Series

VENTS TT PRO EC

ErP 2015 ErP 2016 ErP 2018

TURBO TUBE TT PRO PROFESSIONAL

Оборудован EC-мотором

Inline mixed-flow fans with the air capacity up to **1995 m³/h**

Application

VENTS TT PRO EC fans combine the versatility and outstanding performance of both axial and centrifugal fans producing a powerful air flow and high pressure while retaining the signature energy-efficiency and response of EC motors.

Integration of several fans into a single computer-controlled system with sensor feedback combined with speed control across the entire dynamic range.

Designed for supply and exhaust ventilation systems requiring high energy efficiency, excellent response, high pressure and air flow rate while keeping noise under control – such as high-humidity commercial and industrial spaces (e.g. bathrooms and kitchens) as well as flats, villas, shops and cafes.

Compatible with air ducts from 100 to 315 mm in diameter.

Design

The casing of VENTS TT PRO EC fan is made of low-combustible polypropylene. The removable central unit with a motor, impeller and terminal box is attached to the fittings by means of special mounting brackets with integral latches. This helps to make the fan maintenance extremely simple and convenient. Fan service no longer requires major disassembly and dismantling of the fan: all you have to do is remove the main unit from the casing and carry out the maintenance as required.

The inlet fitting has a profiled header which ensures smooth air flow into the fan. Conically shaped impelles with specially profiled blades cause circular velosity rise, that resuts in airflow boost and pressure increase comparing to conventional design.

The fan outlet combination of a diffuser, specially designed impeller and rectifier allow for the optimim air distribution: high air capacity and pressure without excessive noise.

Motor

The fans feature high-efficiency electronically commutated (EC) direct current motors. These state-of-the-art units offer excellent energy efficiency. In addition to that EC motors combine high performance and optimum response over the entire speed range. The performance efficiency of electronically commutated motors reaches a staggering 90%.

Speed control

The fans are controlled by means of a 0-10 V control signal while the performance regulation is based on the feedback from the temperature, smoke and other sensors as well as other vital parameter settings. As the control signal changes the EC fan changes speed accordingly to supply the exact air amount required by the ventilation system.

The maximum fan speed does not depend on the electric mains frequency enabling compatibility with both 50 Hz and 60 Hz networks. The fans can be easily combined into a single computer-controlled network. Special software allows for precise control over the operating parameters of the network units. All the system parameters can be monitored from the computer screen allowing to program operating parameters for each fan on the network individually.

Installation

The fans are intended for installation in matching diameter air ducts at any point of the ventilation system without limitation to mounting angle.

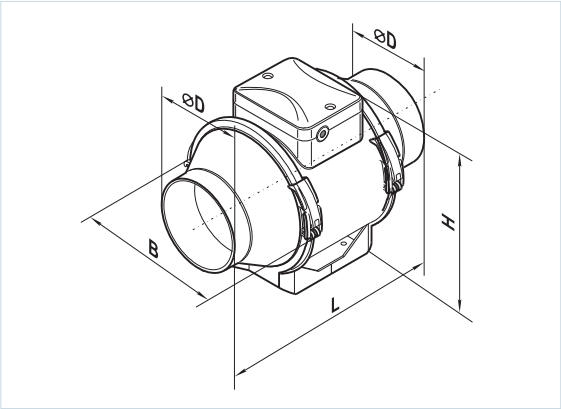
The fan casing has a flat mounting plate for a secure wall mounting.

Electrical connection and installation must be performed in accordance with the instruction manual and the electrical connections diagram applied to the terminal box.

A single system may have several fans installed in parallel to boost the output capacity or in series to boost the working pressure.

Fan overall dimensions:

Type	Dimensions [mm]				Weight [kg]
	ØD	B	H	L	
TT PRO 100 EC	97	192	241	303	1.75
TT PRO 125 EC	123	193	241	259	2.15
TT PRO 150 EC	148	217	289	254	2.30
TT PRO 160 EC	148	217	289	254	3.25
TT PRO 200 EC	197	239	296	278	3.95
TT PRO 250 EC	247	288	339	383	7.80
TT PRO 315 EC	309	360	423	443	11.95



Accessories

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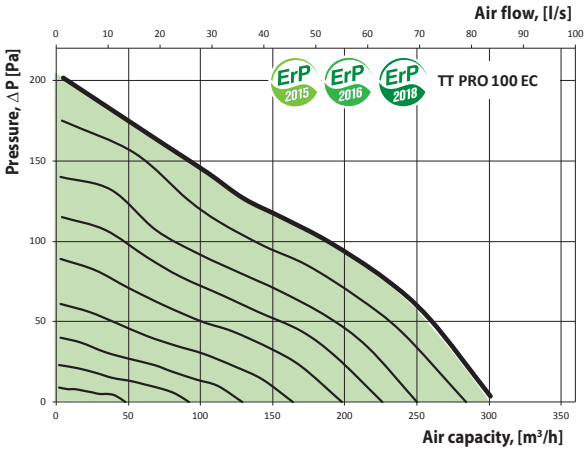
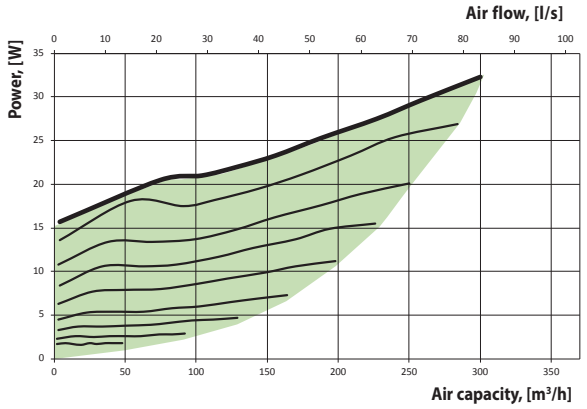
Technical data:

	TT PRO 100 EC	TT PRO 125 EC
Voltage [V / 50/60 Hz]	1~ 230	1~ 230
Power [W]	32	45
Current [A]	0.29	0.39
Max. air capacity [m^3/h]	300	465
RPM [min^{-1}]	3018	3036
Sound pressure level at 3 m distance [dB(A)]	47	52
Max. transported air temperature [°C]	-25... +55	-25... +55
SEC class	B	B
Protection rating	IP X4	IP X4

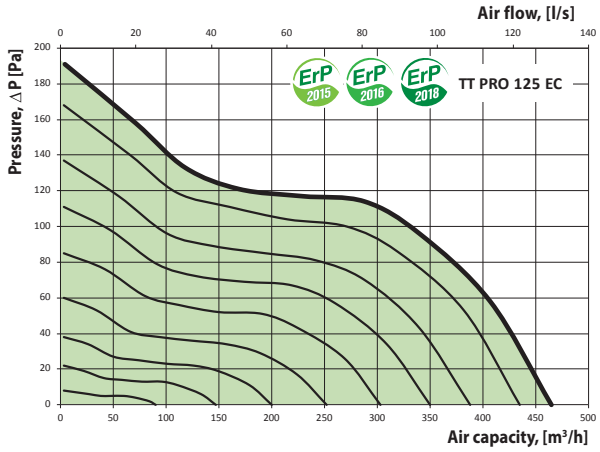
VENTS TT PRO EC

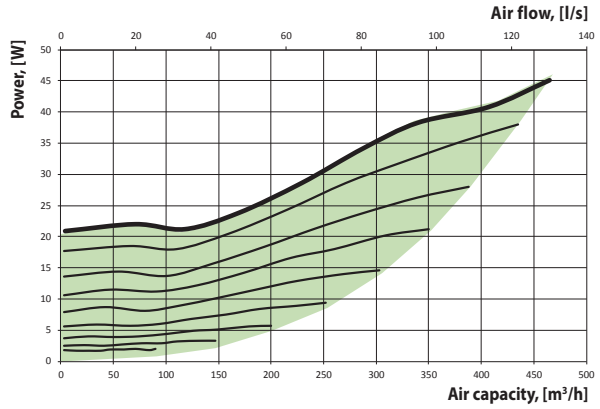




Sound power level, A-filter applied											Sound pressure level at 3 meters, A-filter applied	Sound pressure level at 1 meters, A-filter applied
Sound-power level, A - weighted		general	Octave frequency band, Hz									
	Hz		63	125	250	500	1000	2000	4000	8000	LpA, 3m [dB(A)]	LpA, 1m [dB(A)]
L_{WA} to inlet	dB(A)	74	42	55	62	70	69	66	58	52	54	63
L_{WA} to outlet	dB(A)	69	33	42	59	66	63	62	57	50	49	59
L_{WA} to environment	dB(A)	67	27	45	55	65	62	60	49	38	47	57

VENTS TT PRO EC



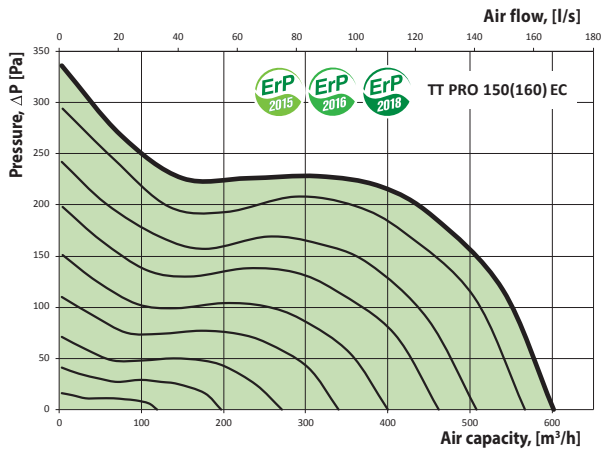


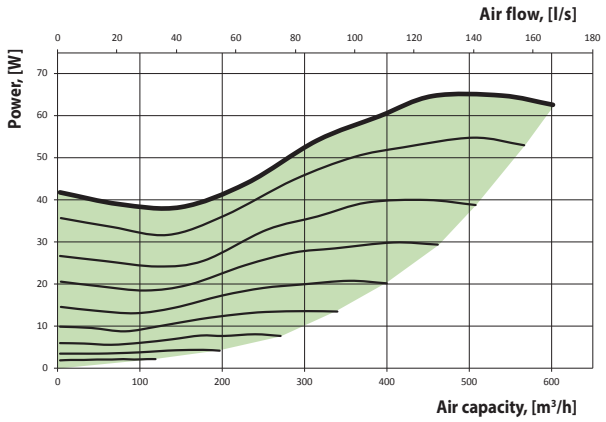
Sound power level, A-filter applied											Sound pressure level at 3 meters, A-filter applied	Sound pressure level at 1 meters, A-filter applied
Sound-power level, A - weighted		general	Octave frequency band, Hz									
	Hz		63	125	250	500	1000	2000	4000	8000	LpA, 3m [dB(A)]	LpA, 1m [dB(A)]
L_{WA} to inlet	dB(A)	74	43	51	61	70	68	70	61	53	54	64
L_{WA} to outlet	dB(A)	69	33	48	57	65	64	64	59	51	49	59
L_{WA} to environment	dB(A)	72	29	44	55	72	59	61	48	34	52	62

Technical data:

	TT PRO 150 (160) EC	TT PRO 200 EC
Voltage [V / 50/60 Hz]	1~ 230	1~ 230
Power [W]	65	140
Current [A]	0.53	0.99
Max. air capacity [m³/h]	602	1095
RPM [min⁻¹]	3018	2880
Sound pressure level at 3 m distance [dB(A)]	47	49
Max. transported air temperature [°C]	-25... +55	-25... +55
SEC class	B	-
Protection rating	IP X4	IP X4

VENTS TT PRO EC





Sound-power level, A - weighted		Sound power level, A-filter applied										Sound pressure level at 3 meters, A-filter applied	Sound pressure level at 1 meters, A-filter applied
		general	Octave frequency band, Hz										
	Hz		63	125	250	500	1000	2000	4000	8000		LpA, 3m [dB(A)]	LpA, 1m [dB(A)]
L_{WA} to inlet	dB(A)	75	34	47	59	70	69	72	64	56		55	65
L_{WA} to outlet	dB(A)	71	34	43	54	67	64	67	64	55		51	61
L_{WA} to environment	dB(A)	67	37	44	54	65	60	63	55	41		47	57

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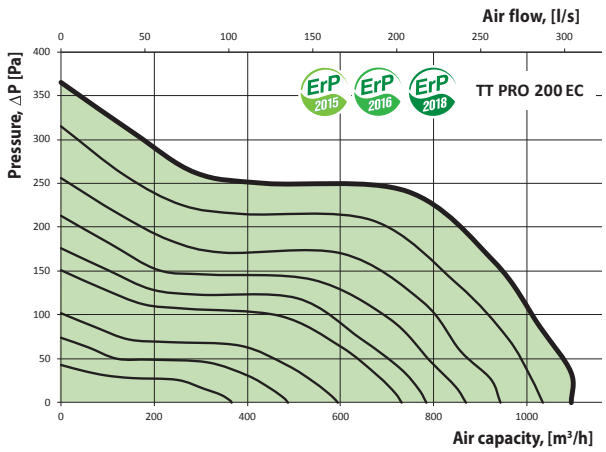

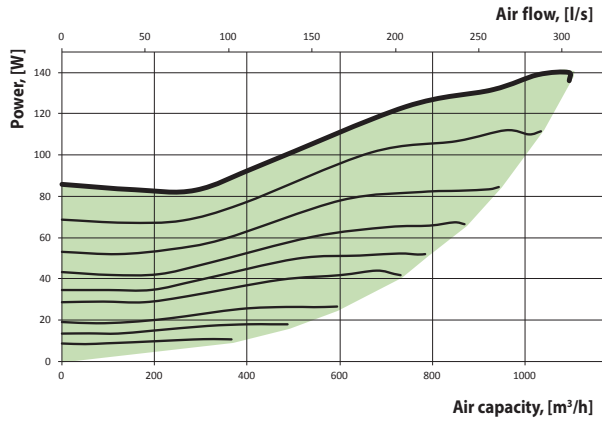

Sound-power level, A - weighted		Sound power level, A-filter applied										Sound pressure level at 3 meters, A-filter applied	Sound pressure level at 1 meters, A-filter applied
		general	Octave frequency band, Hz										
	Hz		63	125	250	500	1000	2000	4000	8000		LpA, 3m [dB(A)]	LpA, 1m [dB(A)]
L_{WA} to inlet	dB(A)	76	36	45	57	70	69	72	69	59		56	63
L_{WA} to outlet	dB(A)	76	48	49	56	69	71	71	70	60		56	65
L_{WA} to environment	dB(A)	69	35	42	54	65	65	65	58	43		49	59

Technical data:

	TT PRO 250 EC	TT PRO 315 EC
Voltage [V / 50/60 Hz]	1~ 230	1~ 230
Power [W]	197	306
Current [A]	1.35	2.00
Max. air capacity [m³/h]	1500	1995
RPM [min⁻¹]	2784	2508
Sound pressure level at 3 m distance [dB(A)]	53	55
Max. transported air temperature [°C]	-25... +55	-25... +55
SEC class	-	-
Protection rating	IP X4	IP X4

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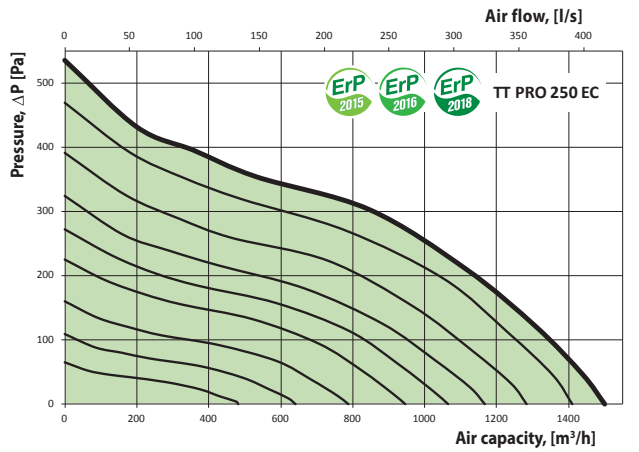

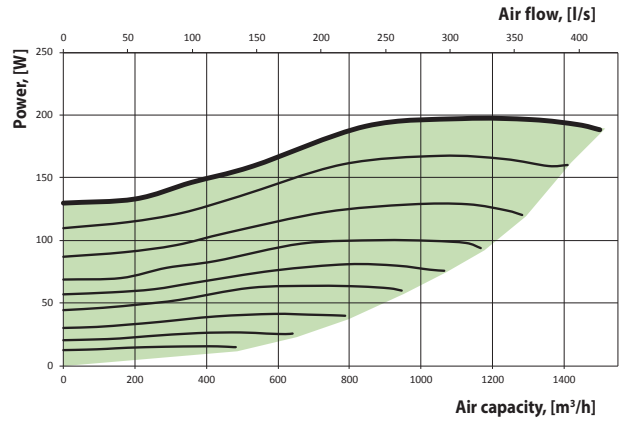

Sound-power level, A - weighted		Sound power level, A-filter applied: general	Octave frequency band, Hz: 63	125	250	500	1000	2000	4000	8000	Sound pressure level at 3 meters, A-filter applied: LpA, 3m [dB(A)]	Sound pressure level at 1 meters, A-filter applied: LpA, 1m [dB(A)]
	Hz											
L_{WA} to inlet	dB(A)	81	43	51	64	77	77	77	69	62	61	71
L_{WA} to outlet	dB(A)	81	49	54	67	75	78	77	72	62	61	71
L_{WA} to environment	dB(A)	73	53	49	56	66	71	68	55	43	53	63

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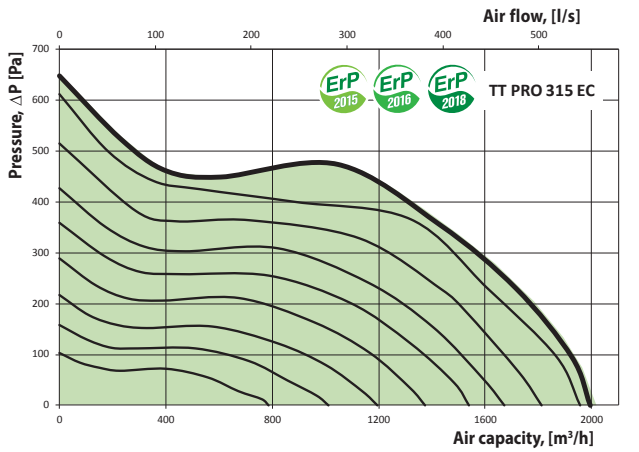

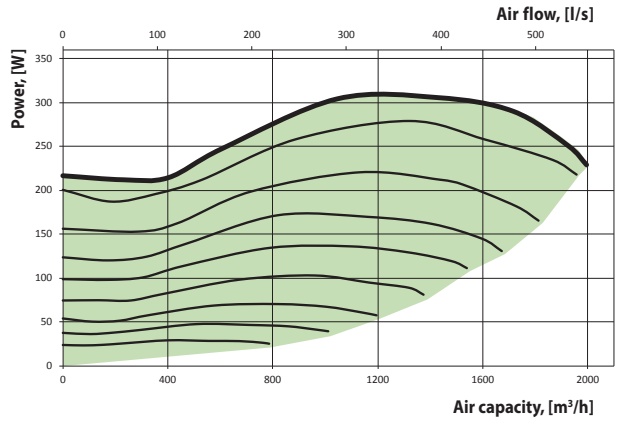

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	Hz											
L_{WA} to inlet	dB(A)	81	42	54	64	74	78	75	70	63	61	70
L_{WA} to outlet	dB(A)	83	43	54	72	77	78	78	73	66	63	72
L_{WA} to environment	dB(A)	75	37	48	60	68	73	68	60	48	55	65