

AC axial fan

straight blades (A series)

with guard grille for short nozzle

S4D350-AA06-19 ebmpapst Datasheet

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Amtsgericht (court of registration) Stuttgart · HRB 590142



Nominal data

Type	S4D350-AA06-19				
Motor	M4D068-EC				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		-	-	-	-
Speed (rpm)	min ⁻¹	1420	1620	1420	1620
Power consumption	W	145	190	145	190
Current draw	A	0.68	0.62	0.39	0.36
Max. back pressure	Pa	150	150	150	150
Max. back pressure	inH ₂ O	0.6	0.6	0.6	0.6
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	50	50	50	50

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

Data according to ErP Directive

		Actual	Req. 2015		
01 Overall efficiency η_{es}	%	28.5	28.5	09 Power consumption P_e	kW 0.15
02 Measurement category		A		09 Air flow q_v	m ³ /h 2015
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa 75
04 Efficiency grade N		40	40	10 Speed (rpm) n	min ⁻¹ 1390
05 Variable speed drive		No		11 Specific ratio*	1.00

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = $1 + p_g / 100\,000\text{ Pa}$

LU-64797



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Technical description

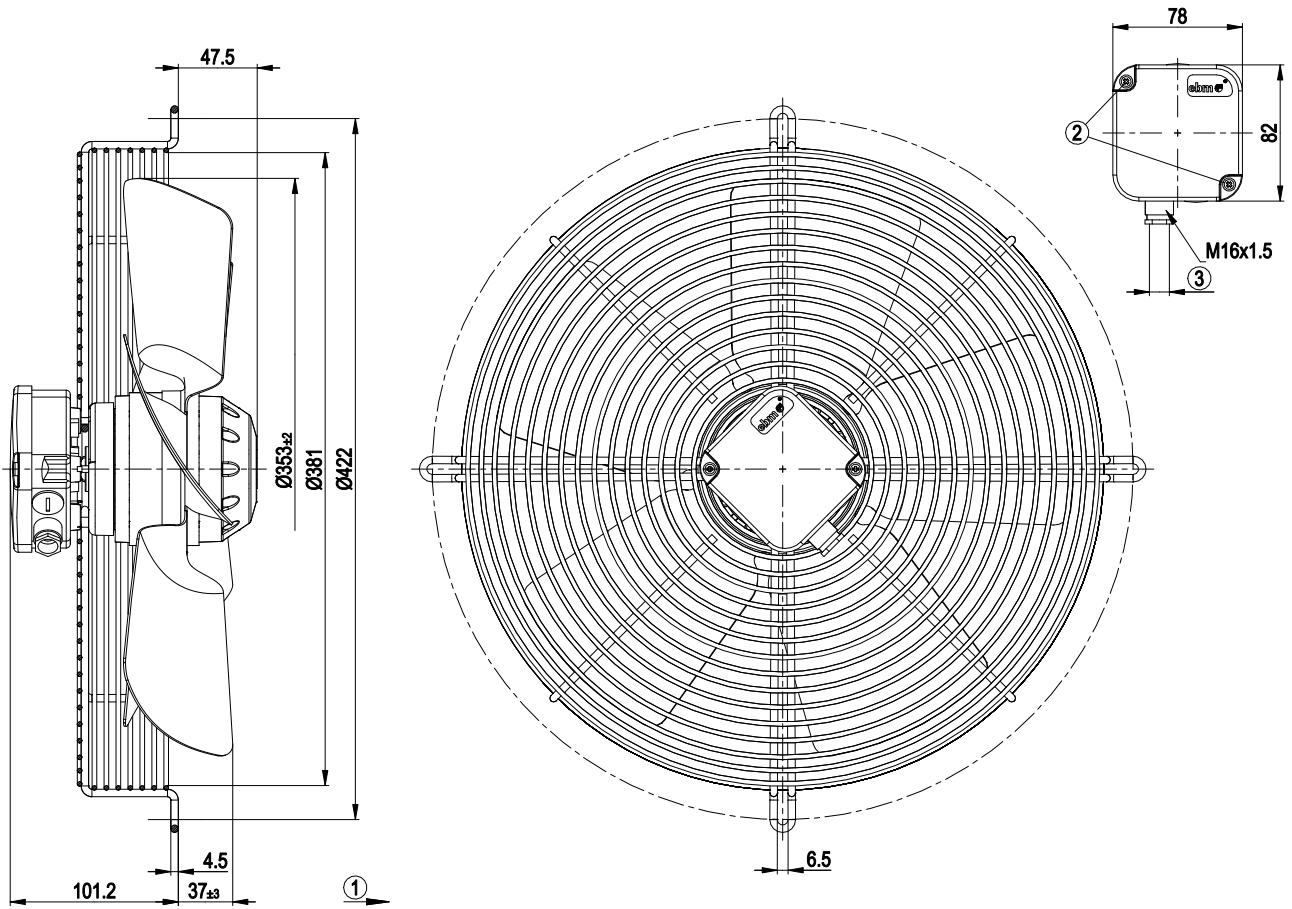
Weight	4.8 kg
Fan size	350 mm
Rotor surface	Painted black
Terminal box material	Die-cast aluminum
Terminal box cover material	Aluminum alloy
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, 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	H0+
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
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



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Product drawing



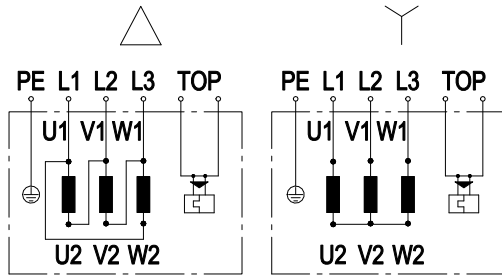
1	Direction of air flow "A"
2	Tightening torque 1.3 ± 0.2 Nm
3	Cable diameter min. 6 mm, max. 8 mm, tightening torque 2 ± 0.3 Nm



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Connection diagram



Note: Change of rotation direction by reversing two phases

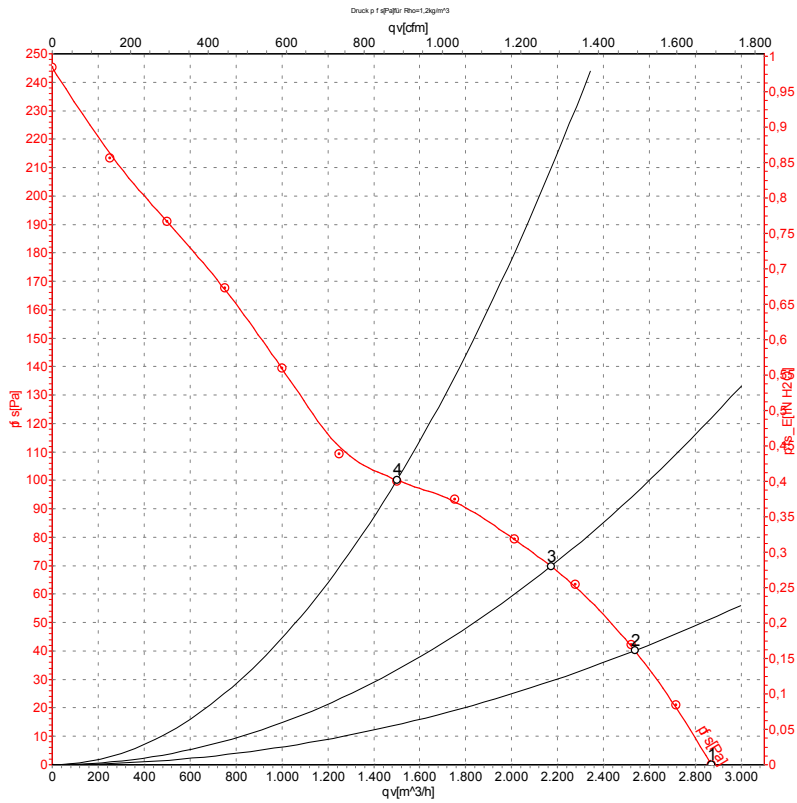
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				



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Curves: Air performance 50 Hz



Measurement: LU-64797-1

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	qv	p _{fs}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	400	50	1420	128	0.39	2870	0	1690	0.00
2	400	50	1405	141	0.40	2535	40	1495	0.16
3	400	50	1395	150	0.41	2170	70	1280	0.28
4	400	50	1385	158	0.41	1500	100	885	0.40

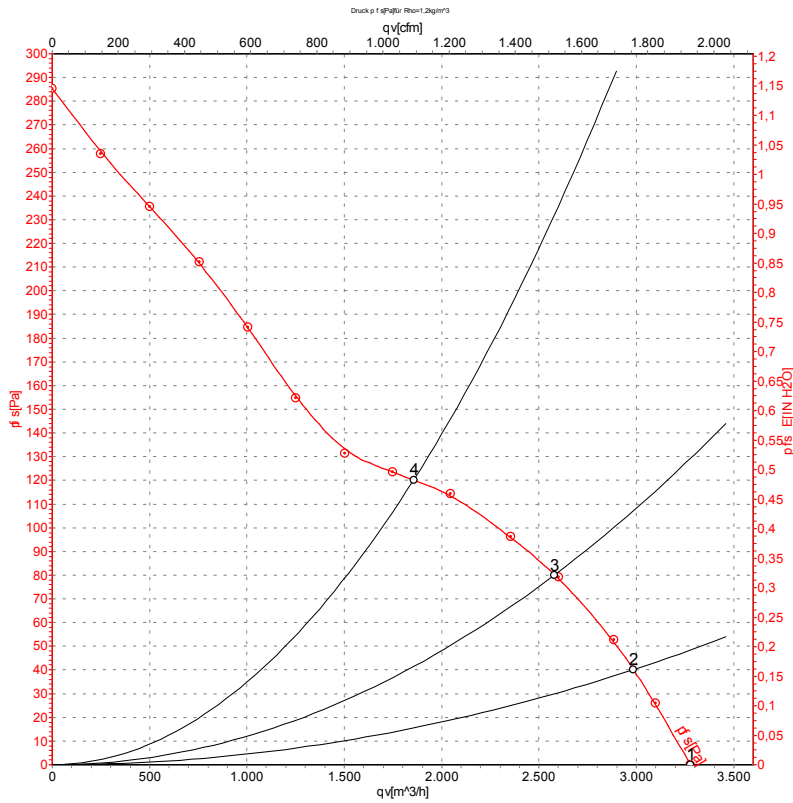
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



Measurement: LU-64798-1

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	Pe	I	qv	p _{fs}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	400	60	1620	169	0.36	3280	0	1930	0.00
2	400	60	1605	185	0.36	2985	40	1755	0.16
3	400	60	1580	202	0.38	2580	80	1520	0.32
4	400	60	1560	217	0.39	1855	120	1090	0.48

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

