

Series
VENTS TT-MD



Inline mixed-flow fans
with the air capacity
up to **9450 m³/h**

Application

New series of the duct fans VENTS TT-MD enclosed in a special sound-insulated casing that ensures low-noise operation of the fans at high aerodynamic characteristics. The fans are compatible with Ø 355, 400, 450, 500 air ducts. VENTS TT-MD combine wide

capabilities and high performance features of both axial and centrifugal fans, thus providing powerful air stream and high pressure. The fans are used as a component part of air handling systems for various commercial and industrial premises with high requirements to noise level, i.e. in libraries, conference halls, educational institutions, kindergartens, etc.

Design

The fan casing is made of polymer-coated steel. The conic impeller with special blade profiling increase air flow speed and provide higher pressure and air capacity as compared to standard axial fans. The diffuser, the specially profiled impeller and the directing vanes at outlet from the fan casing distribute air flow in such a way as to attain the best combination of high performance and high pressure at low noise level. The fan casing is equipped with an airtight terminal box for connection to power mains.

Motor

Energy efficient motor with low energy demand. The motor is equipped with thermal switches for the motor overheating protection. The ball bearings extend the motor service life up to 40 000 hrs. at non-stop operation. The motor has IP X4 ingress protection rating.

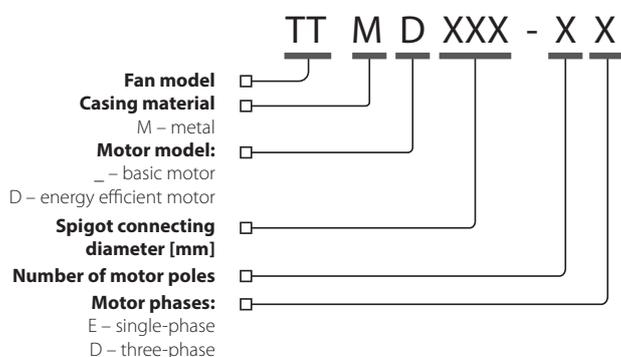
Speed control

The fan is controlled with an external 0-10 V control signal. The fan capacity is regulated depending on temperature and pressure level, smoke content, etc. Maximum fan speed does not depend on the current frequency. The fan is compatible both with 50 or 60 Hz power mains. The fans may be integrated into a unified data processing control system. The specially designed software provides precise control of all the fans integrated into the system. The computer displays all the system parameters. Each fan in the system may be individually adjusted.

Mounting

The fan may be mounted at any place and at any angle within the ductwork system. Several fans may be installed in one system in parallel to attain higher air capacity or in series to increase operating pressure in the system. The fan casing is equipped with fixing brackets for fastening to the floor, wall.

Designation key:

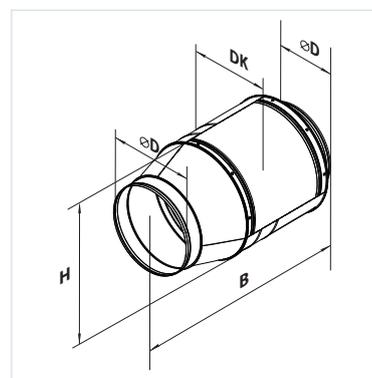


Overall dimensions:

Model	Dimensions			
	B	Ø D	DK	H
TT-MD 355-4E	685	353	605	515
TT-MD 400-4E	740	397	665	570
TT-MD 450-4E	900	447	800	705
TT-MD 500-4E	900	497	815	720
TT-MD 500-4D	900	497	815	720

ErP data

Overall efficiency	η, [%]
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m ³ /h]
Static pressure	[Pa]
Speed	[n/min ⁻¹]
Specific ratio	SR



Accessories



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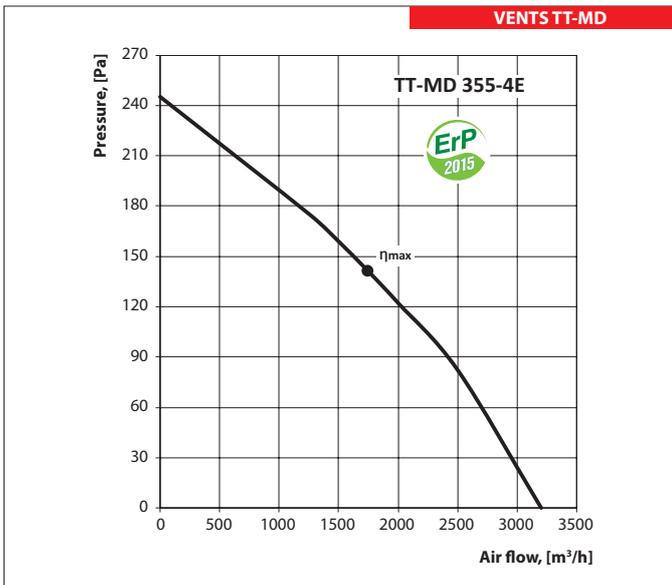
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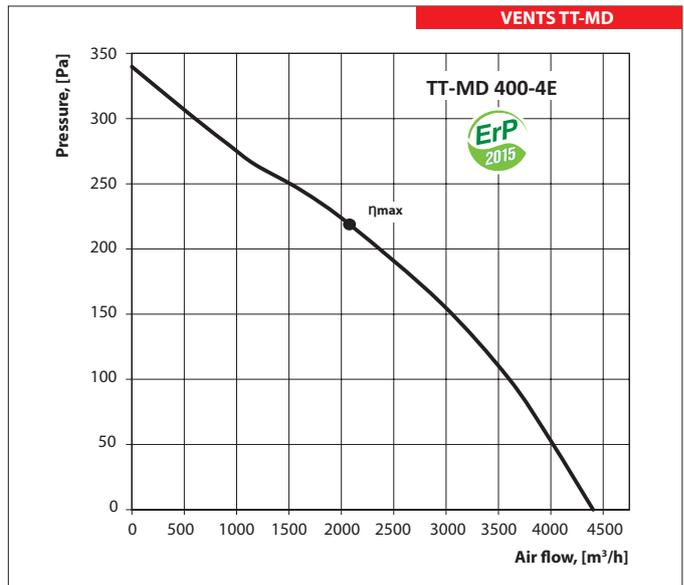
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Technical data:

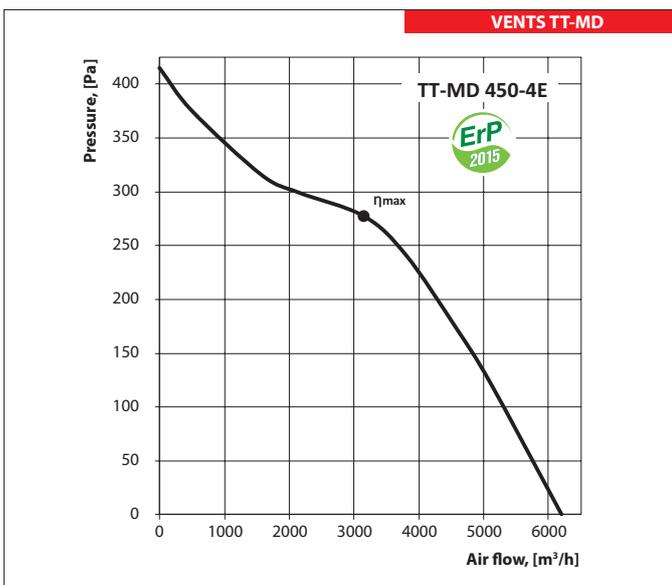
	TT-MD 355-4E	TT-MD 400-4E	TT-MD 450-4E	TT-MD 500-4E	TT-MD 500-4D
Voltage [V]	1~ 230	1~ 230	1~ 230	1~ 230	3~ 400
Power [W]	310	460	910	1450	1350
Current [A]	1,35	2	4.4	6.1	2.3
Max. air capacity [m ³ /h]	3250	4400	6200	8750	9450
RPM [min ⁻¹]	1390	1340	1330	1310	1320
Sound pressure level at 3 m distance [dB(A)]	55	57	64	67	68
Max. transported air temperature [°C]	-25 +60	-25 +60	-25 +60	-25 +60	-25 +60
Protection rating	IP X4				



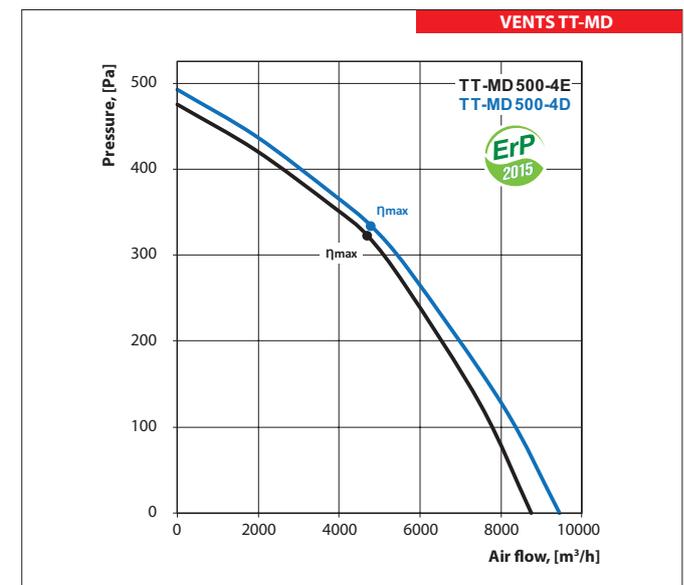
η, [%]	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
30,6	A	Static	47,7	No	0,239	1.13	1782	145	1410	1



η, [%]	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
33,2	A	Static	48	No	0,389	1.7	2091	218	1360	1



η, [%]	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
35,8	A	Static	47,9	No	0,693	3.45	3157	277	1380	1



η, [%]	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
36,3	A	Static	46	No	1,185	5.1	4710	322	1350	1

η, [%]	MC	EC	N	VSD	[kW]	[A]	[m ³ /h]	[Pa]	[RPM]	SR
39,4	A	Static	49,3	No	1,15	2,2	4805	333	1380	1