

# AC axial fan

straight blades (A series)

with guard grille for short nozzle

S4E350-AA06-29 ebmpapst Datasheet

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## Nominal data

Type	S4E350-AA06-29		
Motor	M4E068-EC		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	1390	1550
Power consumption	W	140	195
Current draw	A	0.62	0.86
Capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. back pressure	Pa	120	90
Max. back pressure	inH <sub>2</sub> O	0.48	0.36
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	70	50
Starting current	A	1.4	1.3

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 $\eta_{es}$	%	28.5	28.5	09 Power consumption $P_e$	kW	0.15
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	1880
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	80
04 Efficiency grade N		40	40	10 Speed (rpm) n	min <sup>-1</sup>	1360
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-64421



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## Technical description

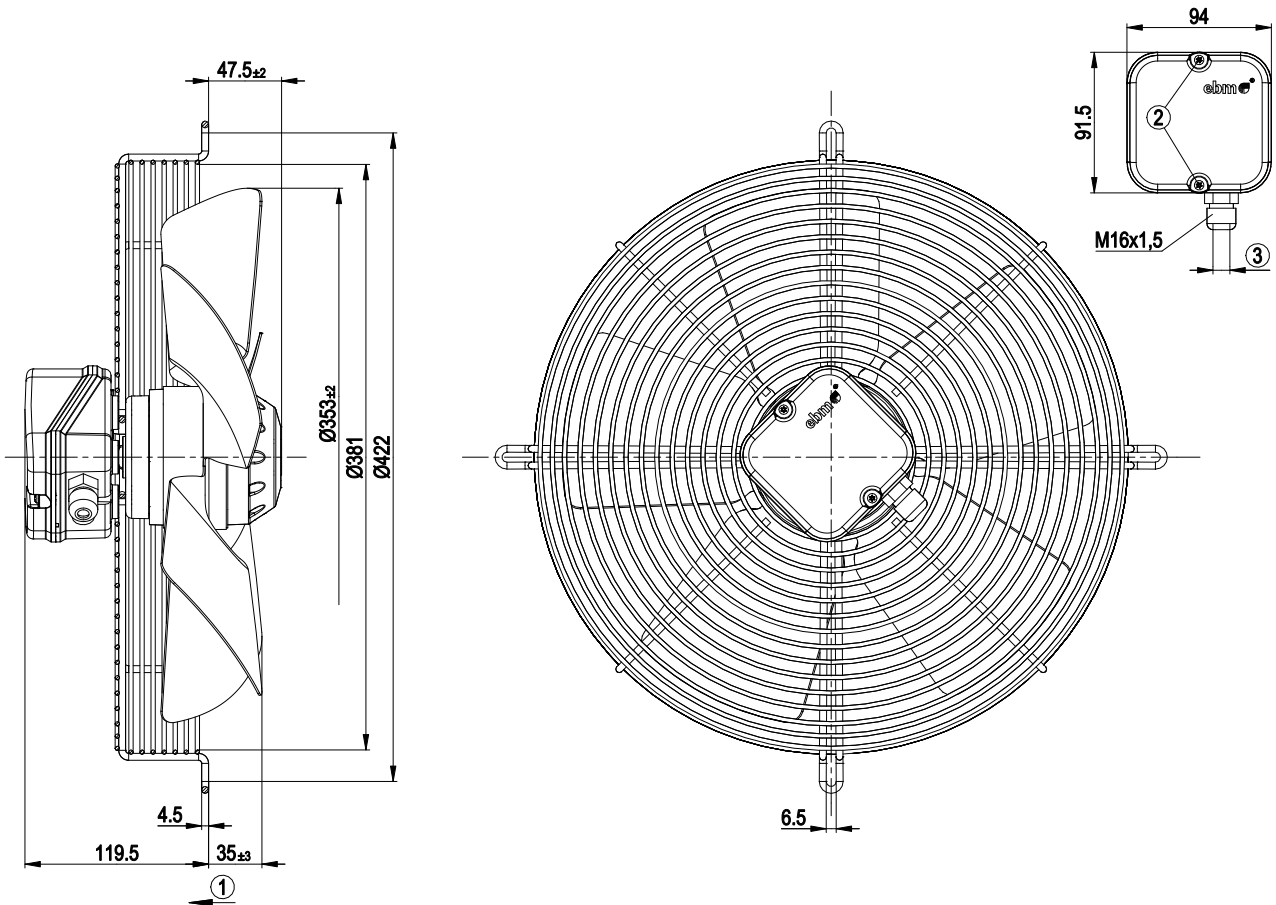
Weight	4.7 kg
Fan size	350 mm
Rotor surface	Painted black
Terminal box material	ABS plastic
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	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 with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
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; CE



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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



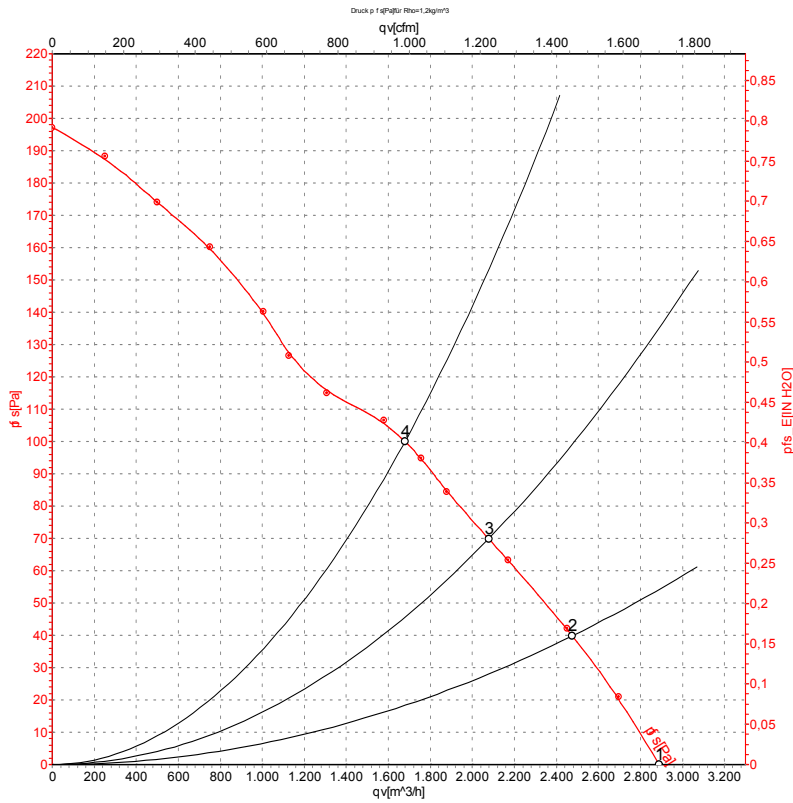
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				



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## Curves: Air performance 50 Hz



Measurement: LU-64421-1

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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	230	50	1390	140	0.62	2890	0	1700	0.00
2	230	50	1370	143	0.63	2475	40	1455	0.16
3	230	50	1360	149	0.65	2080	70	1225	0.28
4	230	50	1330	167	0.73	1680	100	990	0.40

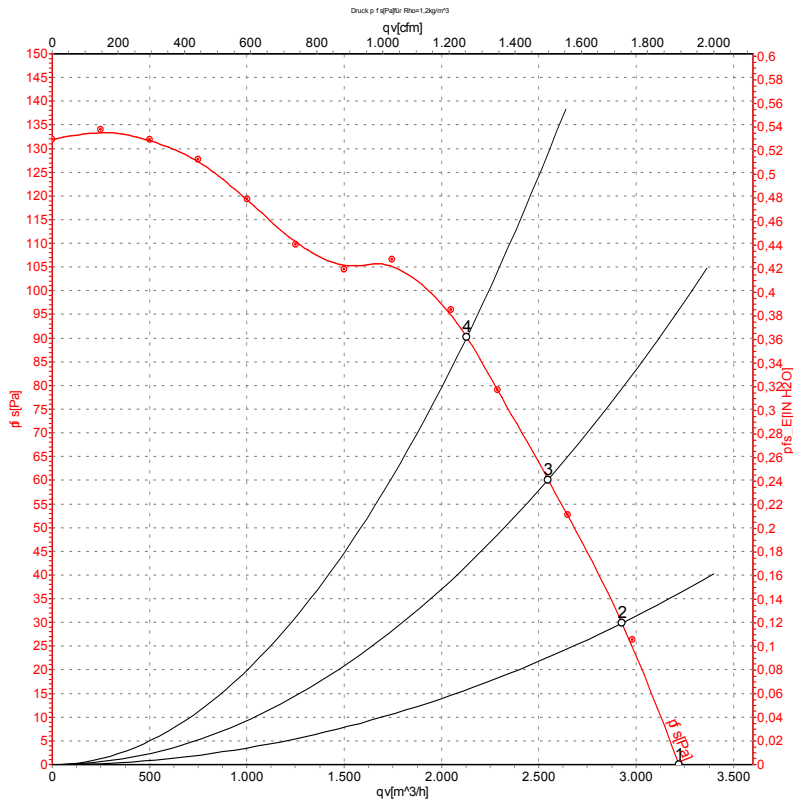
U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



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## Curves: Air performance 60 Hz



Measurement: LU-64461-1

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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	230	60	1550	195	0.86	3220	0	1895	0.00
2	230	60	1520	202	0.88	2925	30	1725	0.12
3	230	60	1495	210	0.91	2550	60	1500	0.24
4	230	60	1475	216	0.94	2130	90	1255	0.36

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

