S4D250-AH22-01

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S4D250-AH22-01**
Motor	**M4D068-CF**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed	min^{-1}	1400	1580	1400	1580
Power input	W	25	32	25	32
Current draw	A	0.12	0.12	0.07	0.07
Max. back pressure	Pa	70	70	70	70
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	85	80	85	80
Starting current	A	0.16	0.15	0.16	0.15

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	2.52 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F5
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	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CCC; EAC

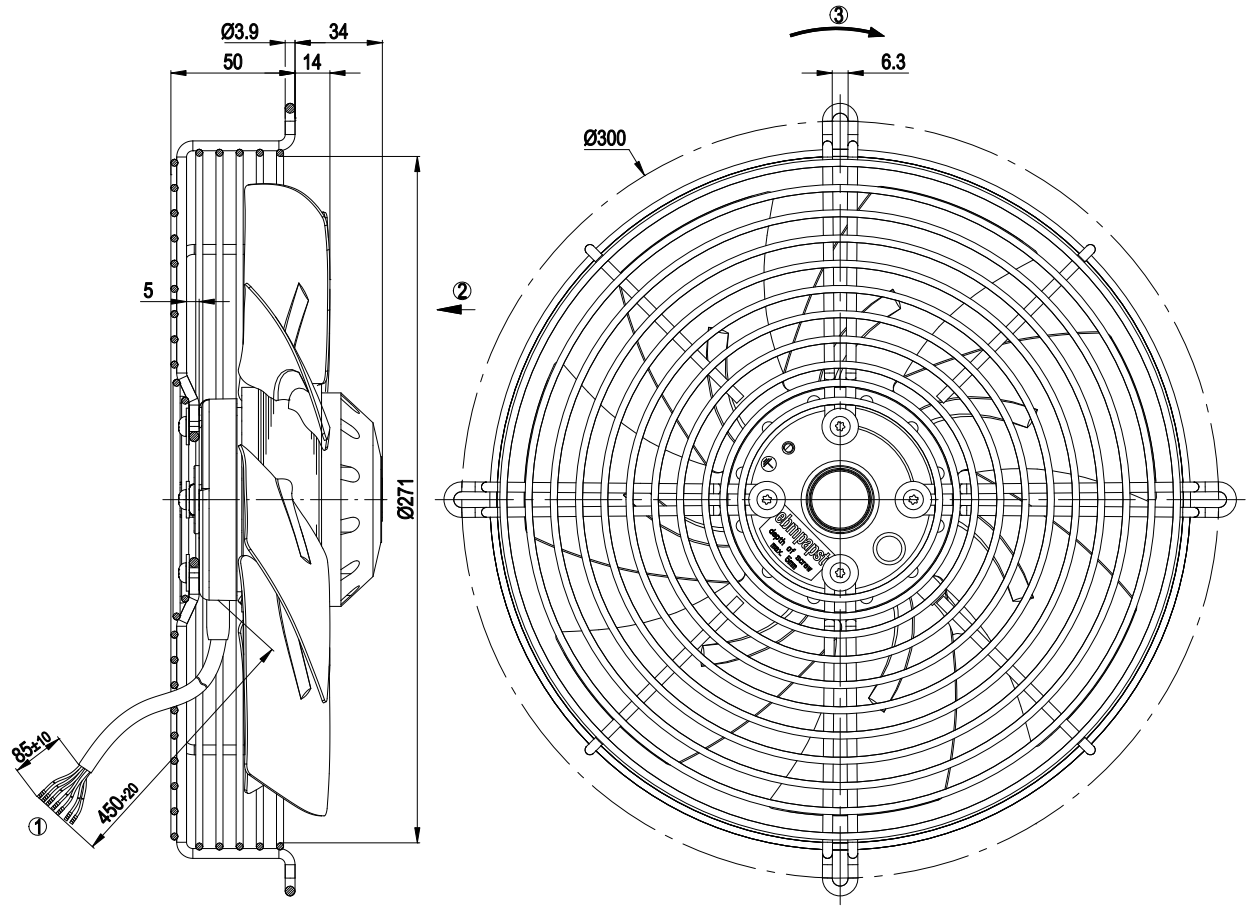
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Product drawing



1	Connection line PVC, 7x brass lead tips crimped
2	Direction of air flow "V"
3	Direction of rotation counter-clockwise, seen on rotor

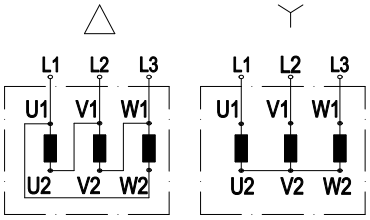
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Connection screen



Change direction of rotation by reversing two phases

	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow

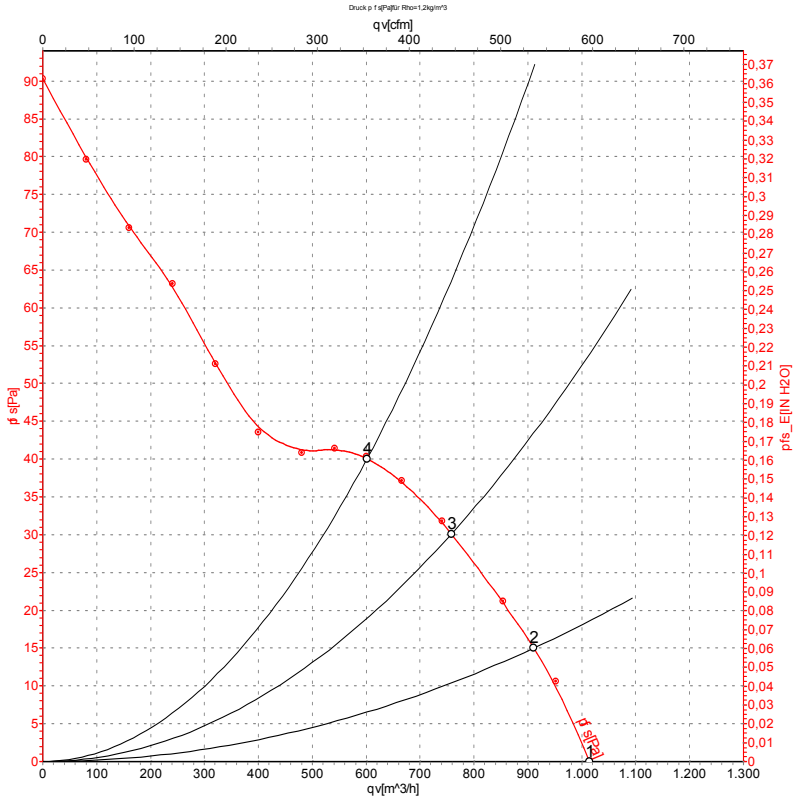
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Charts: Air flow 50 Hz



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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	400	50	1400	25	0.07	1015	0
2	400	50	1380	27	0.07	910	15
3	400	50	1365	29	0.07	760	30
4	400	50	1355	30	0.07	600	40

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

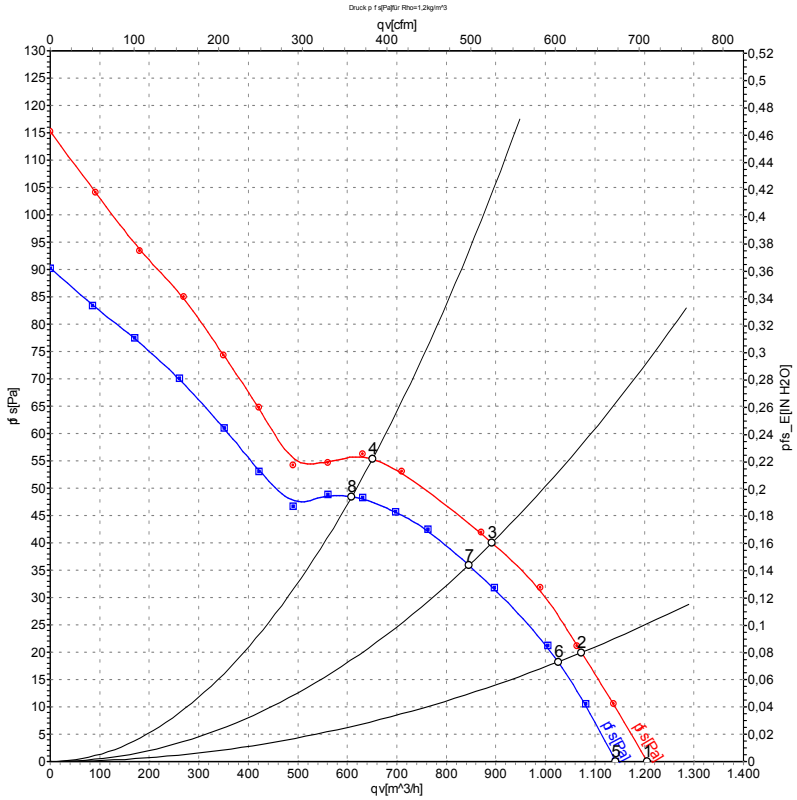
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Charts: Air flow 60 Hz



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Measured values

	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	480	60	1650	35	0.07	1205	0
2	480	60	1625	40	0.07	1075	20
3	480	60	1600	44	0.08	890	40
4	480	60	1585	46	0.08	650	56
5	400	60	1580	32	0.07	1140	0
6	400	60	1550	35	0.07	1025	18
7	400	60	1510	38	0.07	845	36
8	400	60	1490	40	0.08	610	48

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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