

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	620	W
Input power kW	0.62	kW
Input current	1.23	A
Impeller speed	900	rpm
Air flow	max 5,820	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
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Ambient and duct temperature

Ambient and duct temperature	-20 to 40	°C
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Dimensions and weights

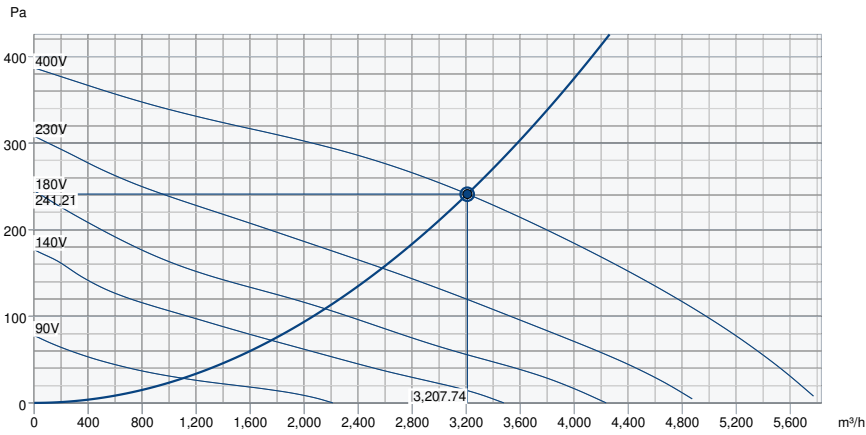
Weight	63	kg
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Others

Motor type	AC
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Performance

Performance curve

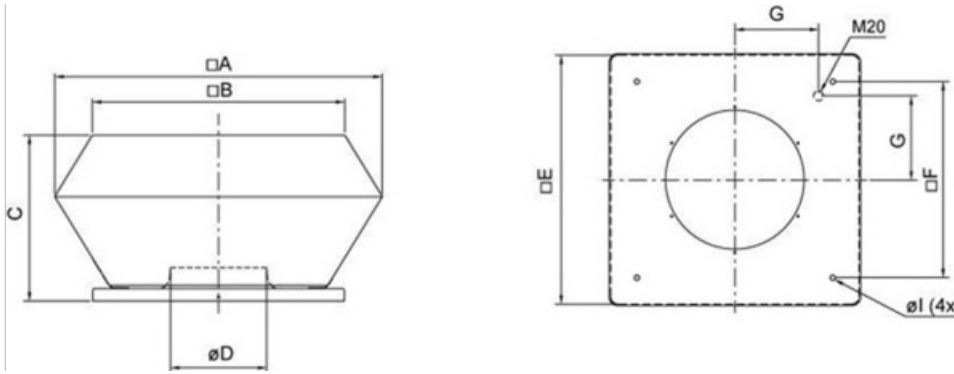


Hydraulic data

Required air flow	3,206 m³/h
Required static pressure	241 Pa
Working air flow	3,208 m³/h
Working static pressure	241 Pa
Air density	1.204 kg/m³
Power	584.5 W
Fan control - RPM	902 rpm
Current	1.17 A
SFP	0.656 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)	58	59	66	63	64	59	52	45	70
Outlet	dB(A)	57	61	69	71	70	63	57	55	75

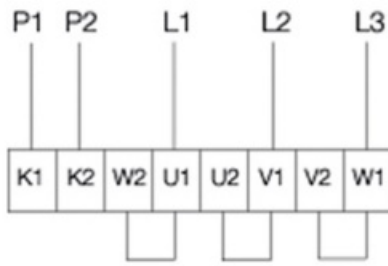
Dimension



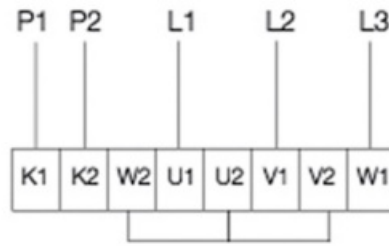
	□A	□B	C	∅D	□E	□F	G	∅I
DVEX 560	1150	955	560	364	939	750	293	12

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 2 Speed Cont. Systemair (5941)
- 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 2 Speed contr. Systemair (5945)
- 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_3061_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