VTA/EC

Centrifugal roof exhaust fans, sound insulated and equipped with EC Technology motor

Fan:
- Backward curved impeller in aluminum sheet, except models 190 and 250 in plastic.
- Foldable casing for ease of inspection and maintenance.
- Vertical discharge.
- Prepared with pressure taps for automatic flow or pressure control.
- Mineral wool insulation with high acoustic attenuation performance.
- Safety switch included, with 1.5 metre cable.
- Status display for all models.
- Motor cover to prevent water and snow to enter the duct.

Motor:
- EC Technology external rotor motors with integrated speed controller, controllable via PWM and 0-10 V signals.
- IP54 protection.
- Single-phase 230 V 50/60 Hz and three-phase 400 V 50/60 Hz.
- Maximum temperature of air to be carried: -25 ºC +50 ºC.

Finish:
- All metal parts of the equipment are made of galvanised sheet steel.
- The parts exposed to the elements are coated with a layer of Epoxy powder primer, followed by a layer of RAL 7024 polyester powder paint. Anti-corrosion protection category C5H, according to EN ISO 12944-2.

On request:
- Any other RAL can be supplied.

Order code

VTA/EC	***–***	***310***	***–***	***M***	***/***	***L***
VTA/EC: Centrifugal roof exhaust fans, sound insulated and equipped with EC Technology motor		Size		T = Three-phase M = Single-phase		L: Low speed H: High speed

Technical characteristics

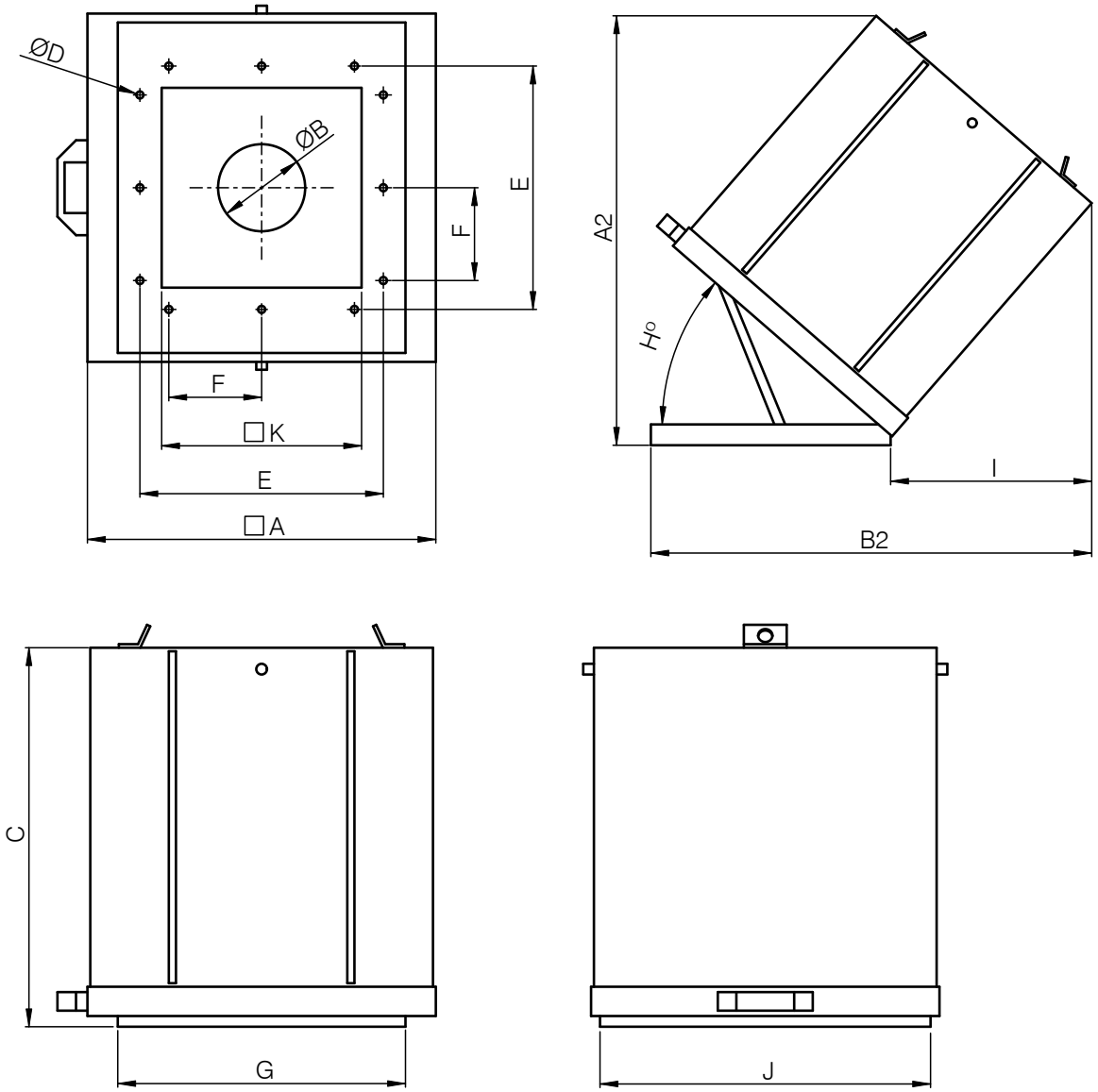
Model	Speed (r/min)	Maximum admissible current (A)		Max. electric power	Maximum flow rate	Sound pressure level at 50% of max speed.*	Approx. weight
	min.	230V	400V	(W)	(m³/h)	dB (A)	(Kg)
VTA/EC-190-M	3540	0.97		122	675	33	18
VTA/EC-250-M	2420	0.98		129	1190	33	21
VTA/EC-310-M/L	1920	1.35		187	2110	35	31
VTA/EC-310-M/H	2320	2.00		480	2780	41	33
VTA/EC-355-M	1460	1.45		226	2605	35	30
VTA/EC-400-M/L	1680	2.00		423	3760	38	42
VTA/EC-400-M/H	1700	4.70		762	5070	45	47
VTA/EC-400-T	2000		1.68	939	5540	48	46
VTA/EC-500-T	1250		2.00	1005	7790	42	54

* Irradiated sound pressure level in dB(A) at a distance of 3 m and at maximum flow rate.

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Dimensions mm

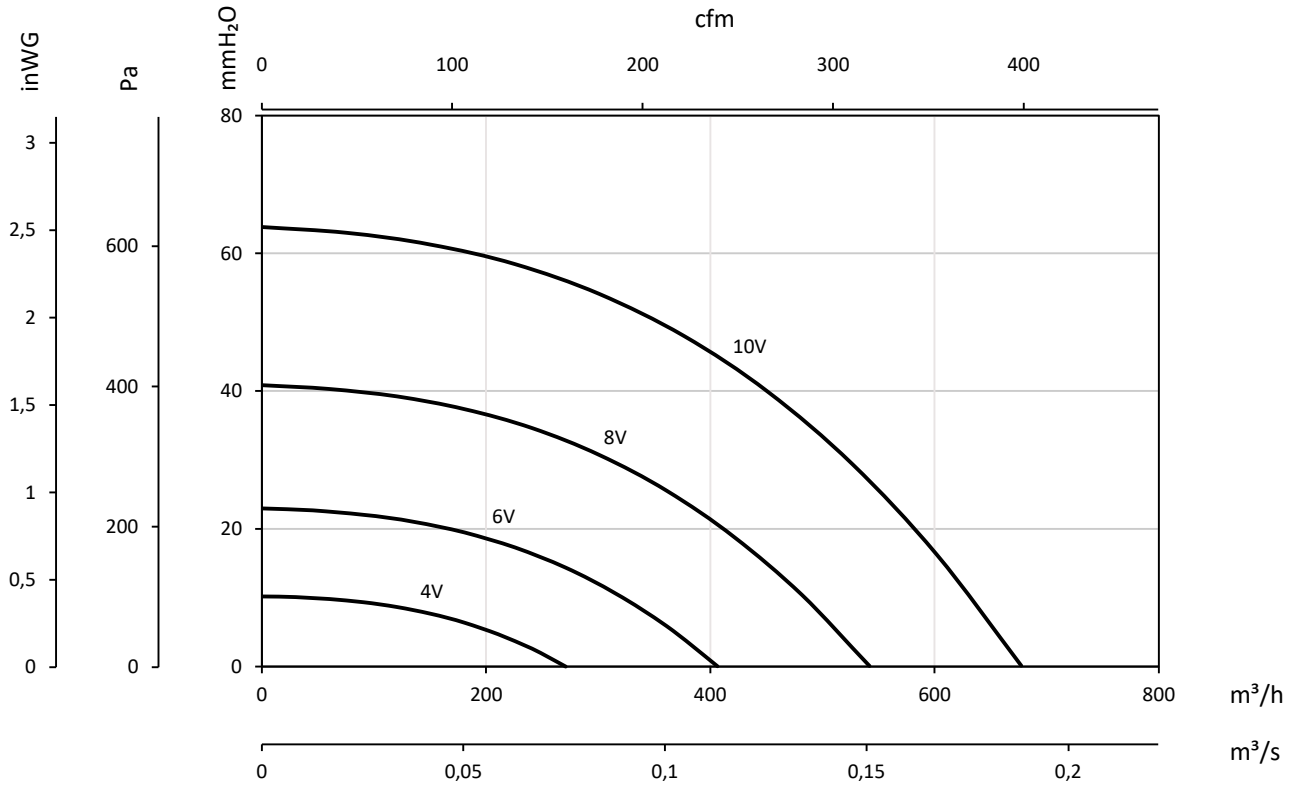


	A	ØB	C	D	E	F	G	J	Hº	I	K	A2	B2
VTA/EC-190-M	488	122	551	10	341	130	403	463	41	358	280	728	789
VTA/EC-250-M	488	162	551	10	341	130	403	463	41	358	280	728	789
VTA/EC-310-M/L	598	202	602	10	448	154	510	570	43	405	384	839.5	944
VTA/EC-310-M/H	598	202	602	10	448	154	510	570	43	405	384	839.5	944
VTA/EC-355-M	598	236	602	10	448	154	510	570	43	405	384	839.5	944
VTA/EC-400-M/L	688	253	727	10	538	217	600	660	44	500	475	992	1128
VTA/EC-400-M/H	688	253	727	10	538	217	600	660	44	500	475	992	1128
VTA/EC-400-T	688	253	727	10	538	217	600	660	44	500	475	992	1128
VTA/EC-500-T	778	323	751	10	628	264	690	750	47	541	564	1073	1258

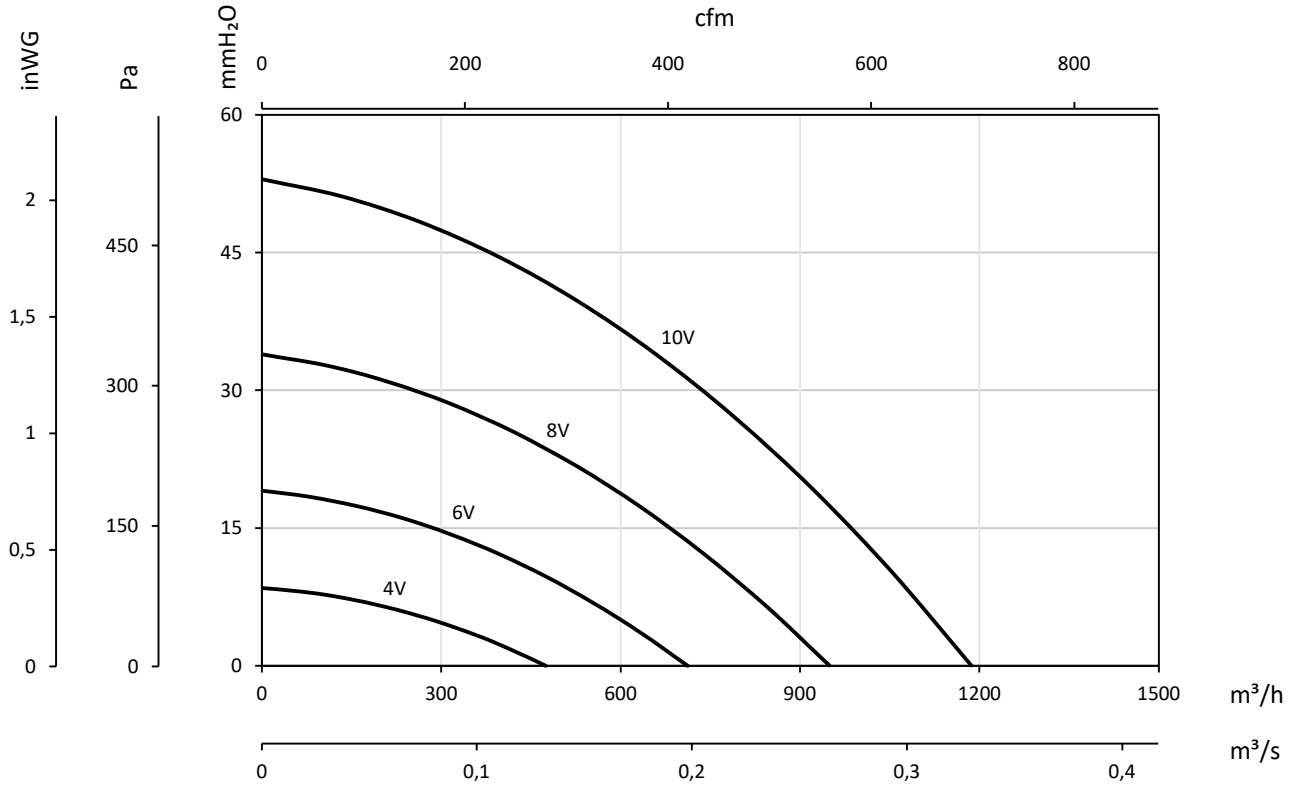
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

VTA/EC-190-M

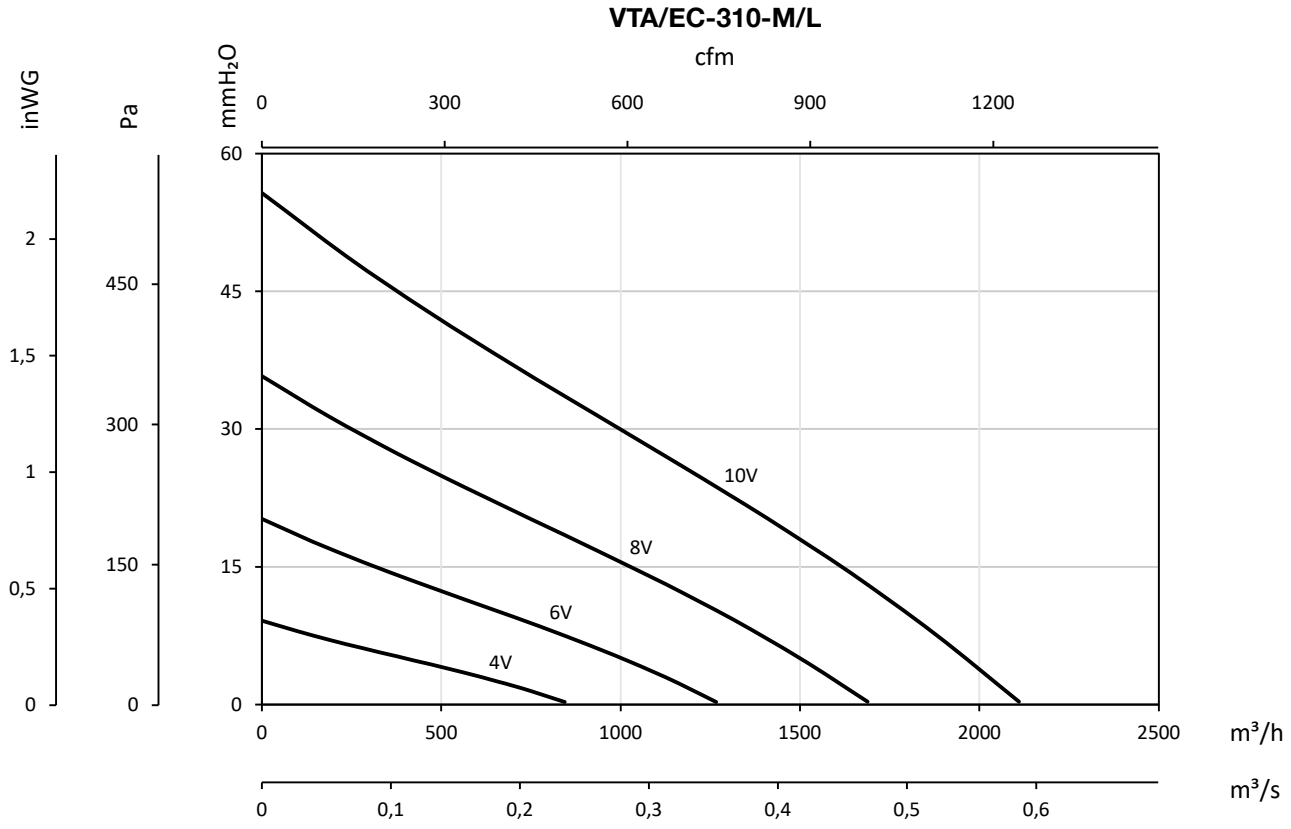


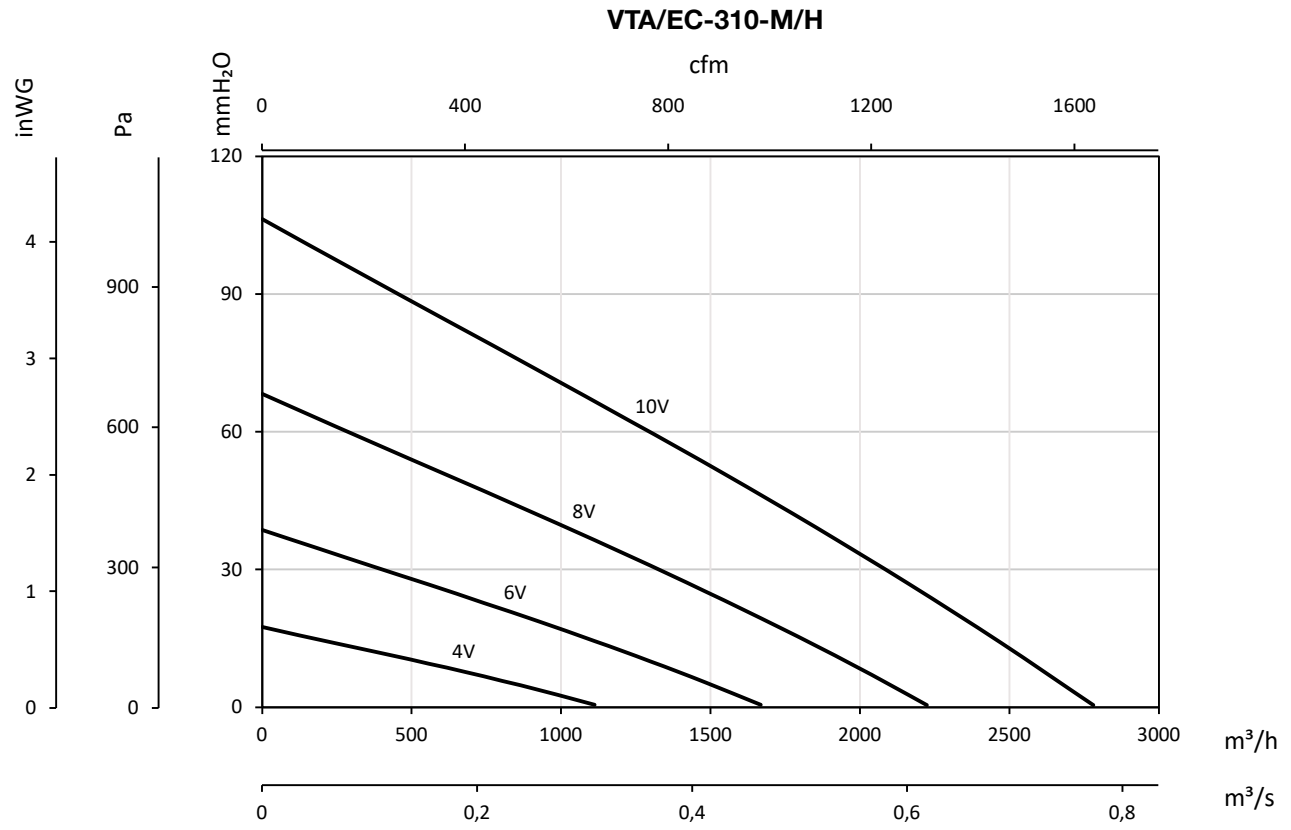
VTA/EC-250-M



Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

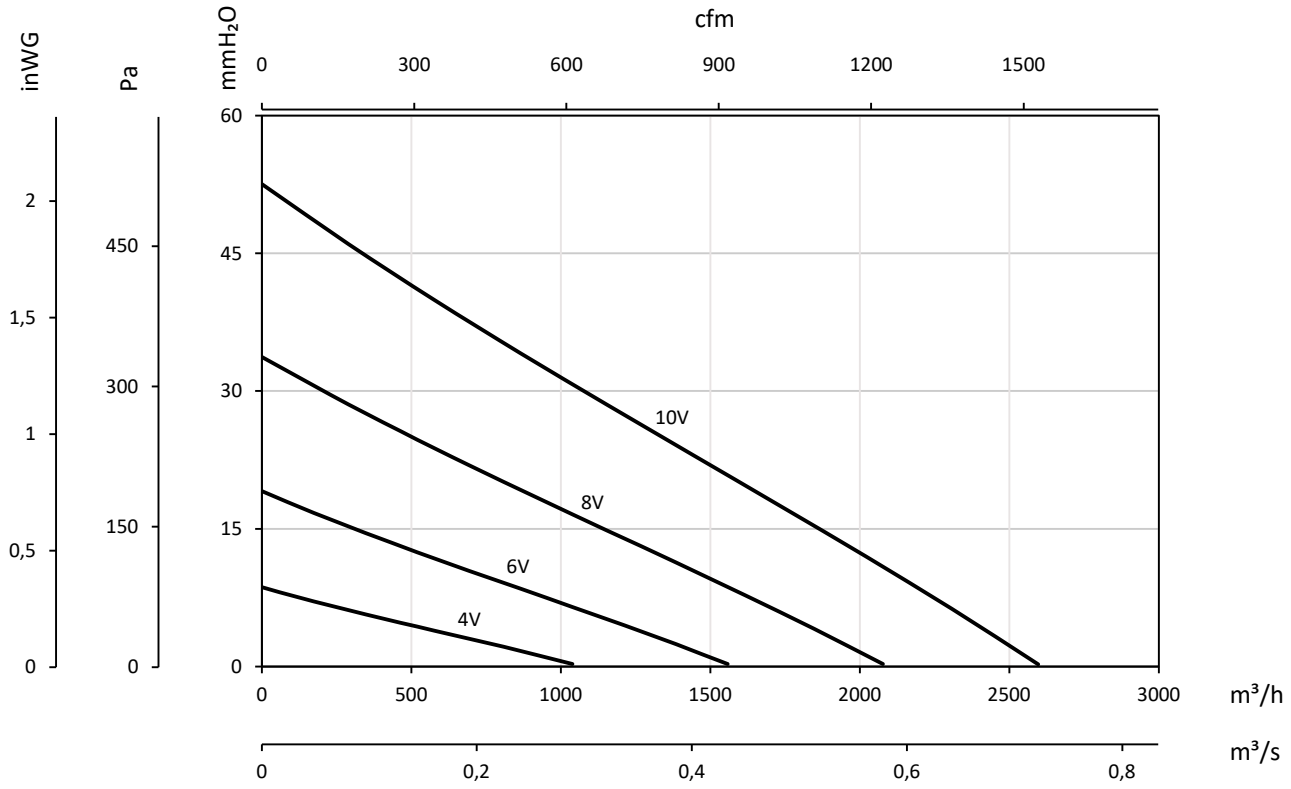




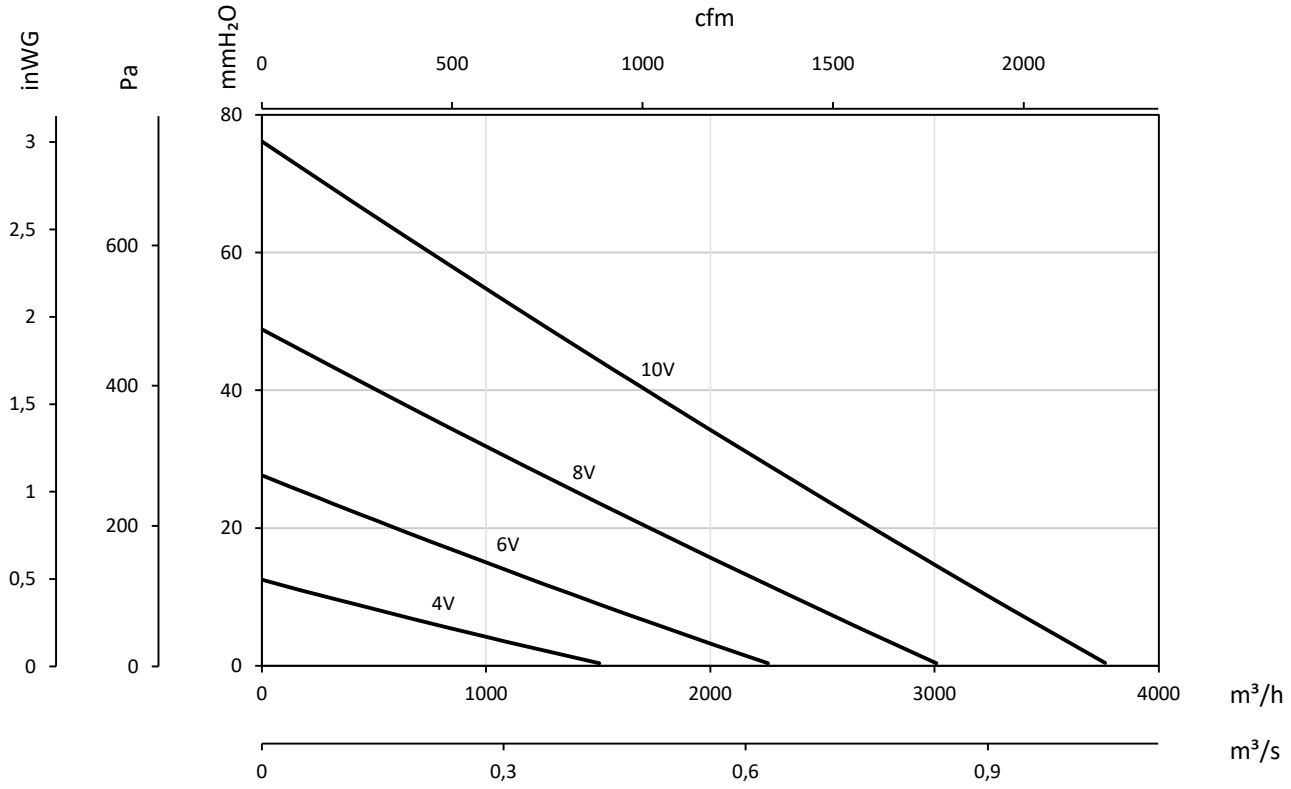
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

VTA/EC-355-M

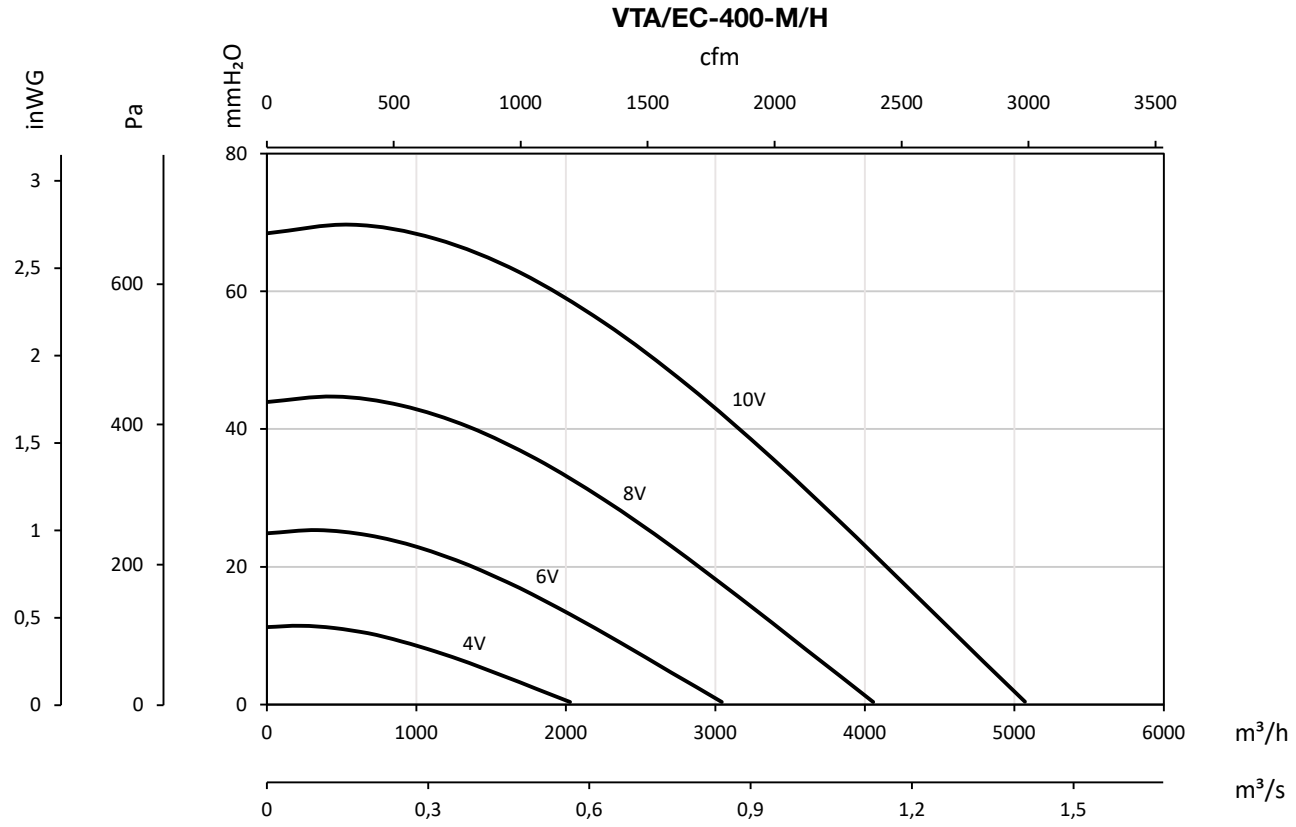


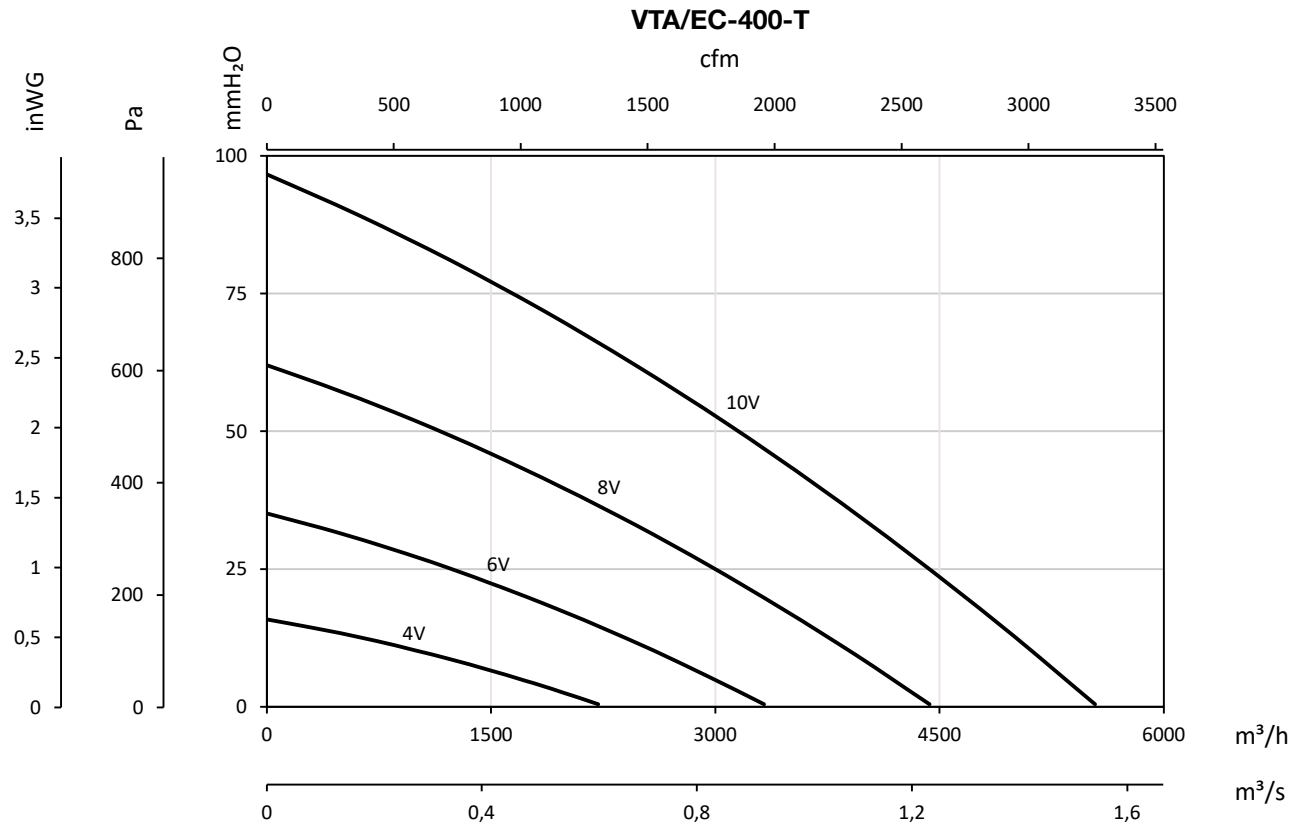
VTA/EC-400-M/L



Characteristic curves

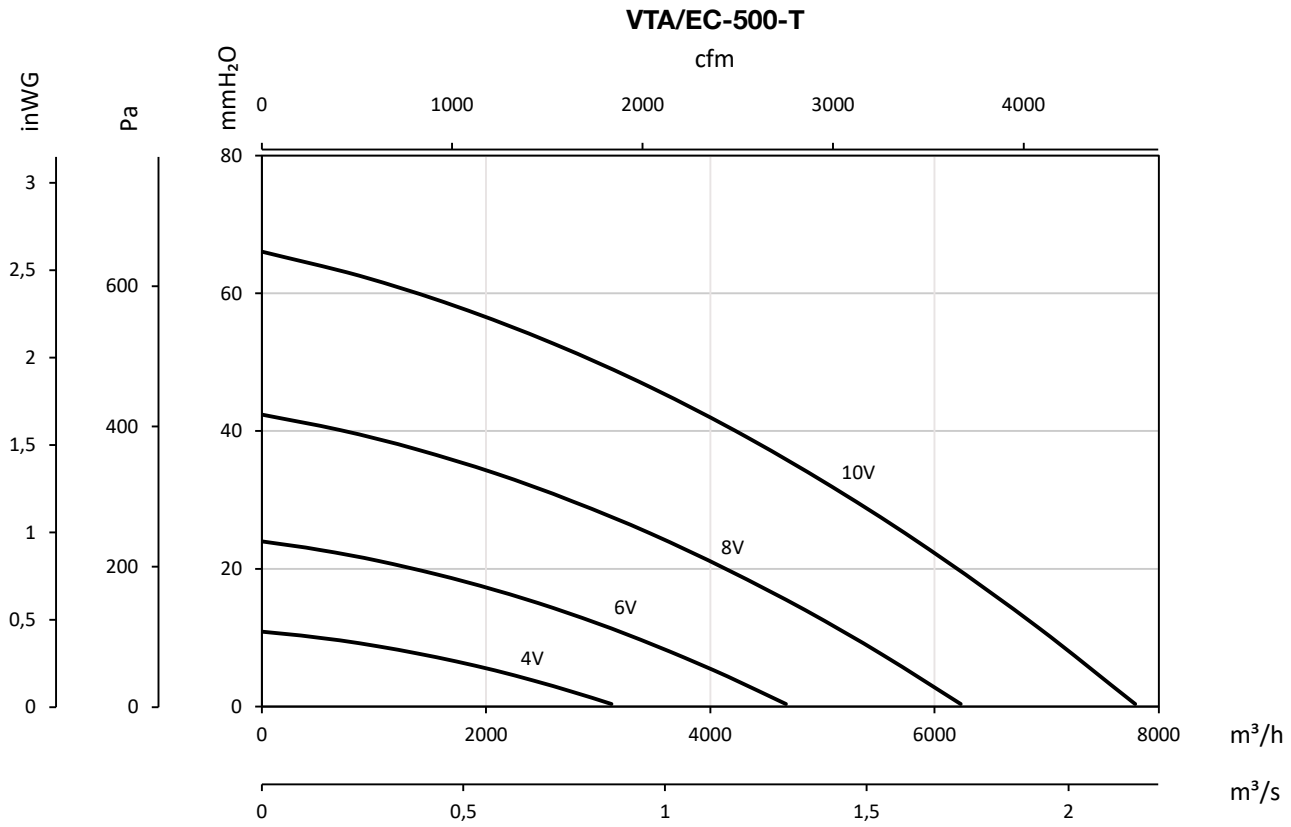
Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg





Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg



Pressure connection

Air flow rate → Q [m³/h]
Calibration factor → K
Difference in pressure → Δp [Pa]

$$Q = K \, x \sqrt{\Delta p}$$

	K Factor*
VTA/EC-190-M	33
VTA/EC-250-M	35
VTA/EC-310-M/L	100
VTA/EC-310-M/H	102
VTA/EC-355-M	124
VTA/EC-400-M/L	165
VTA/EC-400-M/H	154
VTA/EC-400-T	181
VTA/EC-500-T	250

* Values given for ρ = 1.2 kg/m3 and at 20 ºC.

Accessories


EC CONTROL


PVT


BTI


SI-FUENTE DE ALIMENTACIÓN


SI-PRESIÓN


CAP/EC


MTP

Acoustic characteristics

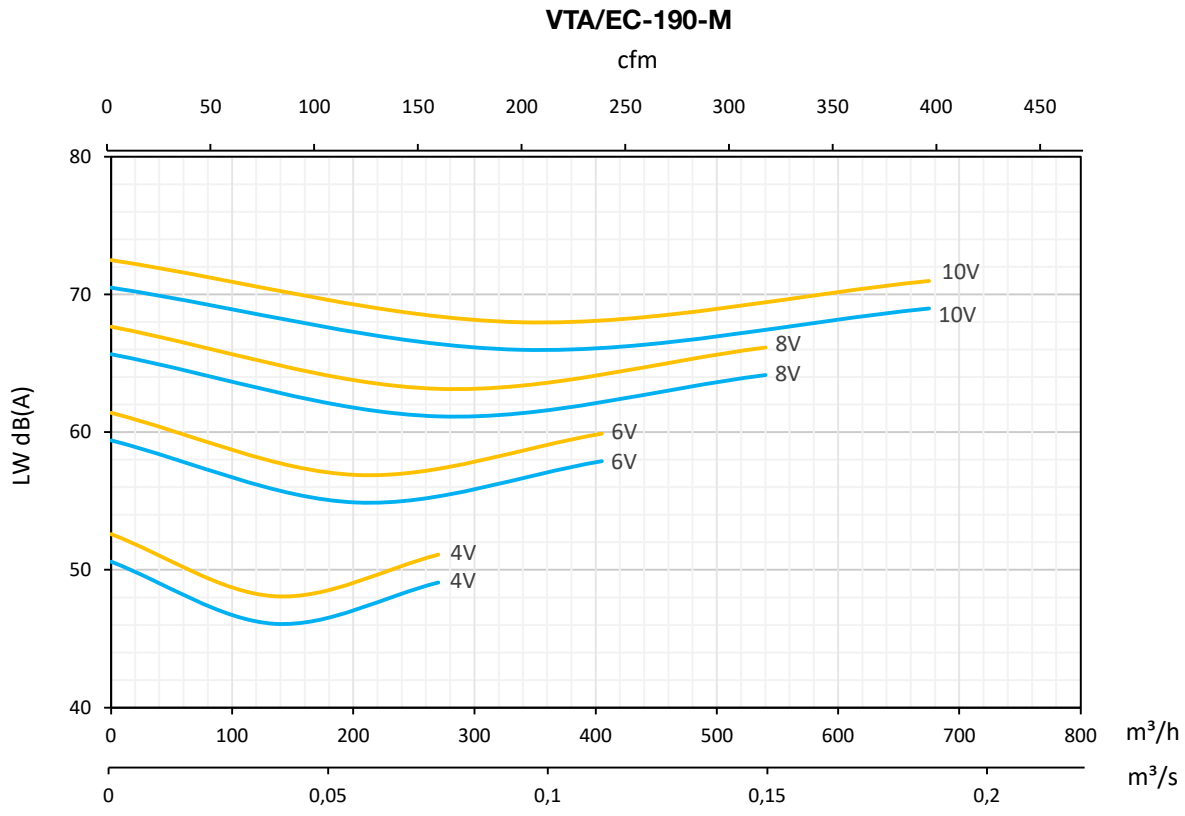
Q= Flow rate in m³/h, m³/s and cfm — Inlet — Irradiated

The total sound pressure level in the surroundings at different distances can be estimated using the following formula:

$$L_{pA} = L_{WA} - \Delta L$$

Lw = Sound power level dB (A)
ΔL = Acoustic attenuation dB

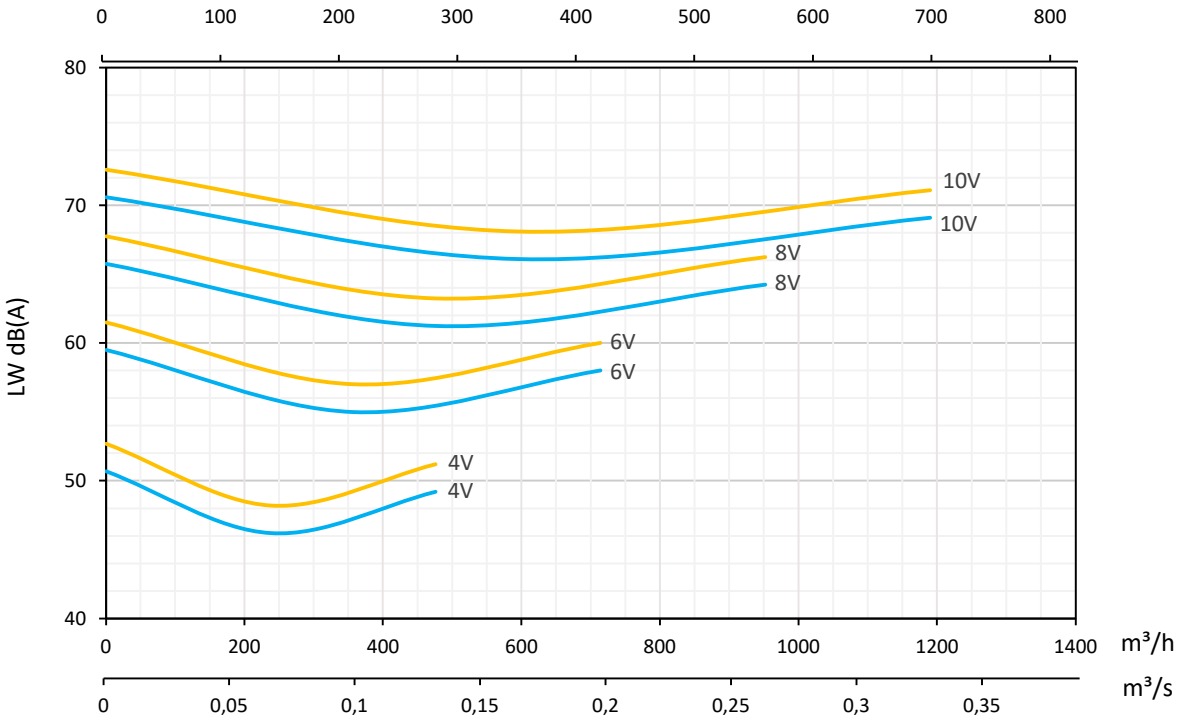
Distance (m)	1	3	10	20	30	40
Acoustic attenuation (ΔL)	11	20.5	31	37	40.5	43



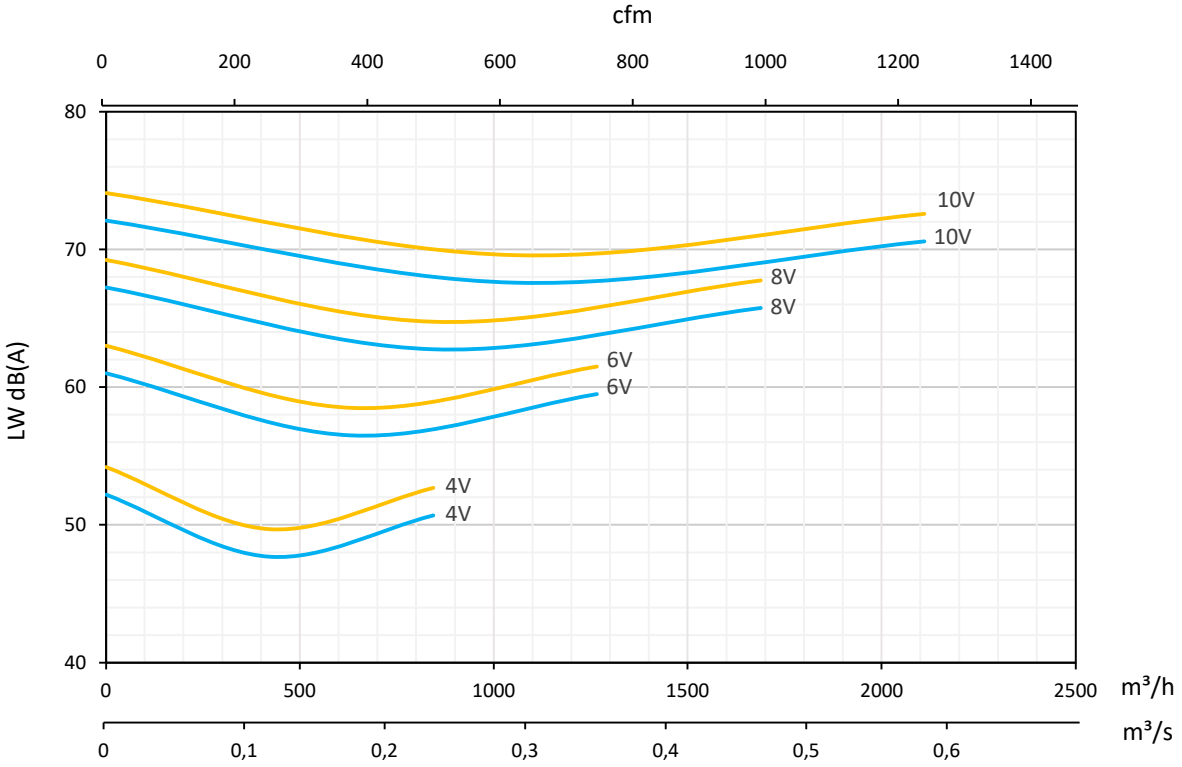
Acoustic characteristics

Q= Flow rate in m³/h, m³/s and cfm — Inlet — Irradiated

VTA/EC-250-M



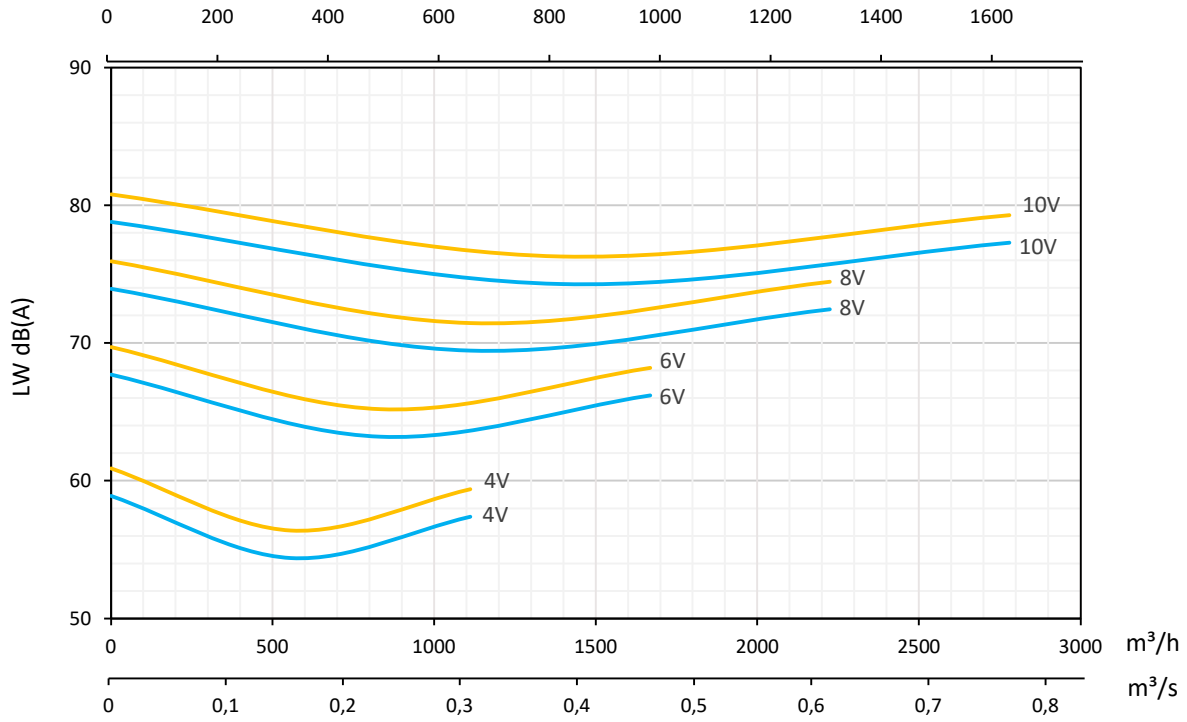
VTA/EC-310-M/L



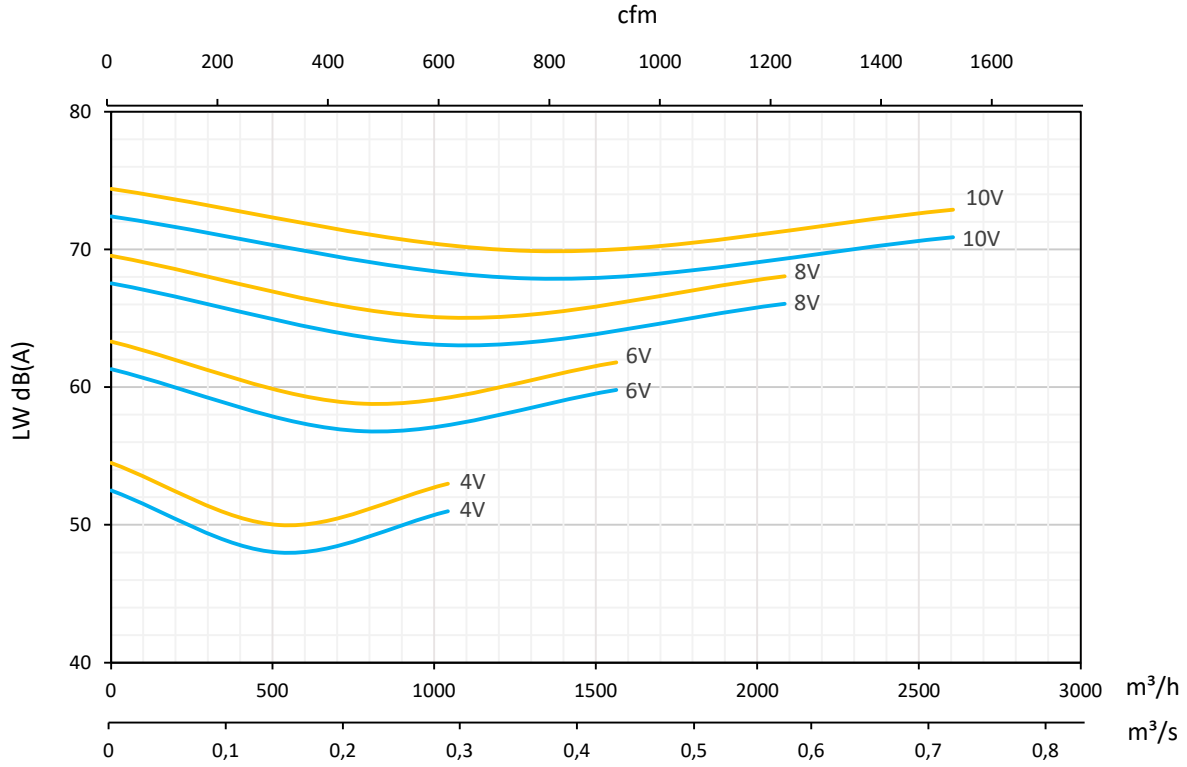
Acoustic characteristics

Q= Flow rate in m³/h, m³/s and cfm — Inlet — Irradiated

VTA/EC-310-M/H



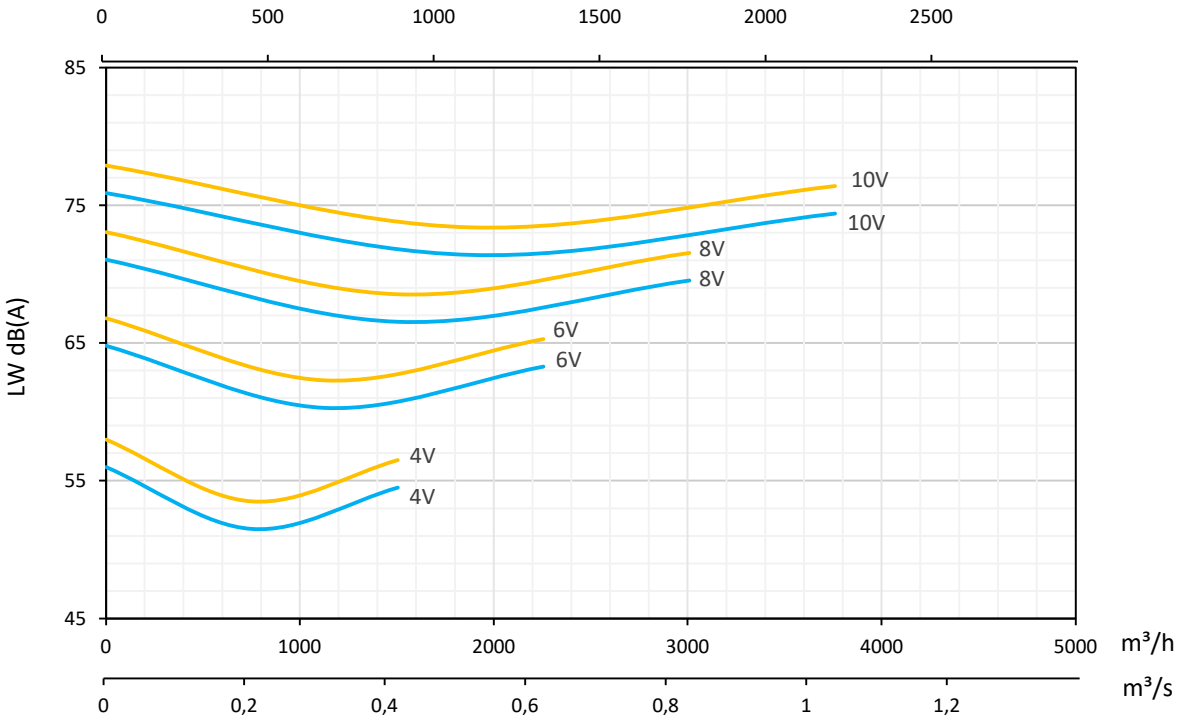
VTA/EC-355-M



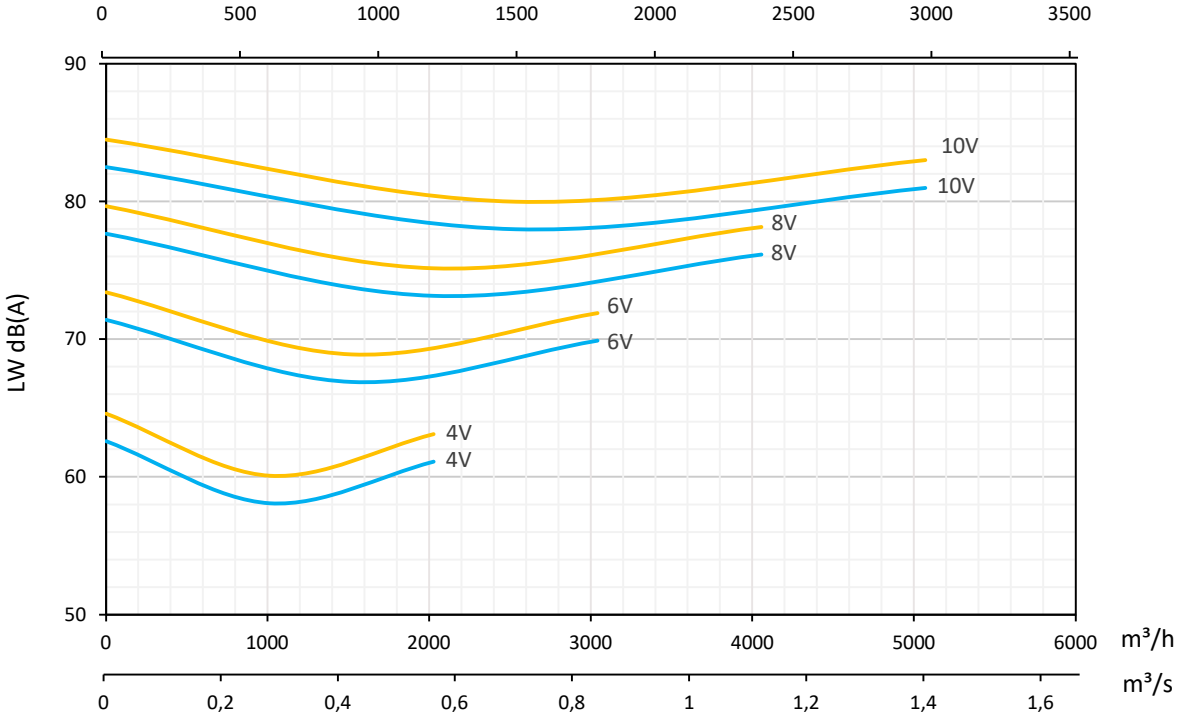
Acoustic characteristics

Q= Flow rate in m³/h, m³/s and cfm — Inlet — Irradiated

VTA/EC-400-M/L



VTA/EC-400-M/H



Acoustic characteristics

Q= Flow rate in m³/h, m³/s and cfm — Inlet — Irradiated