S4D315-BP30-41

AC axial fan

sickled blades (S series), single inlet

with guard grille for full nozzle

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Nominal data

Type	**S4D315-BP30-41**
Motor	**M4D068-DF**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	460	460
Connection		Y	Y	Y	Y
Frequency	Hz	50	60	60	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	UL
Speed (rpm)	min^{-1}	1420	1630	1650	1650
Power input	W	82	102	125	130
Current draw	A	0.25	0.22	0.24	0.24
Max. back pressure	Pa	120	120	130	130
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	80	80	75	75
Starting current	A	0.38	0.37	0.38	0.38

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

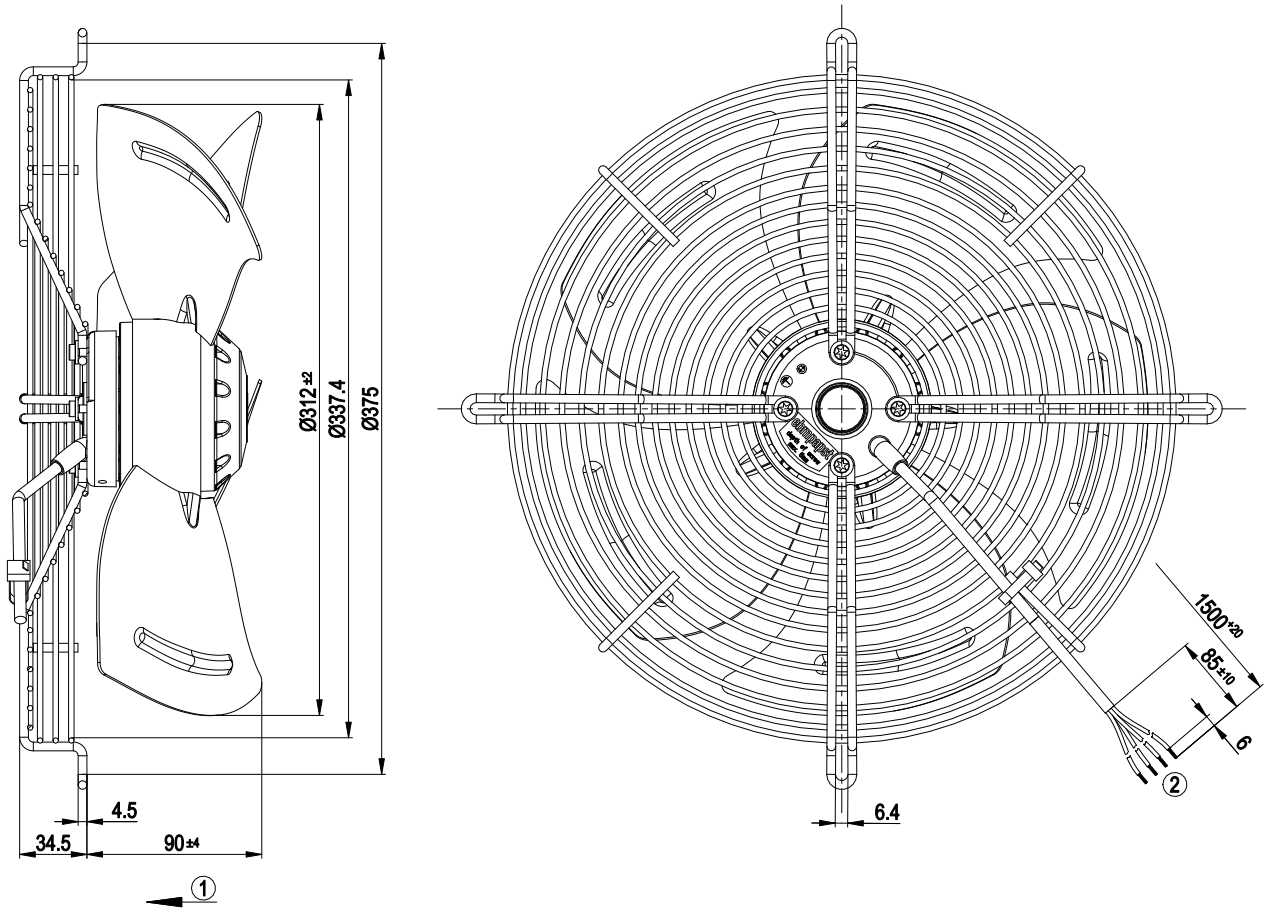
Mass	3.3 kg
Size	315 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated with black plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F2-2
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1, motor does not have factory-installed overheating protection
Approval	CSA C22.2 No.100; UL 1004-1; EAC

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Product drawing



1	Direction of air flow "V"
2	Connection line PVC 4G 0.5 mm², 4x lead tips crimped

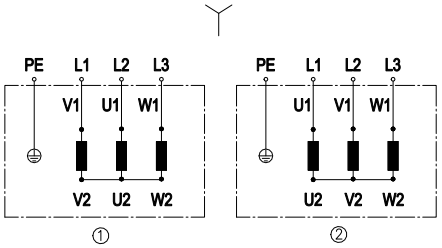
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Connection screen



Change direction of rotation by reversing two phases

	Three-phase motor
Y	Star connection
1	Anti-clockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green / yellow

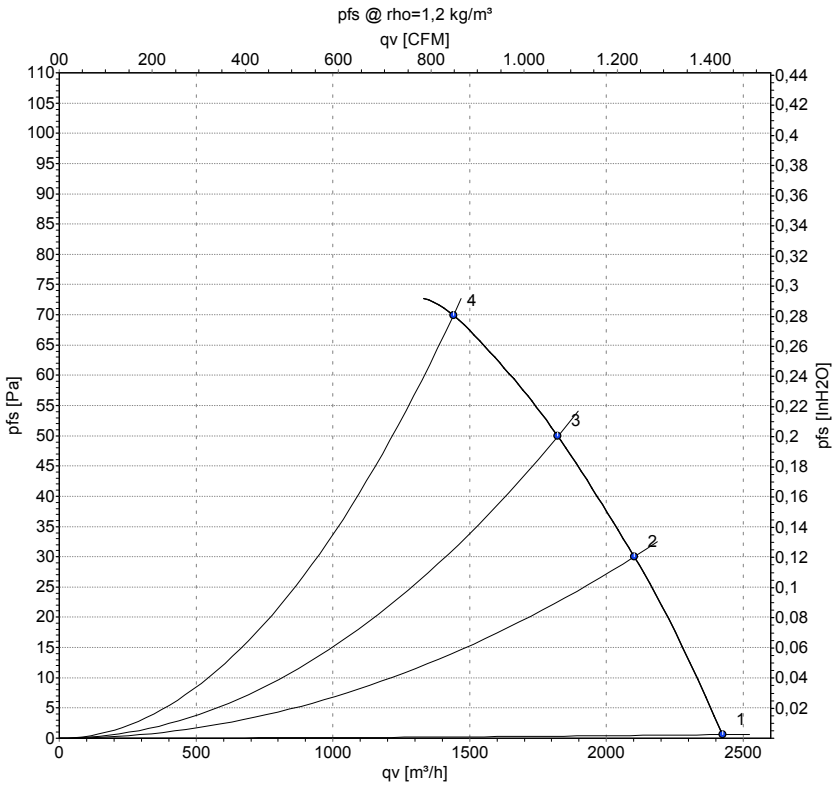
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Charts: Air flow 50 Hz



Measurement: LU-55176-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	Y	400	50	1420	82	0.25	2425	0	1425	0.00
2	Y	400	50	1400	91	0.25	2100	30	1235	0.12
3	Y	400	50	1390	99	0.26	1820	50	1070	0.20
4	Y	400	50	1370	107	0.26	1440	70	850	0.28

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

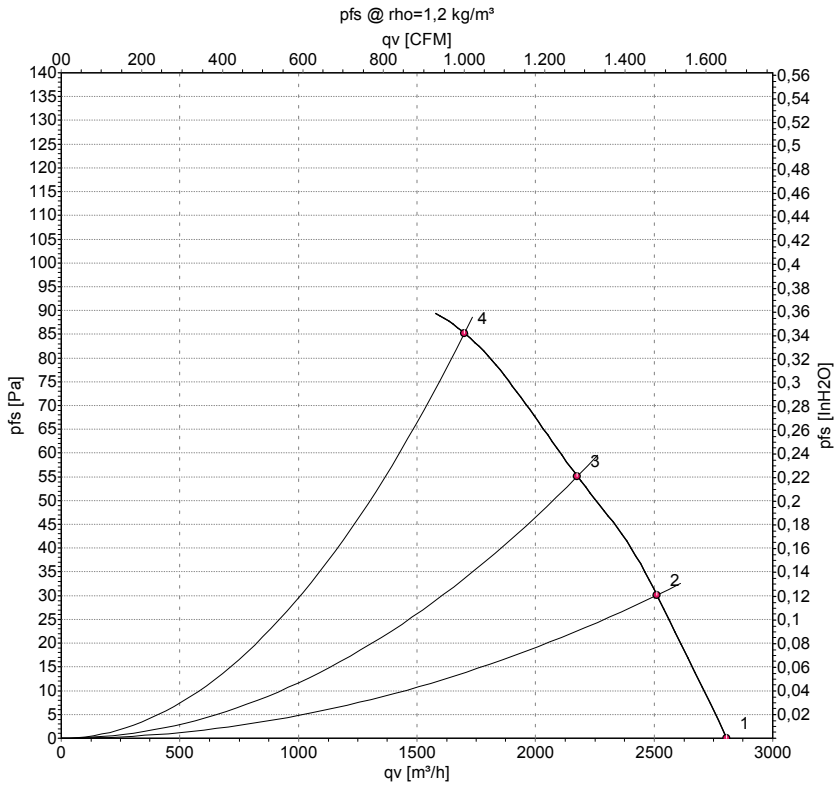
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Charts: Air flow 60 Hz



Measurement: LU-55182-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	Y	400	60	1630	102	0.22	2805	0	1650	0.00
2	Y	400	60	1605	116	0.23	2510	30	1480	0.12
3	Y	400	60	1575	129	0.24	2175	55	1280	0.22
4	Y	400	60	1540	143	0.26	1700	85	1000	0.34

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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