Item Number: #87819 Operating Mode: 400V 3~ 50Hz

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.

Performance

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

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.**

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 5step, stepless speed regulator, D/Y switch or frequency converter.

Installation

The DVN/DVNI are for outside installation.

Item Number: #87819 Operating Mode: 400V 3~ 50Hz

Technical parameters

Motor type

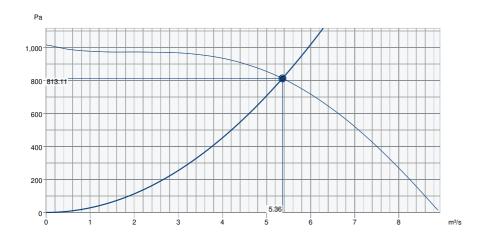
Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Input power	7,595	W
Input current	13.7	А
Impeller speed	981	rpm
Air flow	max 8.936	m³/s
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C
Sound data		
Sound pressure level at 10m (free field)	62	dB(A)
Sound pressure level at 4m (free field)	70	dB(A)
Protection/Classification		
Enclosure class, motor	IP55	
Insulation class	F	
Data according to ErP		
ErP ready	Not ErP relevant	
Dimensions and weights		
Weight	387	kg
Others		

AC



Performance

Performance curve



Hydraulic data	
Required air flow	5.36 m³/s
Required static pressure	813 Pa
Working air flow	5.36 m³/s
Working static pressure	813 Pa
Air density	1.204 kg/m³
Power	7,657.6 W
Fan control - RPM	980 rpm
Current	13.80 A
SFP	1.428 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

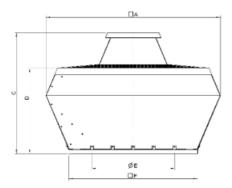
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	70	78	80	82	80	77	73	68	87
Outlet	dB(A)	71	79	81	84	82	78	74	69	88

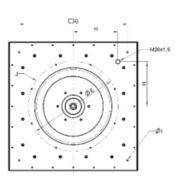
Accessories



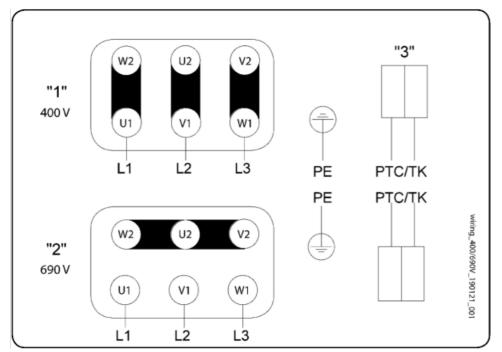
Dimension

DVN □A □B С øD øΕ øl 1690 830 1251 1050 433 ø9 (8x) 800-900 1180 872 ø14 (4x)





Wiring



Three phase motor with cold conductor

Delta connection

"2' Star connection

"3" Thermal motor protection optional

Changing of direction of rotation by interchanging of two phases



Accessories

- ASF 800/900 inlet flange DVS (9572)
- Frequency converter FRQS-16A (37275)
- U-EK230E Motor protection (30199)
- ASS 800/900 flex. inl.con. DVN (9579)
- FDS-L 800/900/DVN flat roof so (95285)
- VKS 800/900 Back draft damper (9547)

• Frequency converter FRQ5S-16A (37276)

Item Number: #87819 Operating Mode: 400V 3~ 50Hz

- REV-5POL/05-7,5kW R/Y (33979)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- FDS 800/900/DVN flat roof sock (9554)
- SSD 800/900 socket silencer (9566)

Documents

- MANUAL_ROOF_FANS_EN_002_.PDF
- UKCA DECLARATION OF CONFORMITY_THERMOFANS_EN_002.PDF