AC axial fan - HyBlade®

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Nominal data

Type	**S4D300-AS34-31**
Motor	**M4D068-CF**

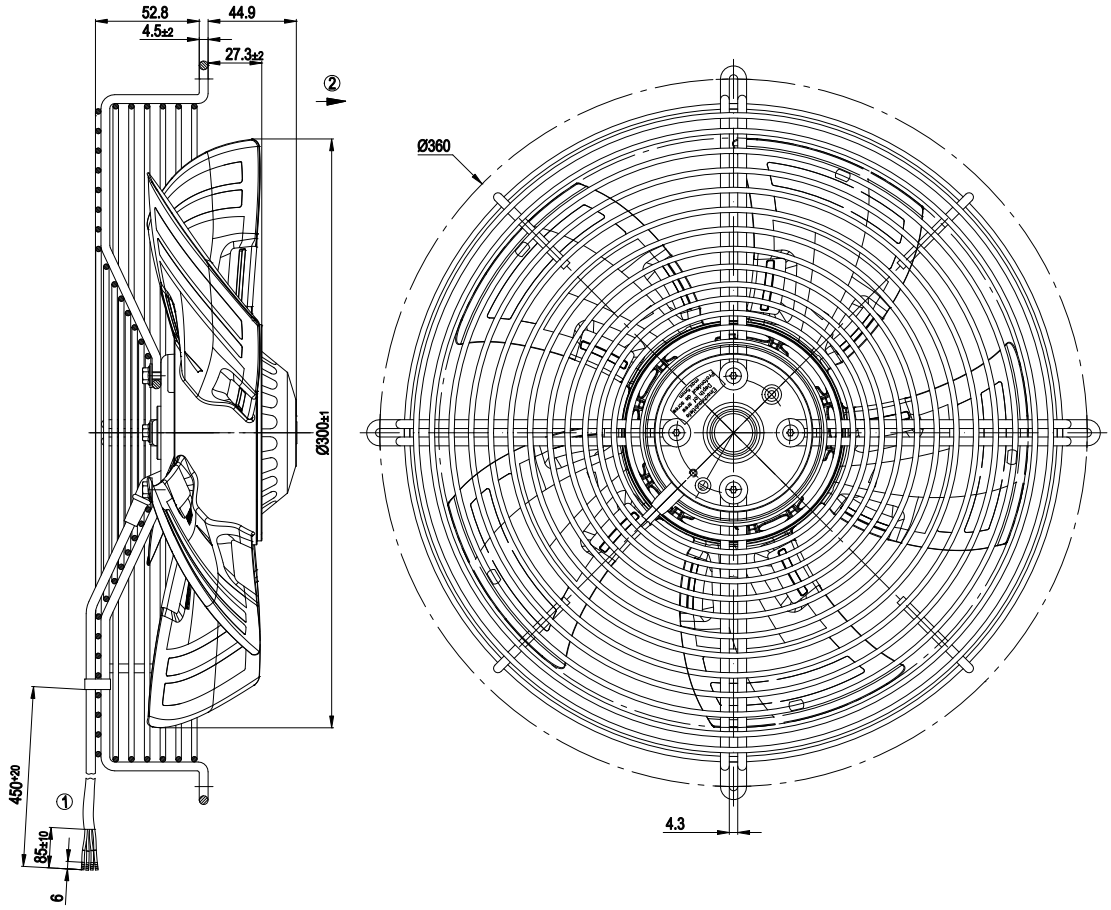
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1300	1400
Power input	W	68	90
Current draw	A	0.14	0.15
Max. back pressure	Pa	60	70
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	55

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Technical features

Mass	2.6 kg
Size	300 mm
Surface of rotor	Coated in black
Material of impeller	PP plastic, fibreglass-reinforced
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
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
Approval	CCC

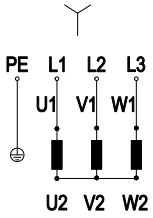
Product drawing



1	Connection line PVC 4G 0.5 mm², 4x brass lead tips crimped
2	Direction of air flow "A"
3	Depth of screw max. 5 mm

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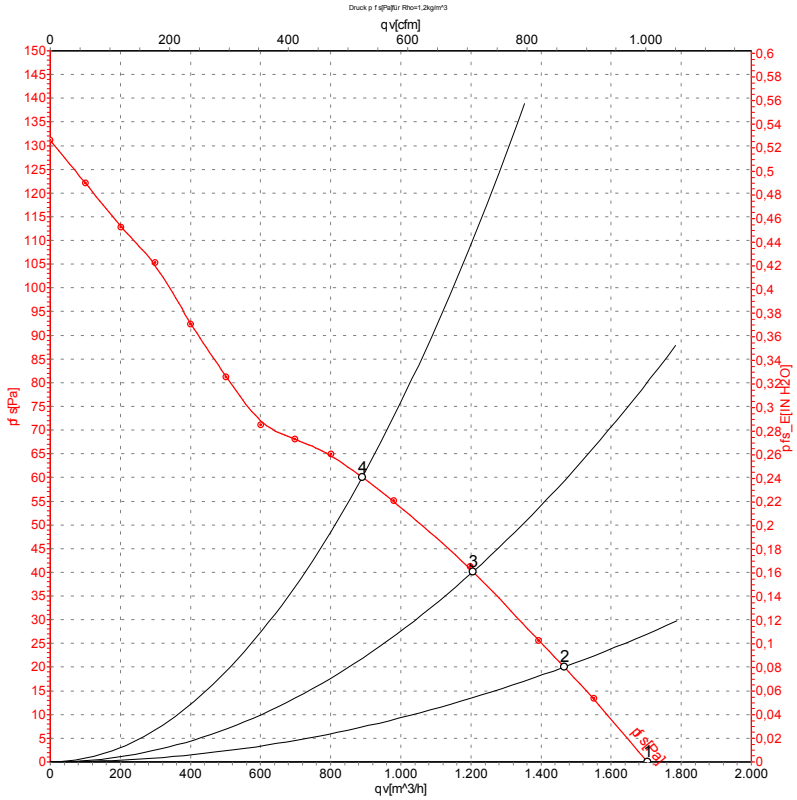
Connection screen



Y	Star connection	L1	black	L2	blue
L3	brown	PE	green/yellow		

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Charts: Air flow 50 Hz



Measurement: LU-114649

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.

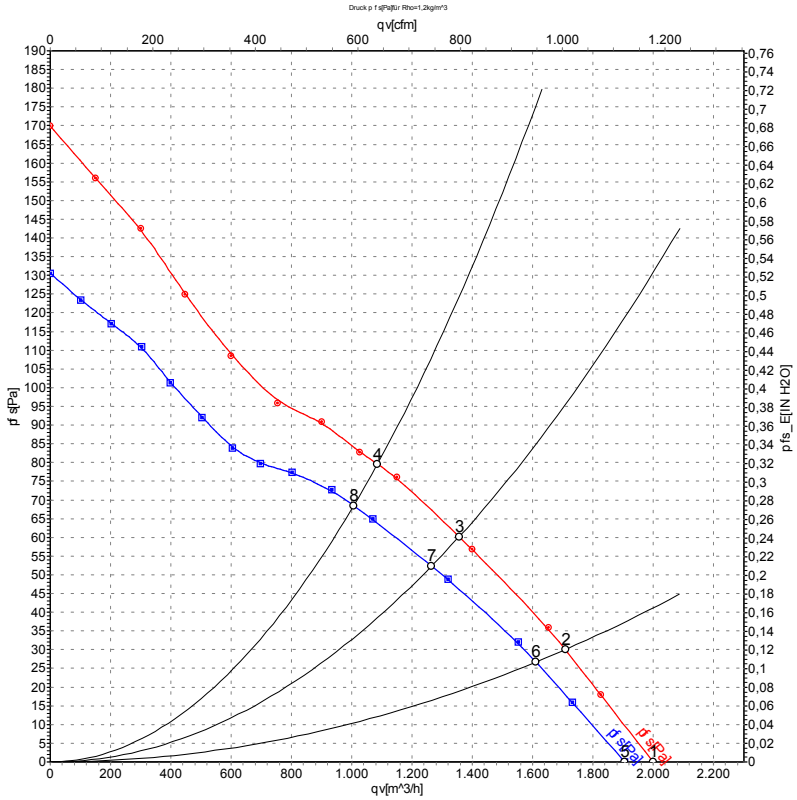
Measured values

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	400	50	1350	55	0.13	52	59	1705	0
2	400	50	1350	57	0.13	51	58	1465	20
3	400	50	1335	61	0.13	51	58	1205	40
4	400	50	1300	68	0.14	56	64	890	60

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-114654
Measurement: LU-114653

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

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	480	60	1600	80	0.15	56	64	2000	0
2	480	60	1580	86	0.15	56	64	1710	30
3	480	60	1560	92	0.15	56	64	1355	60
4	480	60	1510	105	0.16	56	64	1085	80
5	400	60	1500	70	0.13	55	62	1905	0
6	400	60	1495	75	0.14	54	61	1610	27
7	400	60	1460	80	0.14	54	61	1265	52
8	400	60	1400	90	0.15	58	66	1005	68

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
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