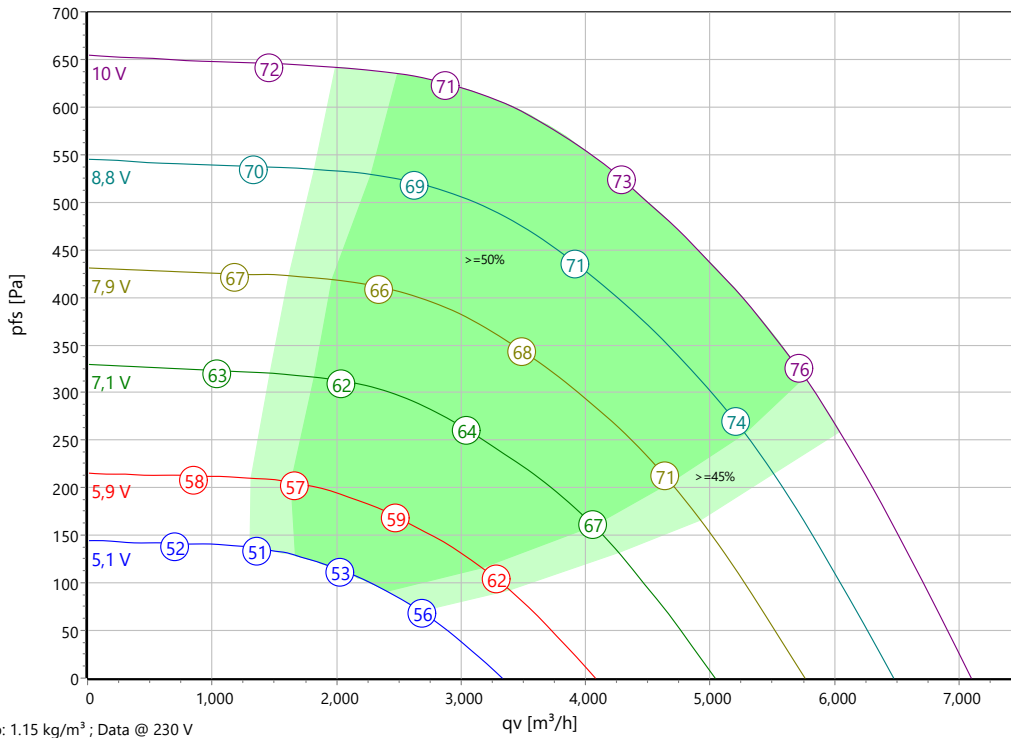




Type: **GKHM 450-CIB.125.5FA**  
 Module  
 Part no.: N88-45312



**Curve:**



**ErP-Data:**

| (EU) Nr. 327/2011 (Lot11) |       |                   |
|---------------------------|-------|-------------------|
| Q <sub>v</sub>            | 4539  | m <sup>3</sup> /h |
| P <sub>fs</sub>           | 517   | Pa                |
| η <sub>fs</sub>           | 61.3  | %                 |
| P <sub>ed</sub>           | 1.15  | kW                |
| n                         | 1480  | r/min             |
| N                         | 71    | N                 |
| v                         | 6.304 | m/s               |

**Nominal Data:**

| U [V]     | f [Hz] | Data @ [V] | P <sub>ed</sub> [kW] | I <sub>N</sub> [A] | n <sub>N</sub> [r/min] | t <sub>R</sub> [°C] | k <sub>10</sub> [m <sup>2</sup> /h] | Eff.-Rating | IP    | m [kg] |
|-----------|--------|------------|----------------------|--------------------|------------------------|---------------------|-------------------------------------|-------------|-------|--------|
| 1~200-277 | 50/60  | 230        | 1.15                 | 5.1                | 1480                   | -25 .. +40          | 171                                 | IE4         | IP 54 | 31.7   |

**Sound Data:**

| Frequency          | Σ |   | 125Hz | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | Distances          | 1 m | 4 m |
|--------------------|---|---|-------|-------|-------|------|------|------|------|--------------------|-----|-----|
| LwA(A,in) [dB(A)]  |   | - | -19   | -13   | -8    | -5   | -6   | -8   | -13  | LpA(A,in) [dB(A)]  | -7  | -17 |
| LwA(A,out) [dB(A)] | 7 | - | -15   | -11   | -7    | -4   | -8   | -12  | -18  | LpA(A,out) [dB(A)] | 0   | -10 |

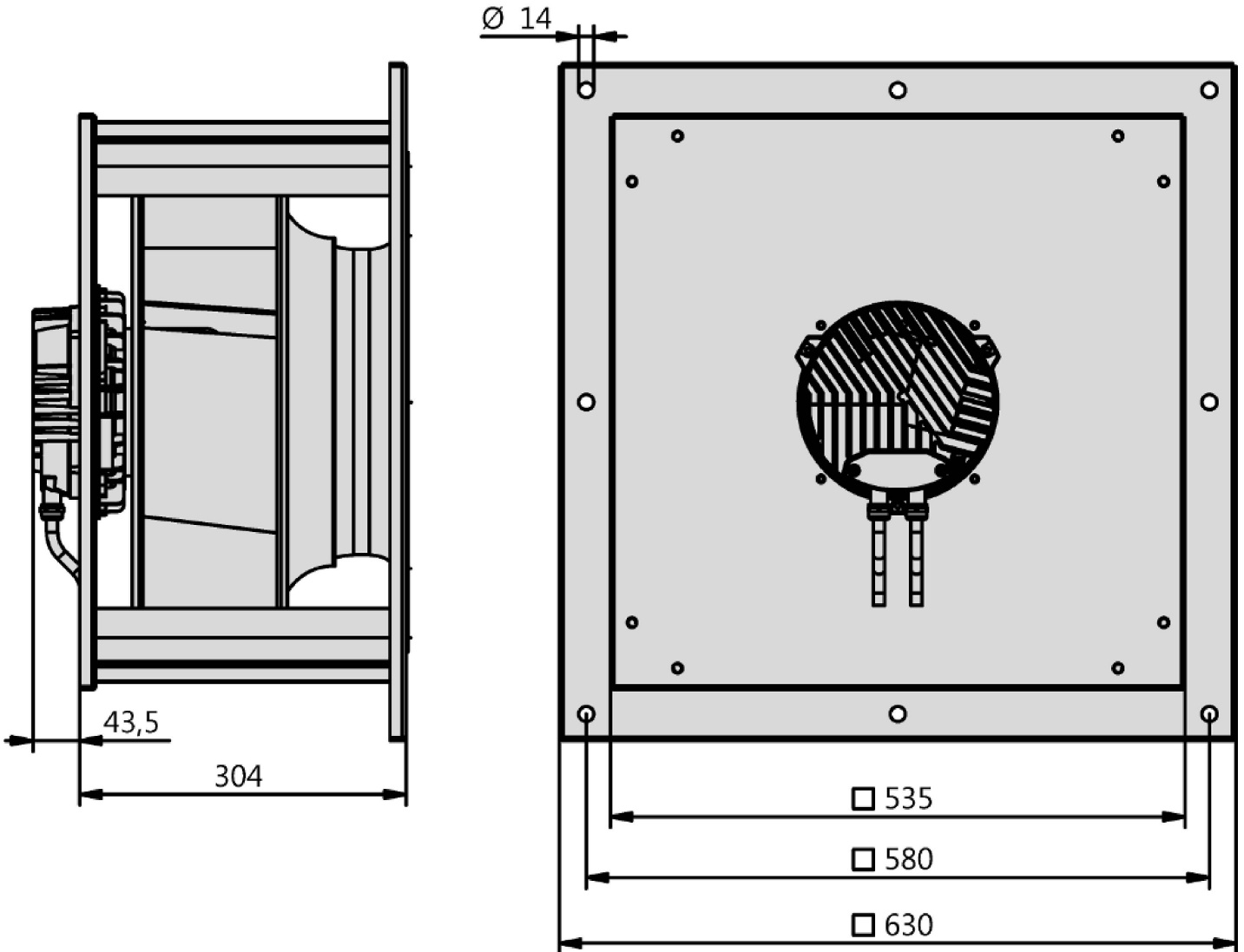
Attention: Start-up times up to ~ 20 - 60 sec. depending on motor-impeller combination, motor load and number of operation.  
 Please note during project planning (e.g. for condenser units in refrigeration circuits)!



Type: **GKHM 450-CIB.125.5FA**

Module

Part no.: N88-45312

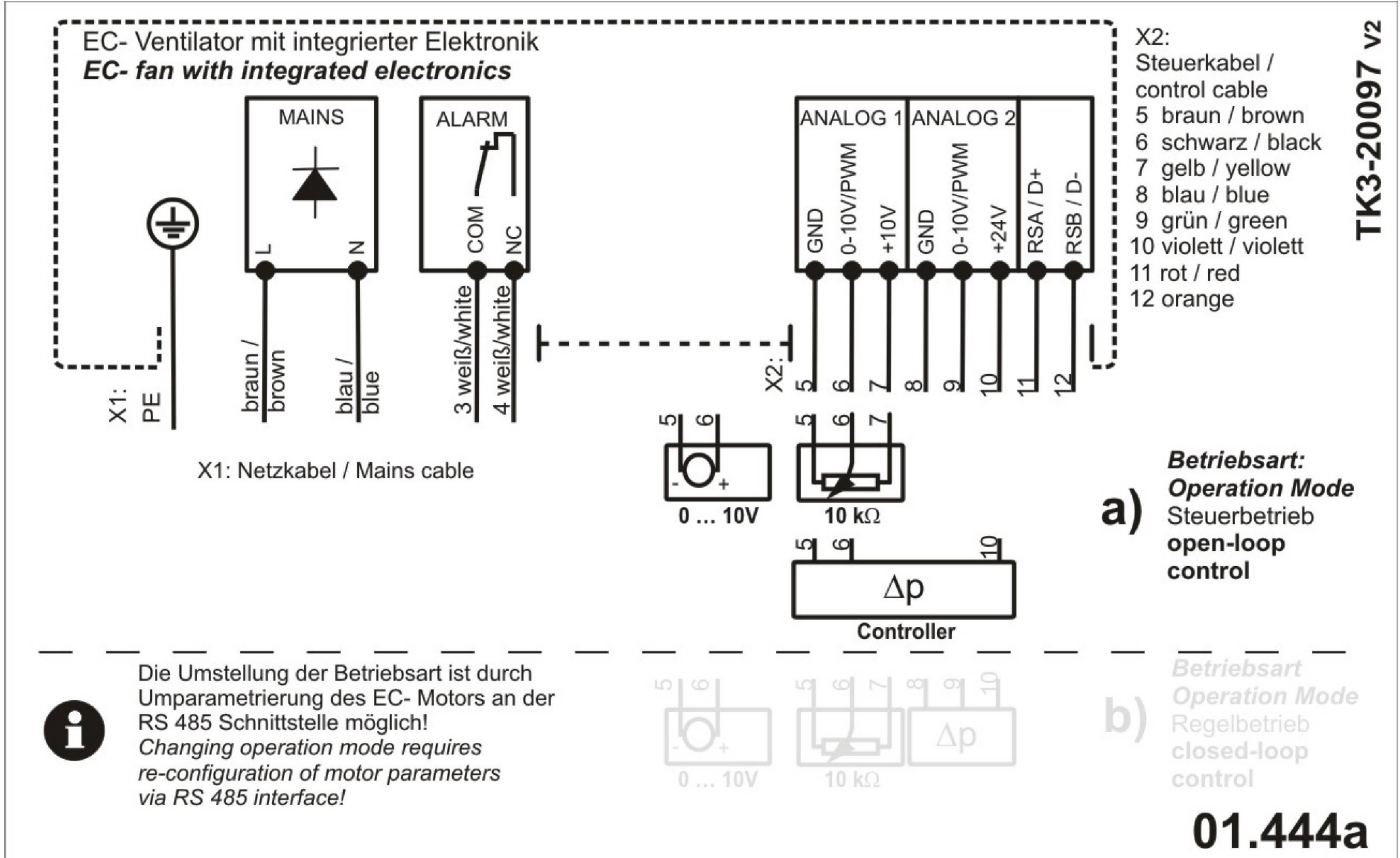




Type: **GKHM 450-CIB.125.5FA**

Module

Part no.: N88-45312

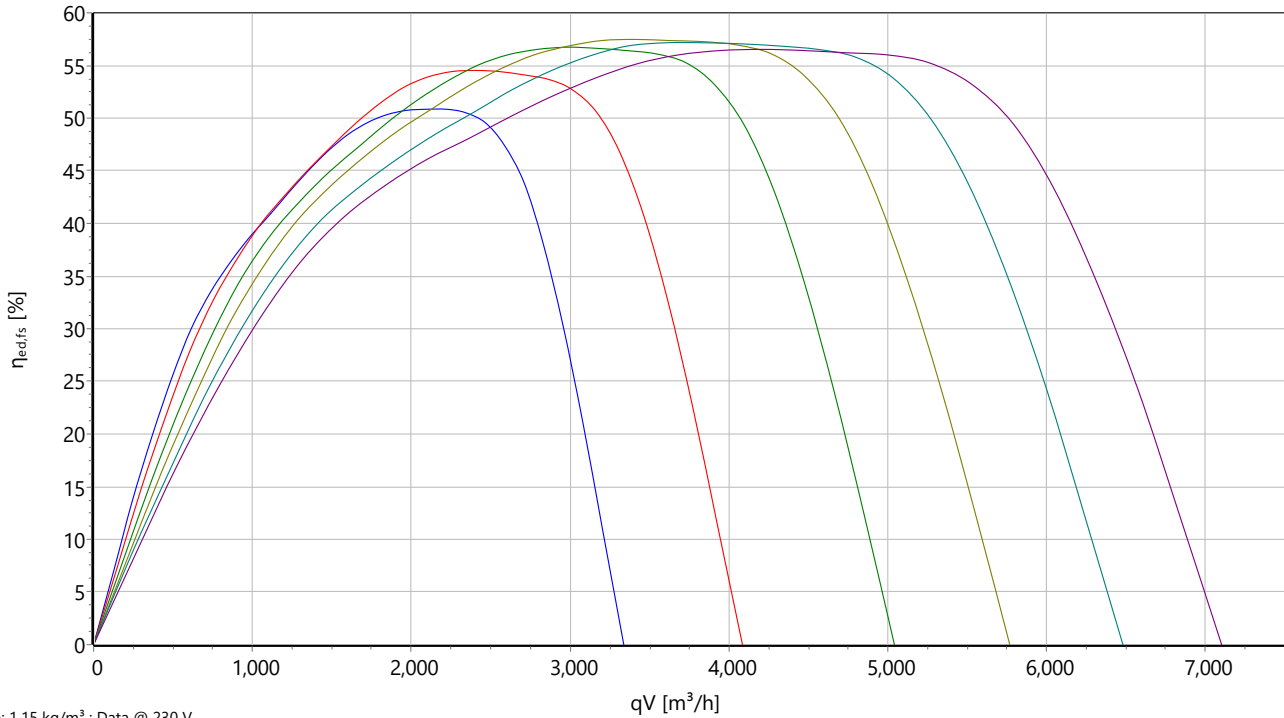




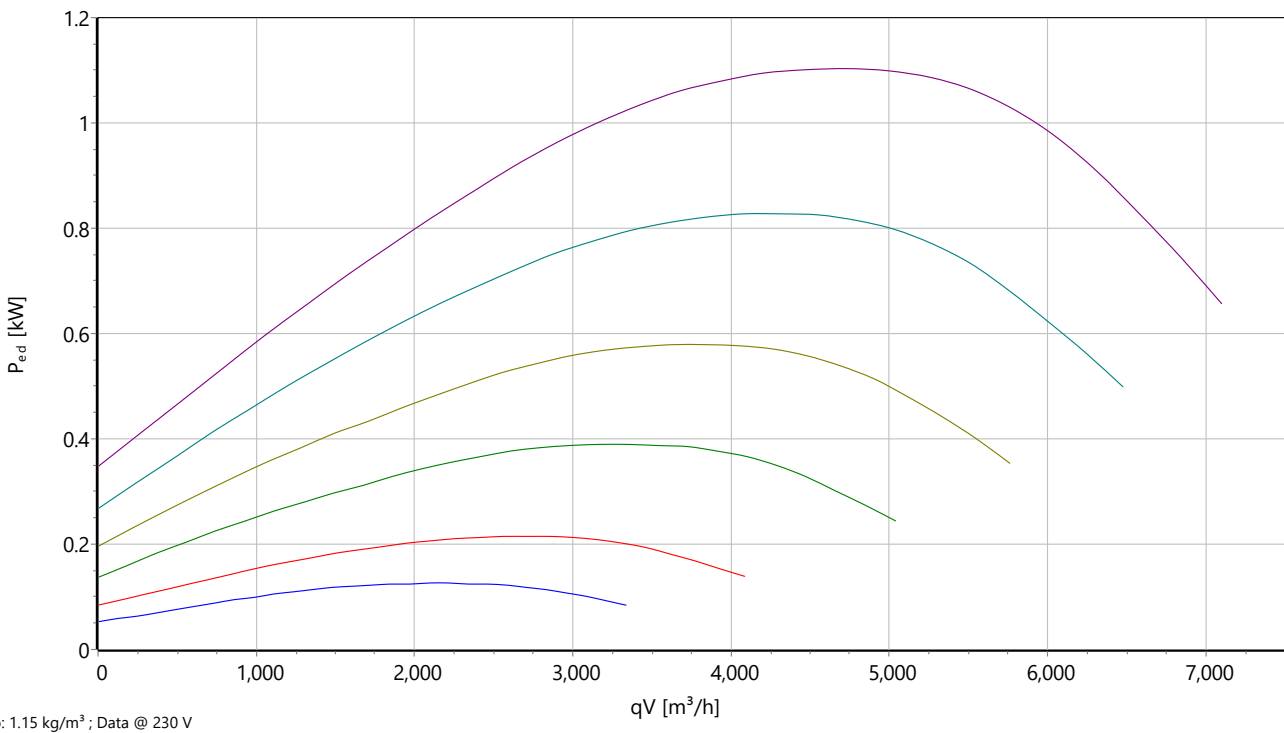
Type: **GKHM 450-CIB.125.5FA**  
 Module  
 Part no.: N88-45312



**stat. Efficiency**



**Input power**

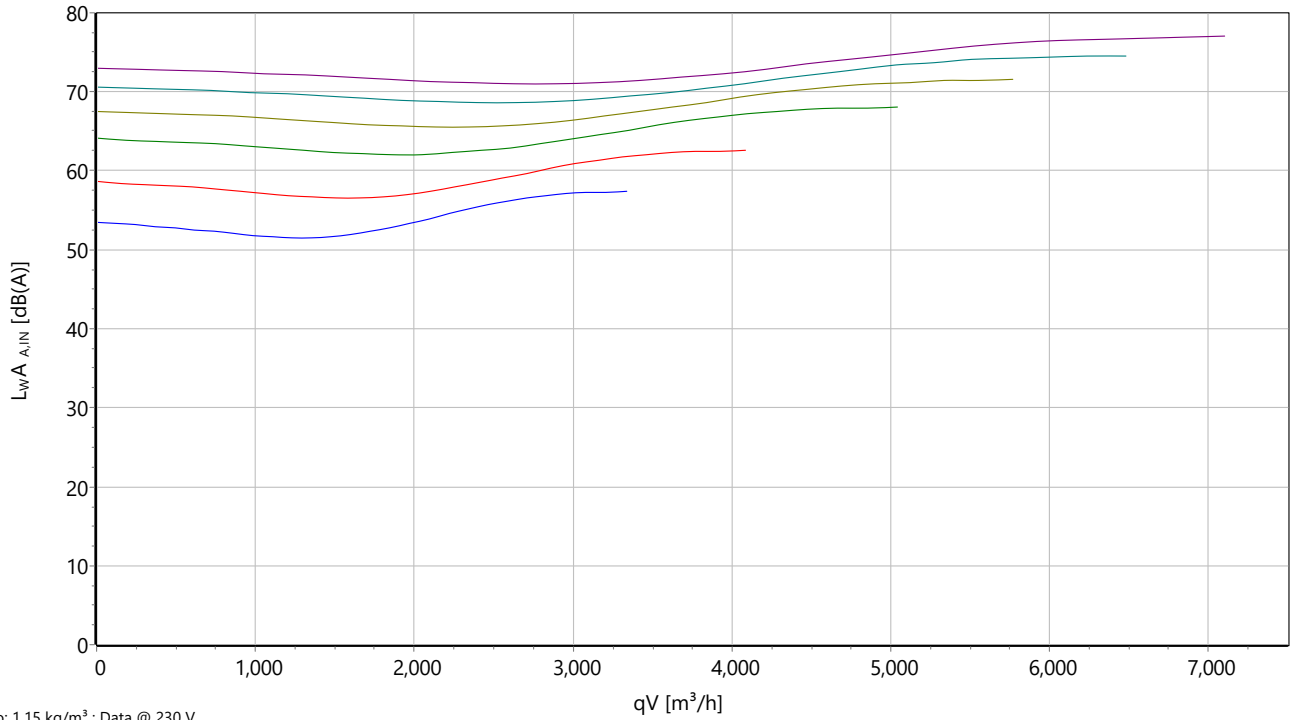




Type: **GKHM 450-CIB.125.5FA**  
 Module  
 Part no.: N88-45312



Sound power



## GKH... - Plug Fan

with EC-Motor and B-Impeller

- pressure orientated high performance impeller
- speed infinitely adjustable
- fast start-up (due to pre-configured system)
- different mechanical configurations available
- maintenance free operation through lifetime lubricated ball bearings
- in compliance with ERP directive (327/2011)
- high operating efficiency due to EC drives
- constant high degree of efficiency (even under partial load)



### Description:

Rosenberg EC-Plug fans combined with electronically commutated motors (EC -motors), form a very compact, efficient and optimized fan unit. They impress with low installation depth and a simple installation. Fast start-up is ensured because of well-integrated components.

### Applications:

Air Handling Units / Wind Power / Railway\* / Compressors / Transformer cooling

\*Due to the diverse requirements in rail technology, the usability must be agreed with Rosenberg in advance ([railway@rosenberg-gmbh.com](mailto:railway@rosenberg-gmbh.com)).

### Mechanical Configuration:

Plug fans, in dependence of the fan type, are available in different mechanical designs. Mounting either with horizontal or vertical motor shaft.

- \_KHR, RRE = Motorized Impeller (Inlet Cone Accessory)
- \_KHM, RRM = Fan Module type "Module" cone and supporting frame included
- \_KHS = Fan Module type "Spider" cone and supporting frame included
- \_KHB = Fan Module type "Mounting Stand" cone and supporting frame included

### Impeller:

Impeller made of aluminum (AlMg3) with 7 backward curved blades and efficiency optimized circumferential diffusor. Sound optimized. Pressure orientated behaviour.

Product range: 250, 280, 315, 355, 400, 450, 500, 560, 630 and 710 mm.

### Motors:

The EC motors used are characterized by a very high degree of efficiency, even in partial load ranges, as well as good controlling and regulation behavior. They are easy to connect, individually preconfigured, compact in design and show a high power density. The implementation of additional functions (e.g. air flow and pressure control) is possible. All motors are speed controllable in the range 0 -100%.

**Integrated Motor Protection:**

The motor protection is integrated with Rosenberg EC motors. All necessary parameters, such as temperature, blocked rotor, over and undervoltage and power are continuously checked and monitored via an intelligent failure management.

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**Electrical connection:**

**1~phase Variants:**

The electrical connection is made via cables from the motor.

**3~phase Variants:**

The electrical connection is made via cable glands from the integrated terminal box of the motor.

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**Air volume control:**

For more information see accessories.

**Infinitely variable controlling:**

via Potentiometer or external set point

**Constant-Air Flow-Control:**

via pressure controller in combination with air flow measuring points integrated in the inlet cone

**Constant-Pressure-Control:**

via pressure controller

**Constant-Temperature-Control:**

via temperature controller

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**Important notes:**

**Air performance curves:**

The air performance curves have been established using the intake test method in the test chamber according to DIN EN ISO 5801. They show pressure increase as a function of the volume flow. Performance curves were recorded in installation type A.

**Sound levels:**

The tests and their performance curves were conducted according to DIN 45635 part 38 or. ISO 133347 -3 and DIN EN ISO 3744/ 3745 in accordance with the envelope surface method.

**Erp-Information:**

Rosenberg fans have a specific (pressure-) ratio < 1,05 (pressure < 5000 Pa).

### **Service life:**

For maximum service life of Rosenberg products please beware of the maintenance hints on the manual for each product type.

### **Recycling and disposal:**

For recycling and disposal of Rosenberg products comply with applicable locally requirements and regulations.