

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 alluminum, 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~	
Input power	120	W
Input power kW	0.12	kW
Input current	0.23	A
Impeller speed	1,340	rpm
Air flow	max 1,480	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

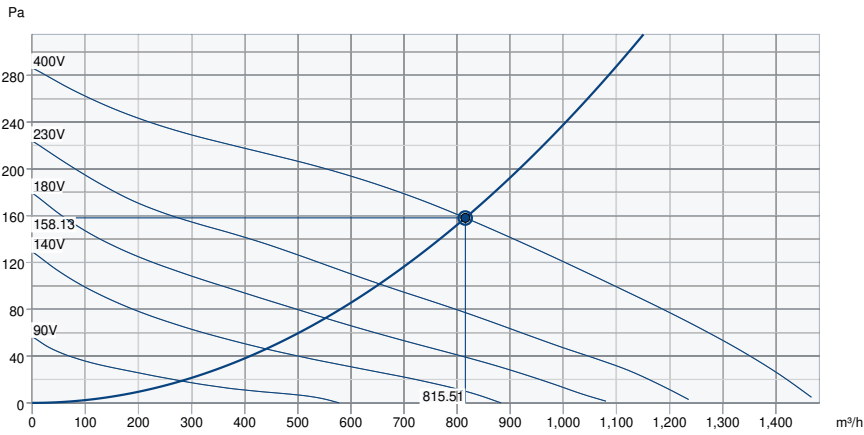
Weight	18	kg
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Others

Motor type	AC
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Performance

Performance curve

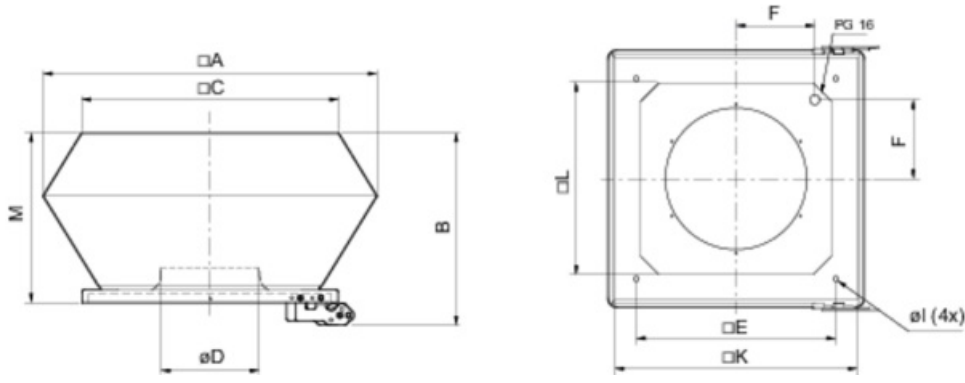


Hydraulic data

Required air flow	815 m³/h
Required static pressure	158 Pa
Working air flow	816 m³/h
Working static pressure	158 Pa
Air density	1.204 kg/m³
Power	113.4 W
Fan control - RPM	1,340 rpm
Current	0.22 A
SFP	0.501 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)	48	53	56	60	55	53	49	37	64
Outlet	dB(A)	48	53	56	63	63	59	52	40	67

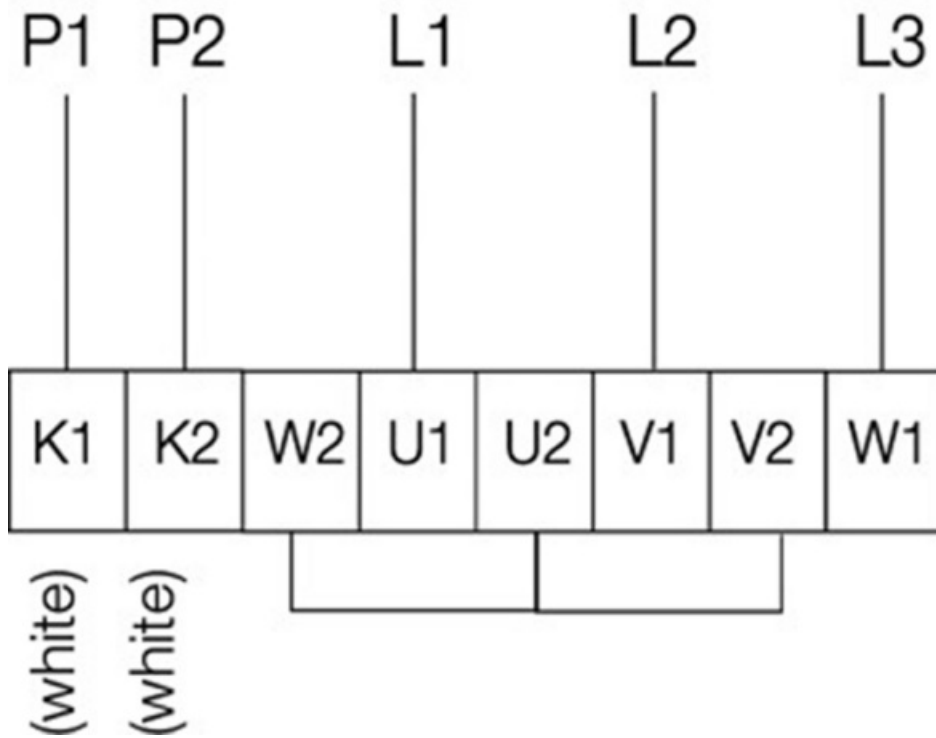
Dimension



	$\square A$	B	$\square C$	$\varnothing D$	$\square E$	F	$\varnothing l$	$\square K$	$\square L$	M
DVEX 315	560	382	470	192	330	146	12	406	304	330

Wiring

400V 3~



Accessories

- ASF 310/311 inlet flange DVS (9568)
- R-DK4 KT Transformer (302568) (6051)
- RTRD 2 Speed Cont. Systemair (5941)
- SSD 310/311 socket silencer (9561)
- U-EK230E Motor protection (30199)
- FDS 310/311 flat roof socket (9549)
- SSD 310/311 ZM socket sil (95062)
- ASS-EX 310/311 flex. con. DVEX (4830)
- VKS-EX 310/311 Back draft da. (8483)
- ASK 310/311 inflow box SSD (300904)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRDU 2 Speed contr. Systemair (5945)
- TDA DV 310/311 Adapter (301392)
- REV-3POL/ATEX-11kW R/Y (36414)
- FDS-L 310/311 flat roof socket (95279)
- TG 400-800 Roof curb (1718)
- Ex e-Terminal box 1,5/6mm² 32A (2704)

Documents

- imo_fans_atex_en_008
- PTB_08_ATEX_3060_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