

## 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.

### Certifications



Green Ventilation

## 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)	230	V
Frequency	50; 60	Hz
Phases	1~	
Input power	677	W
Input power kW	0.677	kW
Input current	2.85	A
Impeller speed	1,463	rpm
Air flow	max 1.394	m³/s
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)	44	dB(A)
Sound pressure level at 4m (free field)	52	dB(A)

### Protection/Classification

Enclosure class, motor	IP55
Insulation class	B

### Data according to ErP

ErP ready	Not ErP relevant
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### Dimensions and weights

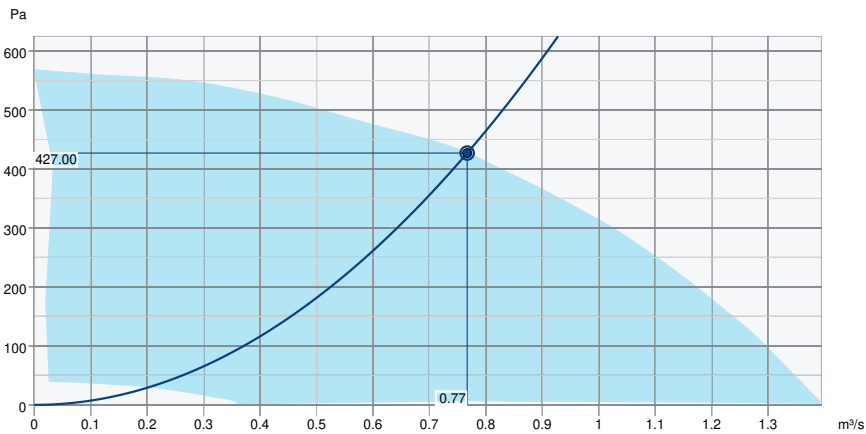
Weight	32.5	kg
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### Others

Motor type	EC
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## Performance

### Performance curve



#### Hydraulic data

Required air flow	0.77 m³/s
Required static pressure	427 Pa
Working air flow	0.77 m³/s
Working static pressure	427 Pa
Air density	1.204 kg/m³
Power	662.3 W
Fan control - RPM	1,464 rpm
Current	2.79 A
SFP	0.864 kW/m³/s
Control voltage	10.0 V
Supply voltage	230 V

## Acoustic

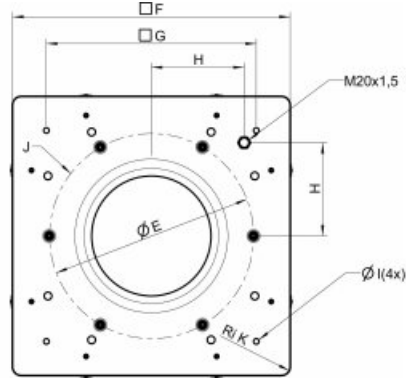
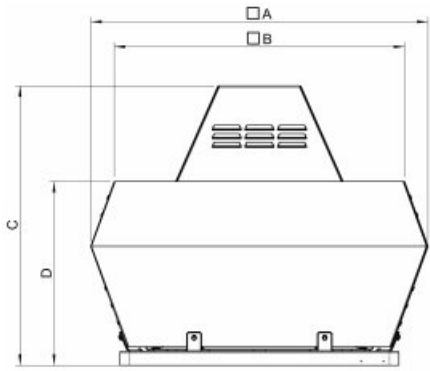
Mid-frequency band, Hz

400EC	Hz	Tot	63	125	250	500	1k	2k	4k	8k
LwA Inlet	dB(A)	76	63	65	69	71	70	67	62	55
LwA Surrounding	dB(A)	78	65	67	71	73	72	69	64	57

Measurement point: 2772m<sup>3</sup>/h; 427 Pa

## Dimension

DVN	A	B	C	D	ØE	F	G	H	ØI	J
355-400	720	618	600	390	438	595	450	200	Ø12 (4x)	Ø9 (6x)



## Accessories

- ASF 355-500 inlet flange DVS (9569)
- ASS 355-500 flex. con. DVS (9576)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent Room Unit (3018)
- MTV-1/010 Controller 0..10V+ (30650)
- SSD 355/400 socket silencer (9562)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- SSS 355 slant. socket silencer (30077)
- FDS 355/400 flat roof socket (9550)
- FTG 355/400 Tilting device (30508)
- TG 540-800 Roof curb (1727)
- BMS Trickle & Boost Switch (120363)
- ASK 355/400 inflow box SSD (300905)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- TDA DV 355/400 Adapter (301393)
- Presence detector/IR24-P (6995)
- SDS 355/400 slant. roof socket (3785)
- TG 540-1230 Roof curb (1726)
- FDS-L 355/400 flat roof socket (95281)
- TG 540-800 A60 Roof Curb (5086)
- VKS 355-500 Back draft damper (9544)
- DVN 400EC (382366)

## Documents

- [MANUAL\\_ROOF\\_FANS\\_EN\\_003\\_.PDF](#)
- [UKCA DECLARATION OF CONFORMITY\\_THERMOFANS\\_EN\\_002.PDF](#)
- [313886\\_DE-EN.PDF](#)