S4D300-AR42-51

AC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**S4D300-AR42-51**
Motor	**M4D068-CF**

Phase		3~	3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	230	265	400	400	440	460	480
Wiring		Δ	Δ	Y	Y	Y	Y	Y
Frequency	Hz	50	60	50	60	60	60	60
Method of obtaining data		fa	fa	fa	fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	CE	CE	CE	CE
Speed (rpm)	min^{-1}	1130	1200	1130	1090	1160	1200	1230
Power consumption	W	38	55	38	48	53	55	58
Current draw	A	0.1	0.14	0.06	0.07	0.08	0.08	0.09
Max. back pressure	Pa	30	33	30	25	33	33	34
Max. back pressure	inH2O	0.12	0.13	0.12	0.1	0.13	0.13	0.14
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	80	65	80	65	65	65	65

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	2.5 kg
Fan size	300 mm
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Blade material	Sheet steel, painted black
Guard grille material	Steel, galvanized and coated with signal white plastic (RAL 9003)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F2-2
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

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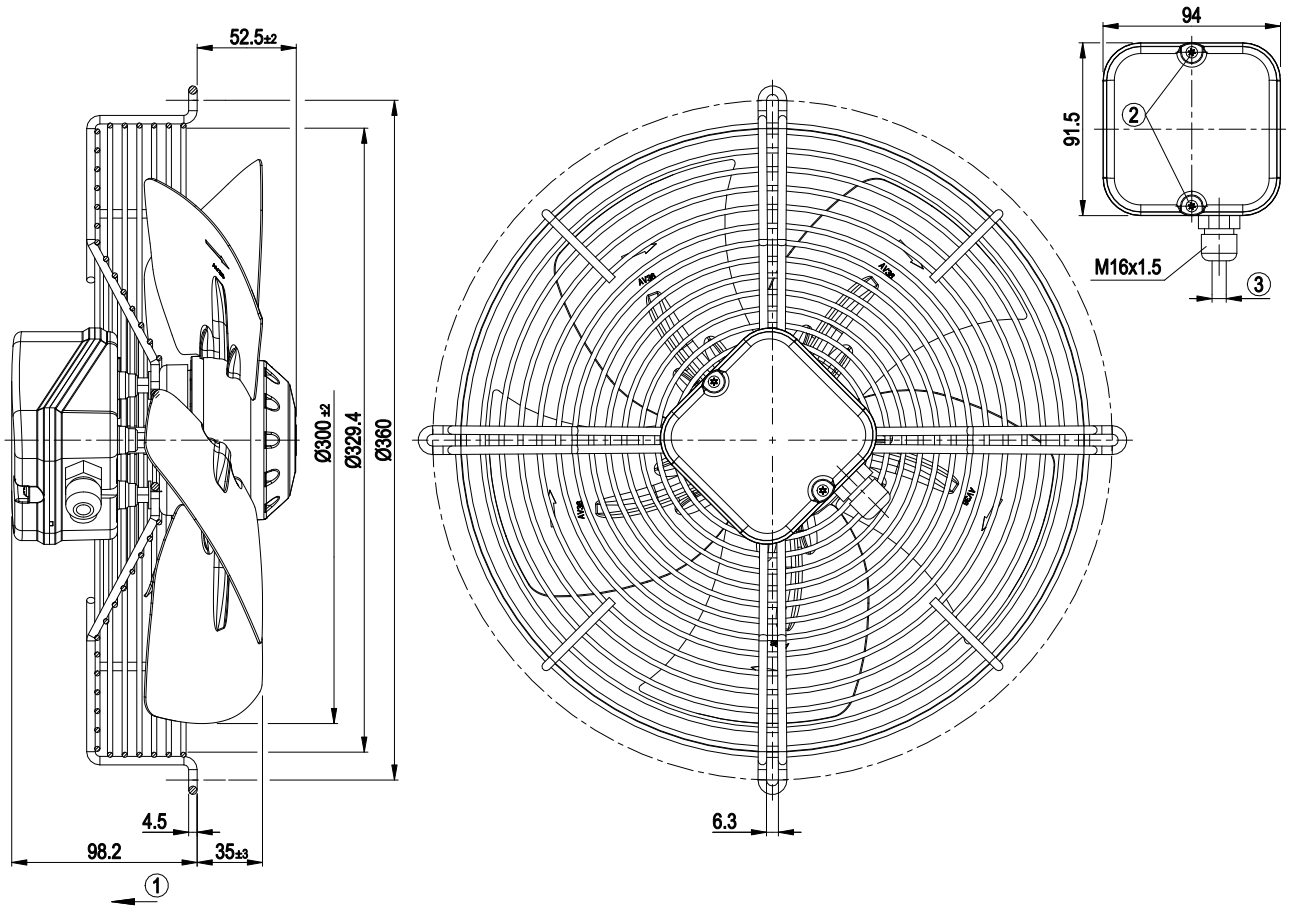
Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.8±0.2 Nm
3	Cable diameter: max. 7.5 mm, tightening torque 1.3±0.2 Nm

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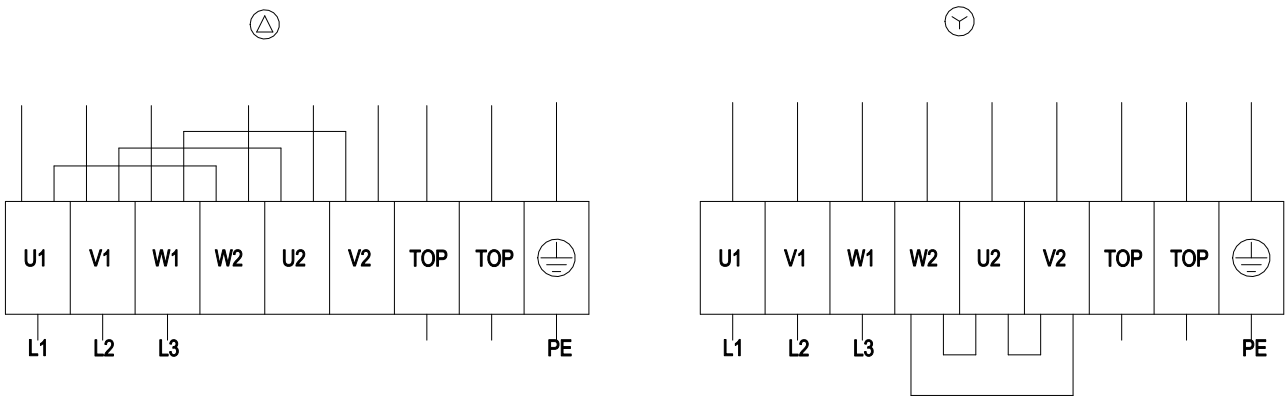
Connection diagram



Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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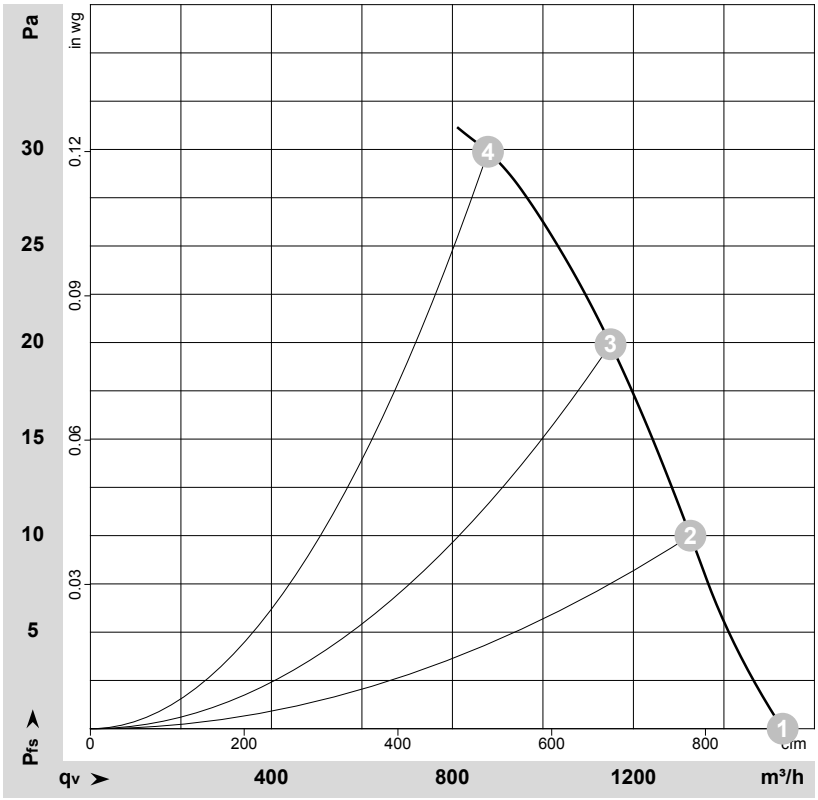
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112235-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y	400	50	1130	38	0.06	1530	0	900	0.00
2	Y	400	50	1090	41	0.07	1325	10	780	0.04
3	Y	400	50	1055	43	0.07	1150	20	675	0.08
4	Y	400	50	1000	46	0.08	880	30	515	0.12

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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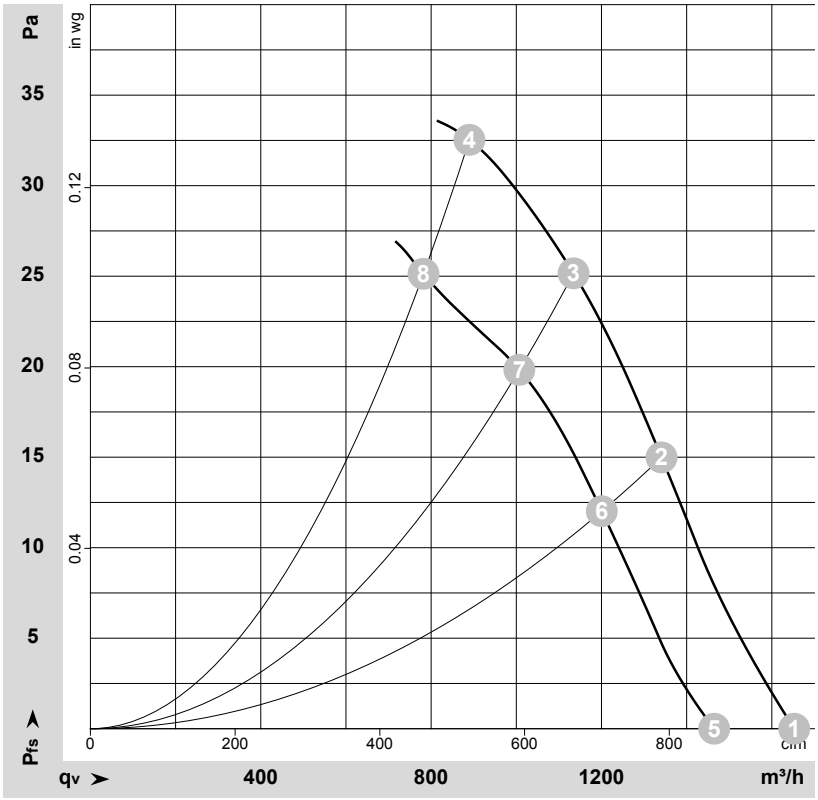
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112237-1
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Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y	460	60	1200	55	0.08	1650	0	970	0.00
2	Y	460	60	1140	59	0.08	1340	15	790	0.06
3	Y	460	60	1090	62	0.09	1135	25	665	0.10
4	Y	460	60	1005	66	0.09	890	33	525	0.13
5	Y	400	60	1090	48	0.07	1465	0	860	0.00
6	Y	400	60	1025	50	0.08	1200	12	705	0.05
7	Y	400	60	975	52	0.08	1005	20	595	0.08
8	Y	400	60	910	54	0.09	780	25	460	0.10

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase