

## DHS 450EV

Centrifugal roof fan, horizontal discharge

Item Number: [246927](#)

Variant: 230V 1~ 50Hz

To protect the motors from overheating the sileo range motors up to size 311 are equipped with integrated thermal contacts with manual reset. 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/DHS/DVSI sileo ...DV / DS: 3~ with Y/D-connection for 2-speeds

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

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.

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

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)	230	V
Frequency	50	Hz
Phases	1~	
Input power	765	W
Input current	3.2	A
Impeller speed	1,370	rpm
Air flow	max 1.629	m <sup>3</sup> /s
Capacitance of capacitor	16	µF
Temperature of transported air	max 65	°C
Max temperature of transported air, when speed controlled	65	°C
Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	F	
Data according to ErP		
ErP ready	ErP 2018	

**Dimensions and weights**

Weight

32 kg

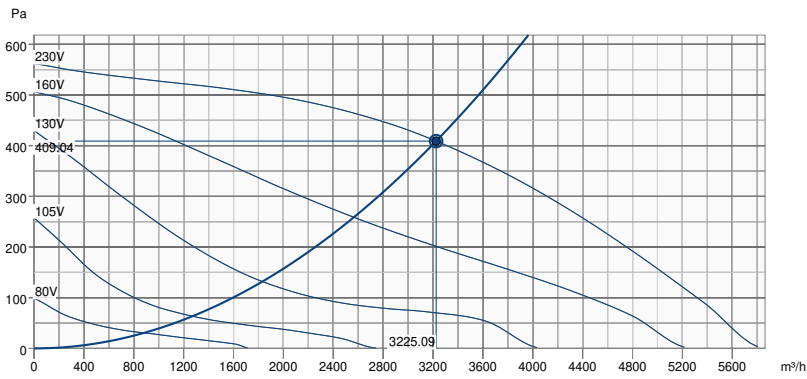
**Others**

Motor type

AC

# Performance

## Performance curve

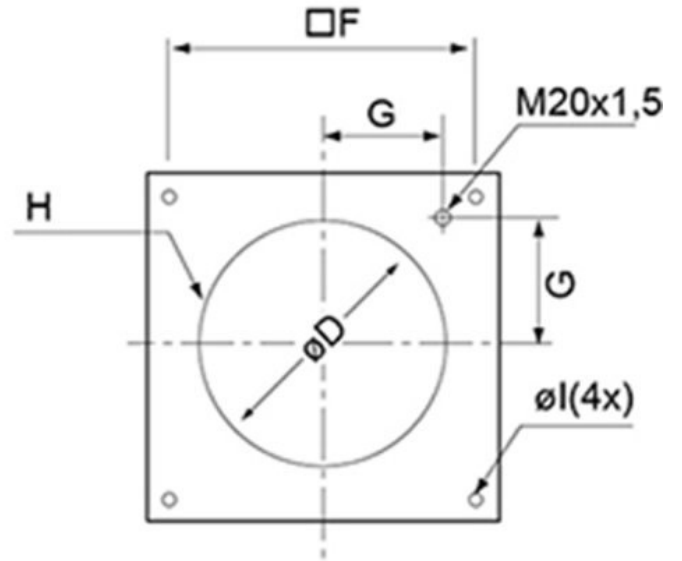
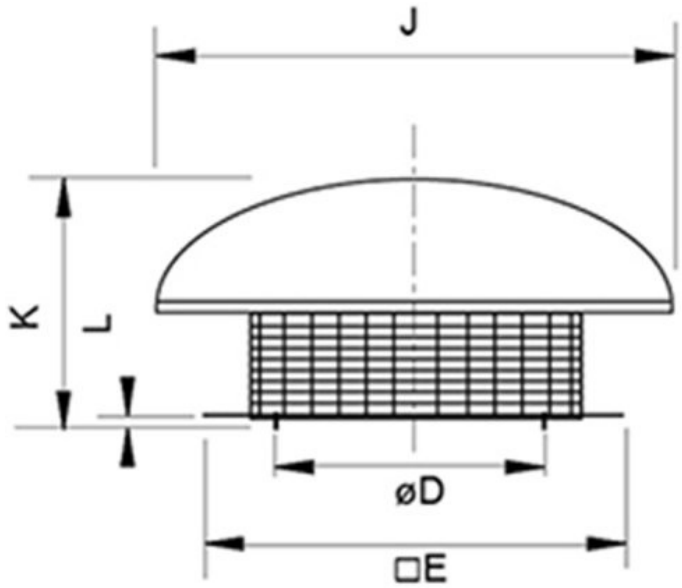


Hydraulic data	
Required air flow	3224.63 m³/h
Required static pressure	409 Pa
Working air flow	3225.09 m³/h
Working static pressure	409 Pa
Air density	1.204 kg/m³
Power	761.2 W
Fan control - RPM	1371 rpm
Current	3.21 A
SFP	0.850 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	45	57	64	69	72	70	62	54	76
Outlet	dB(A)	46	58	65	70	74	71	63	55	77

## Accessories

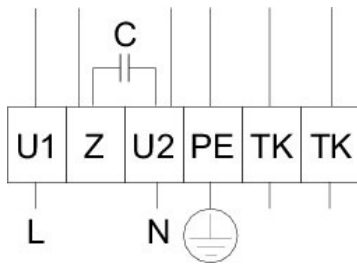
## Dimension



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

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

## Wiring



U1 blue (L)

Z brown

U2 black (N)

PE green/yellow

TK grey

## Ecodesign

Product	
Trade name	Systemair
Product name	DHS 450EV sileo
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	0.8958 m <sup>3</sup> /s
P nom	0.761 kW
Ps nom	409 Pa
Fan efficiency	48 %
External Leakage	0 %
Sound power level LWA	77 dB(A)

## Accessories

- ASF 355-500 inlet flange DVS (9569)
- ASS 355-500 flex. con. DVS (9576)
- Motor protect. switch S-ET 10 (161199)
- REU 5 Speed control (5006)
- RTRE 5 Speed control (5010)
- TDA DV 450-500 Adapter (301394)
- 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)
- VKS 355-500 Back draft damper (9544)
- ASK 450/500 inflow box SSD (300907)
- Frequency converter FRQ5SE-6A (37421)
- REE 4 Speed control (5317)
- REV-5POL/05-7,5kW R/Y (33979)
- SSD 450-500 socket silencer (9563)
- Frequency converter FRQSE-6A (37419)
- 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)

## Documents

- MANUAL\_ROOF\_FANS\_EN\_008\_.PDF
- UKCA DECLARATION OF CONFORMITY\_ROOF FANS\_EN\_002.PDF