



DVS Roof Fans

Centrifugal roof fan with vertical discharge



- DVS is the non-insulated version
- DVSI is the insulated version with acoustic and thermal insulation 50 mm
- Extensive range of accessories
- Available with AC motors for 50 and 60Hz

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

Flexibility

The DVS/DVSI fans are intended to use for **extract** air with **vertical discharge**.

The fans are designed to handle high air volumes at medium pressure without generating excessive noise.

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

The **sound optimized** impellers together with **high efficient** external rotor motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

Accessories

DVS/DVSI fans can be selected together with variety types of **accessories** as roof sockets, tilting devices, dampers, etc.

Features

Construction

The **Casing** is made out of **sea water resistant aluminium**. **Base frame** manufactured from **galvanised steel** with integrated inlet cone. Integrated bird guard manufactured from powder coated, galvanised steel.

DVSI is with **50 mm mineral wool acoustic and thermal insulation**.

Impeller

The DVS/DVSI fans use **radial** impeller with **backward curved blades**. These are out of high-performance composite material or aluminum (from Size 710), dynamically **balanced** and paired with corresponding **AC external rotor** motors.

Motor

DVS/DVSI fans are designed with **AC motors**. Motors are suitable for **50Hz** and **60Hz**.

Motor protection

Depending on the type, **AC** motors have an **integrated** thermal protection with manual (electrical) reset, prewired integral **thermocontact TK** or **thermistor PTC** with leads to a **motor protection device**.

Control

The **AC motors** can be controlled by **5-step, stepless** speed regulator, **D/Y** switch or **frequency converter**.

Installation

The DVS/DVSI are for **outside installation**.

Technical parameters

Nominal data

Voltage (nominal)	230	V
Frequency	50	Hz
Phases	1~	
Input power	121	W
Input current	0.52	A
Impeller speed	1,293	rpm
Air flow	max 1,603	m³/h
Capacitance of capacitor	4	µF
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

Protection/Classification

Enclosure class, motor	IP44
Insulation class	B

Data according to ErP

ErP ready	ErP 2018
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Dimensions and weights

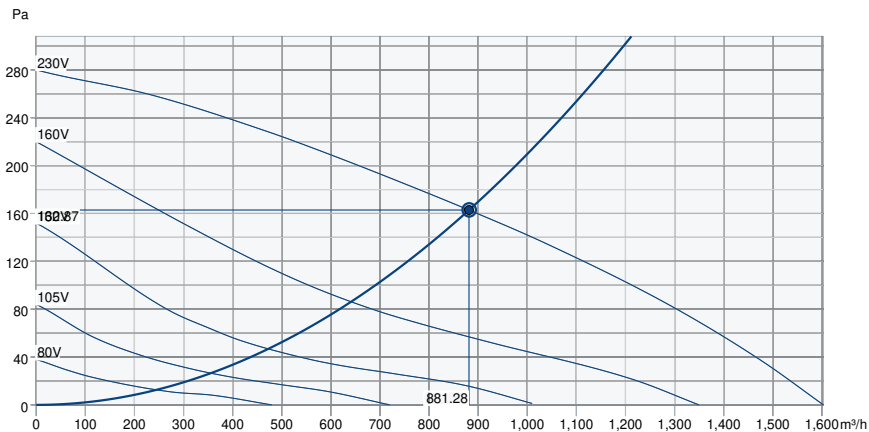
Weight	12.8	kg
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Others

Motor type	AC
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Performance

Performance curve



Hydraulic data

Required air flow	882 m³/h
Required static pressure	163 Pa
Working air flow	881 m³/h
Working static pressure	163 Pa
Air density	1.204 kg/m³
Power	120.5 W
Fan control - RPM	1,293 rpm
Current	0.50 A
SFP	0.492 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

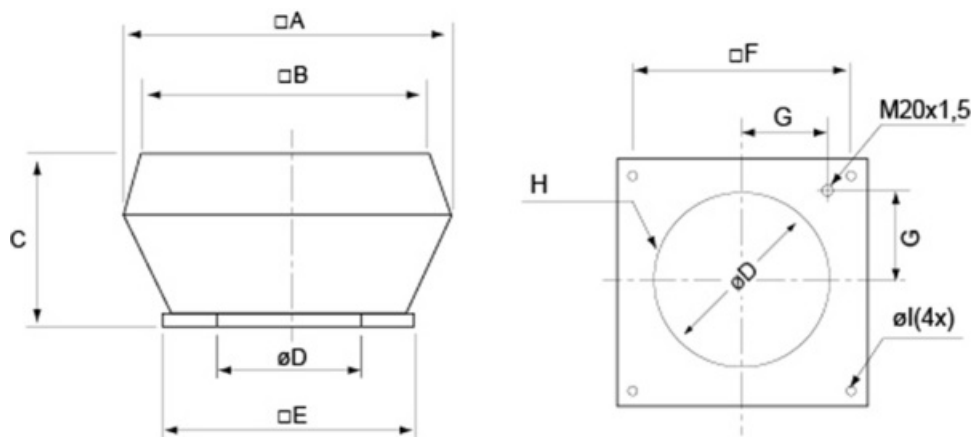
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	31	45	48	53	56	50	46	33	59
Outlet	dB(A)	33	47	49	55	57	51	47	35	61

Accessories

Ecodesign

Product			
Trade name		Systemair	
Product name		DVS 311EV sileo	
Ecodesign			
ErP compliance		2018	
Unit category		NRVU	
Drive		External MSD or VSD	
Unit type		UVU	
Heat recovery type		None	
Temperature ratio (UVU)		Not applicable	
qv nom		0.2447	m³/s
P nom		0.121	kW
Ps nom		163	Pa
Fan efficiency		33.1	%
External Leakage		0	%
Sound power (LWA)		61	dB(A)

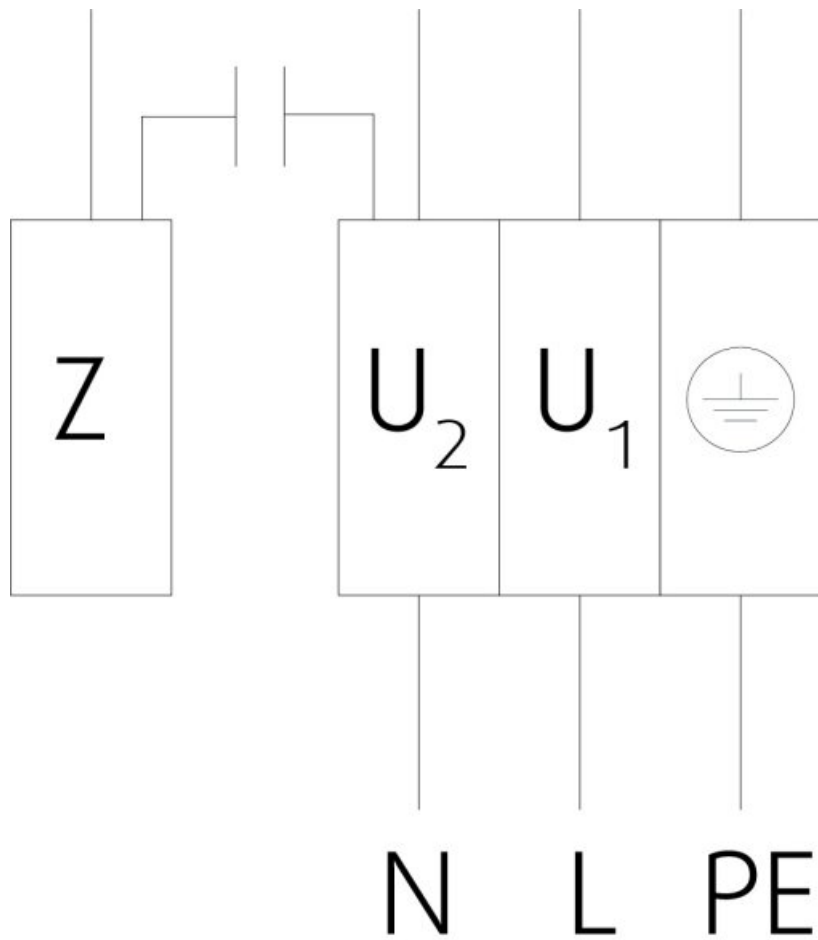
Dimension



* diameter D refers to scREW-hole-circuit H

DVS	A	B	C	ØD	E	F	G	H	ØI
311	560	470	330	285	435	330	146	6xM6	10(4x)

Wiring



.	assignment
L=U1	blue
N=U2	black
Z	brown
PE	green/yellow

Accessories

- ASF 310/311 inlet flange DVS (9568)
- ASS 310/311 flex. inl.con. DVS (9575)
- RE 1,5 Speed control (5000)
- REPT 6 Digital regulator (5698)
- REV-3POL/03-7,5kW R/Y (33978)
- SSD 310/311 socket silencer (9561)
- Frequency converter FRQSE-6A (37419)
- SSS 310 slant. socket silencer (30076)
- FDS-L 310/311 flat roof socket (95279)
- SSD 310/311 ZM socket sil (95062)
- TG 400-800 Roof curb (1718)
- VKS 310/311 Back draft damper (9543)
- ASK 310/311 inflow box SSD (300904)
- Frequency converter FRQ5SE-6A (37421)
- REE 1 Speed control (5314)
- REU 1.5 Speed control (5004)
- REV-5POL/05-7,5kW R/Y (33979)
- TDA DV 310/311 Adapter (301392)
- SDS 310/311 slant. roof socket (3784)
- FDS 310/311 flat roof socket (9549)
- FTG 310/311/315 Tilting device (30507)
- SSD-L 310/311 Socket silencer (79856)
- VKM 310/311 Back draft damper (9555)
- PKE-2.5V speed controller (30172)

Documents

- [MANUAL_ROOF_FANS_EN_001_.PDF](#)
- [EU DECLARATION OF CONFORMITY_ROOF FANS_EN_004.PDF](#)

Specification

The box is made out of saltwater- proofed aluminium. The underframe has a deep- drawn inlet cone and a grill made up of electroplated, powder- coated steel- plate. Freewheeling radial impeller consists of polyamide PA6 with backward- curved impeller vanes. The actuation is carried out by a maintenance- free, speed- controlled external rotor motor. The motor is hang up vibration- free. For protecting the motor, the production run has built in thermal contacts with manually reset device. For annealing the engine is designed inside the air flow. Impeller according to VDI 2060, quality category Q6,3 and dynamically weigh heavy in two levels. DVS/DHS/DVSI ...EZ / EV / ES: