Turbo EC

Inline mixed-flow fans

Use

- Supply and extract ventilation systems installed in various premises.
- Mounting in kitchens, bathrooms and other humid premises.
- Ventilation air ducts requiring high pressure, powerful air flow and low noise level.
- Compatible with ∅ 4", 5", 6", 8", 10" round air ducts.
- Compact size for limited spaces.

Air flow: up to 745 CFM

Power: from 25.9 W

Noise level: from 1.7 Sones

Design

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

Mounting

- 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.

Accessories

Silencers	Filter boxes		Electric heaters	Water heaters	Backdraft air dampers	Air dampers	Clamps	Speed controllers
								
SD	KFBK	KFBT	EKH	WKH	VRV	VK / VKA	K	CDT E/0-10

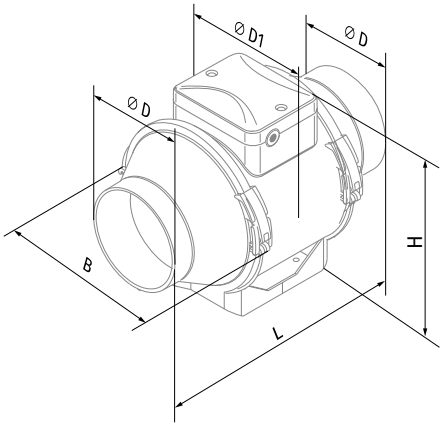
Options

- **FR:** built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with IEC plug as a standard.
- **G:** smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 13 ft cable. The fan is supplied with a pre-wired power cable with IEC plug as a standard.
- **GI:** smooth speed controller with an electronic thermostat and a temperature sensor integrated into the air duct. The fan is supplied with a pre-wired power cable with IEC plug as a standard.

Designation key			
Series	**Motor type**	**Duct diameter [mm]**	**Options**
Turbo	**EC:** electronically commutated motor	**100; 125; 150; 200; 250**	**FR:** built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with IEC plug as a standard. **G:** smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 13 ft cable. The fan is supplied with a pre-wired cable with IEC plug as a standard. **GI:** smooth speed controller with an electronic thermostat and a temperature sensor integrated into the air duct. The fan is supplied with a pre-wired power cable with IEC plug as a standard.

Dimensions [in]

Model	Duct dia	∅ D	B	H	L	Weight [lb]
Turbo EC 100	4"	3 3/4"	6 9/16"	7 1/2"	9 11/16"	3.1
Turbo EC 125	5"	4 13/16"	6 9/16"	7 1/2"	9 11/16"	3.1
Turbo EC 150	6"	5 3/4"	8 3/4"	9 13/16"	11 5/8"	6.6
Turbo EC 200	8"	7 13/16"	9 7/16"	10 1/4"	11 5/8"	14.1
Turbo EC 250	10"	9 3/4"	11 5/16"	12 11/16"	15 1/16"	18.3

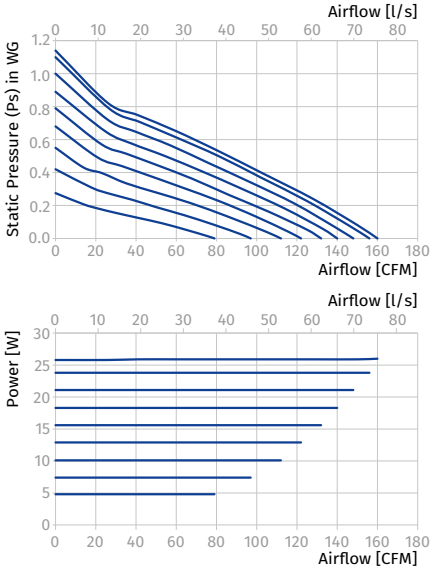


Technical data

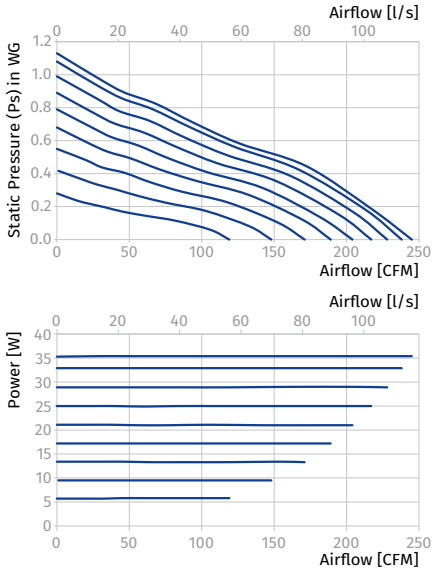
Model	Duct dia	Energy Star compliance	RPM*	Sones	Watts*	Amps*	CFM*	CFM vs. Static Pressure (Ps) in WG 10 V signal										Max Ps, in WG	Volts
								0"	0.125"	0.2"	0.25"	0.375"	0.5"	0.75"	1"	1.25"	1.5"		
Turbo EC 100	4"	yes	2940	1.7	25.9	0.42	134	160	145	134	127	106	87	42	11	–	–	1.14	120
Turbo EC 125	5"	yes	2928	1.8	35.4	0.54	215	245	227	215	207	187	158	85	25	–	–	1.13	120
Turbo EC 150	6"	yes	2800	2.6	52.4	0.54	318	343	328	318	311	293	272	222	143	66	8	1.53	120
Turbo EC 200	8"	yes	2750	3.2	121.3	1.76	560	590	573	560	550	533	512	468	405	303	180	2.05	120
Turbo EC 250	10"	yes	2568	3.2	170.6	2.26	680	745	705	680	663	625	590	505	415	308	240	2.50	120

* The parameters RPM, Watts are indicated at 0.2 in WG static pressure.

TURBO EC 100



TURBO EC 125



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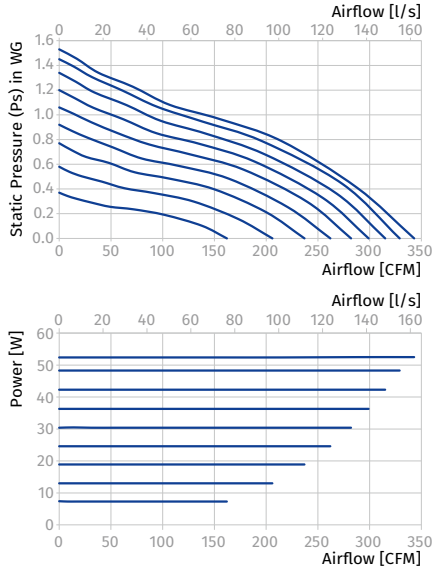
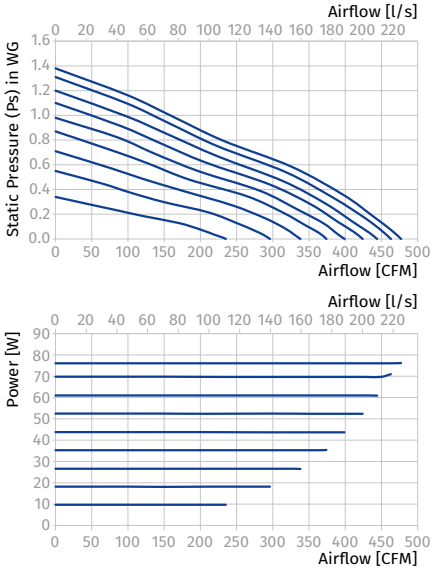


TURBO EC 200



TURBO EC 250