

DVN Roof Fans

Centrifugal heavy duty roof fan solution

- Up to 120°C medium temperature, continuous operation
- DVN is the non-insulated version
- DVNI is the insulated version with acoustic and thermal insulation 50 mm
- Extensive range of accessories
- Available with AC and EC motors for 50 and 60Hz

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



Flexibility

The DVN/DVNI fans are intended to use for **extract** air with **vertical discharge**.

DVN/DVNI are the **smart choice** when **requirements** are **higher than average**, in applications such as extraction from kitchens, process air systems and industrial ovens. They are suitable for continuous air flow temperatures up to 120°C.

The fans are designed to handle high 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.

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

Performance

High performance aluminium impeller together with **high efficient** motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

Accessories

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

Features

Construction

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

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

Impeller

The DVN/DVNI fans use **radial** impeller with **backward curved blades**. These are made out of aluminum, dynamically **balanced** and paired with corresponding **IEC motor** with efficiency **IE3 or EC motor**.

Motor

Depending on the type, DVN/DVNI fans are equipped with **AC** or **EC** external rotor 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**.

Fans with **EC** motors have an **integrated** electronic **thermal protection** including **locked-rotor protection** and **soft-start**.

Control

EC motors with **built-in potentiometer** to adjust working point can be also controlled by external **signal 0-10V**.

EC motors, depending on the type are also equipped with **ModBus** communication or **alarm signal**.

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

Installation

The DVN/DVNI are for **outside installation**.

Technical parameters

Nominal data

Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Input power	351	W
Input power kW	0.351	kW
Input current	0.84	A
Impeller speed	1,431	rpm
Air flow	max 3,110	m³/h
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C

Protection/Classification

Enclosure class, motor	IP55
Insulation class	F

Data according to ErP

ErP ready	Not ErP relevant
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Dimensions and weights

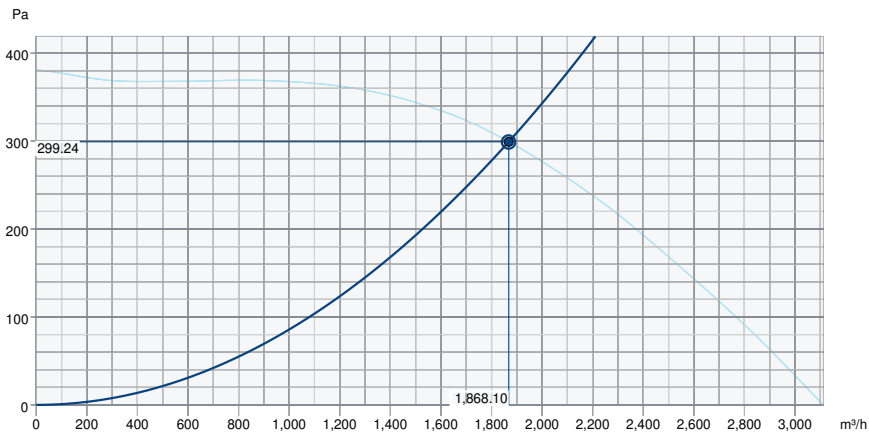
Weight	36	kg
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Others

Motor type	AC
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Performance

Performance curve



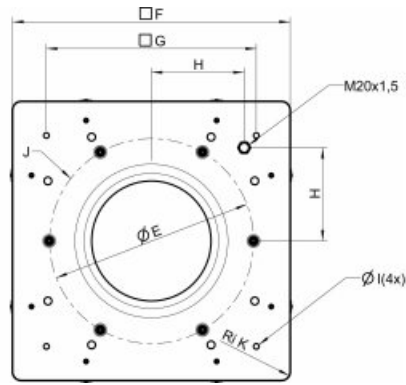
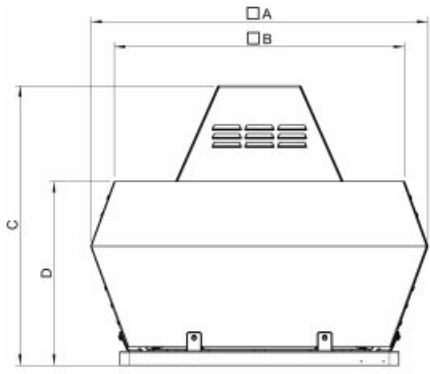
Hydraulic data

Required air flow	1,867 m³/h
Required static pressure	299 Pa
Working air flow	1,868 m³/h
Working static pressure	299 Pa
Air density	1.204 kg/m³
Power	352.1 W
Fan control - RPM	1,431 rpm
Current	0.84 A
SFP	0.679 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

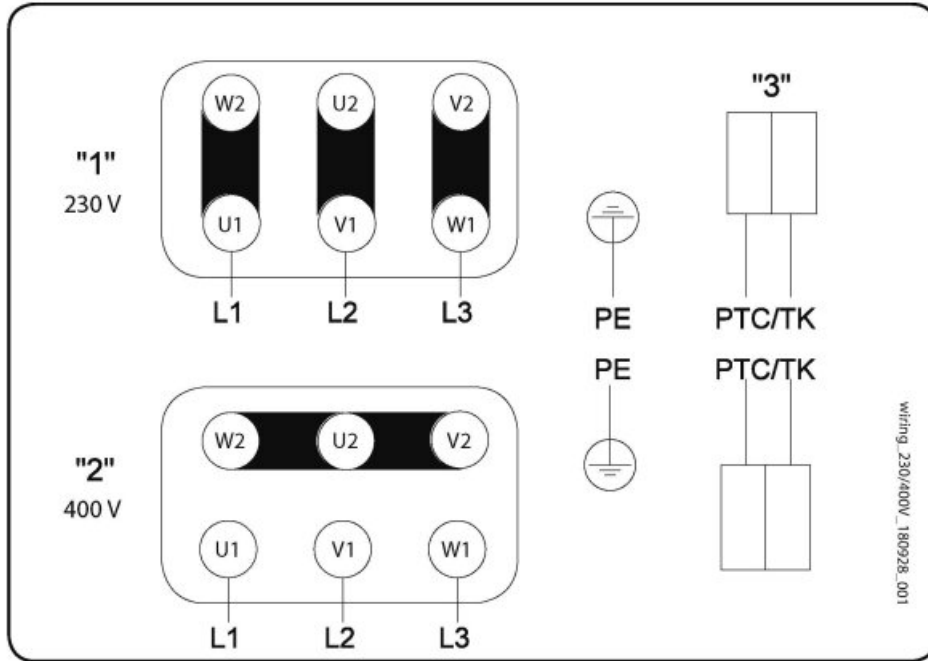
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	35	51	55	55	53	50	44	38	60
Outlet	dB(A)	37	53	56	57	54	51	46	39	62

Dimension

DVNI	A	B	C	D	øE	F	G	H	øI	J
355-400	874	648	600	439	438	595	450	200	ø12 (4x)	ø9 (6x)



Wiring



- 1 3 x 230V Delta Connection
- 2 3 x 400V Star connection
- 3 PTC / TK
- Changing of direction of rotation by interchanging of two phases

Accessories

- ASF 355-500 inlet flange DVS (9569)
- ASS 355-500 flex. con. DVS (9576)
- Frequency converter FRQS-4A (36231)
- REV-9POL/12-7,5kW R/Y (33981)
- TDA DV 355/400 Adapter (301393)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- SSS 355 slant. socket silencer (30077)
- FDS-L 355/400 flat roof socket (95281)
- VKM 355-500 Back draft damper (9556)
- REV-5POL/07-7,5kW B/G (281742)
- REV-9POL/12-7,5kW B/G (281743)
- ASK 355/400 inflow box SSD (300905)
- Frequency converter FRQ5S-4A (36233)
- REV-5POL/07-7,5kW R/Y (33980)
- SSD 355/400 socket silencer (9562)
- U-EK230E Motor protection (30199)
- SDS 355/400 slant. roof socket (3785)
- FDS 355/400 flat roof socket (9550)
- FTG 355/400 Tilting device (30508)
- VKS 355-500 Back draft damper (9544)
- REV-5POL/07-EMV-7,5kW B/G (281744)

Documents

- MANUAL_ROOF_FANS_EN_003_.PDF
- EU DECLARATION OF CONFORMITY_THERMOFANS_EN_004.PDF