

DVNI 400E4

Centrifugal roof fan, 120°C continuous, insulated, vertical

Item Number: 3909

Variant: 230V 1~ 50Hz

- Standard motor outside the air stream_x000D_
- Max temperature of transported air 120°C_x000D_
- Suitable for coastal applications_x000D_
- Vertical exhaust_x000D_
- Low sound level_x000D_

The casing and impeller with backward-curved blades is manufactured from seawater resistant aluminum. The base frame and the integrated protection guard consist of powder-coated galvanised steel._x000D_

The motor is suspended on effective vibration dampers._x000D_

The single-phase motor is speed-controllable via transformer and the three-phase motor additionally via D/Y connection. To protect the motor from overheating the fan has integral thermal contacts with external leads for connection to a motor protection device._x000D_

The DVNI version has a 50 mm mineral wool insulation for lower sound level._x000D_



Technical parameters

Nominal data		
Voltage (Nominal)	230	V
Frequency	50	Hz
Phase(s)	1~	
Input power	440	W
Starting current	4.9	A
Input current	2	A
Impeller speed	1,420	r.p.m.
Air flow	max 1	m ³ /s
Capacitance of capacitor	12	µF
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)	35	dB(A)
Sound pressure level at 4m (free field)	43	dB(A)
Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	F	

Data according to ErP

ErP ready

Not ErP relevant

Dimensions and weights

Weight

38 kg

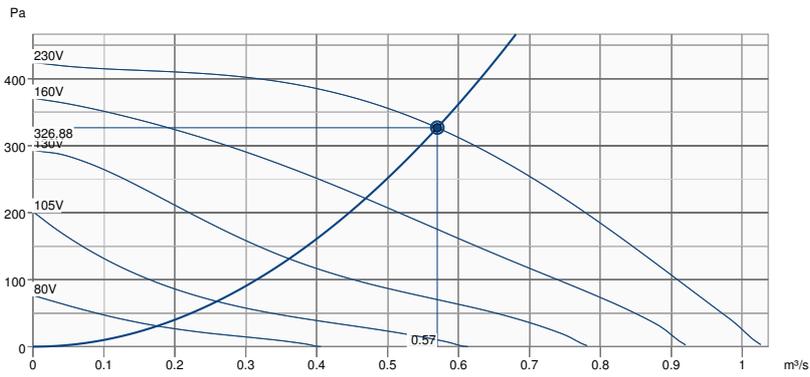
Others

Motor type

AC

Performance

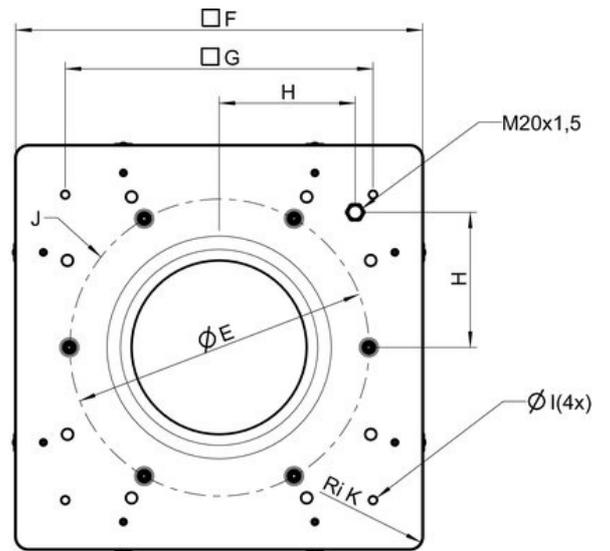
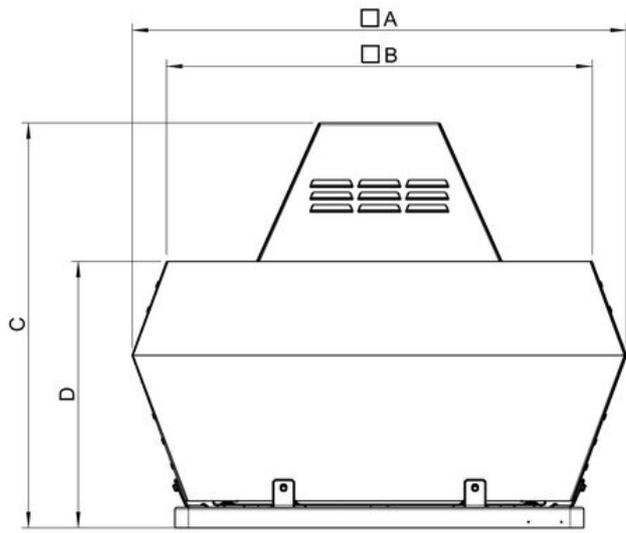
Performance curve



Hydraulic data

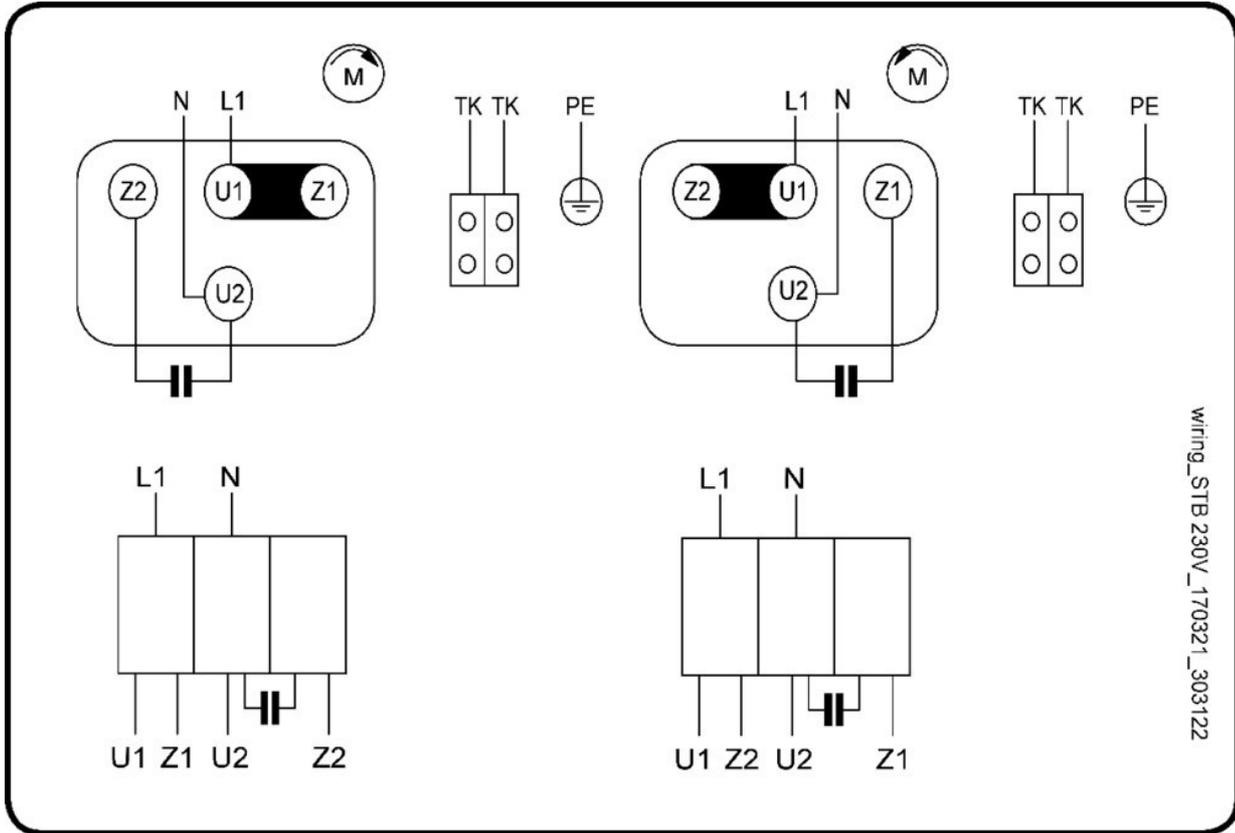
Required air flow	0.57 m³/s
Required static pressure	327 Pa
Working air flow	0.57 m³/s
Working static pressure	327 Pa
Air density	1.204 kg/m³
Power	448.7 W
Fan control - RPM	1377 rpm
Current	1.95 A
SFP	0.787 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

Dimension



DVNI	A	B	C	øD	E	F	G	H	øI	J
355-400	874	648	600	439	438	595	450	200	12(4x)	6xM8

Wiring



Acoustic

Mid-frequency band, Hz

400E4	Hz	Tot	63	125	250	500	1k	2k	4k	8k
LwA Inlet	dB(A)	73	60	62	66	68	67	64	59	52
LwA Surrounding	dB(A)	66	59	59	61	60	56	47	45	39

Measuring point: $q_v = 0,69 \text{ m}^3/\text{s}$, $P_s = 249 \text{ Pa}$

Accessories

- ASF 355-500 inlet flange DVS (9569)
- ASS 355-500 flex. con. DVS (9576)
- REU 3 Speed control (5005)
- RTRE 3 Speed control (5009)
- S-ET 10 Motor Protection (161199)
- TDA DV 355/400 Adapter (301393)
- REV-5POL/05 incl. EMC KIT (34549)
- SSS 355 slant. socket silencer (30077)
- FDS-L 355/400 flat roof socket (95281)
- SSD 355/400 ZM socket sil (95061)
- VKS 355-500 Back draft damper (9544)
- ASK 355/400 inflow box SSD (300905)
- FRQ5S-E-6A (37421)
- REV-5POL/05 ON/OFF (33979)
- S-ET 10 Motor Protection (5154)
- SSD 355/400 socket silencer (9562)
- FRQS-E-6A (37419)
- SDS 355/400 slant. roof socket (3785)
- FDS 355/400 flat roof socket (9550)
- FTG 355/400 Tilting device (30508)
- VKM 355-500 Back draft damper (9556)

Documents

- IMO_DV_140429_DE,GB,SE_V1.0_314480.PDF
- MANUAL_ROOF_FANS_EN_007_.PDF
- EU DECLARATION OF CONFORMITY_THERMOFANS_EN_[002].PDF

Specification

Roof fan, vertical discharge.

Casing made of seawater resistant aluminium. Sound insulated with a 50 mm layer of mineral wool, protected by a perforated sheet, glass mat side coated, non-combustible according to A1 DIN 4102. Base frame with deep-drawn admission nozzle made of galvanised steel sheet, 40 µm powder-coated RAL 7030. Powder-coated bird-protection grid

RAL 9005.

Free-running, backward curved centrifugal impeller made of aluminium. Impeller according to VDI 2060, balancing quality Q 6.3, dynamically balanced in two planes.

Voltage controllable external rotor motor,

Standard motor IEC, outside the air flow, for medium temperatures up to 120 °C.

Motor protection by integral thermal contact with leads to a motor protection device.

Speed control via transformer, terminal box (IP54) on the motor.

For outdoor installation.

Vertical installation position.