

VTV/EC

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



Centrifugal roof exhaust fans, sound insulated and equipped with EC Technology motor and folding casing for easy maintenance.

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.
- Motor cover to prevent water and snow to enter the duct.

Motor:

- EC Technology external rotor motors, 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 °C +50 °C.

Finish:

- The parts exposed to the elements are made of Magnelis sheet. Corrosion protection category C5 according to EN ISO 12944-2.

Order code

VTV/EC	—	310	—	M	/	L
↓		↓		↓		↓
VTV/EC: Centrifugal roof exhaust fans, sound insulated and equipped with EC Technology motor		Size		T = Three-phase M = Single-phase		L: Low flow rate H: High flow rate

Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)		Max. electric power	Maximum flow rate	Sound pressure level ¹	Approx. weight
	min.	230V	400V	(W)	(m³/h)	dB(A)	(Kg)
VTV/EC-190-M	3540	0.97		122	675	41	18
VTV/EC-250-M	2420	0.98		129	1190	42	21
VTV/EC-310-M/L	1920	1.35		187	2110	44	31
VTV/EC-310-M/H	2320	2.00		480	2780	48	33
VTV/EC-355-M	1460	1.45		226	2605	49	30
VTV/EC-400-M/L	1680	2.00		423	3760	45	42
VTV/EC-400-M/H	1700	4.70		762	5070	47	47
VTV/EC-400-T	2000		1.68	939	5540	48	46
VTV/EC-500-T	1250		2.00	1005	7790	53	54

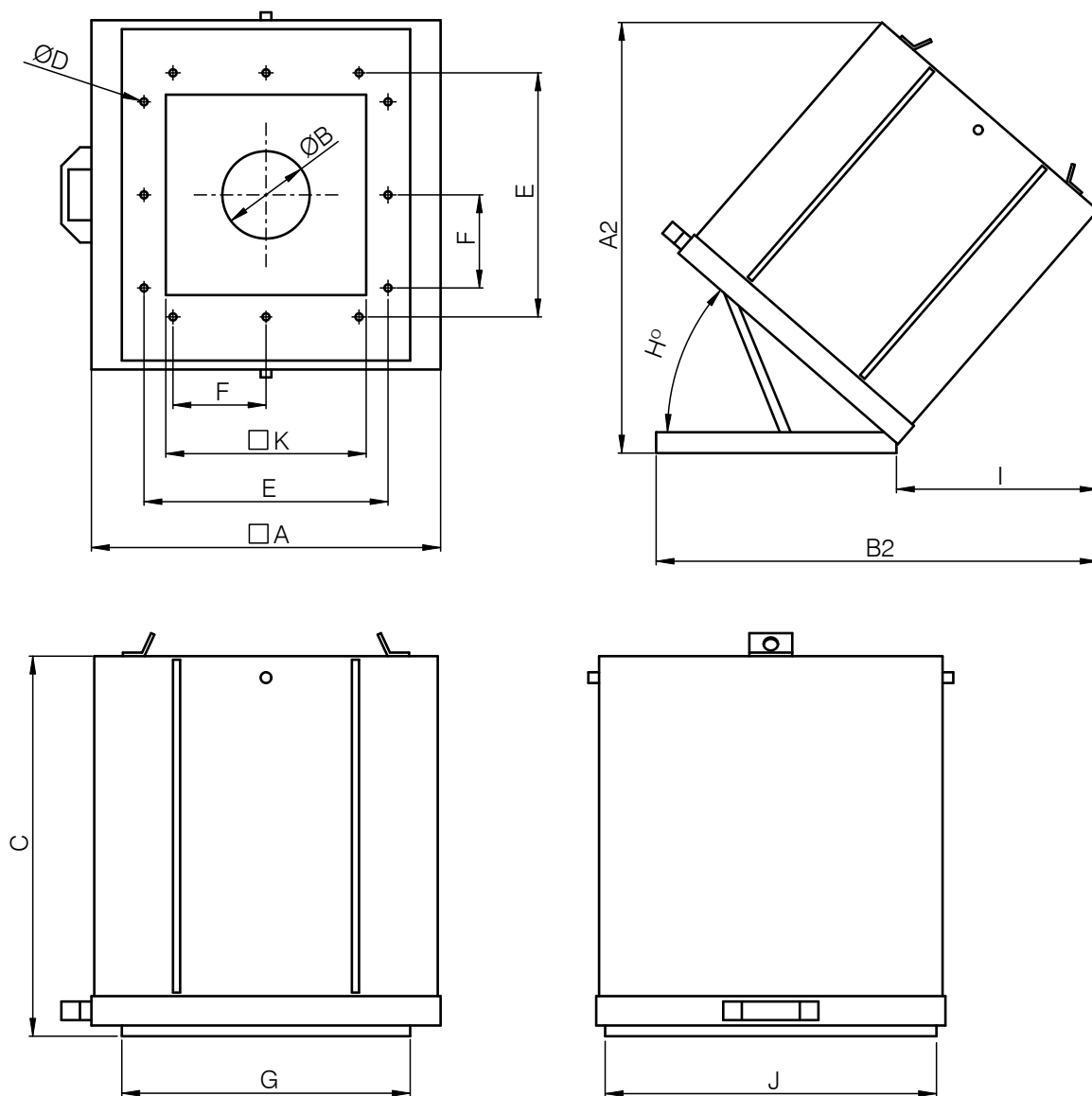
1. Irradiated sound pressure level in dB(A) at a distance of 5 m and at maximum flow rate.



Erp. (Energy Related Products)

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

Dimensions mm

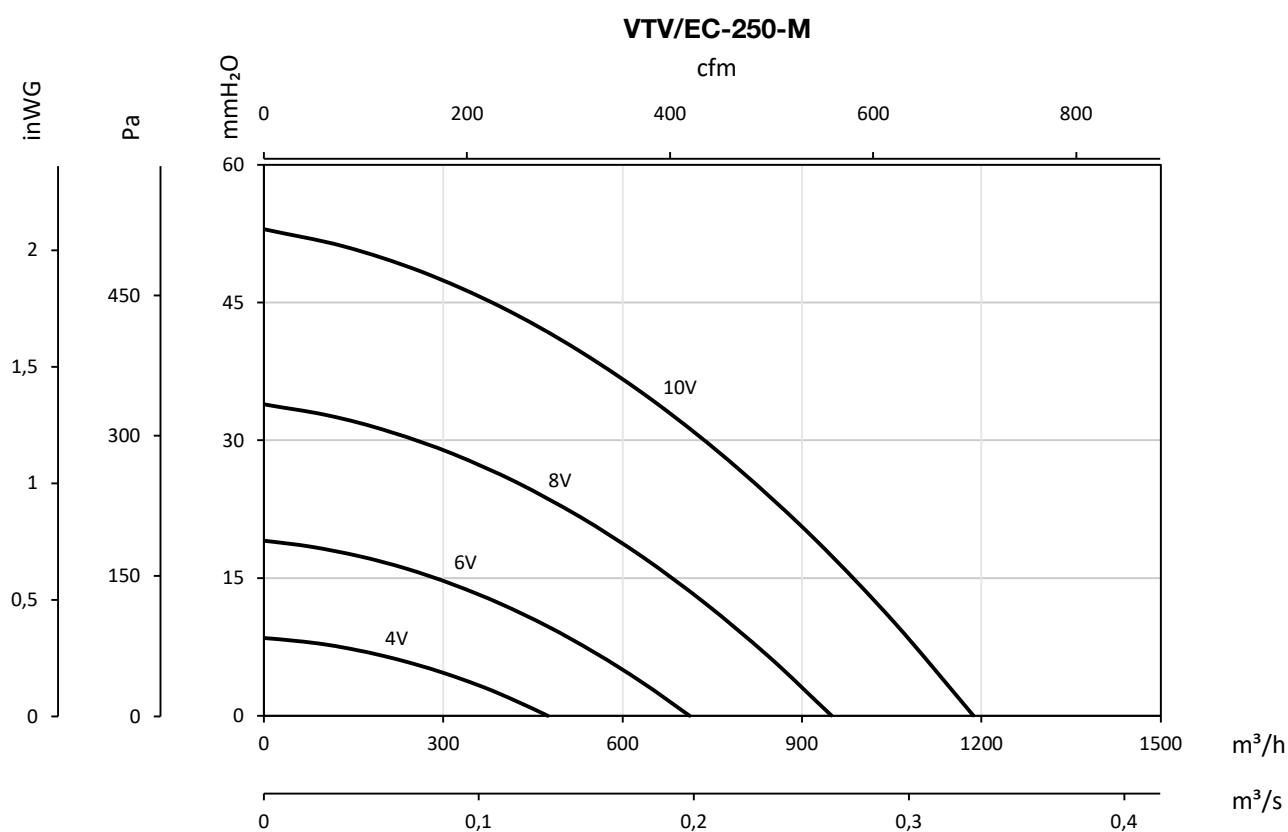
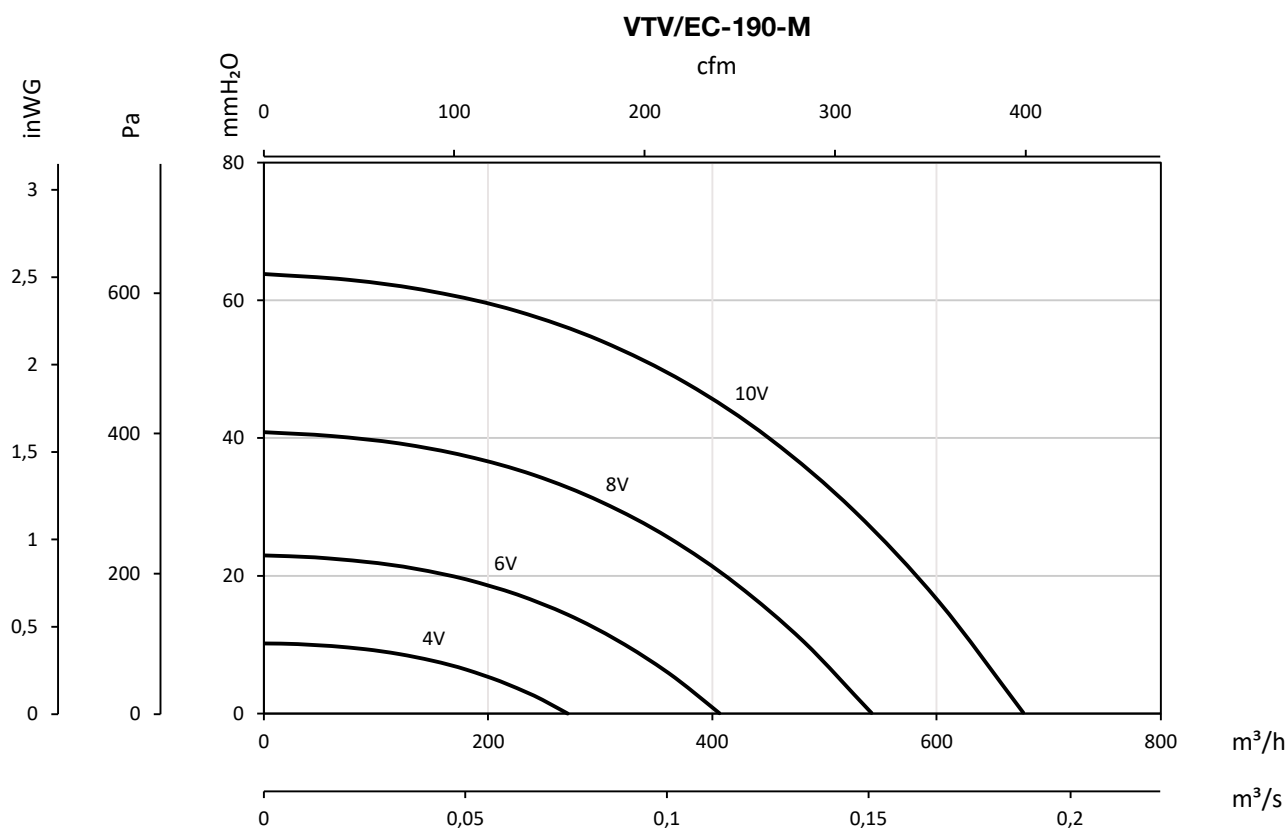


	A	$\varnothing B$	C	D	E	F	G	J	H°	I	K	A2	B2
VTV/EC-190-M	488	122	551	10	341	130	403	463	41	358	280	728	789
VTV/EC-250-M	488	162	551	10	341	130	403	463	41	358	280	728	789
VTV/EC-310-M/L	598	202	602	10	448	154	510	570	43	405	384	839.5	944
VTV/EC-310-M/H	598	202	602	10	448	154	510	570	43	405	384	839.5	944
VTV/EC-355-M	598	236	602	10	448	154	510	570	43	405	384	839.5	944
VTV/EC-400-M/L	688	253	727	10	538	217	600	660	44	500	475	992	1128
VTV/EC-400-M/H	688	253	727	10	538	217	600	660	44	500	475	992	1128
VTV/EC-400-T	688	253	727	10	538	217	600	660	44	500	475	992	1128
VTV/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

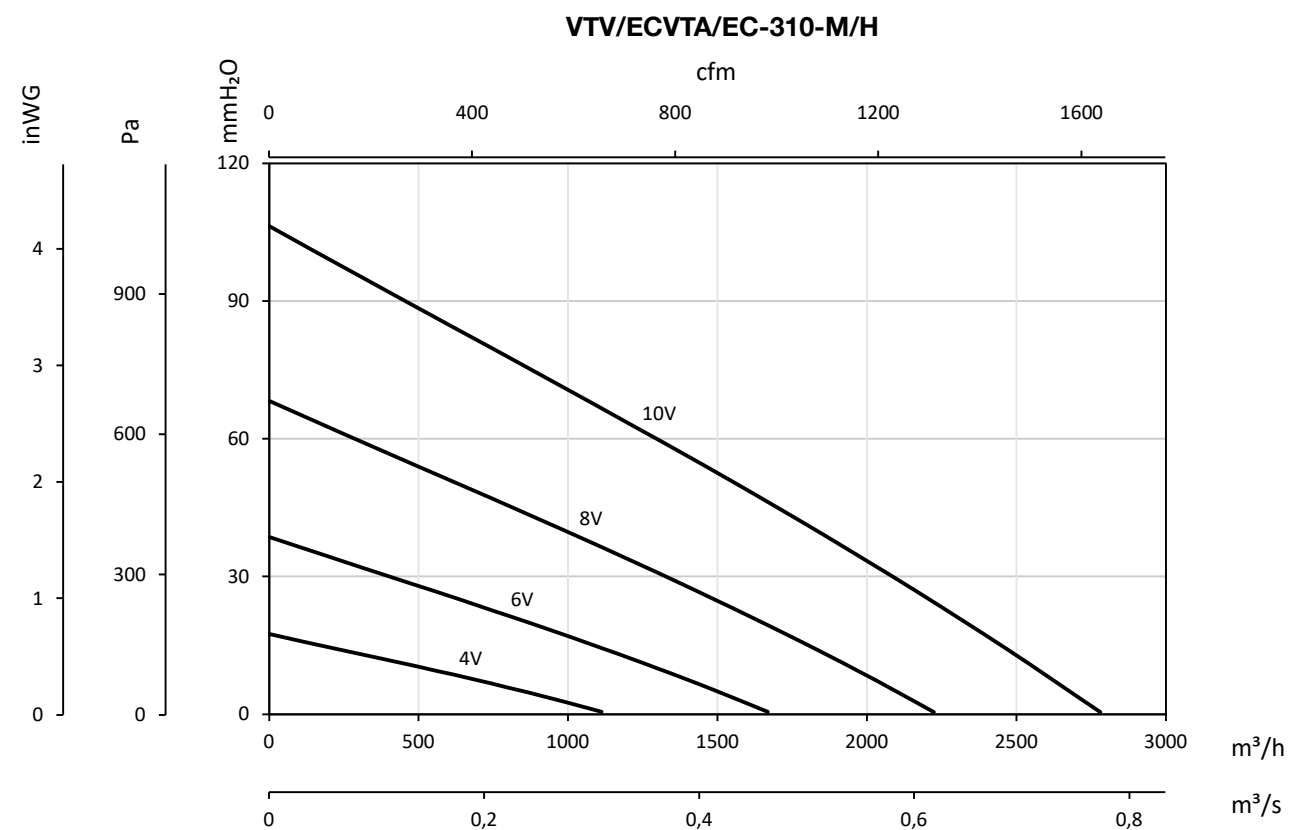
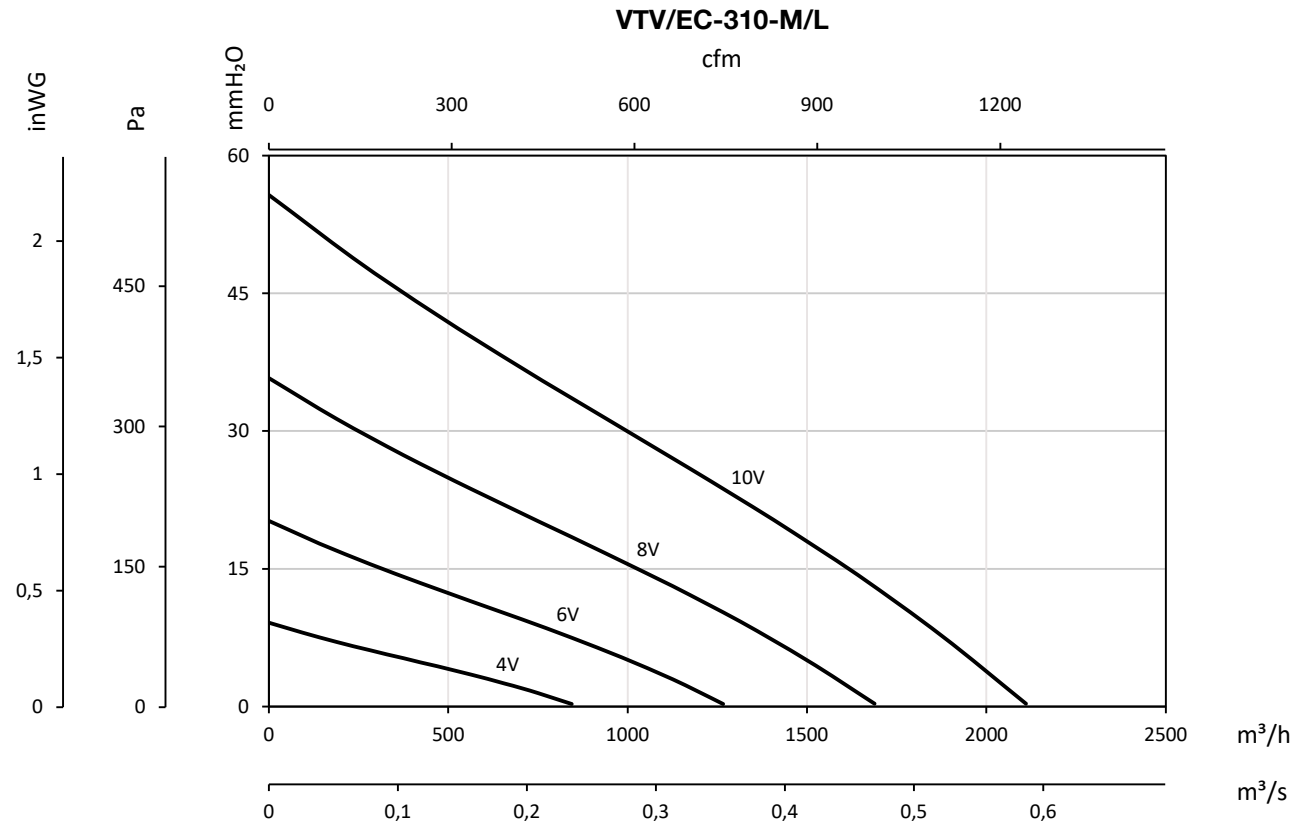
Pe= Static pressure in mm H₂O, Pa and inwg



Characteristic curves

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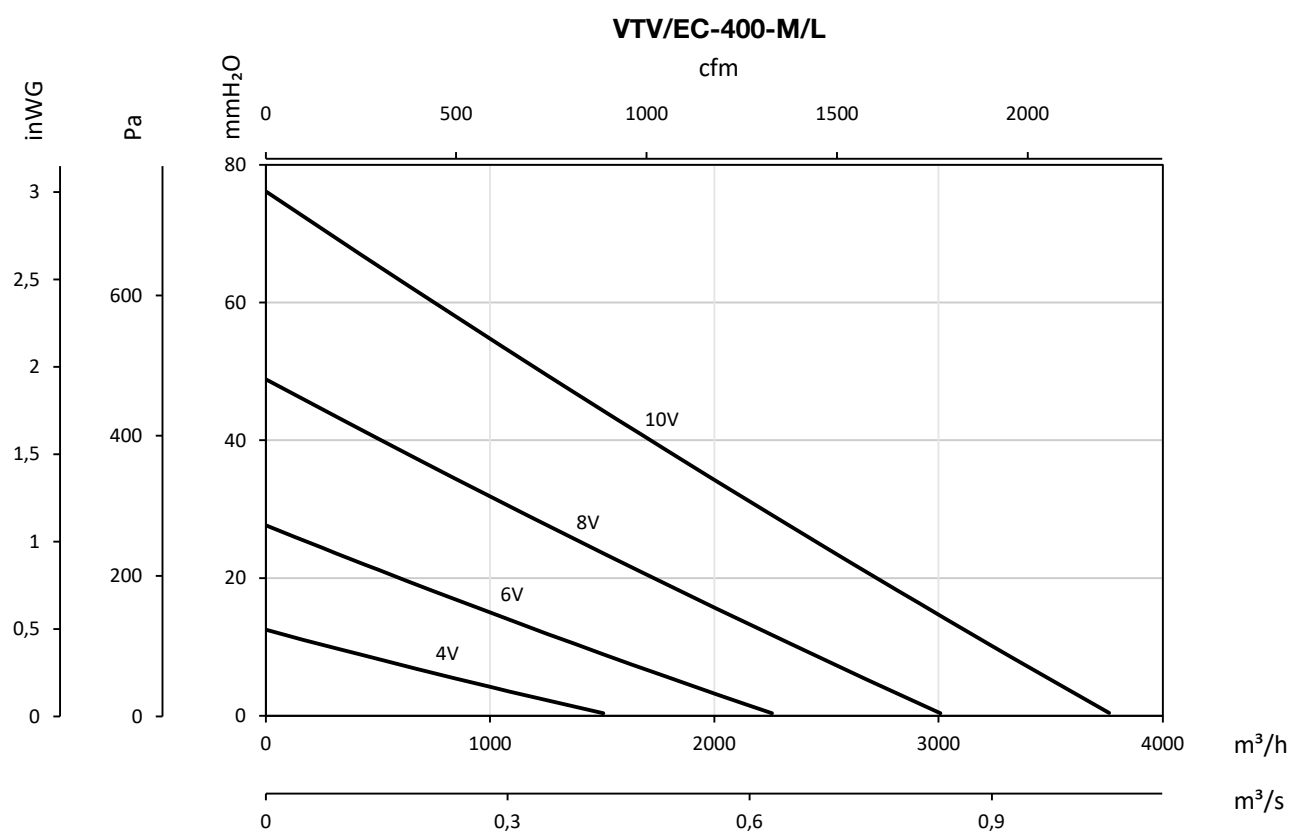
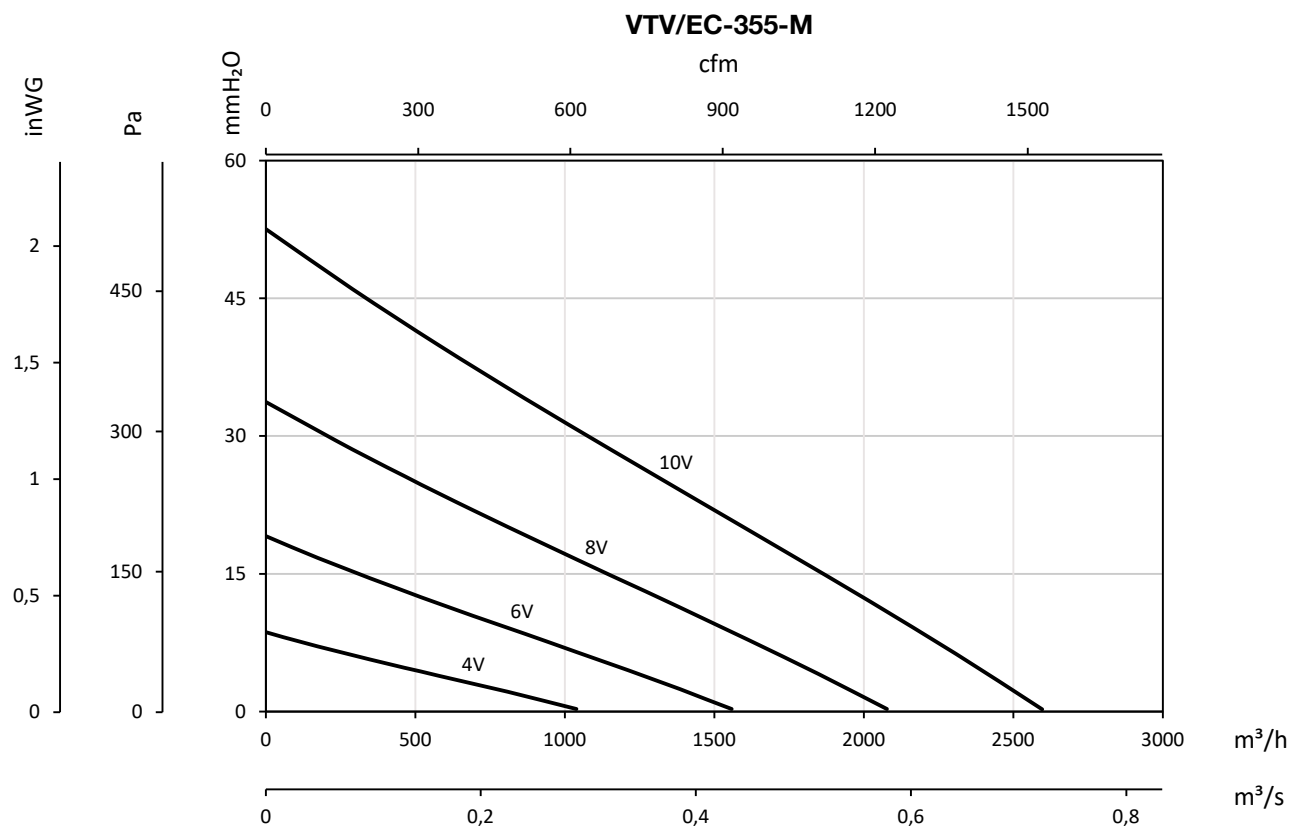
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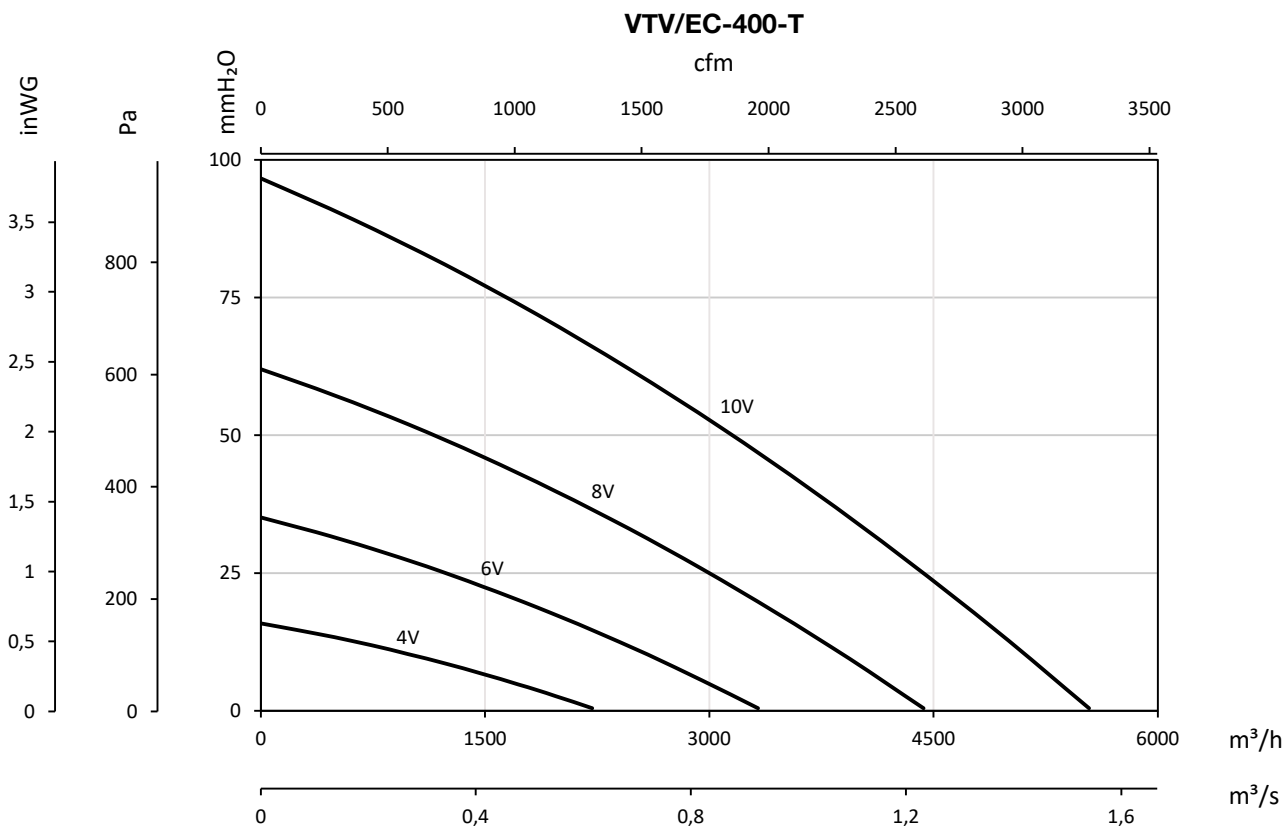
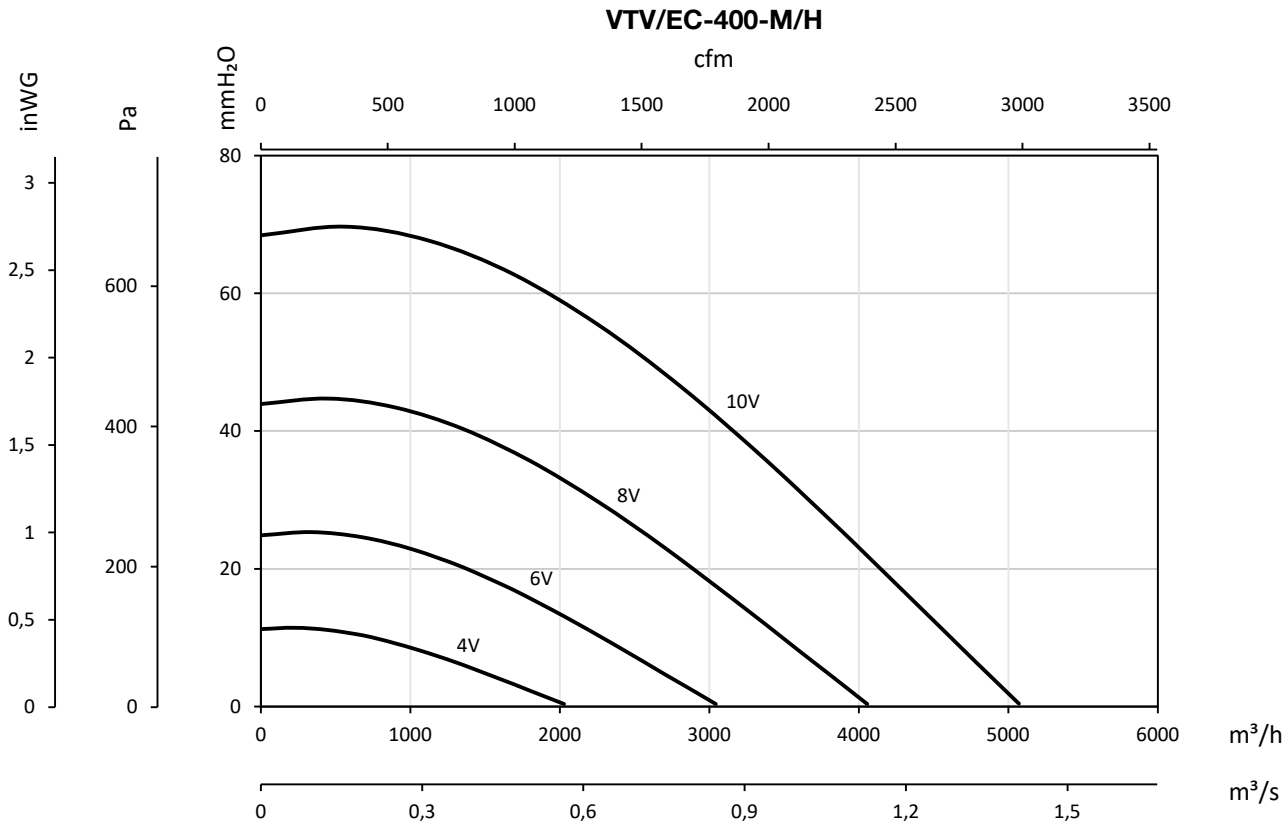
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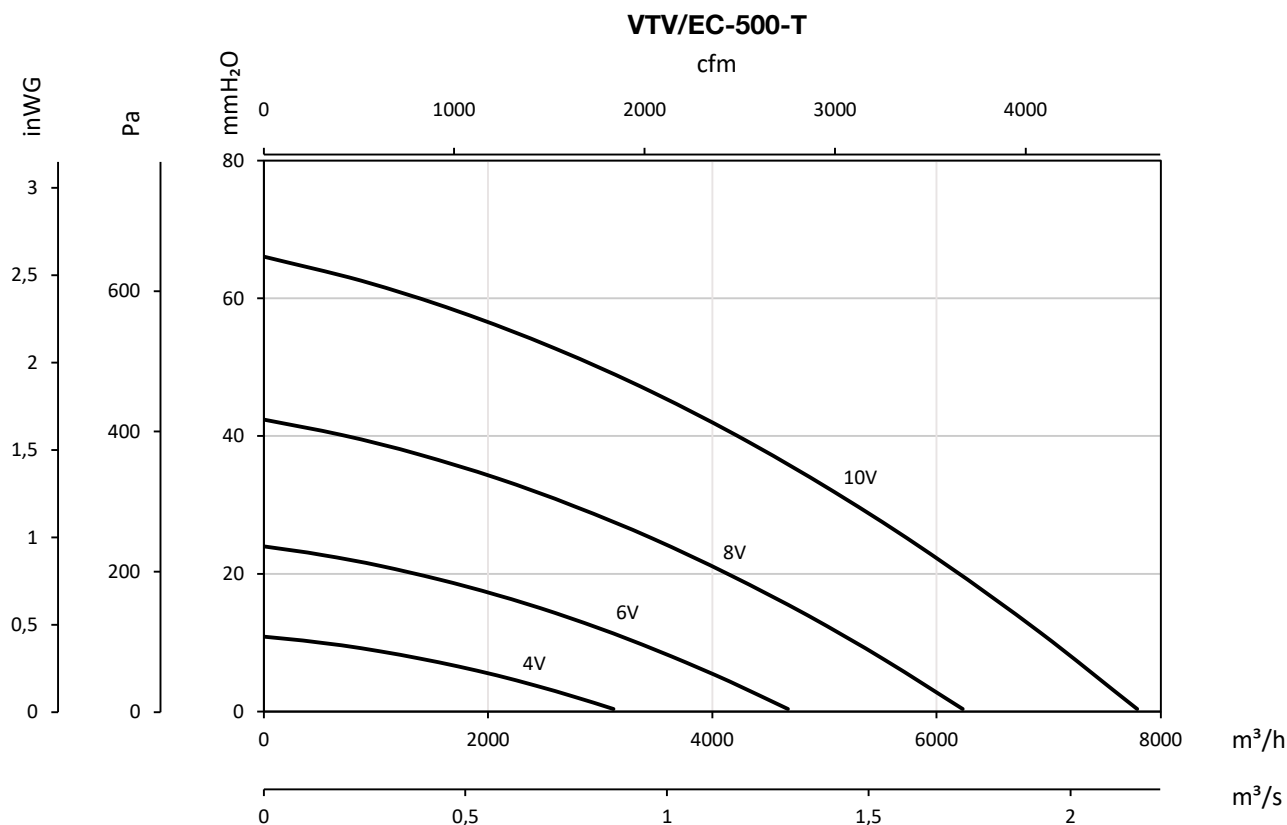
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Characteristic curves

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Pressure connection

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

$$Q = K \times \sqrt{\Delta p}$$

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

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

Accessories



EC CONTROL



OP



PVT



BTI



SI-FUENTE DE ALIMENTACIÓN



SI-PRESIÓN



CAP/EC



MTP

Acoustic characteristics

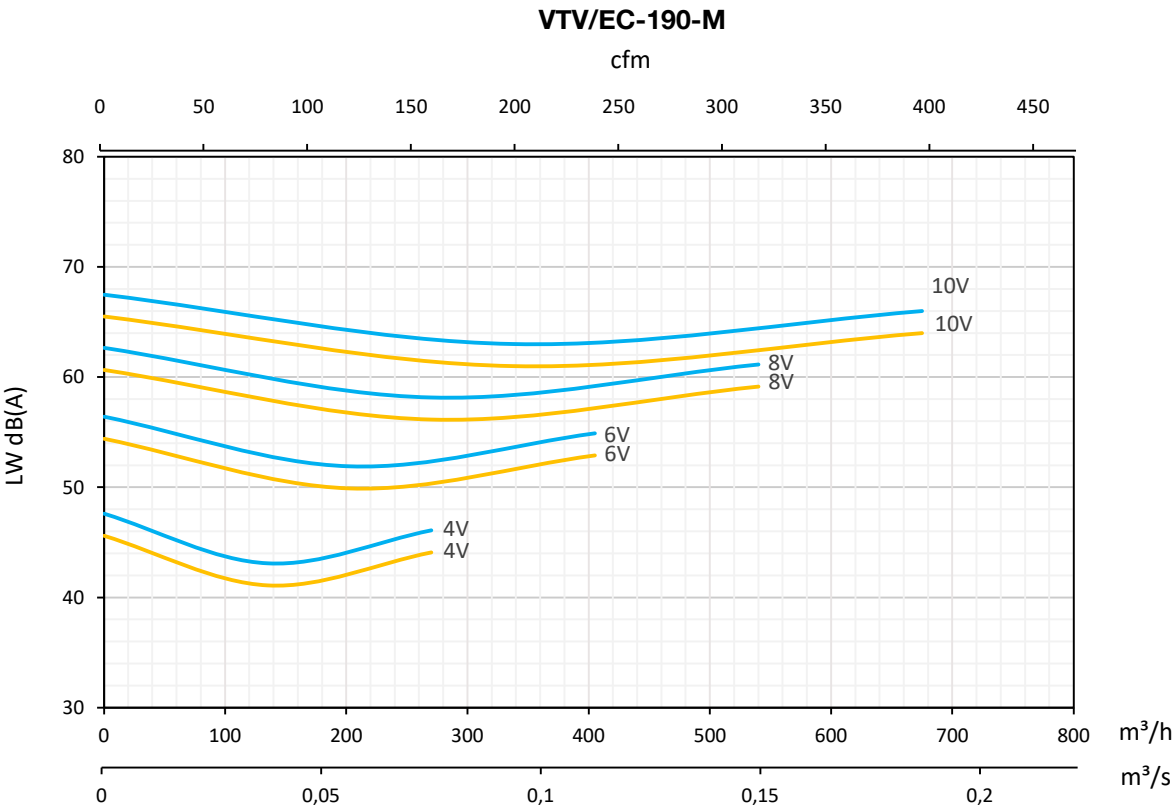
Q= Flow rate in m³/h, m³/s and cfm Inlet Irradiated

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

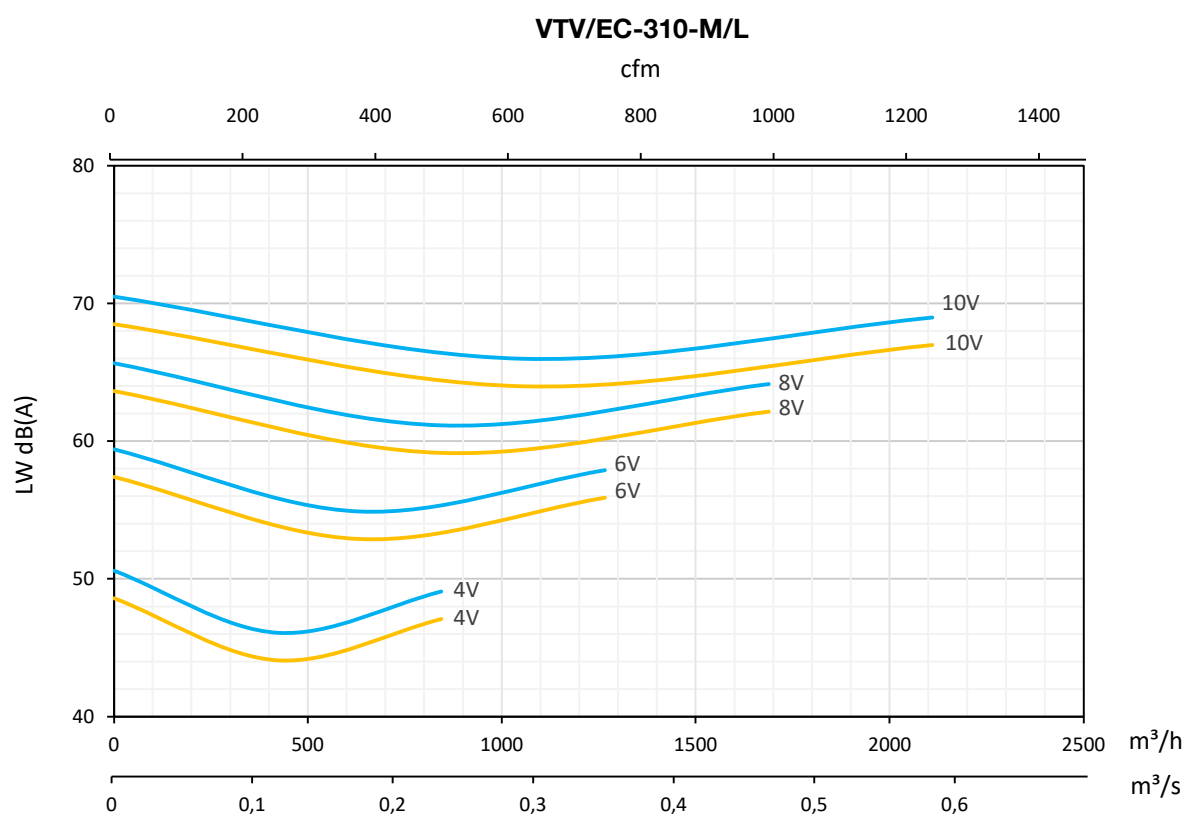
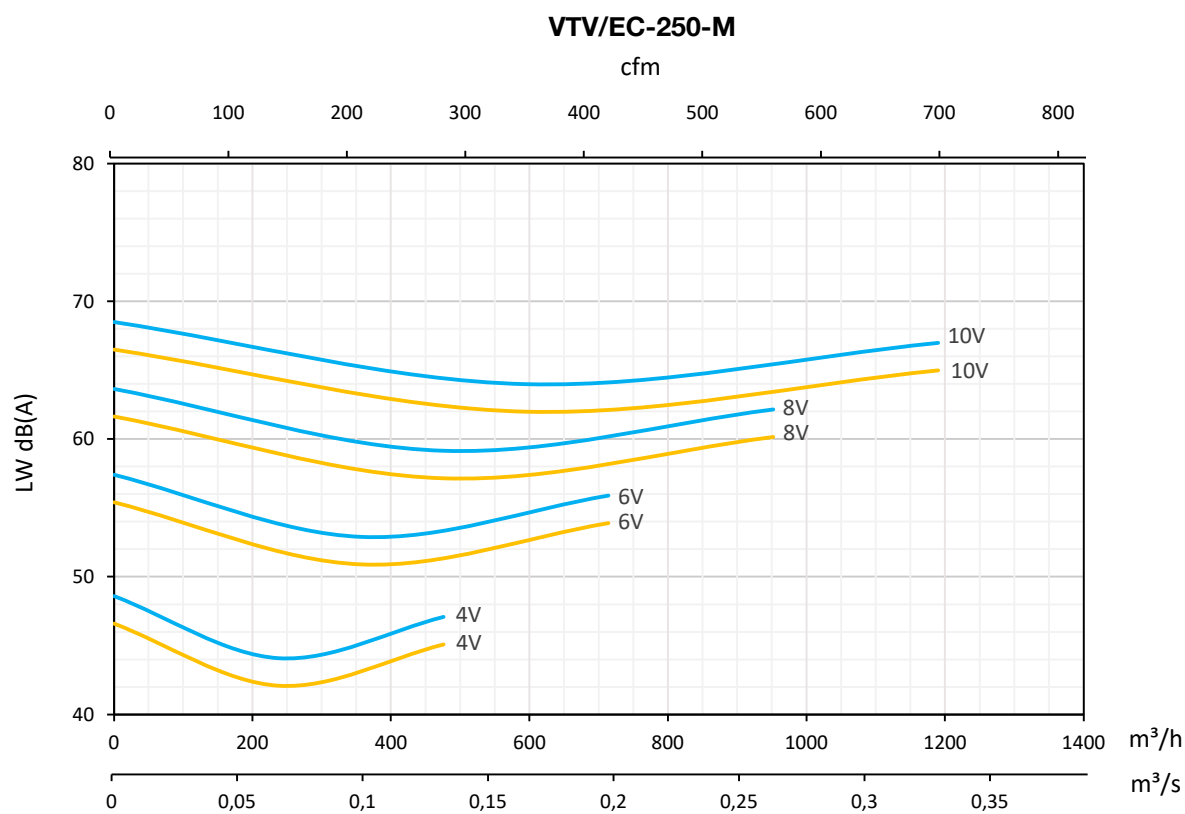
Distance (m)	1	3	10	20	30	40
Acoustic attenuation (ΔL)	11	20.5	31	37	40.5	43



Acoustic characteristics

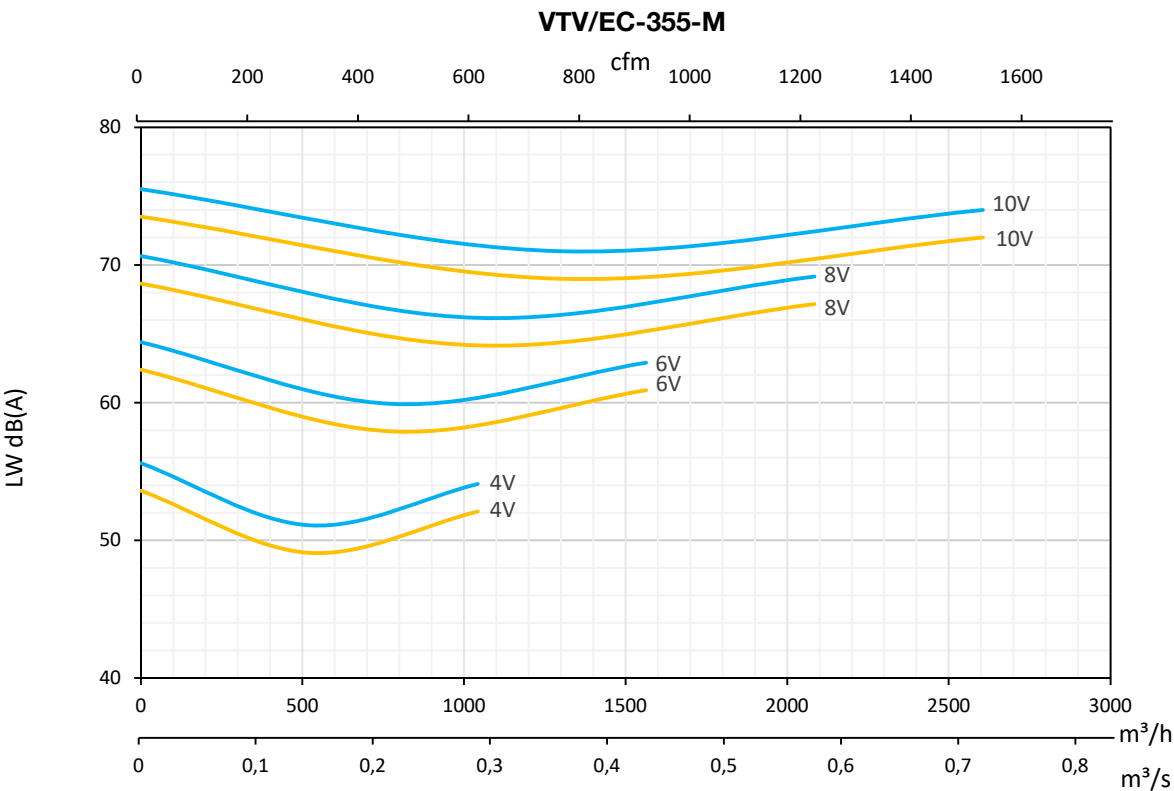
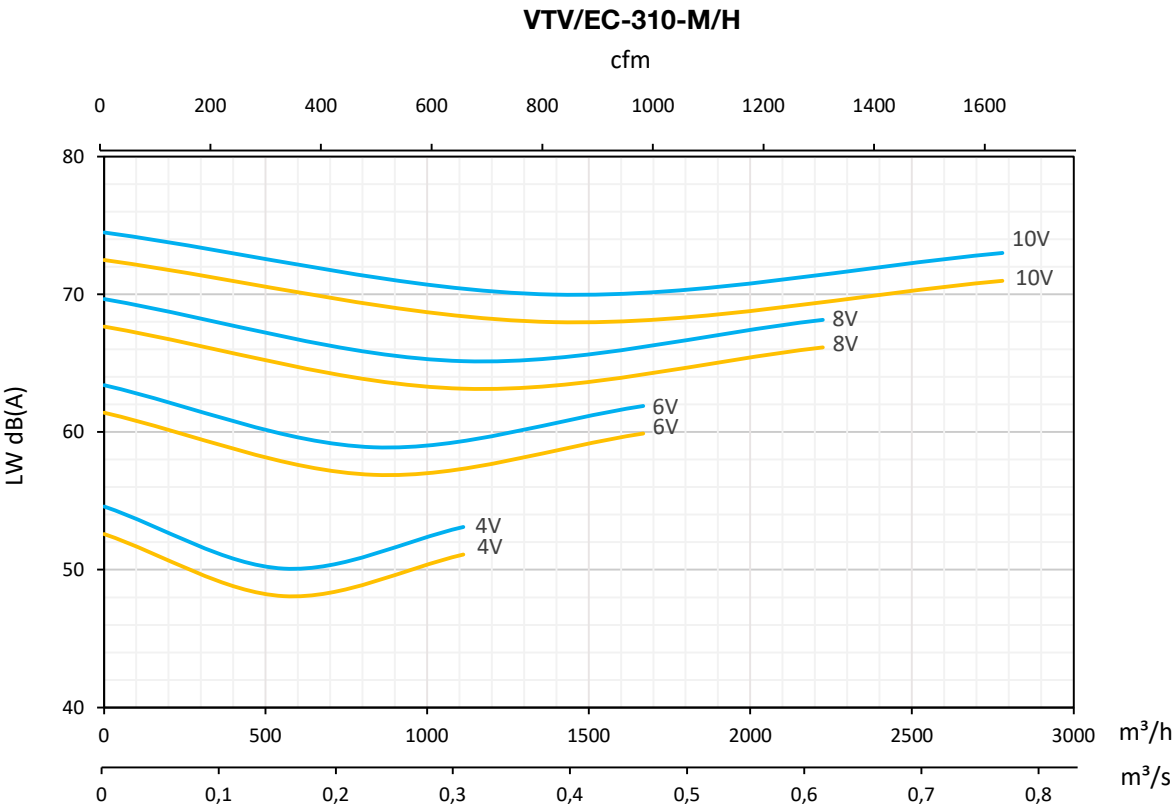
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— Inlet — Irradiated



Acoustic characteristics

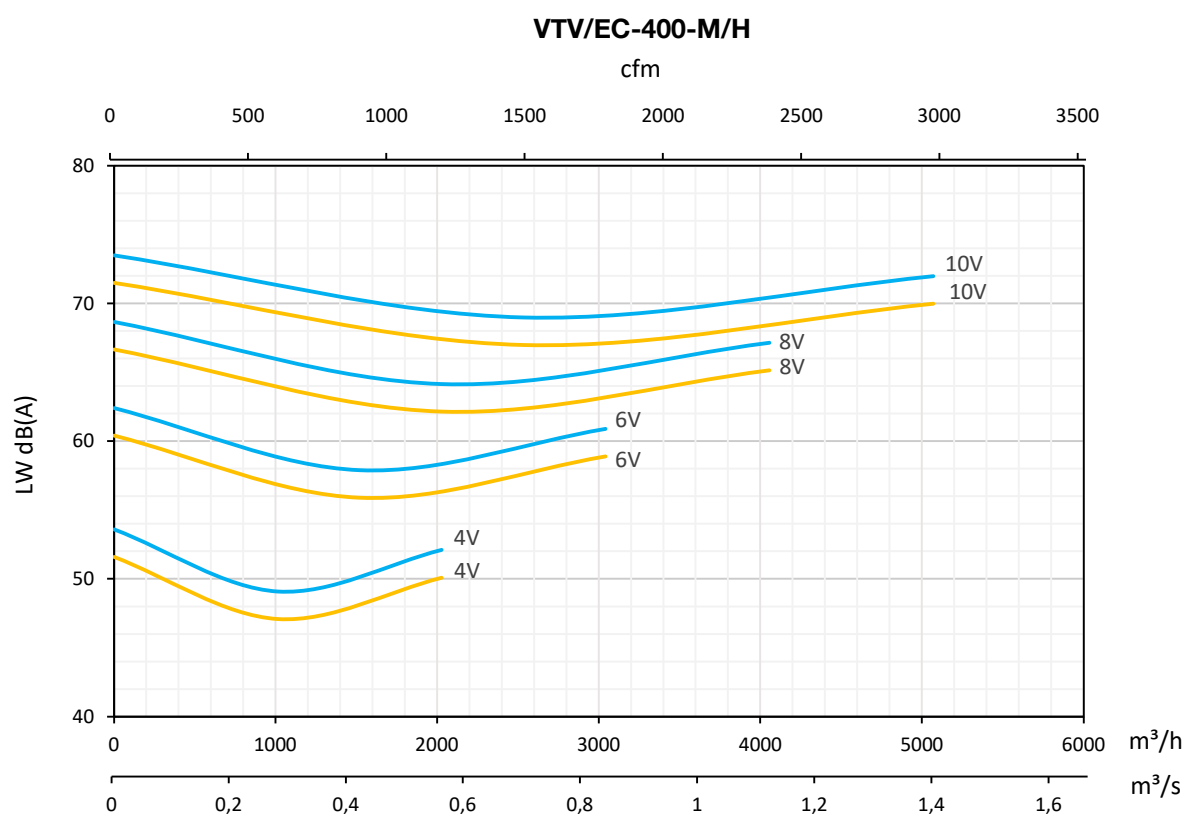
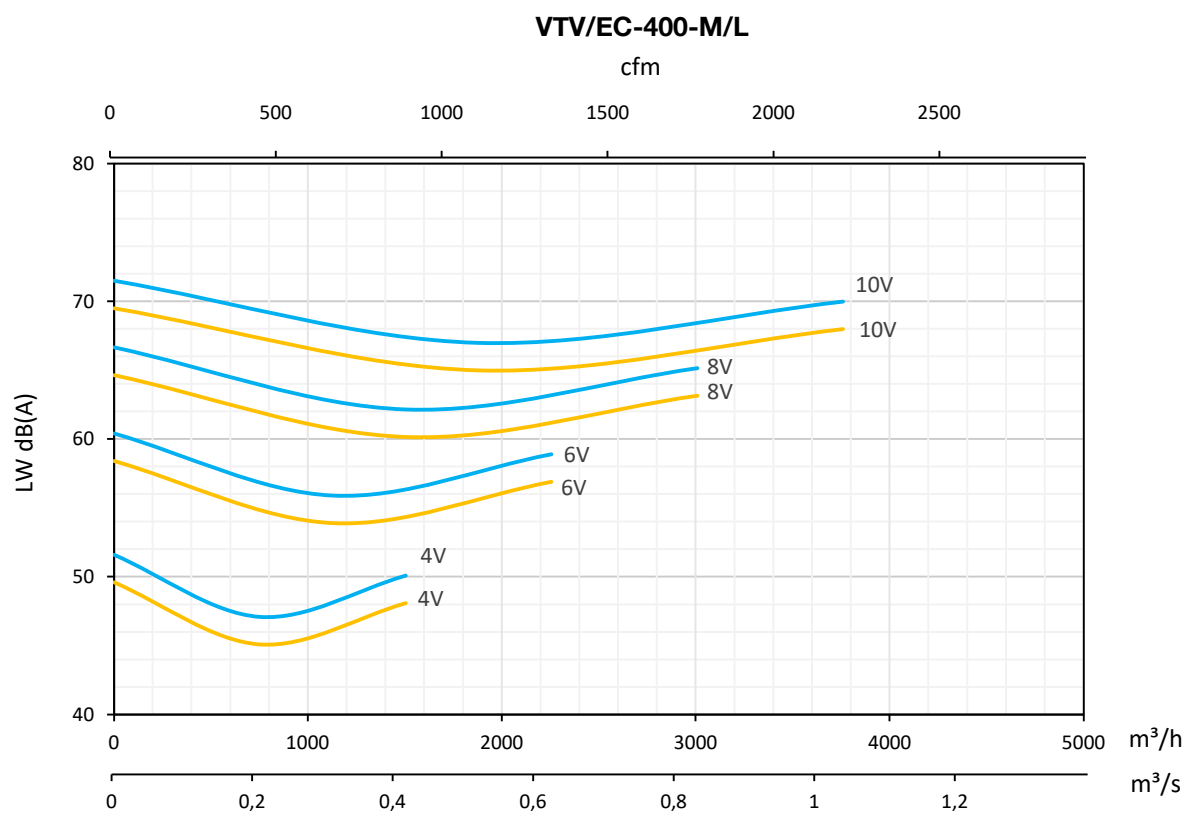
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