

Series
VENTS VPA



LCD control panel

Supply units with the air capacity up to **1520 m³/h** in the compact sound- and heat-insulated casing with electric heating battery.

■ **Description**

The fan unit provides filtration, heating and supply of fresh air to premises with the air capacity from 200 up to 1500 m³/h. All the models are compatible with 100, 125, 150, 200, 250, 315 mm round air ducts.

■ **Casing**

The casing is made of aluzink with internal heat- and sound-insulating 25 mm layer of mineral wool.

■ **Filter**

G4 filter ensures high degree of supply air purification.

■ **Heater**

Electric heating battery is designed for supply air heating during winter and off-season time.

■ **Fan**

Centrifugal fan with backward-curved blades and built-in thermal overheating protection with automatic restart. High-powered motor modification (VPA-1) is available for some standard sizes. The fan motor and impeller are dynamically balanced in two planes. The motor ball bearings are maintenance-free and are designed for at least 40 000 hours service life.

■ **Control and automation**

The supply unit is available in two modifications:

1. No control. Customer-defined and customer-selected automation system.
2. Integrated control and automation system to ensure control of air capacity, setting temperature of supply air, filter clogging degree etc. In addition the automation system provides overheating protection of heating elements. The remote unit control is effected by means of the external control unit with 10 m wire supplied as a standard.

■ **Control and protection functions**

- ▶ remote switching the unit on and off
- ▶ setting of required supply air temperature and maintaining selected temperature mode by means of the control panel (electric air heater control by means of the optosymistor)
- ▶ fan speed control by means of the control panel (3 speed modes)
- ▶ working-out of the required patterns during the unit switching on and off
- ▶ the unit daily or week timer operation
- ▶ active overheating protection of heating elements
- ▶ disabling electric air heating battery operation when the motor is not running
- ▶ electric heater overheating protection by means of two thermostats
- ▶ filter clogging control through the differential pressure sensor

■ **Mounting**

Air supply unit can be mounted on the floor, attached to a ceiling with a seat angle with anti-vibration mounts or attached to a wall by means of the brackets. The unit can be mounted either in service spaces (balcony, storage room, underground floor, roof space etc.) or in the main space by placing the unit above the suspended ceiling or in the pocket. The unit can be mounted in any position except for the vertical one with vertical air downstream because tubular heating elements are not allowed under the fan. Free access to the unit shall be provided for maintenance and filter cleaning.

Designation key: _____

| Series | | Flange diameter, mm | Electric heater power [kW] | Phase |
|------------------|------------------------|------------------------------|-------------------------------|---------------------------------------|
| VENTS VPA | 1 - high-powered motor | 100; 125; 150; 200; 250; 315 | 1,8; 2,4; 3,4; 3,6; 5,1; 6; 9 | 1 – single phase; 3 – three phases |

Accessories



page 240 page 240 page 294 page 295 page 296 page 305

Offered options to the units



page 161

Technical data:

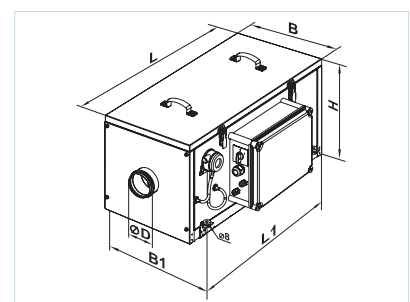
| | VPA 100- 1,8-1 | VPA 125- 2,4-1 | VPA 150- 2,4-1 | VPA 150- 3,4-1 | VPA 150- 5,1-3 | VPA 150- 6,0-3 | VPA 200- 3,4-1 | VPA 200- 5,1-3 | VPA 200- 6,0-3 |
|---------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Unit supply voltage [V / 50 Hz] | 1~ 230 | | 1~ 230 | | 3~ 400 | | 1~ 230 | 3~ 400 | |
| Maximum fan power [W] | 73 | 75 | 98 | | | 193 | | | |
| Fan current [A] | 0,32 | 0,33 | 0,43 | | | 0,84 | | | |
| Electric heater capacity [kW] | 1,8 | 2,4 | 2,4 | 3,4 | 5,1 | 6,0 | 3,4 | 5,1 | 6,0 |
| Electric heater current [A] | 7,8 | 10,4 | 10,4 | 14,8 | 7,4 | 8,7 | 14,8 | 7,4 | 8,7 |
| Number of electrical heating elements | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 |
| Total power of the unit [kW] | 1,873 | 2,475 | 2,498 | 3,498 | 5,198 | 6,098 | 3,593 | 5,293 | 6,193 |
| Total current of the unit [A] | 8,12 | 10,73 | 10,83 | 15,23 | 7,83 | 9,13 | 15,64 | 8,24 | 9,54 |
| Air capacity [m³/h] | 190 | 285 | 425 | | | 810 | | | |
| RPM | 2830 | 2800 | 2705 | | | 2780 | | | |
| Noise level at 3m [dB[A]] | 27 | 28 | 29 | | | 30 | | | |
| Operating temperature [°C] | -25 up to +55 | | -25 up to +55 | | | -25 up to +45 | | | |
| Casing material | aluzink | | aluzink | | | aluzink | | | |
| Insulation | 25 mm mineral wool | | 25 mm mineral wool | | | 25 mm mineral wool | | | |
| Filter | G4 | | G4 | | | G4 | | | |
| Connected air duct size [mm] | 100 | 125 | 150 | | | 200 | | | |
| Weight, [kg] | 50 | | 50 | | | 52 | | | |

Technical data:

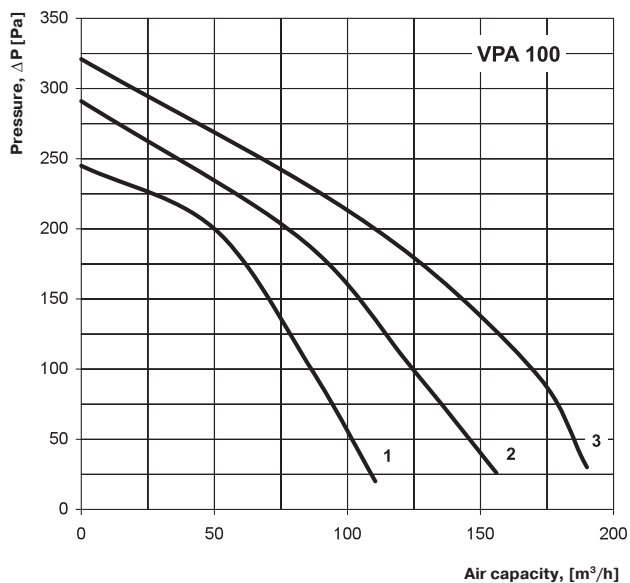
| | VPA 250- 3,6-3 | VPA 250- 6,0-3 | VPA 250- 9,0-3 | VPA 315- 6,0-3 | VPA 315- 9,0-3 | VPA-1 315- 6,0-3 | VPA-1 315- 9,0-3 |
|---------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|------------------------|
| Unit supply voltage [V / 50 Hz] | 3~ 400 | | | 3~ 400 | | | |
| Maximum fan power [W] | 194 | | | 171 | | 296 | |
| Fan current [A] | 0,85 | | | 0,77 | | 1,34 | |
| Electric heater capacity [kW] | 3,6 | 6,0 | 9,0 | 6,0 | 9,0 | 6,0 | 9,0 |
| Electric heater current [A] | 5,3 | 8,7 | 13,0 | 8,7 | 13,0 | 8,7 | 13,0 |
| Number of electrical heating elements | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total power of the unit [kW] | 3,794 | 6,194 | 9,194 | 6,171 | 9,171 | 6,296 | 9,296 |
| Total current of the unit [A] | 6,15 | 9,55 | 13,85 | 9,47 | 13,77 | 10,04 | 14,34 |
| Air capacity [m³/h] | 990 | | | 1190 | | 1520 | |
| RPM | 2790 | | | 2600 | | 2720 | |
| Noise level at 3m [dB[A]] | 30 | | | 30 | | 30 | |
| Operating temperature [°C] | -25 up to +50 | | | -25 up to +50 | | -25 up to +45 | |
| Casing material | aluzink | | | aluzink | | | |
| Insulation | 25 mm mineral wool | | | 25 mm mineral wool | | | |
| Filter | G4 | | | G4 | | | |
| Connected air duct size [mm] | 250 | | | 315 | | | |
| Weight, [kg] | 52 | | | 62 | | | |

Unit overall dimensions:

| Type | Dimensions, [mm] | | | | | |
|---------|------------------|-----|-------|-----|-----|-----|
| | ∅D | B | B1 | H | L | L1 |
| VPA 100 | 99 | 382 | 421,5 | 408 | 800 | 647 |
| VPA 125 | 124 | 382 | 421,5 | 408 | 800 | 647 |
| VPA 150 | 149 | 455 | 496,5 | 438 | 800 | 647 |
| VPA 200 | 199 | 487 | 526,5 | 513 | 835 | 684 |
| VPA 250 | 249 | 487 | 526,5 | 513 | 835 | 684 |
| VPA 315 | 314 | 527 | 566,5 | 548 | 900 | 750 |

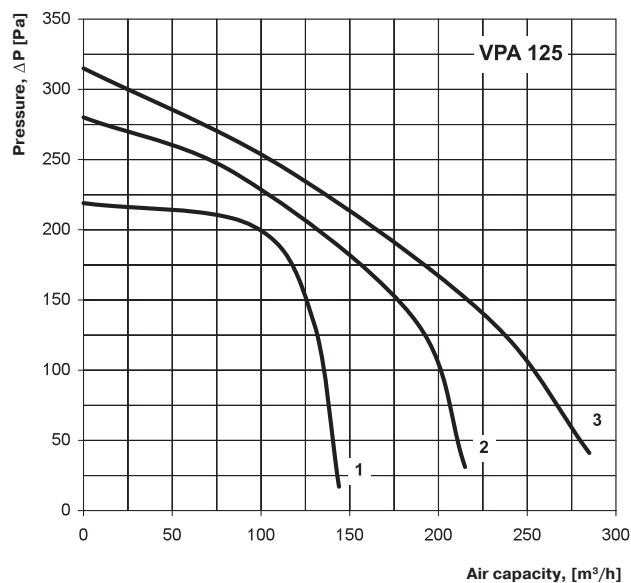


VENTS VPA



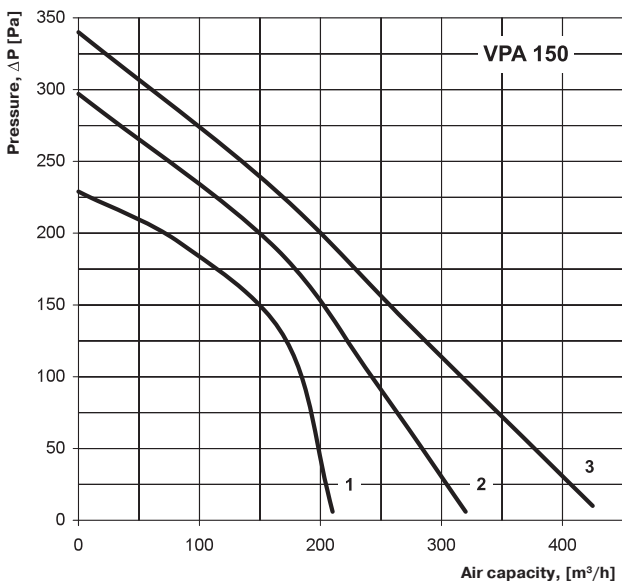
| Sound-power level | Hz | Octave-frequency band [Hz] | | | | | | | | |
|-------------------------|-------|----------------------------|----|-----|-----|-----|------|------|------|------|
| | | Tot. | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| L_{WA} to inlet | dB(A) | 50 | 30 | 47 | 47 | 35 | 40 | 37 | 28 | 16 |
| L_{WA} to outlet | dB(A) | 58 | 39 | 50 | 56 | 49 | 45 | 42 | 33 | 23 |
| L_{WA} to environment | dB(A) | 31 | 5 | 21 | 28 | 24 | 19 | 13 | 4 | 0 |

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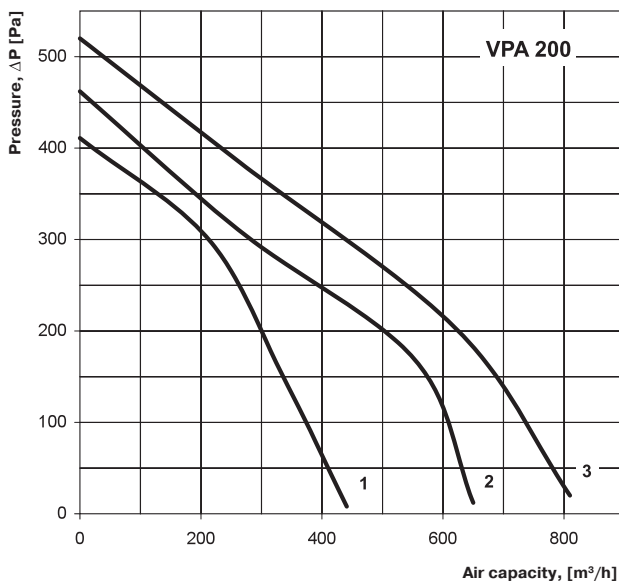
| Sound-power level | Hz | Octave-frequency band [Hz] | | | | | | | | |
|-------------------------|-------|----------------------------|----|-----|-----|-----|------|------|------|------|
| | | Tot. | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| L_{WA} to inlet | dB(A) | 52 | 31 | 48 | 48 | 36 | 41 | 40 | 32 | 18 |
| L_{WA} to outlet | dB(A) | 62 | 40 | 53 | 56 | 52 | 47 | 47 | 37 | 23 |
| L_{WA} to environment | dB(A) | 33 | 9 | 24 | 33 | 26 | 17 | 16 | 3 | 4 |

VENTS VPA

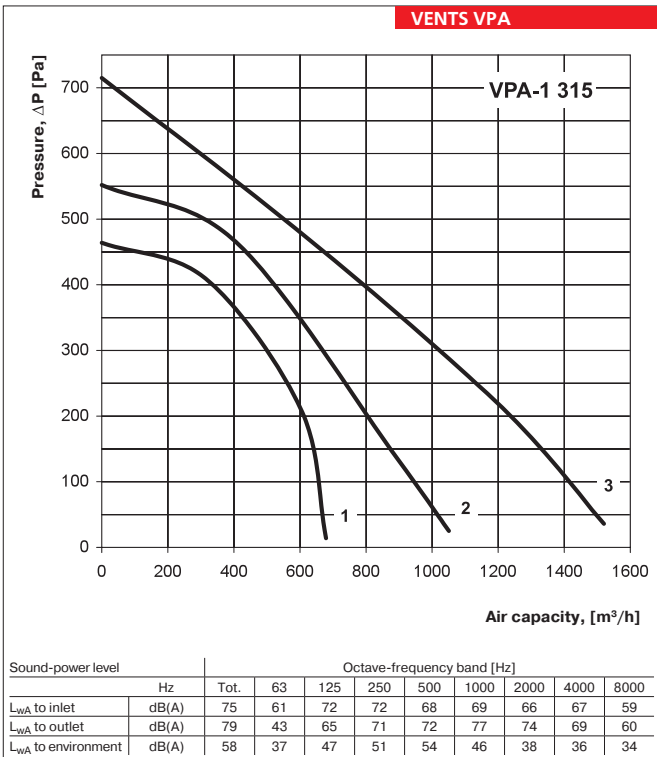
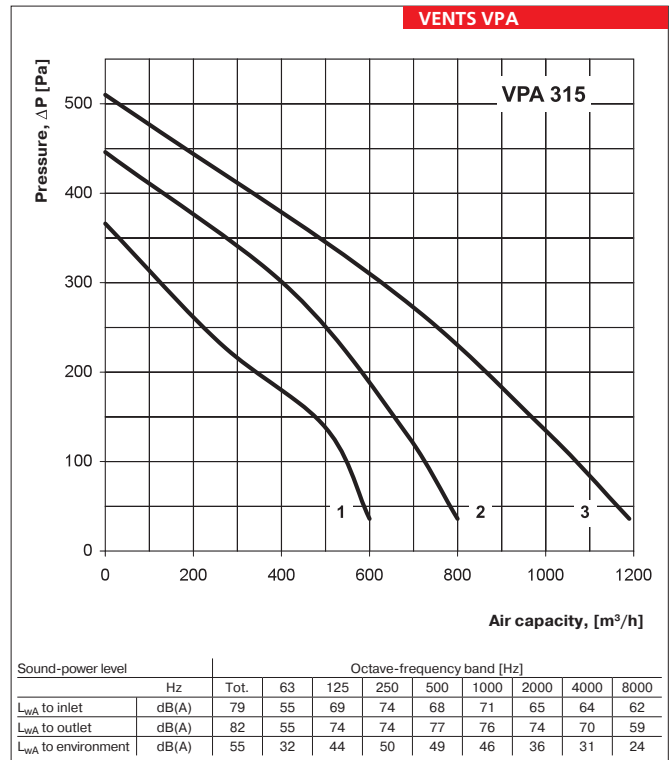
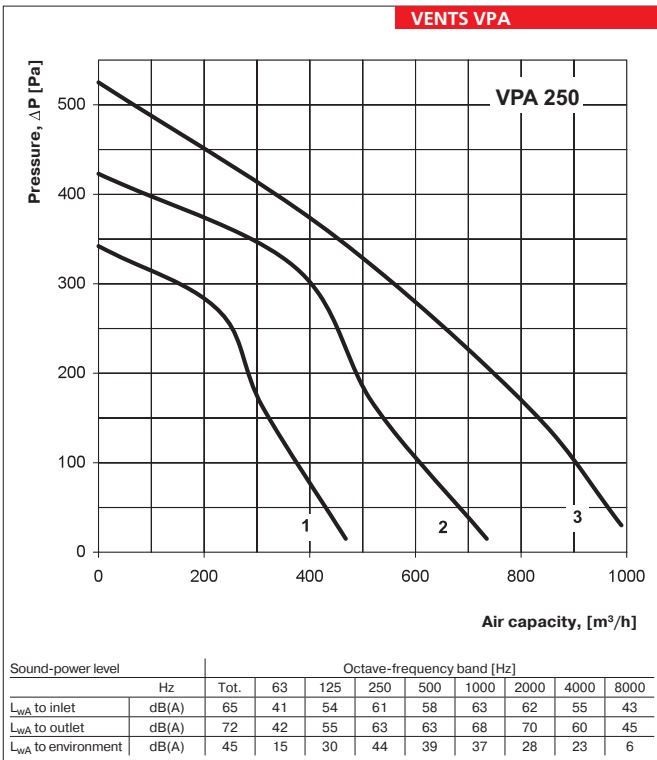


| Sound-power level | Hz | Octave-frequency band [Hz] | | | | | | | | |
|-------------------------|-------|----------------------------|----|-----|-----|-----|------|------|------|------|
| | | Tot. | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| L_{WA} to inlet | dB(A) | 65 | 37 | 53 | 63 | 50 | 53 | 53 | 45 | 30 |
| L_{WA} to outlet | dB(A) | 63 | 22 | 43 | 53 | 52 | 57 | 57 | 46 | 36 |
| L_{WA} to environment | dB(A) | 41 | 14 | 34 | 39 | 19 | 27 | 19 | 7 | 0 |

VENTS VPA



| Sound-power level | Hz | Octave-frequency band [Hz] | | | | | | | | |
|-------------------------|-------|----------------------------|----|-----|-----|-----|------|------|------|------|
| | | Tot. | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| L_{WA} to inlet | dB(A) | 65 | 41 | 58 | 59 | 56 | 60 | 62 | 56 | 41 |
| L_{WA} to outlet | dB(A) | 71 | 46 | 57 | 63 | 64 | 66 | 66 | 58 | 45 |
| L_{WA} to environment | dB(A) | 46 | 15 | 31 | 43 | 40 | 34 | 30 | 22 | 8 |



Accessories to supply units:

| Type | Replaceable filter | Filter type |
|-----------------|--------------------|--------------|
| VPA 100-1,8-1 | SF VPA 100/125 G4 | panel filter |
| VPA 125-2,4-1 | | |
| VPA 150-2,4-1 | SF VPA 150 G4 | panel filter |
| VPA 150-3,4-1 | | |
| VPA 150-5,1-3 | | |
| VPA 150-6,0-3 | | |
| VPA 200-3,4-1 | SF VPA 200/250 G4 | panel filter |
| VPA 200-5,1-3 | | |
| VPA 200-6,0-3 | | |
| VPA 250-3,6-3 | | |
| VPA 250-6,0-3 | SF VPA 315 G4 | panel filter |
| VPA 250-9,0-3 | | |
| VPA 315-6,0-3 | | |
| VPA 315-9,0-3 | SF VPA 315 G4 | panel filter |
| VPA-1 315-6,0-3 | | |
| VPA-1 315-9,0-3 | | |

SUPPLY UNIT SERIES VENTS VPA