

DHS 710DS roof fan

Centrifugal roof fan, horizontal discharge

Item Number: 36204

Variant: 400V 3~ 50Hz



Speed-controllable

Integral thermal contacts

Low sound level

Maintenance-free and reliable

The DVS/DHS/DVSI models have 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 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 ...EZ / EV / ES: 1~ motor with connection for 2-speeds

DVS/DHS/DVSI ...E4: 1-speed motor

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

To protect the motors from overheating the DVS/DHS/DVSI up to size 311 have integral thermal contacts, from size 355 with external leads for connection to a motor protection device.

The casing is made from aluminum and the base frame from galvanised steel. Suitable for coastal applications. The impellers up to size 355 are manufactured from polyamide PA6 25GV, from size 400 in aluminum.

DVS with outlet vertical

DHS with outlet horizontal

DVSI has a 50 mm mineral wool insulation for low noise level.



Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phase(s)	3~	
Input power	2,096	W
Input current	4.04	A
Impeller speed	903	r.p.m.
Air flow	max 14,764	m ³ /h
Temperature of transported air	max 40	°C
Max temperature of transported air, when speed controlled	40	°C

Sound data

Sound pressure level at 10m (free field)	52	dB(A)
Sound pressure level at 4m (free field)	60	dB(A)

Protection/Classification

Enclosure class, motor	IP54
Insulation class	F

Data according to ErP

ErP ready	ErP 2016; ErP 2018
-----------	--------------------

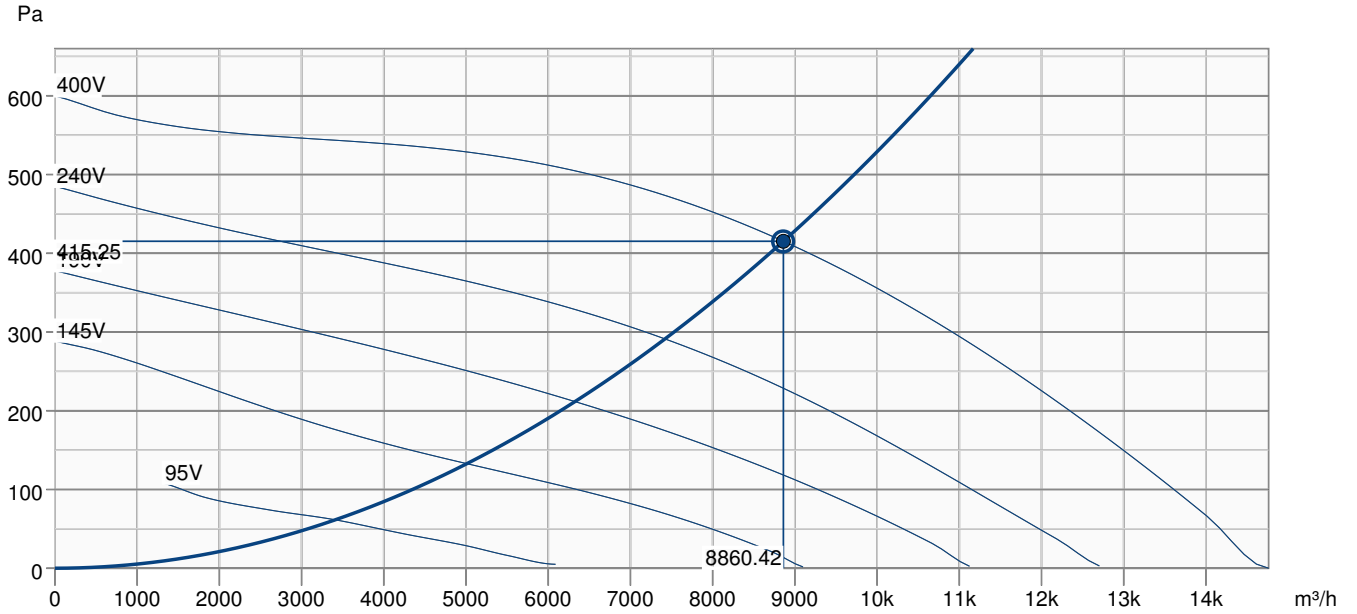
Dimensions and weights

Weight	100	kg
--------	-----	----

Others

Motor type	AC
------------	----

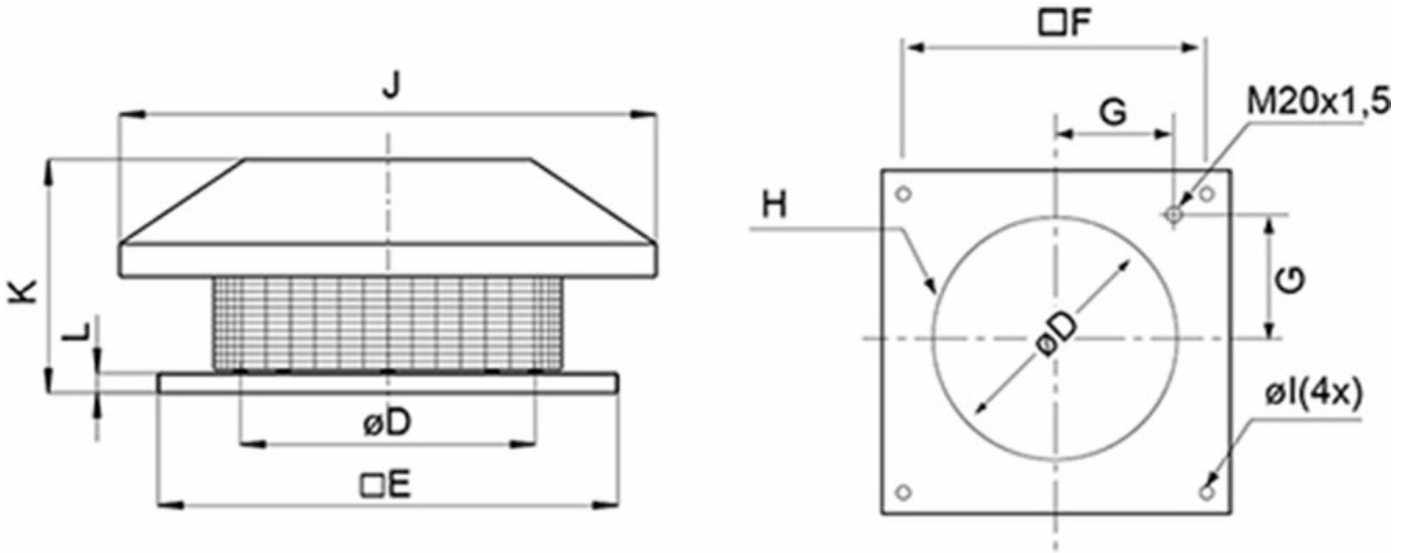
Performance curve



Hydraulic data

Required air flow	8858 m³/h
Required static pressure	415 Pa
Working air flow	8860 m³/h
Working static pressure	415 Pa
Air density	1.204 kg/m³
Power	2096.5 W
Fan control - RPM	904 rpm
Current	4.04 A
SFP	0.852 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

Dimension



* diameter D refers to screw-hole-circuit H

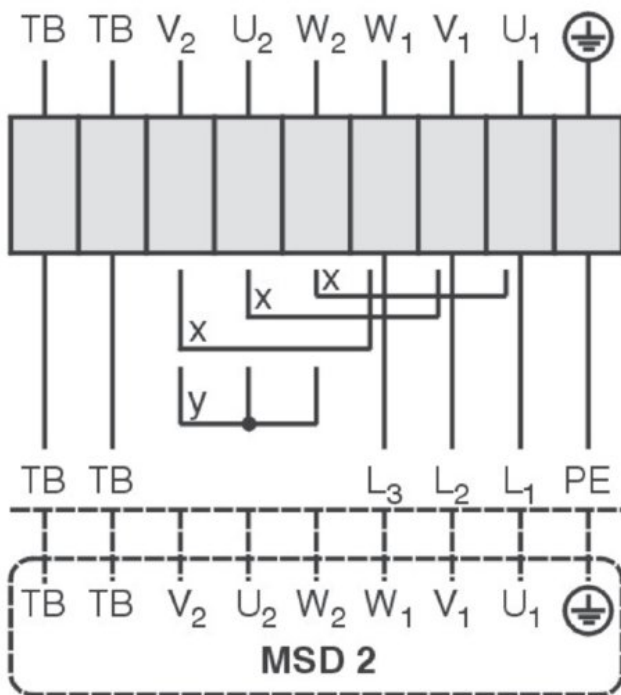
DHS	$\varnothing D$	$\square E$	$\square F$	G	H	$\varnothing I$	J	K	L
710	674	1035	840	320	8xM8	14	$\square 1282$	580	40

Wiring

Drehstrommotor mit 2 Drehzahlen durch Δ/Y -Umschaltung und mit Thermostatschalter (TB). Drehrichtungsänderung durch Vertauschen von 2 Phasen. Bei Verwendung des 2-Stufen-Schaltgerätes MSD 2 keine Brücken einlegen und gestrichelt gezeichnete Anschlüsse zum Schaltgerät durchverbinden.

Three phase motor with 2 speeds and thermostatic switch (TB). Speed changing by Δ/Y -switching. Changing of rotation direction by interchanging of 2 phases. If MSD 2 2-step switching units are used do not insert bridge and connect dotted lines in the wiring diagram to the switching unit.

Moteur triphasé avec vitesses par commutation Δ/Y et avec interrupteur thermostatique (TB). Changement de sens de rotation par inversion de deux phases. En cas de branchement avec un commutateur a deux vitesses MSD 2, ne pas connecter le ponts et brancher toutes les connexions dessinées en hachuré.



U1	braun / brown / brun
V1	blau / blue / bleu
W1	schwarz / black / noir
U2	rot / red / rouge
V2	grau / grey / gris
W2	orange / orange / orange
TB	weiß / white / blanc
PE	gelb-grün / yellow-green / jaune-vert
x	Brücke für hohe Drehzahl bridge for high speed ponts pour grande vitesse
y	Brücke für niedrige Drehzahl bridge for low speed ponts pour petite vitesse

313094

Acoustic

	Hz	Tot	63	125	250	500	1k	2k	4k	8k
LwA Inlet	dB(A)	79	66	68	73	74	74	70	65	57
LwA Surrounding	dB(A)	81	68	70	75	76	76	72	67	59
with SSD 710										
LwA Inlet	dB(A)	69	63	62	65	60	54	45	42	46

Measuring point: $q_v = 2,46 \text{ m}^3/\text{s}$, $P_s = 415 \text{ Pa}$

Mid-frequency band, Hz

Ecodesign

Product	
Trade name	Systemair
Product name	DHS 710DS 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	2.46 m ³ /s
P nom	2.096 kW
Ps nom	415 Pa
Fan efficiency	48 %
External Leakage	0 %
Sound power level LWA	81 dB(A)

Accessories

- ASF 710 inlet flange DVS (9571)
- ASS 710 flex. inlet con. DVS (9578)
- FRQ5S-4A+LED V2 (36233)
- REV-9POL/12 ON/OFF (33981)
- RTRDU 4 Speed contr. Systemair (5946)
- S-DT2SKT Two speed switch Y/D (2697)
- VKM 710 Back draft damper (9558)
- FDS-L 710 flat roof socket (95284)
- SDS 710 slant. roof socket (3789)
- ASK 710 inflow box SSD (300910)
- FDS 710 flat roof socket (9553)
- REV-5POL/07 ON/OFF (33980)
- RTRD 4 Speed cont. Systemair (5942)
- S-DT 16 Motor Protection (161206)
- SSD 710 socket silencer (9565)
- VKS 710 Back draft damper (9546)
- FRQS-4A V2 (36231)
- SSS 710 slant. socket silencer (30080)

Documents

-
-

Specification