



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	4,319	W
Input current	7.39	A
Impeller speed	1,464	rpm
Air flow	max 14,173	m³/h
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C

Sound data

Sound pressure level at 10m (free field)	58	dB(A)
Sound pressure level at 4m (free field)	66	dB(A)

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

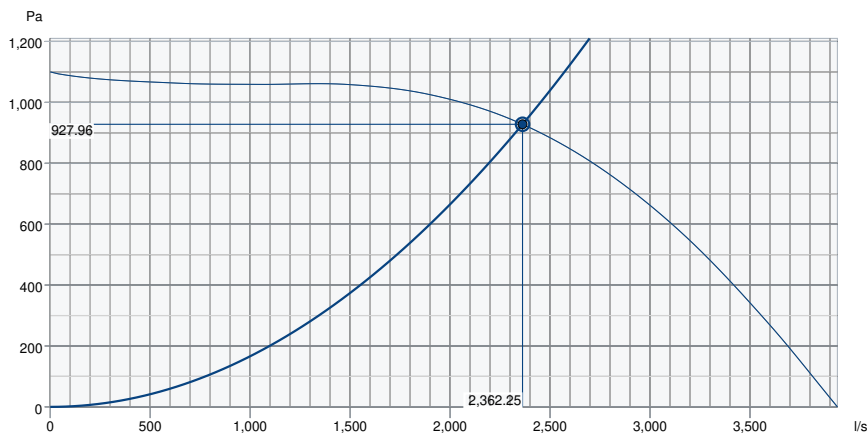
Weight	111	kg
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Others

Motor type	AC
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Performance

Performance curve



Hydraulic data

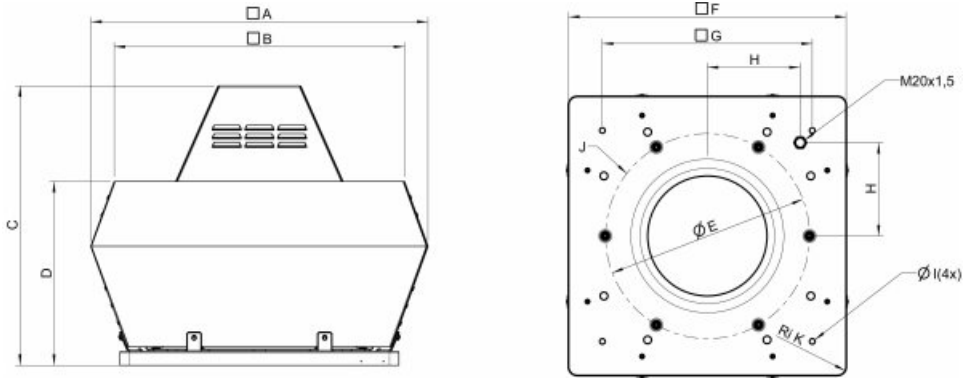
Required air flow	2,362.32 l/s
Required static pressure	928 Pa
Working air flow	2,362.25 l/s
Working static pressure	928 Pa
Air density	1.204 kg/m³
Power	4,345.1 W
Fan control - RPM	1,464 rpm
Current	7.43 A
SFP	1.839 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	62	73	85	85	84	80	75	68	90
Outlet	dB(A)	64	75	86	86	86	81	76	69	92

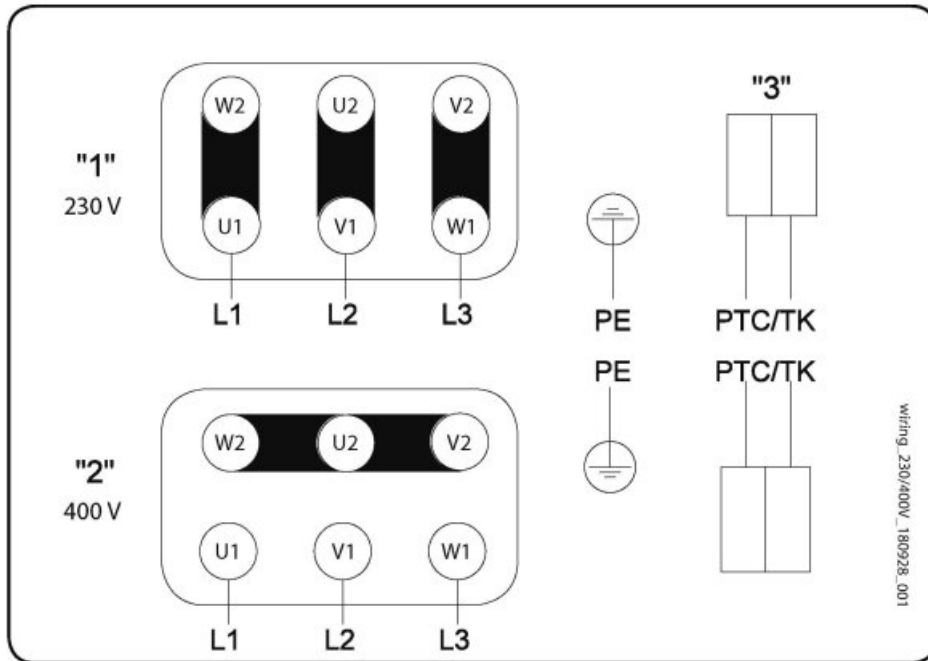
Accessories

Dimension

DVN	□A	□B	C	D	øE	□F	□G	H	øI	J
560-630	1150	955	900	560	605	939	750	293	ø14 (4x)	ø9 (8x)



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 560/630 inlet flange DVS (9570)
- ASS 560/630 flex. inl.con. DVS (9577)
- Frequency converter FRQ5-10A (36230)
- Frequency converter FXDM14AM (31389)
- SSD 560/630 socket silencer (9564)
- U-EK230E Motor protection (30199)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- SSS 560 slant. socket silencer (30079)
- FDS-L 560/630 flat roof socket (95283)
- TG 940-1200 Roof Curb (5090)
- VKS 560/630 Back draft damper (9545)
- ASK 560/630 inflow box SSD (300908)
- Frequency converter FRQ-10A (36228)
- Frequency converter FRQ5S-10A (36234)
- REV-5POL/05-7,5kW R/Y (33979)
- TDA DV 560/630 Adapter (304815)
- Frequency converter FRQS-10A (36232)
- SDS 560/630 slant. roof socket (3781)
- FDS 560/630 flat roof socket (9552)
- FTG 560/630 Tilting device (30509)
- VKM 560/630 Back draft damper (9557)
- REV-5POL/07-EMV-7,5kW B/G (281744)

Documents

- [MANUAL_ROOF_FANS_EN_001_.PDF](#)
- [EU DECLARATION OF CONFORMITY_THERMOFANS_EN_004.PDF](#)

Specification

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