

AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S4E350-AN19-81		
Motor	M4E074-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	1270	1350
Power consumption	W	158	200
Current draw	A	0.70	0.88
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	80	60
Max. back pressure	in. wg	0.32	0.24
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	25	25
Starting current	A	1.1	1.11

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



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Technical description

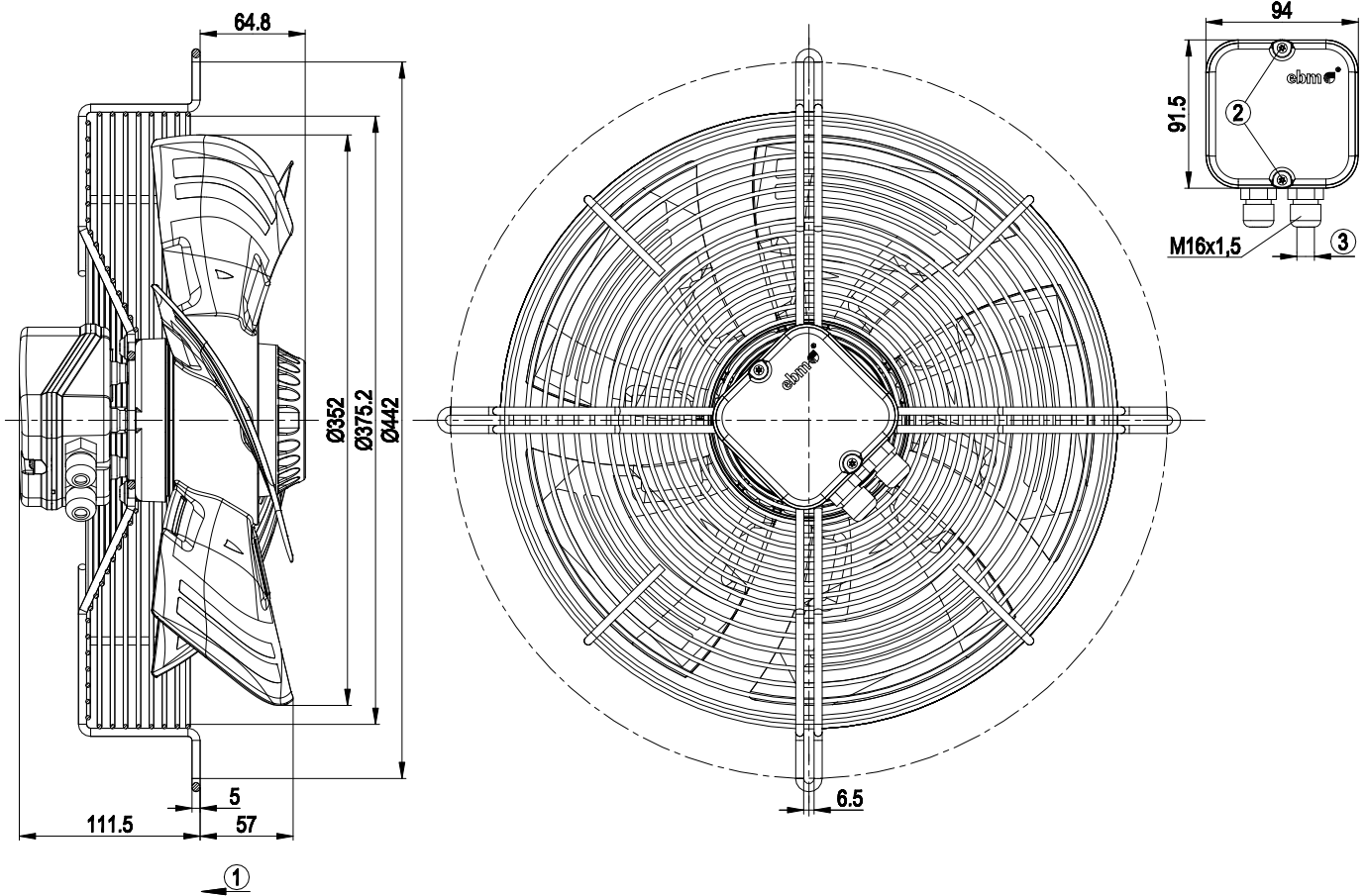
Weight	5.1 kg
Size	350 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	ABS plastic
Blade material	PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"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	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	Terminal box; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1



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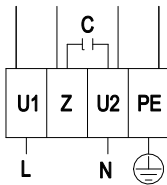
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Product drawing



- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Tightening torque 0.5 ± 0.1 Nm |
| 3 | Cable diameter max. 7.5 mm; tightening torque 1.3 ± 0.2 Nm |

Connection diagram



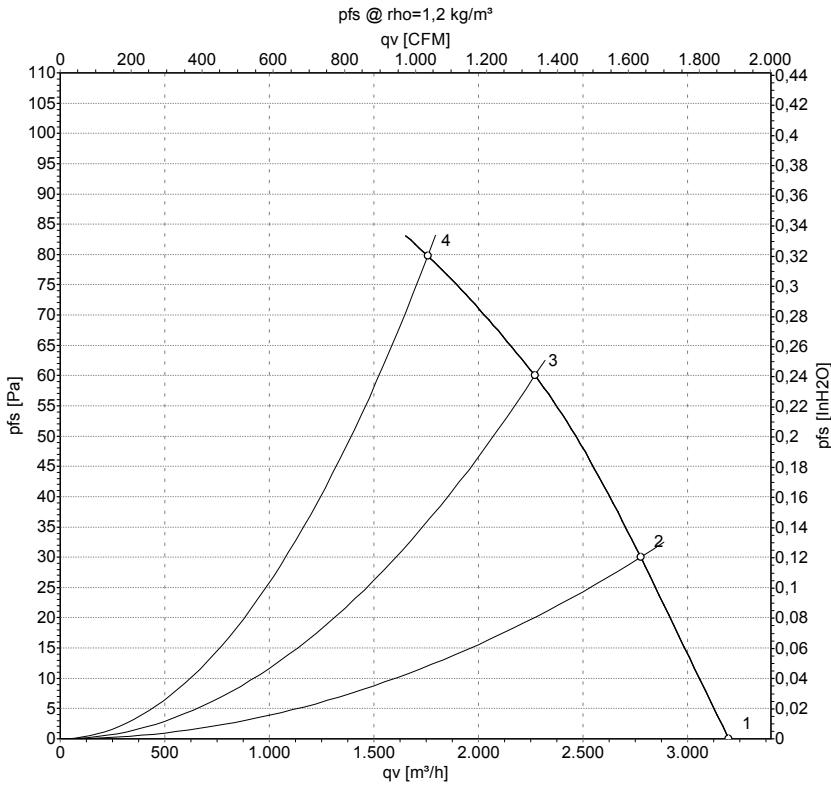
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				



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Curves: Air performance 50 Hz



Measurement: LU-134319-1

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	230	50	1355	134	0.60	3200	0	1885	0.00
2	230	50	1330	142	0.63	2775	30	1635	0.12
3	230	50	1305	151	0.66	2270	60	1335	0.24
4	230	50	1270	158	0.70	1760	80	1035	0.32

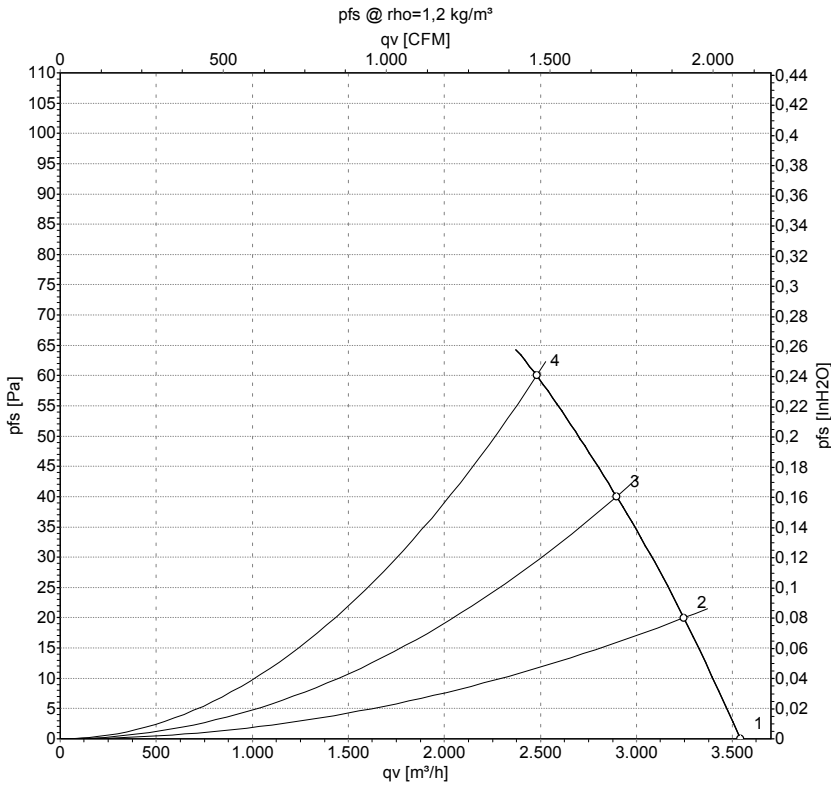
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



Measurement: LU-134321-1

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	230	60	1500	183	0.80	3540	0	2085	0.00
2	230	60	1465	189	0.82	3245	20	1910	0.08
3	230	60	1420	194	0.84	2895	40	1705	0.16
4	230	60	1350	200	0.88	2480	60	1460	0.24

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

