

DVN 450E4

Centrifugal roof fan, 120°C continuous, vertical discharge

Item Number: 8700

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

Norminal data		
Voltage (Nominal)	230	V
Frequency	50	Hz
Phase(s)	1~	
Input power	1,027	W
Starting current	18	A
Input current	4.47	A
Impeller speed	1,412	r.p.m.
Air flow	max 1.604	m ³ /s
Capacitance of capacitor	30	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)	46	dB(A)
Sound pressure level at 4m (free field)	54	dB(A)
Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	F	

Data according to ErP

ErP ready

Not ErP relevant

Dimensions and weights

Weight

49 kg

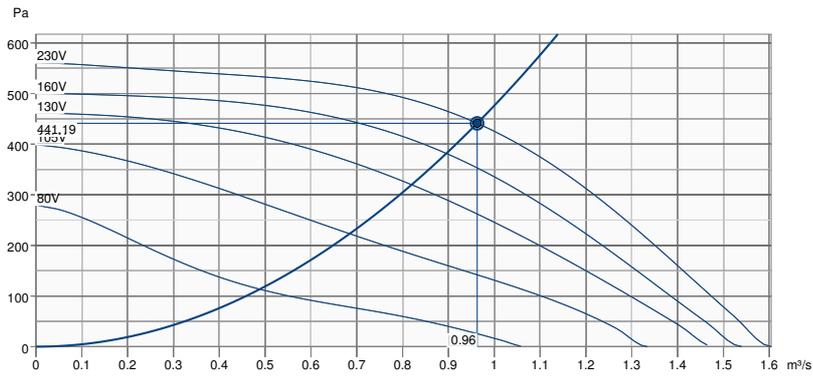
Others

Motor type

AC

Performance

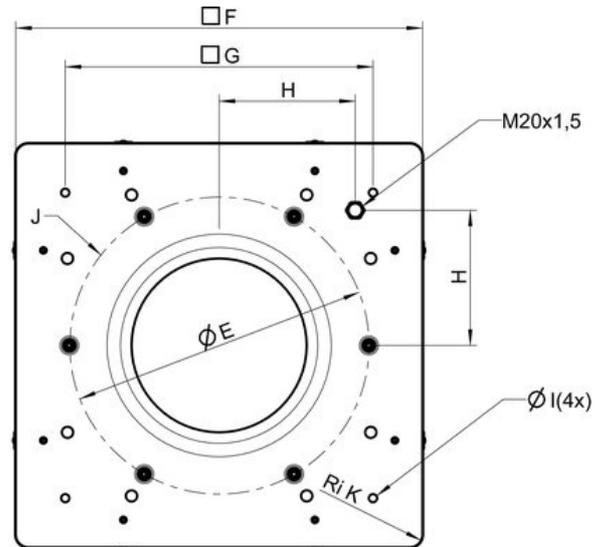
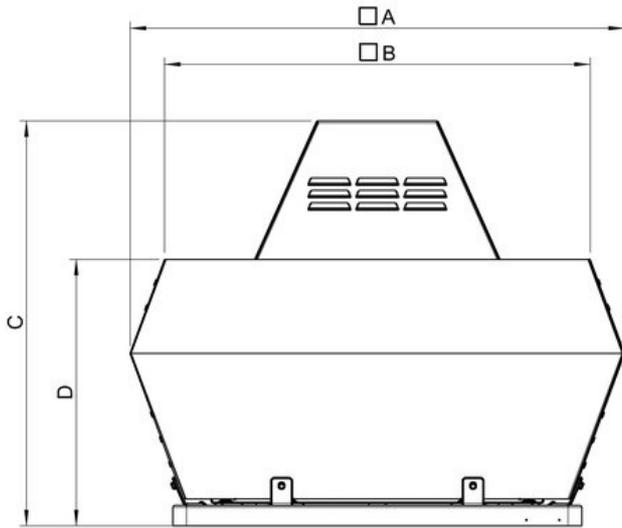
Performance curve



Hydraulic data

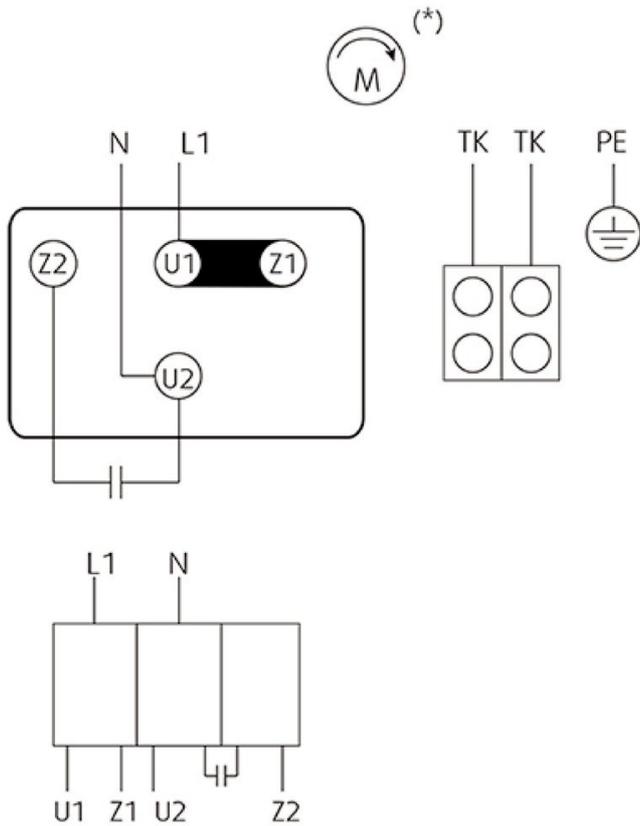
Required air flow	0.96 m³/s
Required static pressure	441 Pa
Working air flow	0.96 m³/s
Working static pressure	441 Pa
Air density	1.204 kg/m³
Power	1027.0 W
Fan control - RPM	1412 rpm
Current	4.47 A
SFP	1.067 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

Dimension



DVN	A	B	C	øD	E	F	G	H	øl	J
355-400	720	618	600	390	438	595	450	200	12(4x)	6xM8
450-500	900	730	675	465	438	665	535	237	12(4x)	6xM8
560-630	1150	955	900	560	605	939	750	293	14(4x)	8xM8
710	1350	1178	936	660	674	1035	840	320	14(4x)	8xM8
800-900	1690	-	1180	830	872	1255	1050	433	14(4x)	8xM8

Wiring



(*) motor shaft rotation seen from inlet of the fan.

Acoustic

Mid-frequency band, Hz

450E4	Hz	Tot	63	125	250	500	1k	2k	4k	8k
LwA Inlet	dB(A)	75	62	64	68	70	69	66	61	54
LwA Surrounding	dB(A)	77	64	66	70	72	71	68	63	56

Measuring point: $qv = 0,97 \text{ m}^3/\text{s}$, $Ps = 439 \text{ Pa}$

Accessories

- ASF 355-500 inlet flange DVS (9569)
- ASS 355-500 flex. con. DVS (9576)
- REU 7 Speed control (5007)
- RTRE 7 Speed control (5011)
- S-ET 10 Motor Protection (161199)
- S-ET 10E Motor Protection (5155)
- TDA DV 450-500 Adapter (301394)
- FRQS-E-6A (37419)
- SDS 450-500 slant. roof socket (3786)
- FDS 450/500 flat roof socket (9551)
- FTG 450/499/500 Tilting device (30248)
- TG 640-1230 Roof curb (1728)
- VKM 355-500 Back draft damper (9556)
- ASK 450/500 inflow box SSD (300907)
- FRQ5S-E-6A (37421)
- REV-5POL/05 ON/OFF (33979)
- S-ET 10 Motor Protection (5154)
- S-ET 10E Motor Protection (161205)
- SSD 450-500 socket silencer (9563)
- DTV500A (96807)
- MicroREX D21 Plus Time Switch (17822)
- SSS 450 slant. socket silencer (30078)
- FDS-L 450/500 flat roof socket (95282)
- SSD 450/500 ZM socket sil (95060)
- TG 640-800 Roof curb (1729)
- VKS 355-500 Back draft damper (9544)

Documents

- MANUAL_ROOF_FANS_EN_007_.PDF
- EU DECLARATION OF CONFORMITY_THERMOFANS_EN_[002].PDF