

Centrifugal roof-mounted extract fans, with low noise levels and high efficiency



Efficient solutions
for air extraction
in buildings



VTV/EC



Acoustic insulation that ensures low noise levels



Energy efficiency through EC Technology motors



Easy installation and maintenance



Resistant to corrosion C5 according to ISO 12944





Efficient solutions for air extraction in buildings

SODECA's VTV/EC centrifugal roof-mounted extract fans guarantee efficient and quiet ventilation, while optimising comfort and air quality in interior spaces using the most advanced technology

APPLICATIONS

Shopping centres, residential buildings, offices, hotels and buildings that require efficient ventilation and minimal sound emission.



Low noise level

Acoustic insulation using high-quality materials that reduce noise.



Resistant to corrosion

Magnelis® is a metal coating that is three times more resistant than galvanised steel, thereby offering exceptional anti-corrosion protection, even in the most aggressive environments.



Energy savings

The high-performance EC Technology electric motor is a key element in reducing electricity consumption, in addition to being easy to regulate with any 0-10 V sensor.



Straightforward installation and maintenance

Designed for easy installation and access in order to perform cleaning and maintenance.

Construction aspects

Hoisting lugs to facilitate transport and installation

Parts exposed to the elements are manufactured out of **Magnelis® steel sheet**. C5 category anti-corrosion protection in accordance with EN ISO 12944-2

Cover for **easy access** to the junction box



Acoustic insulation of 25-mm thick mineral wool installed around the entire perimeter of the housing

Motor protection to prevent entry by water or snow

High-efficiency, **EC Technology** motor

Completely **detachable** equipment

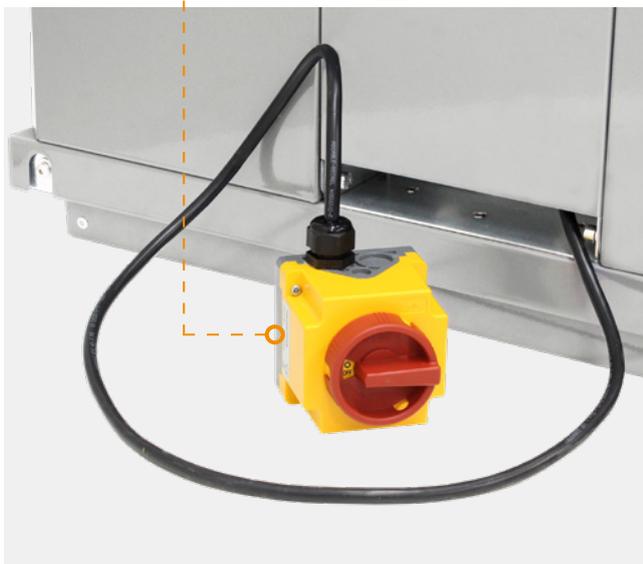


Easy to install

The equipment is fastened to the roof by an opening mechanism that takes 4 bolts.



It includes a **maintenance switch**



Easy to maintain

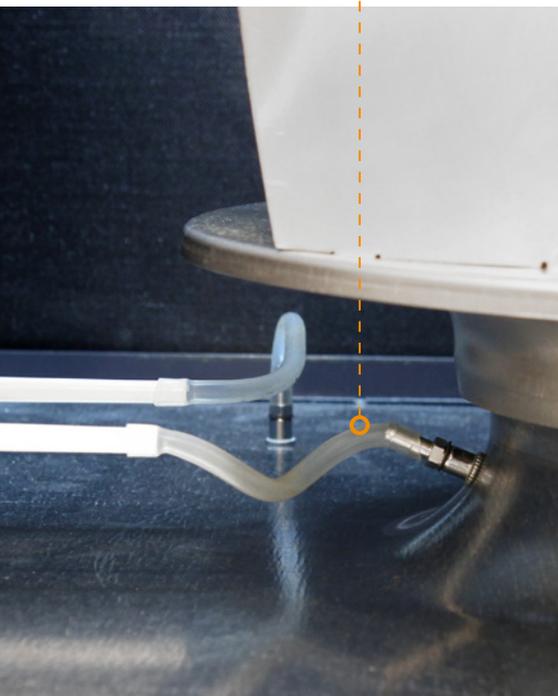
Opening mechanism with access to the inlet duct and the impeller in order to **maintain and clean the unit**.



EC TECHNOLOGY motors

The VTV/EC has a **high-efficiency, EC Technology, external rotor motor** designed to offer optimal operation with reduced electricity consumption.

It allows precise regulation of the speed through 0-10 V and PWM signals, thereby ensuring reliable and stable control that is perfectly adapted to the needs of each application.



Airflow measurement

Equipped with pressure connections for **automatic control** of the flow rate or constant pressure



Accessories

The unit can be fastened to a base if it cannot be fastened directly to a roof.

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)	(m ³ /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

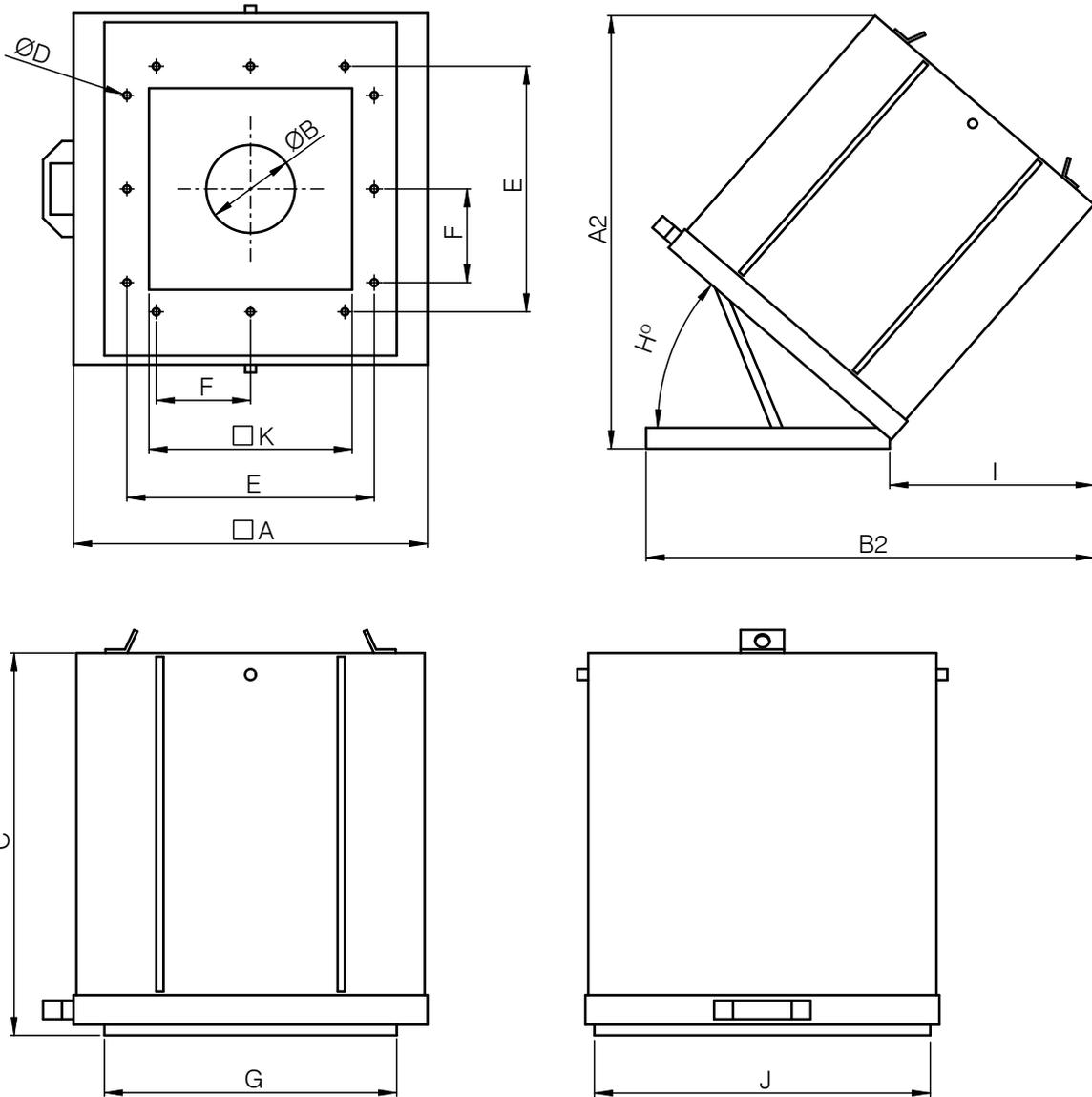
1. Irradiated sound pressure level in dB(A) at a distance of 5 m and at maximum flow rate.



Erp. (Energy Related Products)

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

Dimensions mm

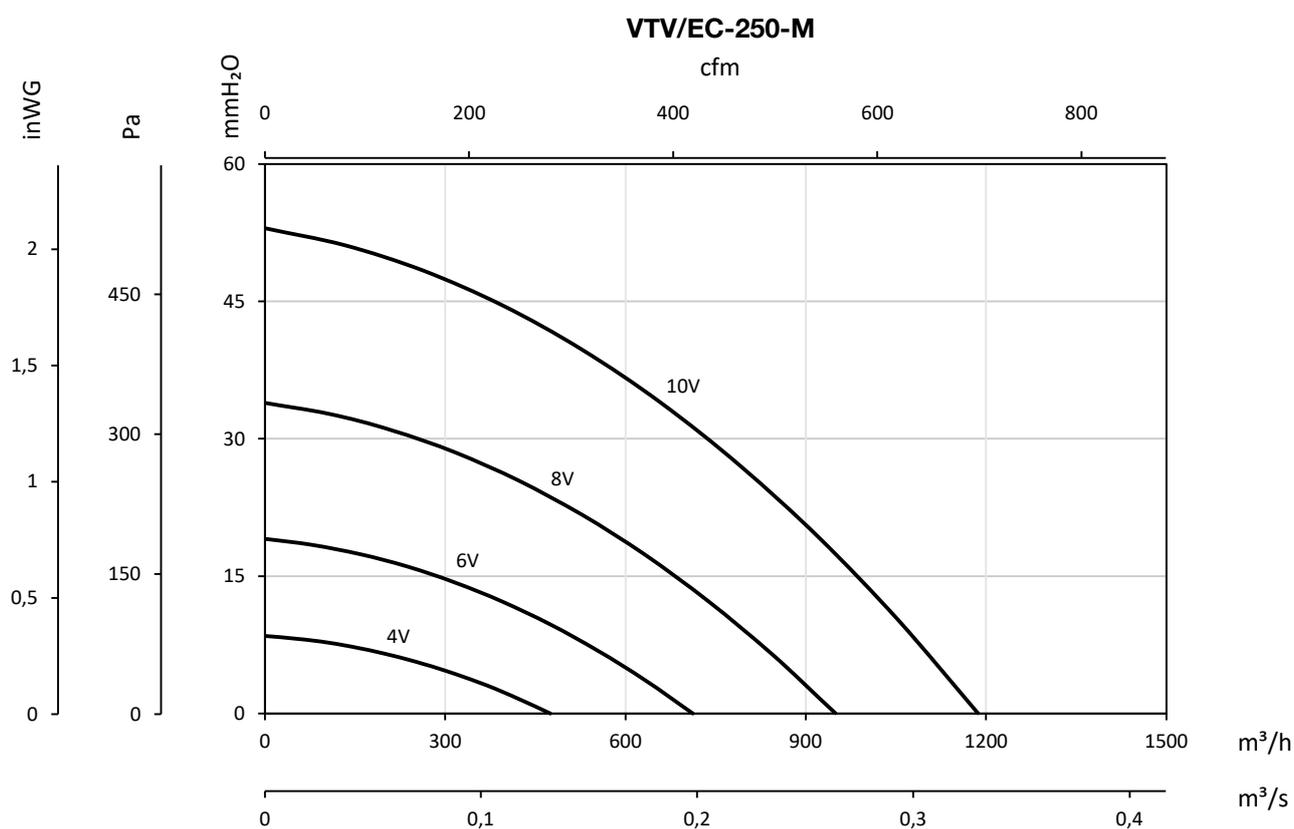
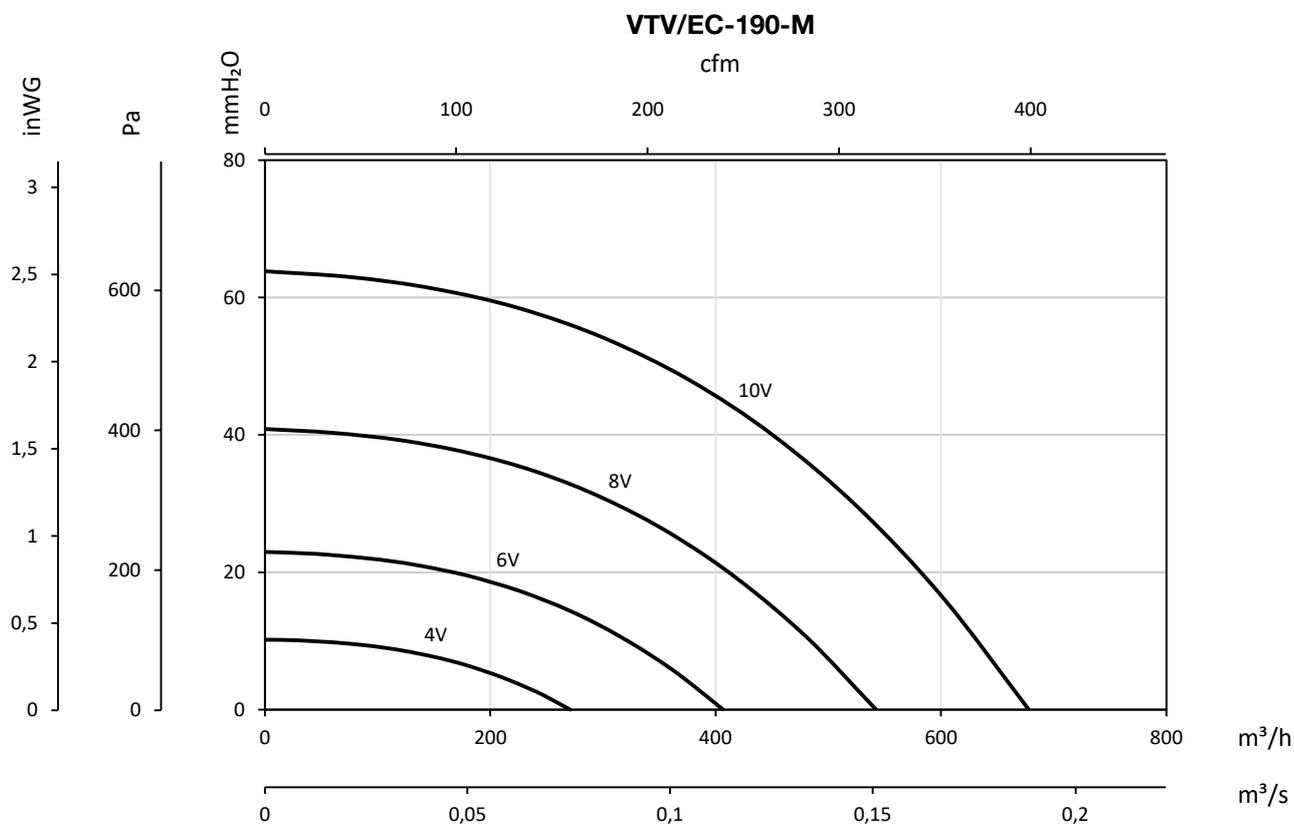


	A	ØB	C	D	E	F	G	J	H°	I	K	A2	B2
VTV/EC-190-M	488	122	551	10	341	130	403	463	41	358	280	728	789
VTV/EC-250-M	488	162	551	10	341	130	403	463	41	358	280	728	789
VTV/EC-310-M/L	598	202	602	10	448	154	510	570	43	405	384	839.5	944
VTV/EC-310-M/H	598	202	602	10	448	154	510	570	43	405	384	839.5	944
VTV/EC-355-M	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

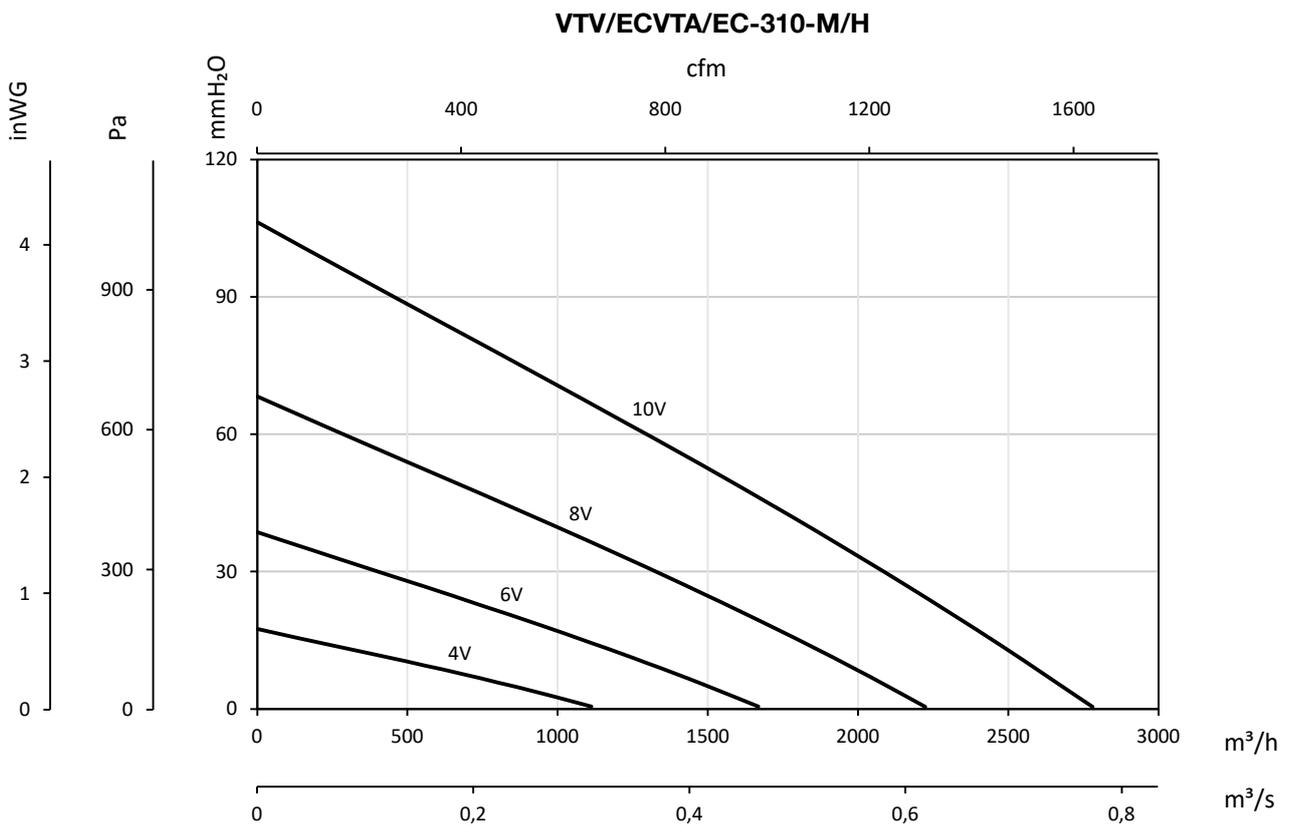
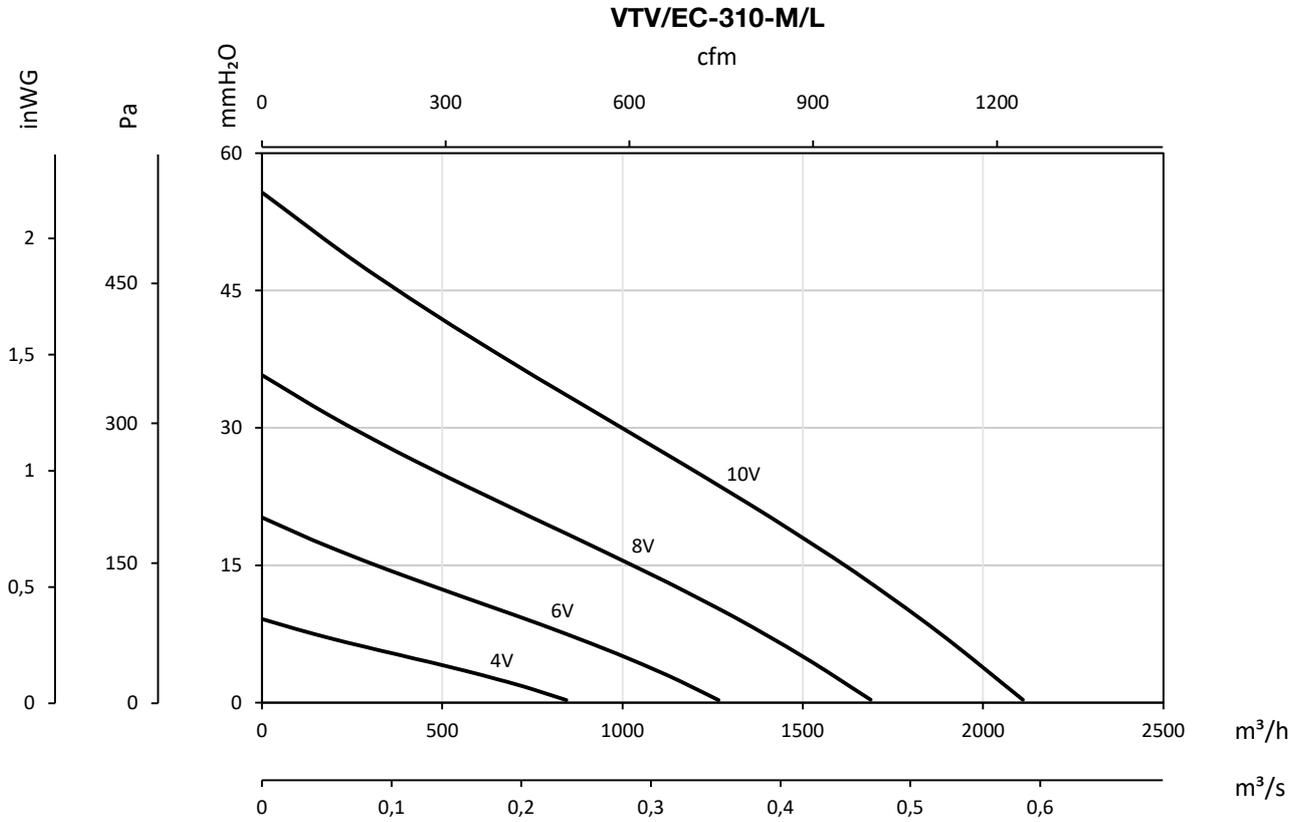
Pe= Static pressure in mm H₂O, Pa and inWG



Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

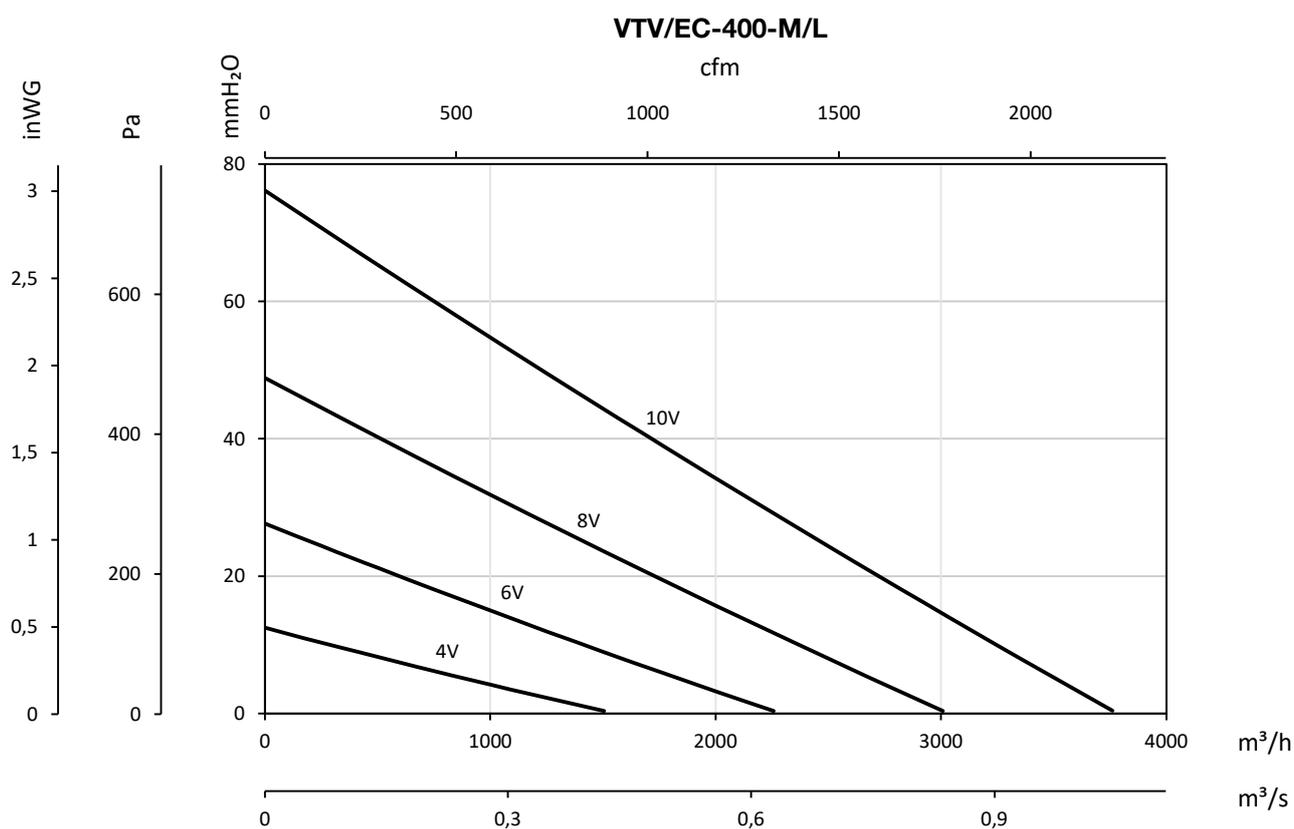
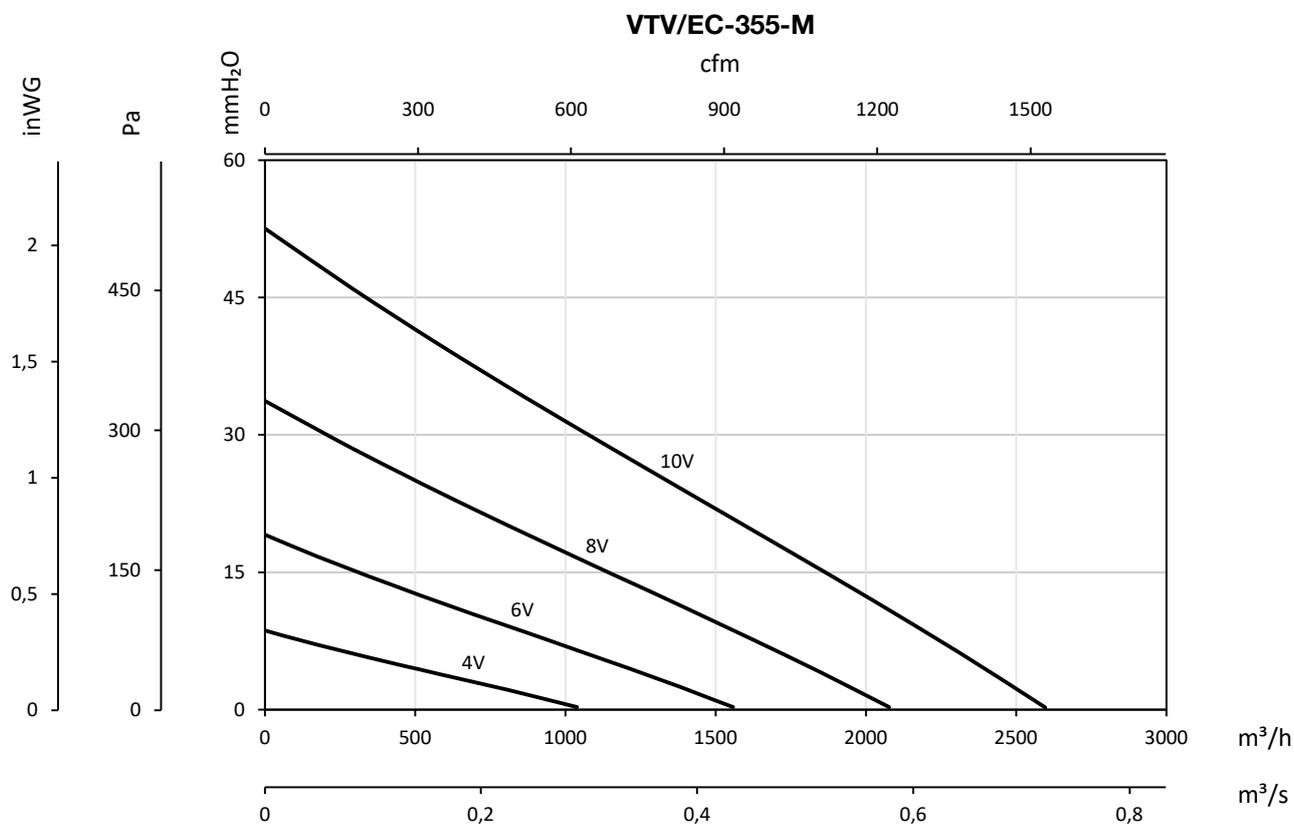
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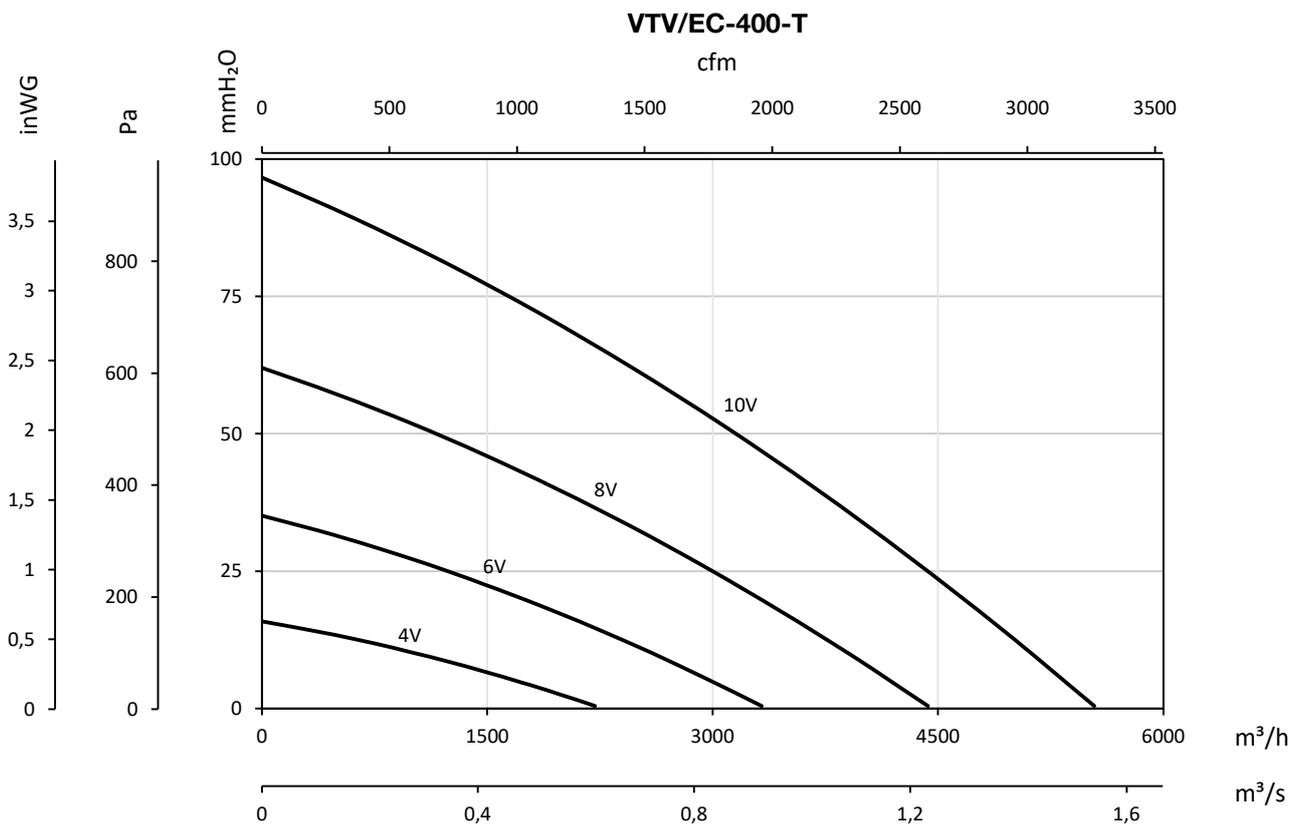
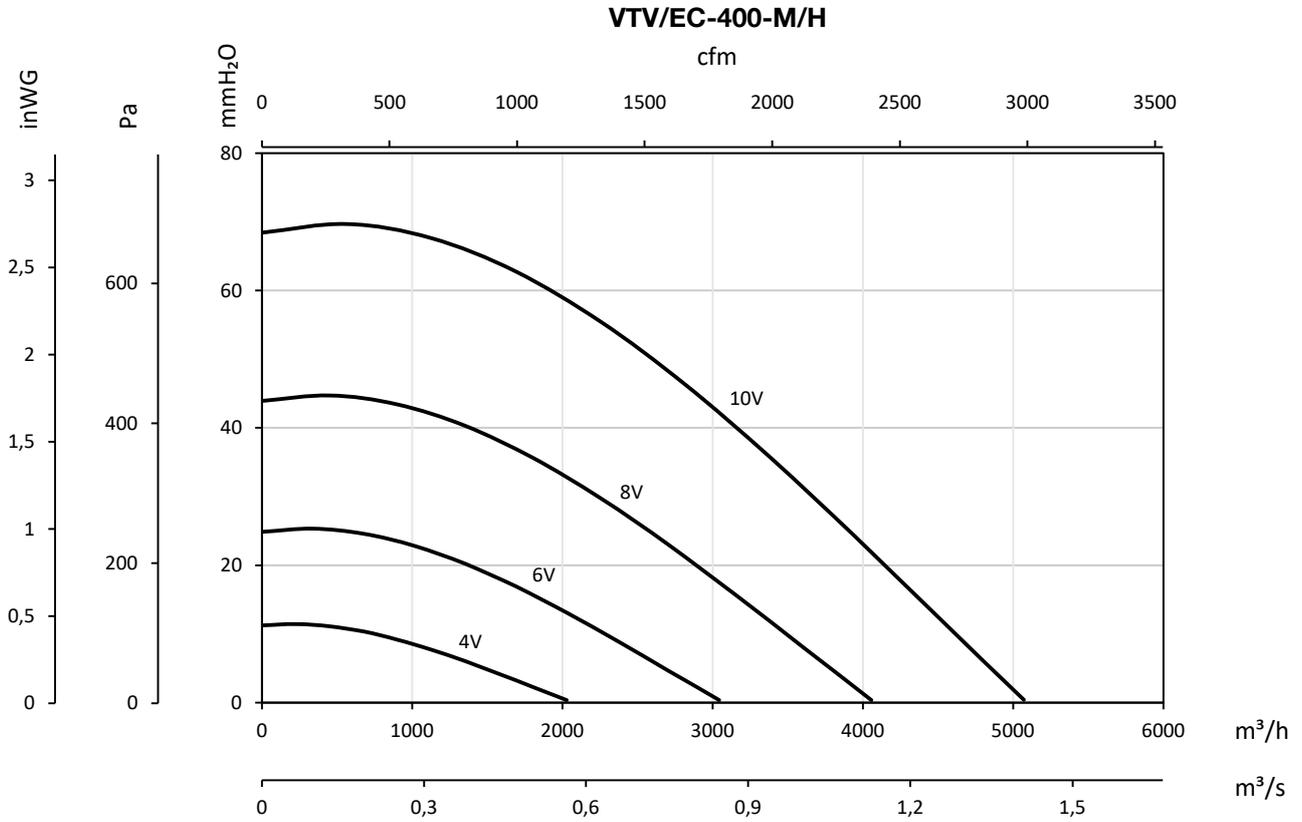
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Characteristic curves

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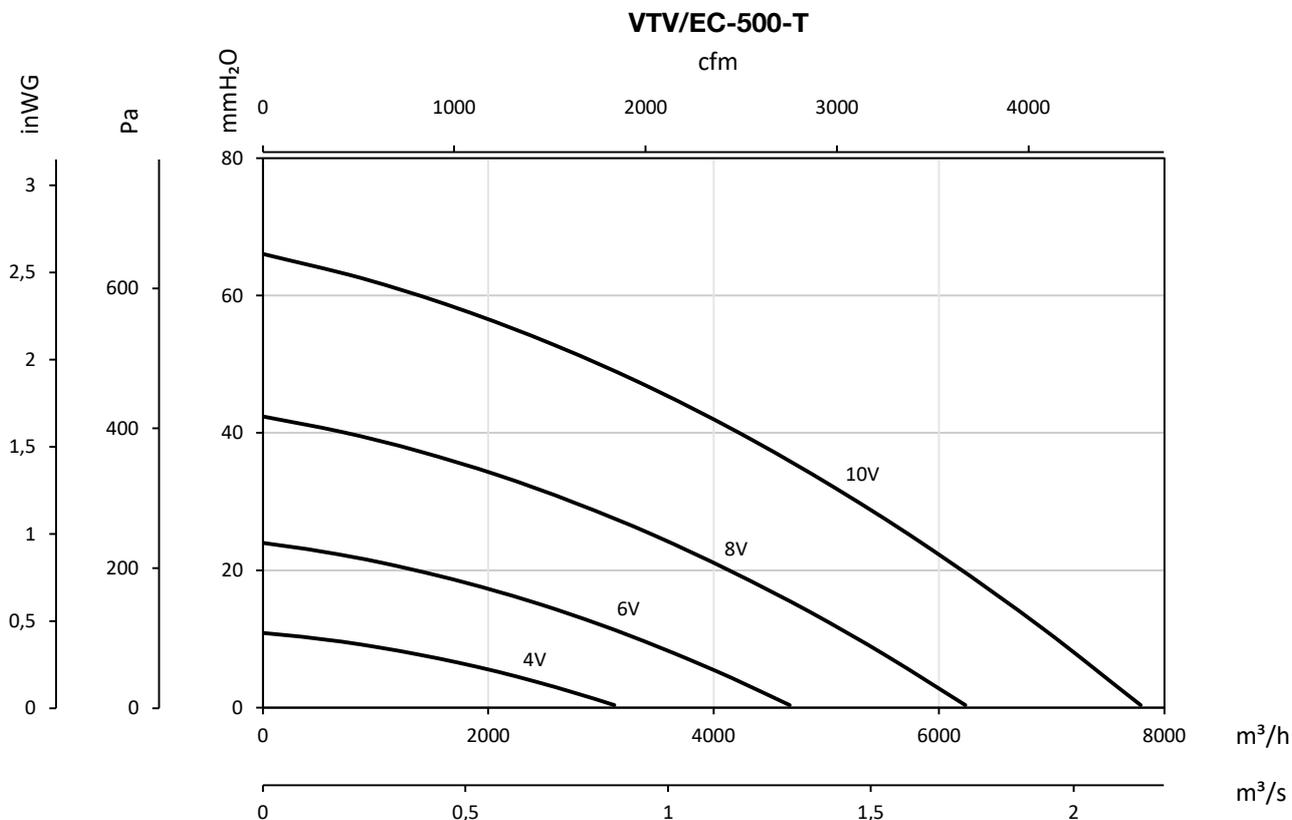
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Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inWG



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

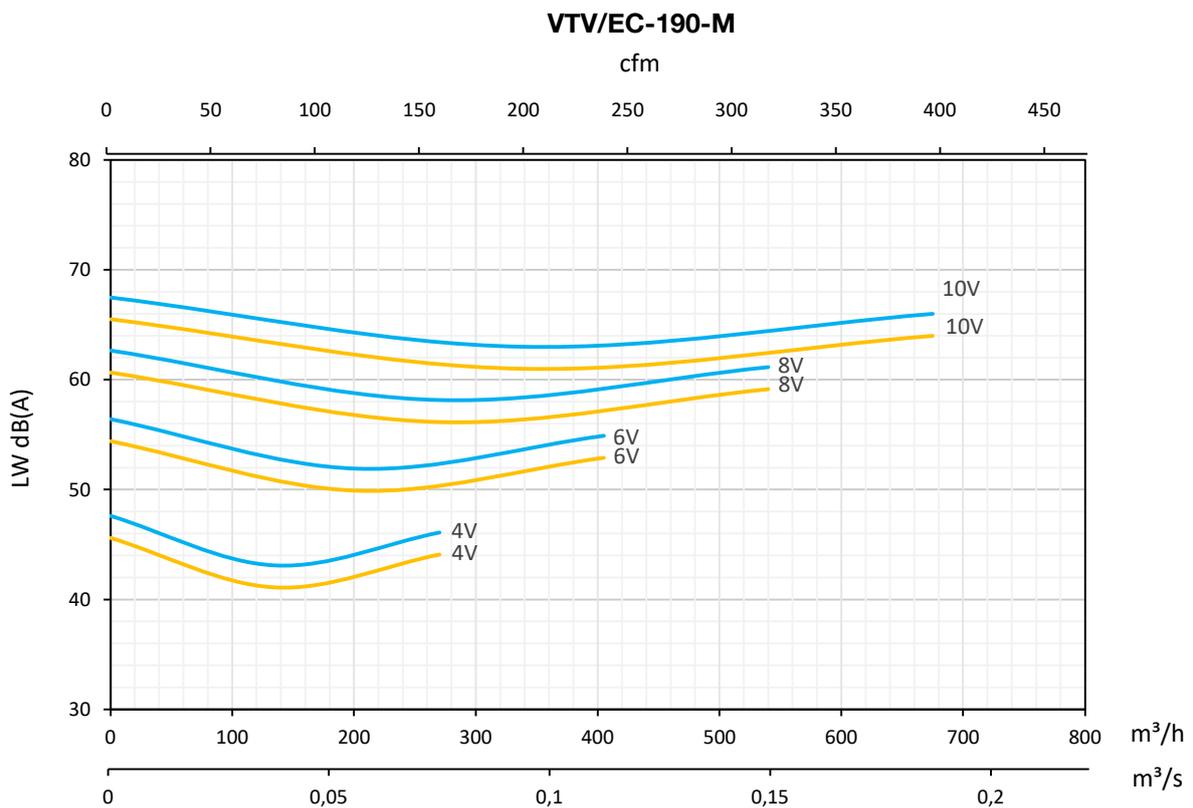
Q= Flow rate in m³/h, m³/s and cfm — Inlet — Irradiated

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

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

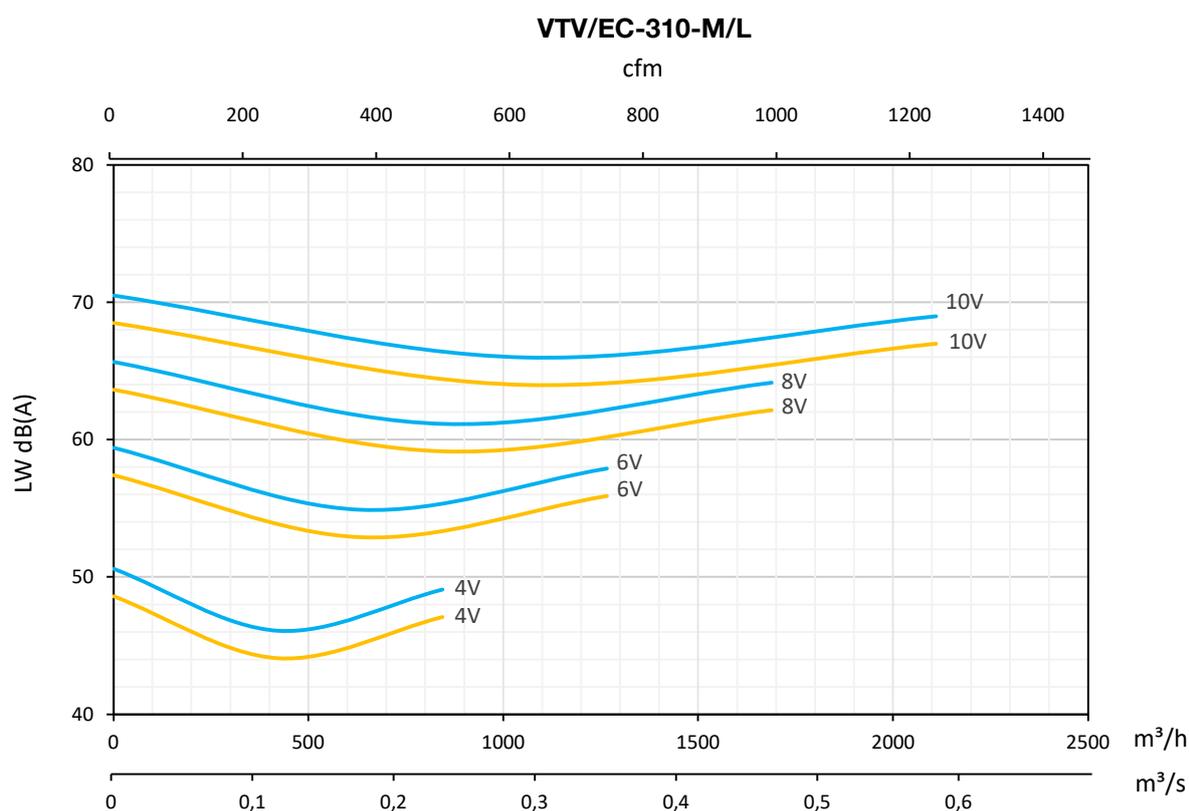
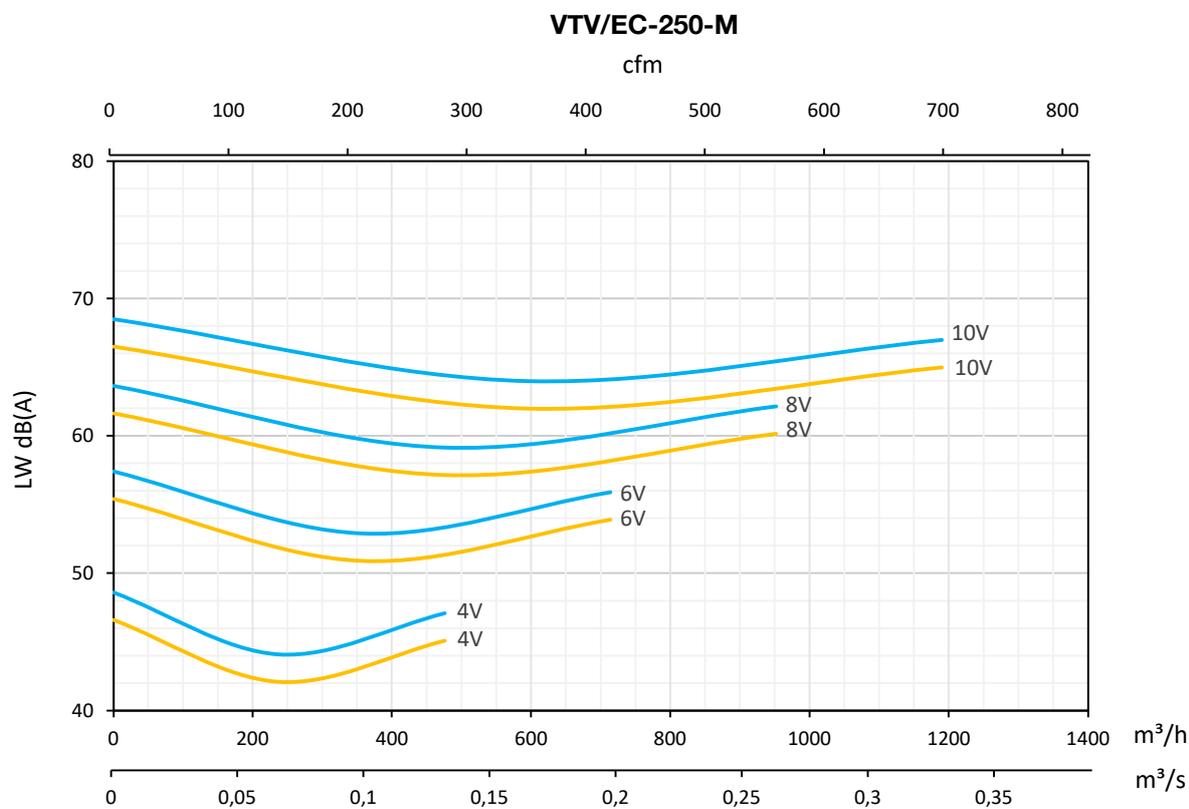
L_w = Sound power level dB(A)
ΔL = Acoustic attenuation dB

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



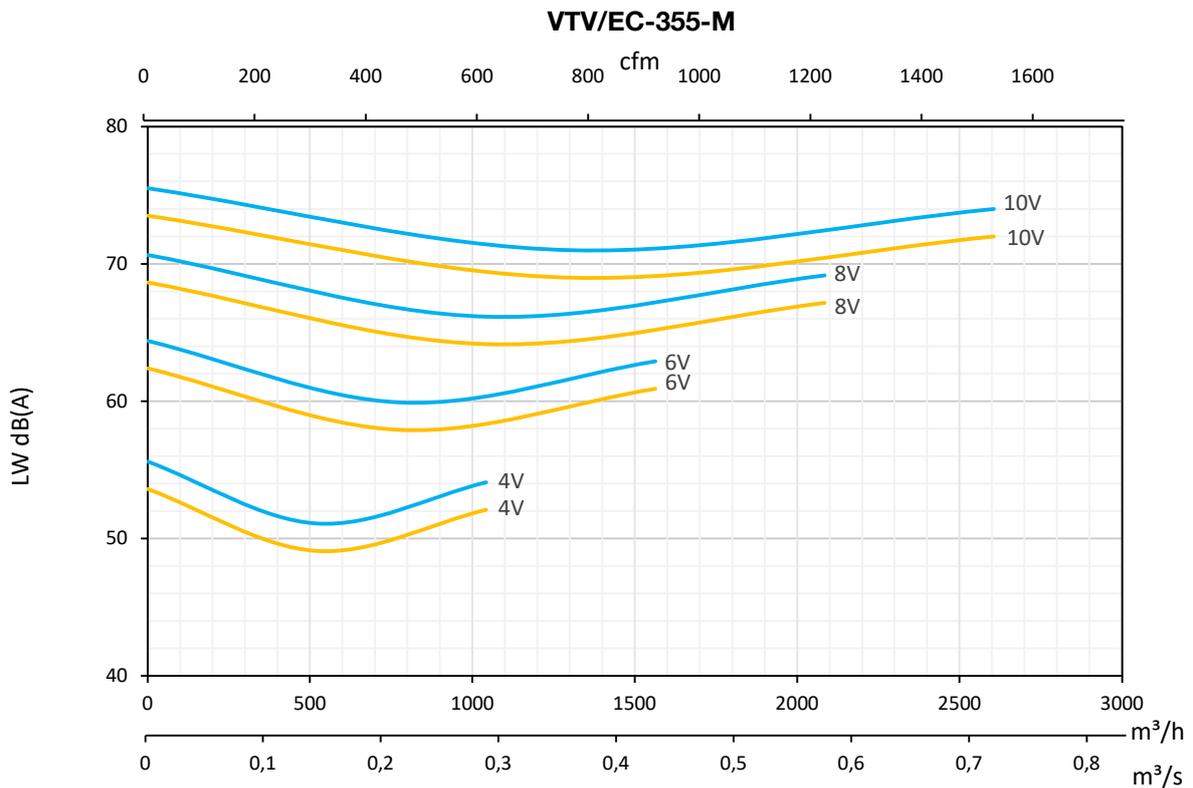
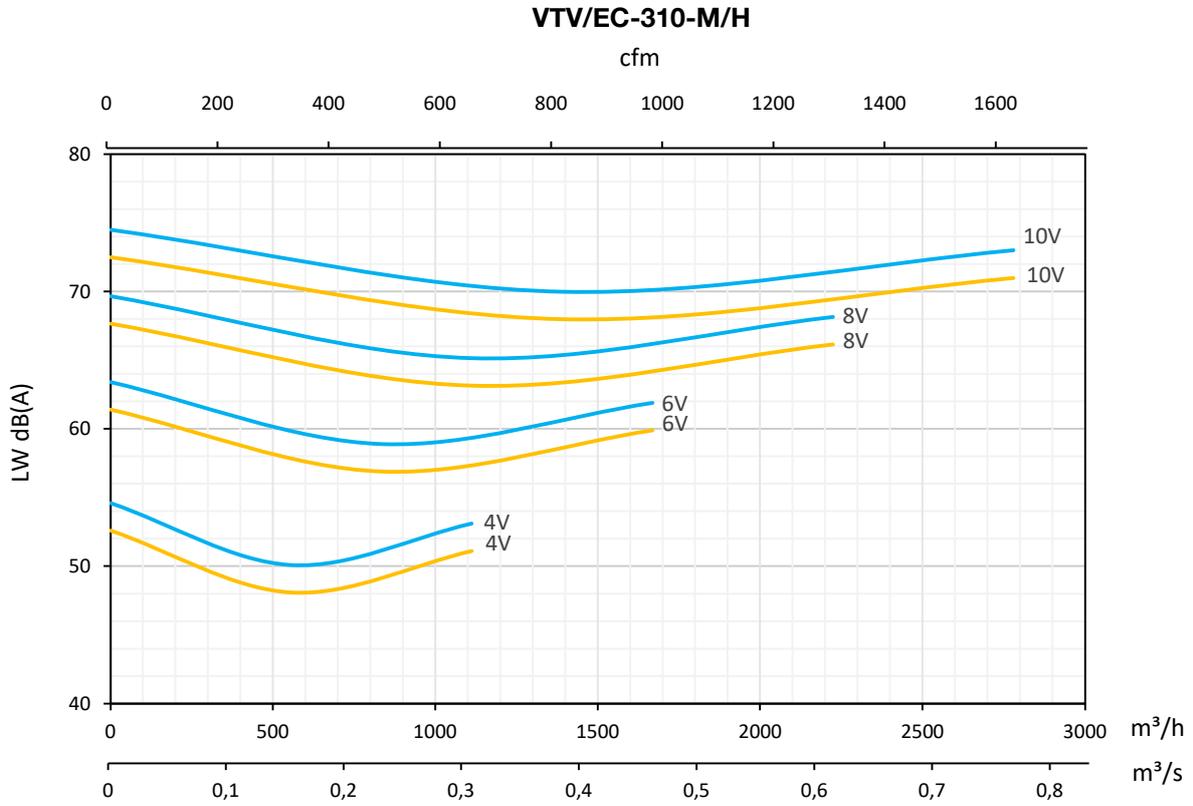
Acoustic characteristics

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



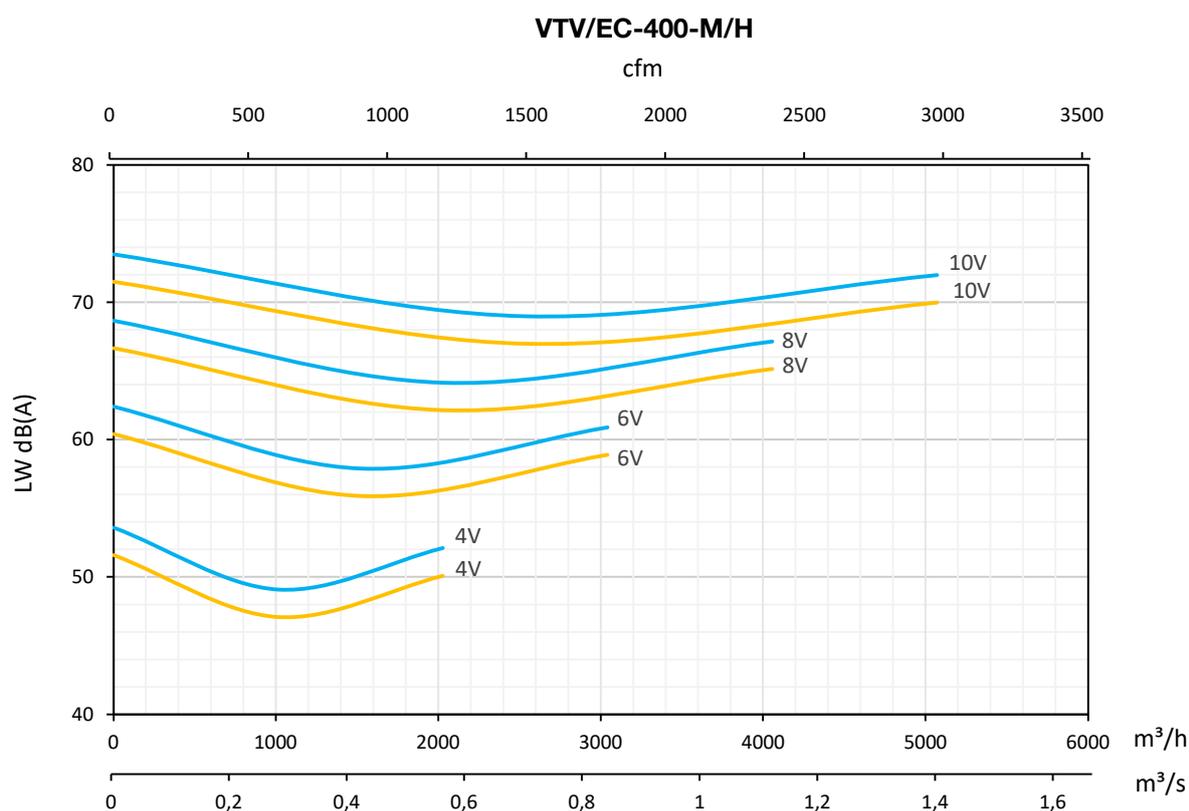
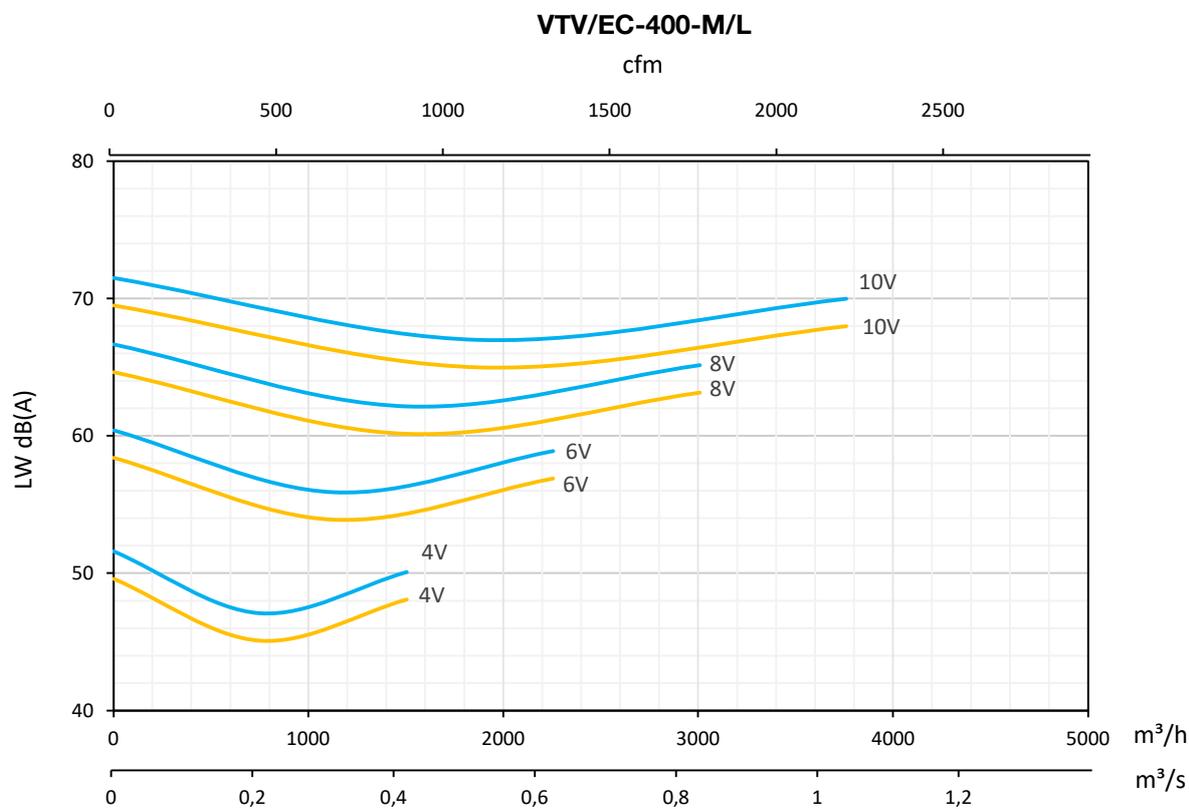
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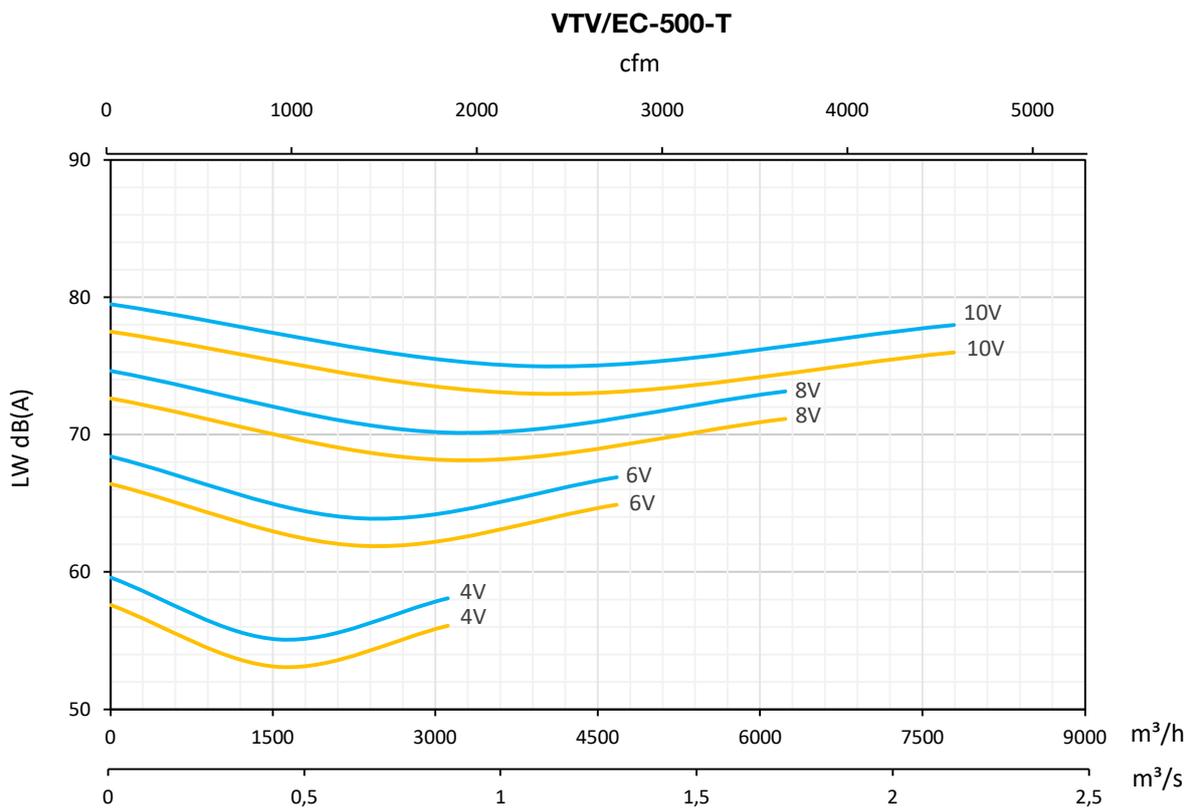
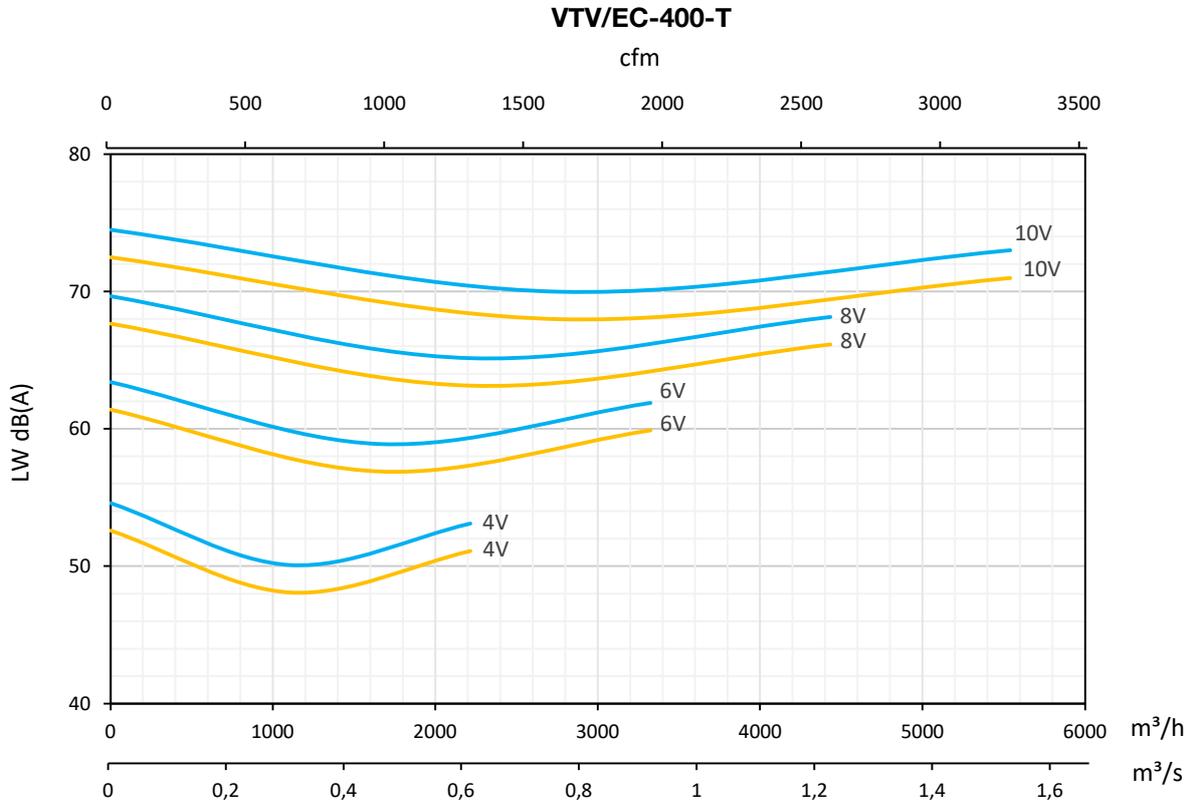
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Acoustic characteristics

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



EUROPE

FINLAND

Sodeca Finland, Oy
HUITTINEN
Sales and Warehouse
Mr. Kai Yli-Sipilä
Metsälinnankatu 26
FI-32700 Huittinen
Tel. + 358 400 320 125
orders.finland@sodeca.com

FINLAND

Sodeca Finland, Oy
VANTAA
Sales and Warehouse
Ainontie 12
FI-01630 Vantaa

Smoke Extraction
Mr. Antti Kontkanen
Tel. +358 400 237 434
akontkanen@sodeca.com
Mrs. Kaisa Partanen
Tel. +358 451 308 038
kpartanen@sodeca.com

Industrial Applications
Mr. Jarno Pikkumäki
Tel. +358 407 723 472
jpikkumaki@sodeca.com

ITALIA

Sodeca Italia
Viale del Lavoro, 28
37036 San Martino B.A.
(VR), ITALY
Tel. +39 045 87 80 140
vendite@sodeca.com

NORWAY

Sodeca Norge AS
Per Krohgs vei 4C
1065 Oslo
NORWAY
Tel. +47 23 28 80 90
post@sodeca.no

PORTUGAL

Sodeca Portugal, Unip. Lda.
PORTO
Rua Veloso Salgado 1120/1138
4450-801 Leça de Palmeira
Tel. +351 229 991 100
geral@sodeca.pt

LISBOA

Pq. Emp. da Granja Pav. 29
2625-607 Vialonga
Tel. +351 219 748 491
geral@sodeca.pt

ALGARVE

Rua da Alegria, 33
8200-569 Ferreiras
Tel. +351 289 092 586
geral@sodeca.pt

UNITED KINGDOM

Sodeca Fans UK, Ltd.
Mr. Mark Newcombe
Tamworth Enterprise Centre
Philip Dix House, Corporation
Street, Tamworth, B79 7DN
UNITED KINGDOM
Tel. +44 (0) 1827 216 109
sales@sodeca.co.uk

AMERICA

CHILE

Sodeca Ventiladores, SpA.
Sra. Sofia Ormazábal
Santa Bernardita 12.005
(Esquina con Puerta Sur)
Bodegas b24 a b26,
San Bernardo, Santiago, CHILE
Tel. +56 22 840 5582
ventas.chile@sodeca.com

COLOMBIA

Sodeca Latam, S.A.S.
Sra. Luisa Stella Prieto
Calle7 No. 13 A-44
Manzana 4 Lote1, Montana
Mosquera, Cundinamarca
Bogotá, COLOMBIA
Tel. +57 1 756 4213
ventascolombia@sodeca.co

PERU

Sodeca Perú, S.A.C.
Sr. Jose Luis Jiménez
C/ Mariscal Jose Luis de
Orbegoso 331. Urb. El pino.
15022, San Luis. Lima, PERÚ
Tel. +51 1 326 24 24
Cel. +51 994671594
comercial@sodeca.pe

MIDDLE EAST AND AFRICA

UNITED ARAB EMIRATES

Sodeca MEA Trading L.L.C
C-83, Sama Residence
Al Nahda First, Deira, DUBAI
orders.meas@sodeca.com



HEADQUARTER

Sodeca, S.L.U.
Pol. Ind. La Barricona
Carrer del Metall, 2
E-17500 Ripoll
Girona, SPAIN
Tel. +34 93 852 91 11
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com

PRODUCTION PLANT

Sodeca, S.L.U.
Ctra. de Berga, km 0,7
E-08580 Sant Quirze de Besora
Barcelona, SPAIN
Tel. +34 93 852 91 11
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com



www.sodeca.com