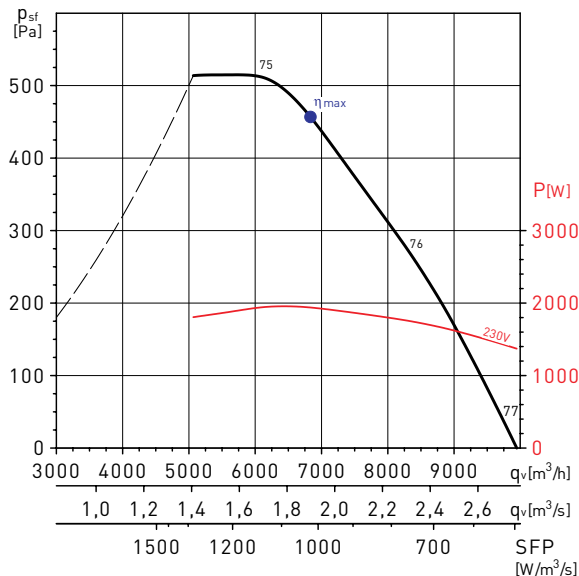
TCBBx2/4-450



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	41,9	47,5	1,316	4842	411	1349

\* See example curve.

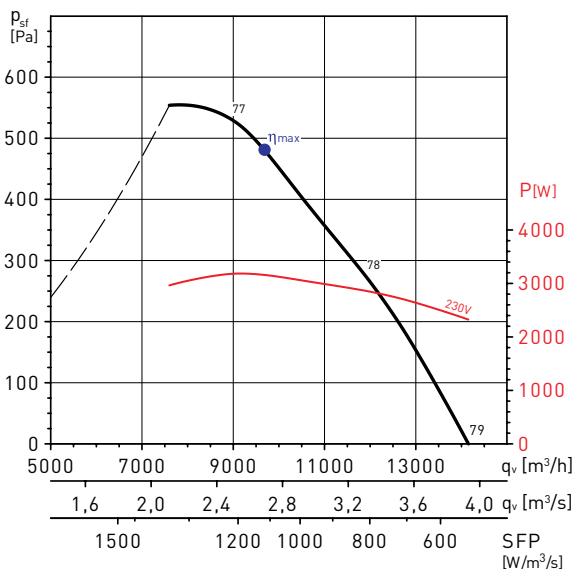
TCBBx2/4-500



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	45,1	49,6	1,957	6383	498	1394

\* See example curve.

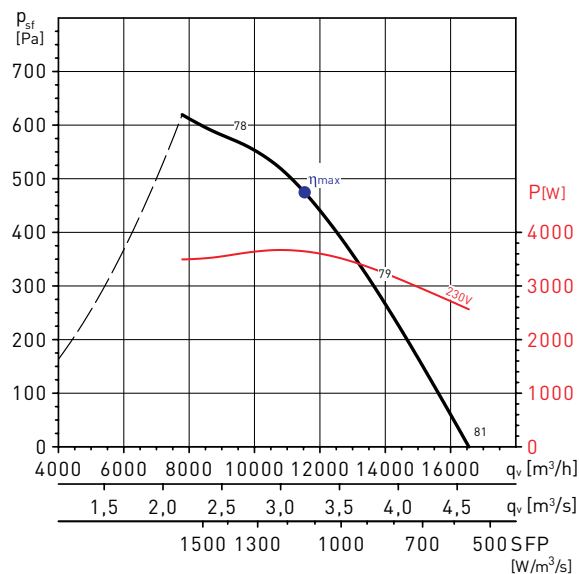
TCBBx2/4-560



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	41,9	45,2	2,970	8741	513	1311

\* See example curve.

TCBBx2/4-630

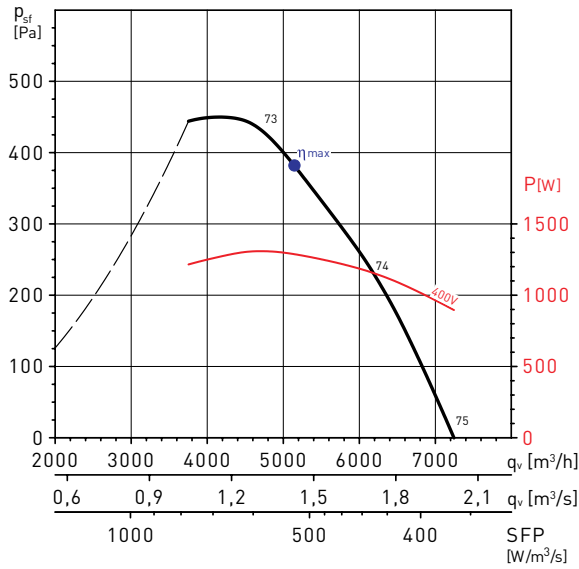


MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
C	Static	No	1	42,4	45,2	3,665	10542	536	1285

\* See example curve.

PERFORMANCE CURVES - 4 POLE MOTOR

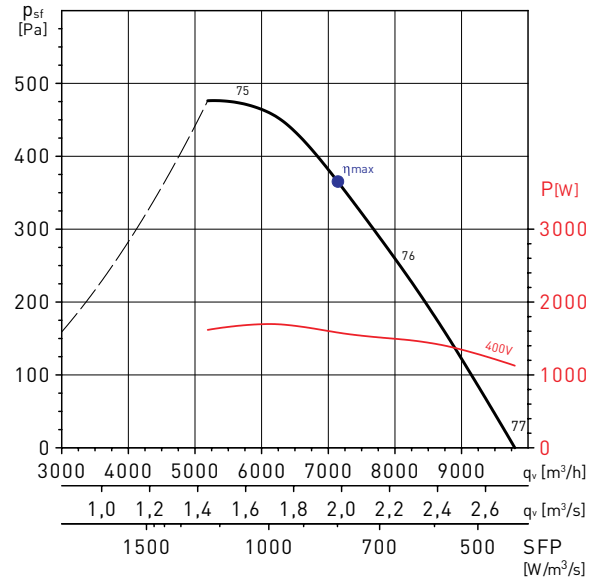
TCBTx2/4-450



MC*	EC*	VSD*	SR*	$\eta$ [%]*	N*	[kW]	[m <sup>3</sup> /h]	[Pa]	[RPM]
C	Static	No	1	43,0	48,6	1,309	4705	432	1375

\* See example curve.

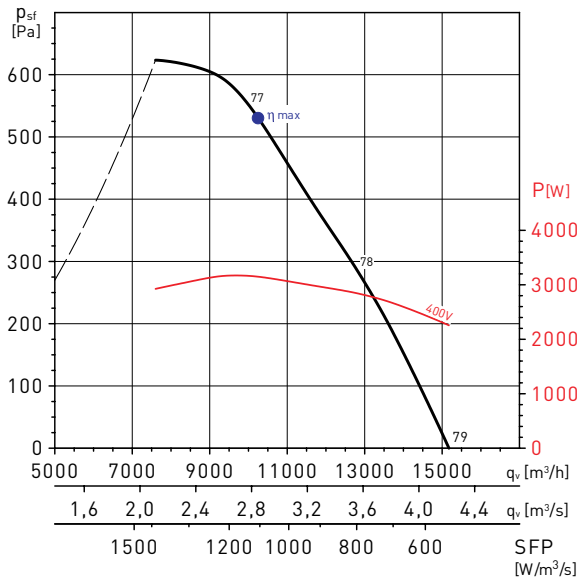
TCBTx2/4-500



MC*	EC*	VSD*	SR*	$\eta$ [%]*	N*	[kW]	[m <sup>3</sup> /h]	[Pa]	[RPM]
D	Total	No	1	53,5	58,6	1,581	7145	427	1348

\* See example curve.

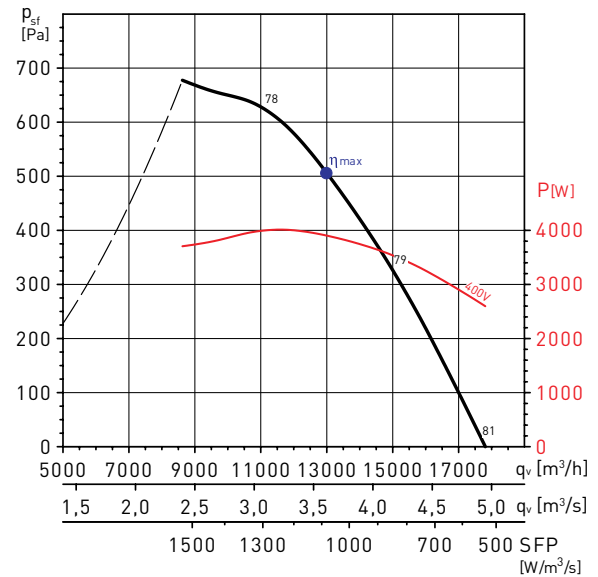
TCBTx2/4-560



MC*	EC*	VSD*	SR*	$\eta$ [%]*	N*	[kW]	[m <sup>3</sup> /h]	[Pa]	[RPM]
D	Total	No	1	55,0	58,2	3,148	10254	611	1365

\* See example curve.

TCBTx2/4-630



MC*	EC*	VSD*	SR*	$\eta$ [%]*	N*	[kW]	[m <sup>3</sup> /h]	[Pa]	[RPM]
D	Total	No	1	54,2	56,8	3,903	12997	587	1387

\* See example curve.