S4D350-AS12-43

AC axial fan

sickle-shaped blades (S series), single-intake
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	**S4D350-AS12-43**
Motor	**M4D074-DF**

Phase		3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400	460
Wiring		Δ	Δ	Y	Y	Y
Frequency	Hz	50	50	50	60	60
Method of obtaining data		fa	fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	CE	CE
Speed (rpm)	min^{-1}	1420	1430	1420	1630	1680
Power consumption	W	95	105	95	130	140
Current draw	A	0.47	0.6	0.27	0.27	0.28
Capacitor	µF		8			
Capacitor voltage	VDB		400			
Capacitor standard			S0 (CE)			
Max. back pressure	Pa	60	60	60	75	80
Max. back pressure	in. wg	0.24	0.24	0.24	0.3	0.32
Min. ambient temperature	°C	-25	-25	-25	-25	-25
Max. ambient temperature	°C	55	55	55	55	55

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	4.5 kg
Size	350 mm
Motor size	74
Rotor surface	Painted black
Blade material	PA plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+; F2-2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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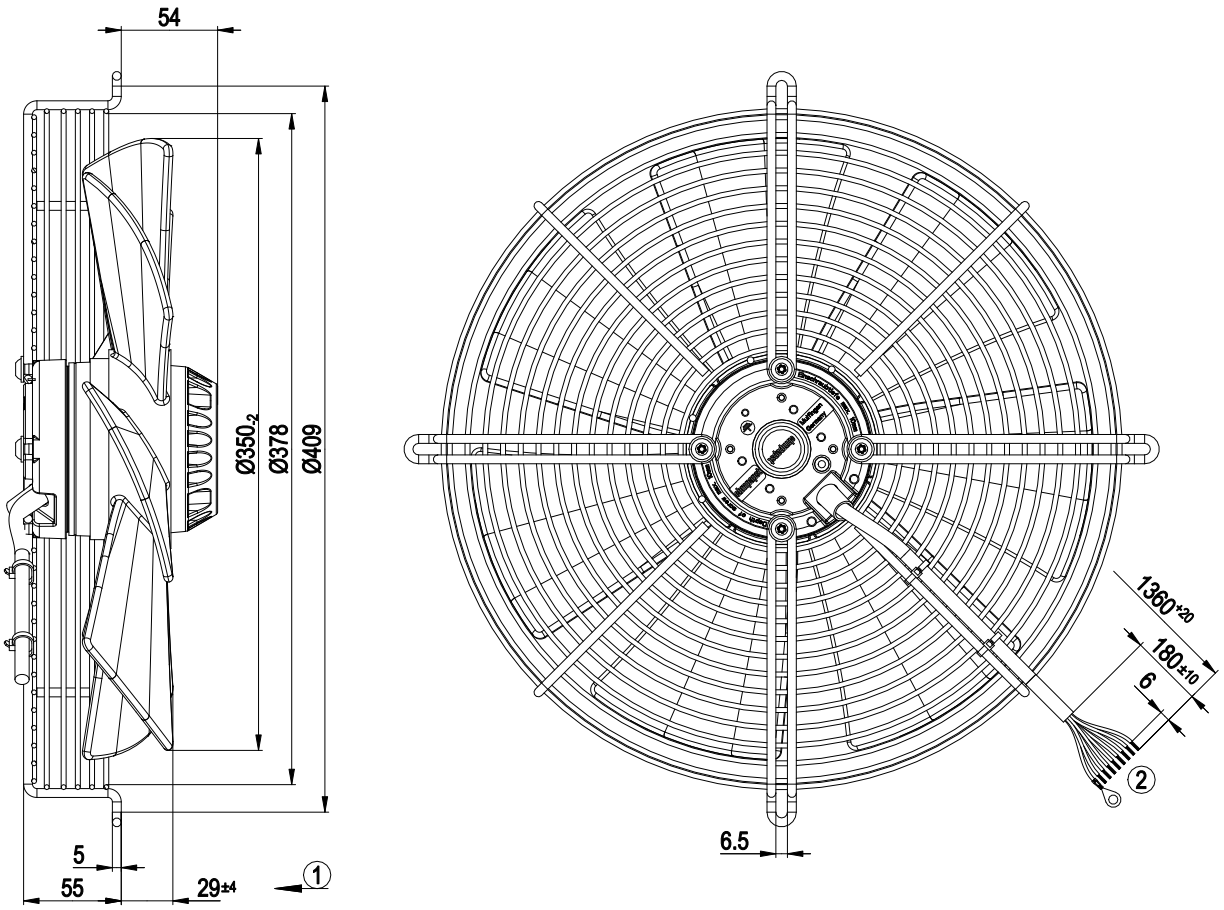
Product drawing



1	Airflow direction "V"
2	Cable PVC 9G 0.5 mm², heat-stabilized, 8x crimped splices, 1x ring terminal Ø 5.2

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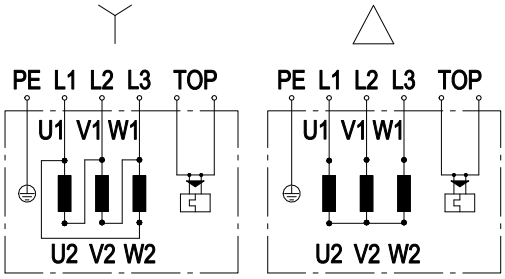
Connection diagram



Note: Change of rotation direction by reversing two phases

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

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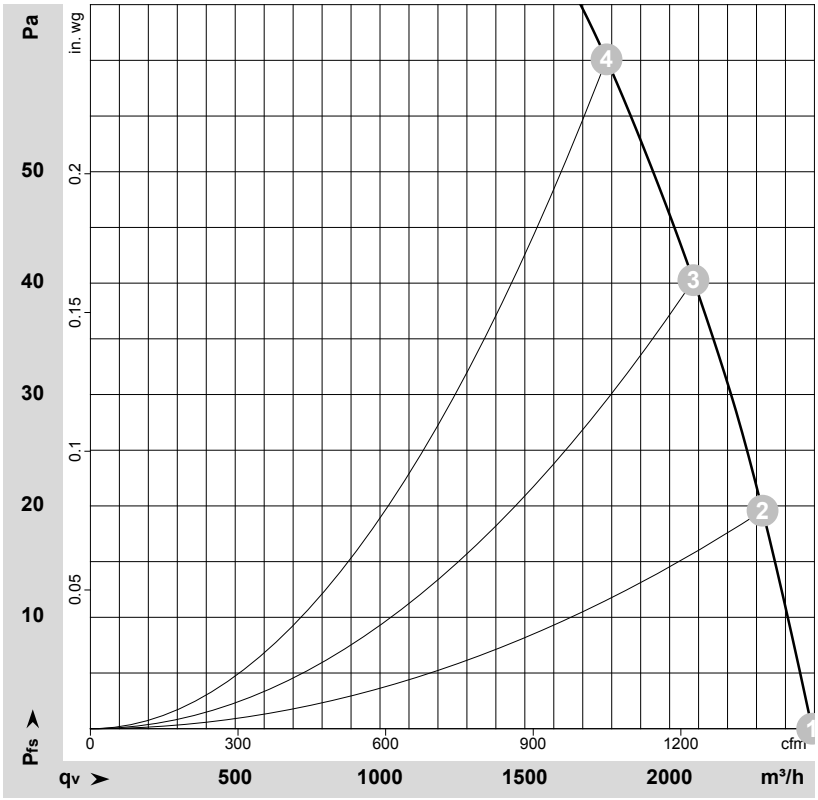
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-31934-1

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

	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	in. wg
1	400	50	1420	95	0.27	2490	0	1465	0.00
2	400	50	1410	103	0.27	2320	20	1365	0.08
3	400	50	1405	110	0.27	2080	40	1225	0.16
4	400	50	1395	115	0.27	1780	60	1050	0.24

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

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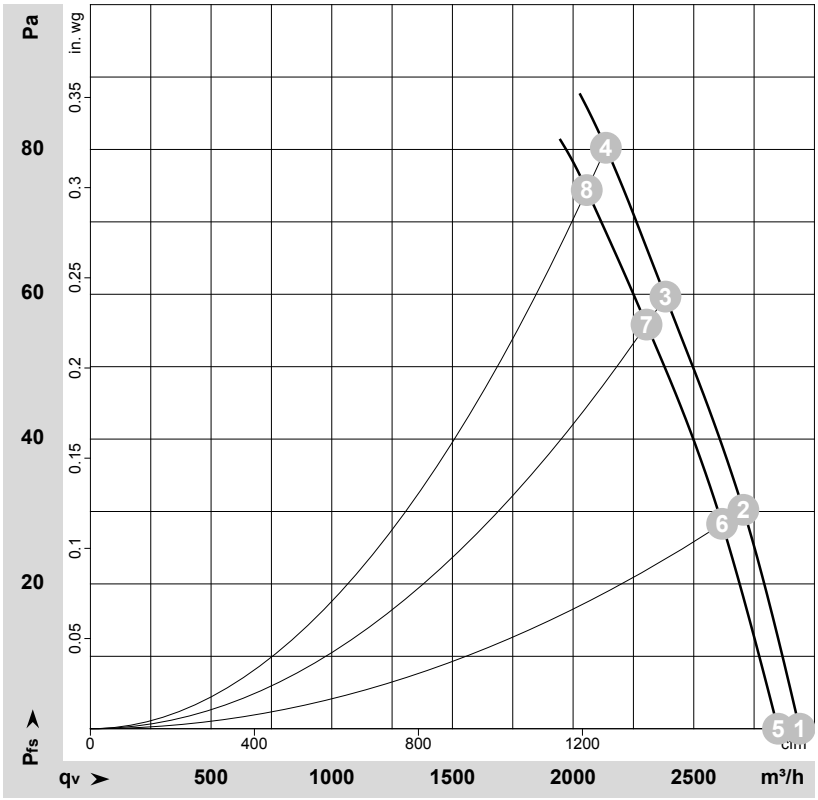
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-32091-1
Measurement: LU-31935-1

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

	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	in. wg
1	460	60	1680	140	0.28	2940	0	1730	0.00
2	460	60	1670	153	0.29	2705	30	1590	0.12
3	460	60	1655	164	0.30	2385	60	1405	0.24
4	460	60	1645	172	0.31	2135	80	1255	0.32
5	400	60	1630	130	0.27	2850	0	1675	0.00
6	400	60	1610	144	0.28	2615	28	1540	0.11
7	400	60	1590	156	0.30	2305	56	1355	0.22
8	400	60	1580	162	0.31	2055	75	1210	0.30

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