

# DHS 500DS sileo roof fan

Centrifugal roof fan, horizontal discharge

Item Number: 37770

Variant: 400V 3~ 50Hz



- High efficiency
- Speed-controllable
- Integral thermal contacts
- Excellent sound level
- Extensive range of accessories
- Maintenance-free and reliable

The DVS/DHS/DVSI sileo is well suited for applications requiring high air volumes at medium pressure and very low noise levels. These models have 3D profiled impellers with backward curved blades and external rotor motors. All motors are speed controllable over the voltage. For speed controlling of the DVS/DHS/DVSI sileo roof fans with a frequency converter a type with all pole sine filter is needed! The motors are suspended on effective vibration dampers.

DVS/DHS/DVSI sileo ...E4 / E6 / EZ / EV: 1~ motor

DVS/DHS/DVSI sileo ...DV / DS: 3~ with Y/D-connection for 2-speeds

To protect the motors from overheating the sileo range motors up to size 311 are equipped with integrated thermal contacts with manual reset in acc. with EN 60335-2-80. From size 355 with external leads for connection to a motor protection device. The casing is made from aluminum and the base frame from galvanized steel. Suitable for coastal applications. The impellers of the sileo types are manufactured from high-performance composite material with highly efficient 3D fan blade profile technology.

DVS sileo with vertical outlet

DHS sileo with horizontal outlet

DVSI sileo has a 50 mm mineral wool insulation for lower noise levels.



## Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phase(s)	3~	
Motor circuit connection	D; Y	
Input power	327	W
Input current	0.7	A
Impeller speed	876	r.p.m.
Air flow	max 5,029	m³/h
Temperature of transported air	max 60	°C

Max temperature of transported air, when speed controlled	60 °C
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<b>Sound data</b>
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Sound pressure level at 10m (free field)	41 dB(A)
Sound pressure level at 4m (free field)	49 dB(A)

<b>Protection/Classification</b>
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Enclosure class, motor	IP54
Insulation class	F

<b>Data according to ErP</b>
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ErP ready	ErP 2016; ErP 2018
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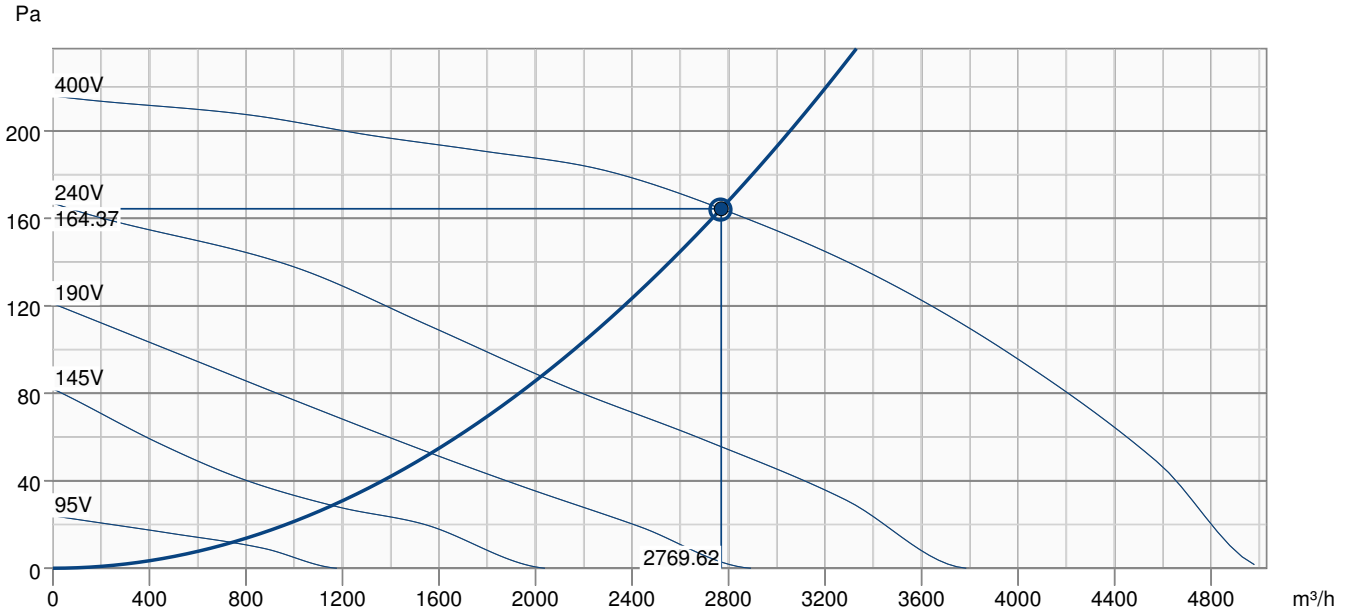
<b>Dimensions and weights</b>
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Weight	29.5 kg
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<b>Others</b>
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Motor type	AC
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## Performance curve

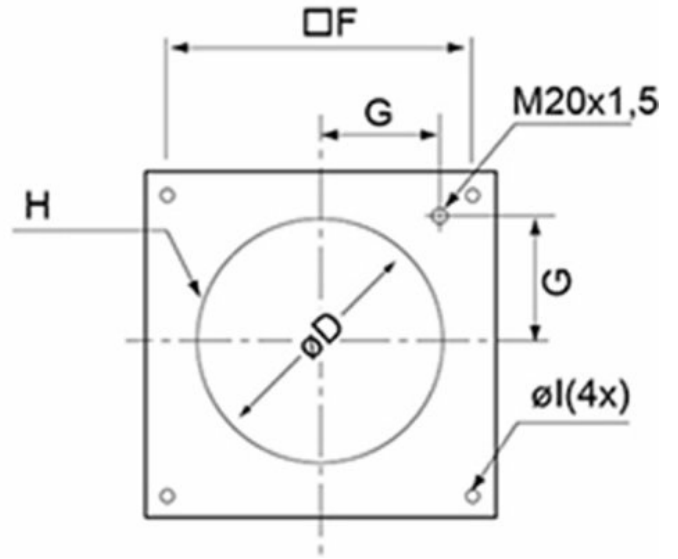
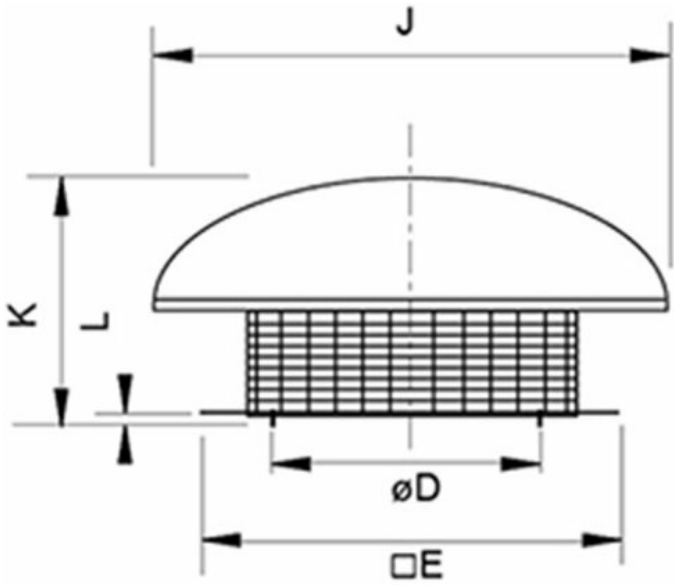


### Hydraulic data

Required air flow	2766 m³/h
Required static pressure	164 Pa
Working air flow	2770 m³/h
Working static pressure	164 Pa
Air density	1.204 kg/m³
Power	315.3 W
Fan control - RPM	883 rpm
Current	0.69 A
SFP	0.410 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)	32	51	58	57	63	60	55	43	67
Outlet	dB(A)	34	52	60	58	65	61	57	45	68

## Dimension

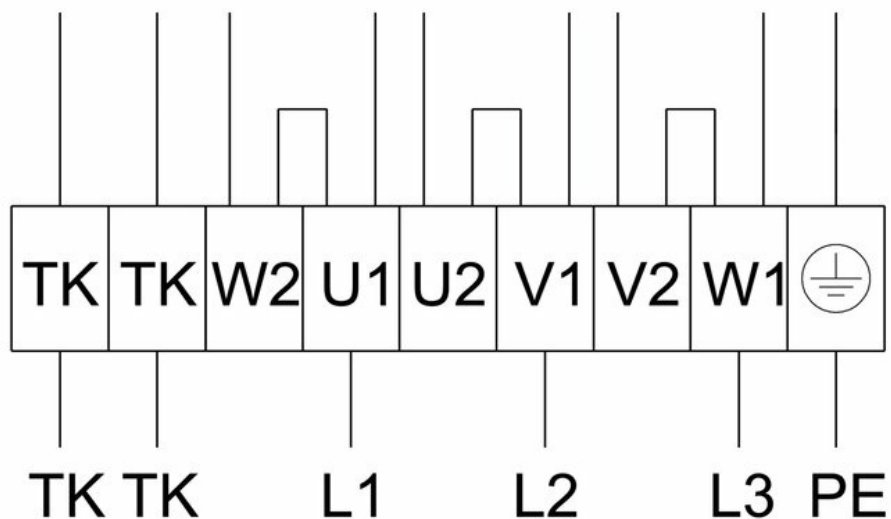


\* diameter D refers to screw-hole-circuit H

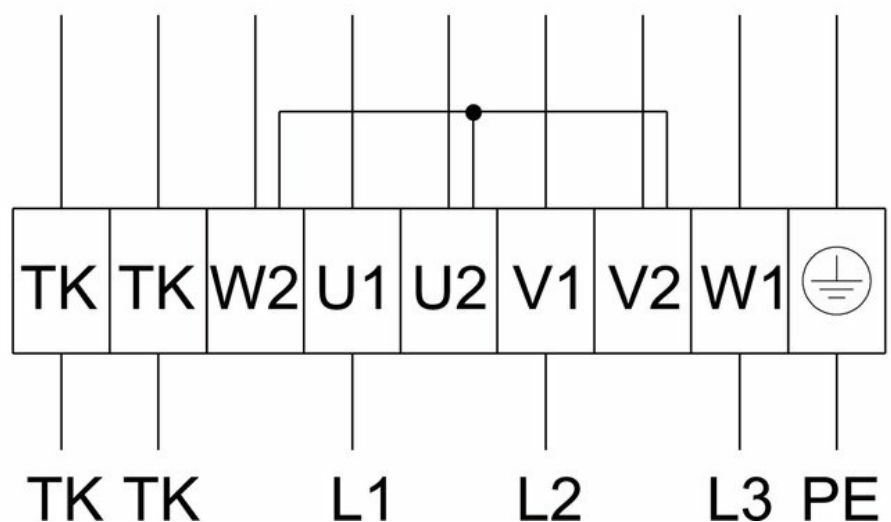
DHS/DHS sileo	øD	□E	□F	G	H	øl	J	K	L
450-500	438	665	535	237	6xM8	12	ø830	490	30

## Wiring

Delta connection



Star connection



## Ecodesign

Product	
Trade name	Systemair
Product name	DHS 500DS sileo roof fan
Ecodesign	
ErP compliance	2018
Unit category	NRVU
Drive	External MSD or VSD
Unit type	UVU
Heat recovery type	None
Temperature ratio (UVU)	Not applicable
qv nom	0.768 m <sup>3</sup> /s
P nom	0.315 kW
Ps nom	164 Pa
Fan efficiency	40 %
External Leakage	0 %
Sound power level LWA	68 dB(A)

## Accessories

- ASF 355-500 inlet flange DVS (9569)
- ASS 355-500 flex. con. DVS (9576)
- FRQ5S-4A+LED V2 (36233)
- REV-5POL/07 ON/OFF (33980)
- RTRD 2 Speed Cont. Systemair (5941)
- S-DT 16 Motor Protection (161206)
- SSD 450-500 socket silencer (9563)
- VKM 355-500 Back draft damper (9556)
- FDS-L 450/500 flat roof socket (95282)
- SDS 450-500 slant. roof socket (3786)
- SSD 450/500 ZM socket sil (95060)
- TG 640-800 Roof curb (1729)
- ASK 450/500 inflow box SSD (300907)
- FDS 450/500 flat roof socket (9551)
- FTG 450/499/500 Tilting device (30248)
- REV-9POL/12 ON/OFF (33981)
- RTRDU 2 Speed contr. Systemair (5945)
- S-DT2SKT Two speed switch Y/D (2697)
- TDA DV 450-500 Adapter (301394)
- VKS 355-500 Back draft damper (9544)
- FRQS-4A V2 (36231)
- SSS 450 slant. socket silencer (30078)
- TG 640-1230 Roof curb (1728)

## Documents

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