

DV-EX Roof Fans

Explosion-proof centrifugal roof fan with vertical discharge

- Certified according to ATEX 2014/34/EU
- Sizes 315 up to 500 inclusive tilting device

[Find more details in our online catalogue](#)



Safety first

DV-EX roof fans are designed for challenging environments where explosive atmospheres can occur. Which is why they are tested according to ATEX directive 2014/34/EU – to ensure they'll perform as intended after installation.

Reliability

The casing made out of **seawater resistant aluminium** with an inside **galvanised steel frame** is hard-wearing. This makes the fan also suitable for coastal applications.

The combination of casing and motor construction ensures to minimize the need for maintenance of the fans and allows long **continuous operation**.

Performance

DV-EX could be used for zone 1 and zone 2; Field of application for gases of groups IIA, IIB and also hydrogen, temperature class T1, T2 and T3.

Features

Construction

The casing casing is manufactured from sea water resistant aluminium. The base frame is manufactured from galvanised steel and the inlet cone from copper. A powder coated bird guard manufactured from galvanised steel is integrated in the casing.

Impeller

The DV-EX fans use **radial** impeller with **backward curved blades**. These are made out of aluminium, dynamically **balanced** and paired with corresponding **external rotor** motors.

Motor

Voltage controllable, explosion proof, 3-phase external rotor motor. Separate "Ex-e" connection box available as an accessory.

Motor protection

Integrated PTC thermistors, to be connected to a motor protection device.

Control

Speed controllable by a 5-step transformer

Installation

The DVS-EX are for **outside installation**.

Technical parameters

Nominal data

| | | |
|---|-----------|------|
| Voltage (nominal) | 400 | V |
| Frequency | 50 | Hz |
| Phases | 3~ | |
| Motor circuit connection | Y | |
| Input power | 1,070 | W |
| Input power kW | 1.07 | kW |
| Input current | 2.15 | A |
| Impeller speed | 880 | rpm |
| Air flow | max 7,925 | m³/h |
| Temperature of transported air | max 40 | °C |
| Max temperature of transported air, when speed controlled | 40 | °C |

Protection/Classification

| | |
|-------------------------|---------------------------|
| Enclosure class, motor | IP44 |
| Insulation class | F |
| Explosion proof marking | II 2G Ex h IIB+H2 T3 Gb |
| Certificate | TPS 20 ATEX 085751 0007 X |

Data according to ErP

| | |
|-----------|------------------|
| ErP ready | Not ErP relevant |
|-----------|------------------|

Ambient and duct temperature

| | | |
|------------------------------|-----------|----|
| Ambient and duct temperature | -20 to 40 | °C |
|------------------------------|-----------|----|

Dimensions and weights

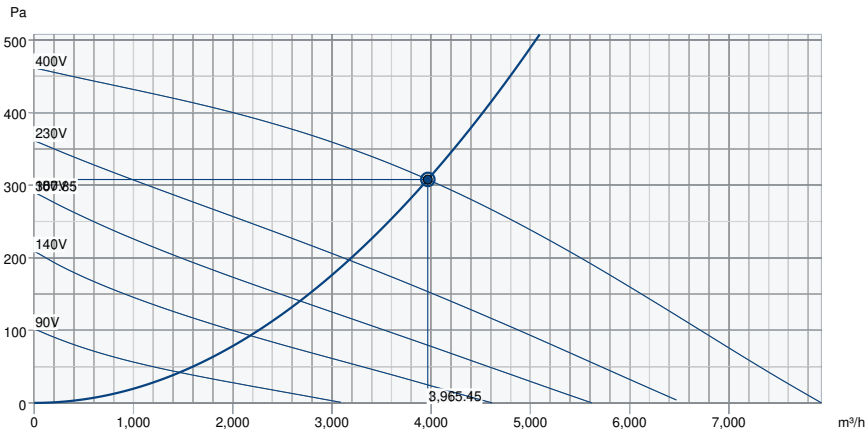
| | | |
|--------|----|----|
| Weight | 78 | kg |
|--------|----|----|

Others

| | |
|------------|----|
| Motor type | AC |
|------------|----|

Performance

Performance curve

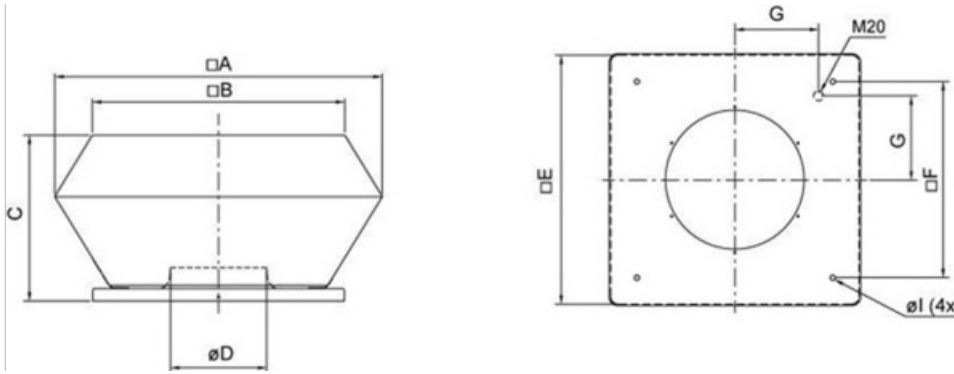


Hydraulic data

| | |
|--------------------------|---------------|
| Required air flow | 3,966 m³/h |
| Required static pressure | 308 Pa |
| Working air flow | 3,965 m³/h |
| Working static pressure | 308 Pa |
| Air density | 1.204 kg/m³ |
| Power | 911.4 W |
| Fan control - RPM | 881 rpm |
| Current | 2.01 A |
| SFP | 0.827 kW/m³/s |
| Control voltage | 400.0 V |
| Supply voltage | 400 V |

| Sound power level | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | Total |
|-------------------|-------|----|-----|-----|-----|----|----|----|----|-------|
| Inlet | dB(A) | 53 | 64 | 69 | 66 | 64 | 61 | 60 | 54 | 73 |
| Outlet | dB(A) | 53 | 66 | 71 | 74 | 71 | 65 | 64 | 57 | 78 |

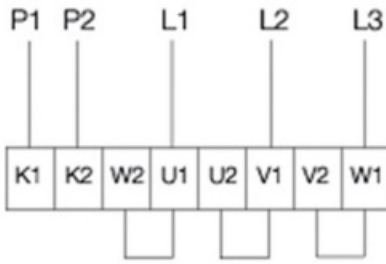
Dimension



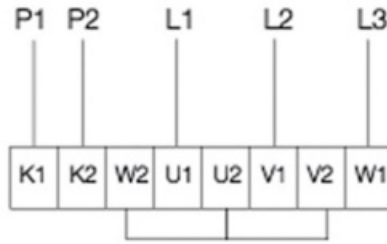
| | $\square A$ | $\square B$ | C | ϕD | $\square E$ | $\square F$ | G | ϕl |
|----------|-------------|-------------|-----|----------|-------------|-------------|-----|----------|
| DVEX 630 | 1150 | 955 | 560 | 410 | 939 | 750 | 293 | 14 |

Wiring

230V3~ (D)



400V3~ (Y)



| | |
|----|-------------|
| U1 | brown |
| V1 | blue |
| W1 | black |
| U2 | red |
| V2 | grey |
| W2 | orange |
| K1 | white (PTC) |
| K2 | white (PTC) |

Accessories

- ASF 560/630 inlet flange DVS (9570)
- R-DK4 KT Transformer (302568) (6051)
- RTRD 4 Speed cont. Systemair (5942)
- SSD 560/630 socket silencer (9564)
- U-EK230E Motor protection (30199)
- FDS 560/630 flat roof socket (9552)
- FTG 560/630 Tilting device (30509)
- ASS-EX 560/630 flex. con. DVEX (30597)
- VKS-EX 560/630 Back draft da. (4813)
- ASK 560/630 inflow box SSD (300908)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRDU 4 Speed contr. Systemair (5946)
- TDA DV 560/630 Adapter (304815)
- REV-3POL/ATEX-11kW R/Y (36414)
- FDS-L 560/630 flat roof socket (95283)
- TG 940-1200 Roof Curb (5090)
- Ex e-Terminal box 1,5/6mm² 32A (2704)

Documents

- imo_fans_atex_en_008
- PTB_08_ATEX_3062_TRANSLATION.PDF
- TPS_20_ATEX_085751_0007_X_EN.PDF
- UPDATE_PTB_08_ATEX_3060_3061_3062.PDF
- EU_DECLARATION_OF_CONFORMITY_ALL_009_314830.PDF