Series VENTS Boost-I EC



Mixed-type duct fans with EC motors in casings with noise and heat insulation.
Air flow up to **1750 m³/h**.

Application

The new VENTS Boost-I EC duct fan series is equipped with a special noise-insulated casing which ensures silent operation and excellent aerodynamic characteristics. Compatible with Ø200 up to Ø250 mm air ducts.

The VENTS Boost-I 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.

Several fans can be integrated into a single computer-controlled system with sensor feedback combined with speed control across the entire dynamic range. Application: Combined supply and exhaust ventilation systems of various commercial and industrial spaces with stringent noise requirements (such as libraries, conference halls, classrooms, kindergarten playrooms etc.).

Design

The external casing is made of galvanized steel. Sound and heat insulation is provided by 30 mm acoustic material. Due to the improved mixed type impeller, which is a hybrid of axial and centrifugal impeller, the Boost-I EC has low power consumption and noise level with high performance.

The specially designed diffuser, impeller and airflow rectifier at the fan outlet provide smooth air flow distribution and enable the best combination of high air flow, increased pressure and low noise.

The fan casing is equipped with an airtight terminal box for connection to power mains.



Motor

The fans are equipped with highly efficient electronically commutated EC motors. These state-of-the-art motors are the most advanced solution in energy efficiency today. EC motors are characterised with high performance and optimum control across the entire speed range. In addition to that, the efficiency of the electronically commutated motor reaches very impressive levels of up to 90 %.

Speed control

The fan is controlled using a 0-10 V control signal. When the control signal value changes, the EC fan changes its rotation speed and provides air flow required for the ventilation system.

Several fans can be integrated into a single computer-driven control system. Custom designed software provides high accuracy control of the fans integrated into a network. The computer display shows all the system parameters and the operation mode can be set individually for each fan in the network.

Mounting

The fans are designed to be used with round air ducts. The fan casing has mounting brackets for convenient installation onto the ceiling. The ducts can be fitted at any angle relative to the fan axis. Make sure to provide sufficient maintenance access during fan installation. 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.

Designation key

| Series | Air ducts diameter | Motor type | Options |
|--|--------------------|---|---|
| VENTS BOOST-I : mixed-type duct fan in casings with noise and heat insulation | 200; 250 | EC : synchronous electronically commutated motor | U : speed controller with an electronic thermostat and a temperature sensor integrated inside an air duct. |
| | | | Temperature-based operation logic. Un: speed controller with an electronic thermostat and a temperature sensor fixed on a 4-meter cable. Temperature-based operation logic. R: power cord with a mains plug. P: integrated smooth speed controller. |

Accessories



















Silencer Filters

Heaters

Backdraft Air shutter

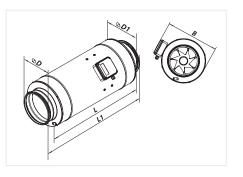
Clamps

Speed



Fan overall dimensions

| T | Dimensions [mm] | | | | Weight | |
|------------------------------|-----------------|-----|-----|-----|--------|------|
| Туре | ØD | ØD1 | L | L1 | В | [kg] |
| Boost-I 200 EC (U, Un, R, P) | 199 | 281 | 601 | 739 | 339 | 8.2 |
| Boost-I 250 EC (U, Un, R, P) | 249 | 337 | 601 | 739 | 389 | 9.5 |



Technical data

| | Boost-I 200 EC | Boost-I 250 EC |
|----------------------------------|----------------|----------------|
| Voltage [V/50 (60) Hz] | 1~230 | 1~230 |
| Power [W] | 121 | 168 |
| Current [A] | 0.96 | 1.34 |
| Max. air flow [m³/h] | 1210 | 1750 |
| Max. air flow [l/s] | 336 | 486 |
| RPM [min ⁻¹] | 3100 | 3282 |
| Noise level at 3m [dBA] | 47 | 48 |
| Transported air temperature [°C] | -25+55 | -25+55 |
| Protection rating | IPX4 | IPX4 |
| Motor protection rating | IP44 | IP44 |

