

EC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

S3G350-AH11-16 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	S3G350-AH11-16	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1450
Power consumption	W	115
Current draw	A	1.05
Max. back pressure	Pa	85
Max. back pressure	in. wg	0.34
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	20

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



EC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

Technical description

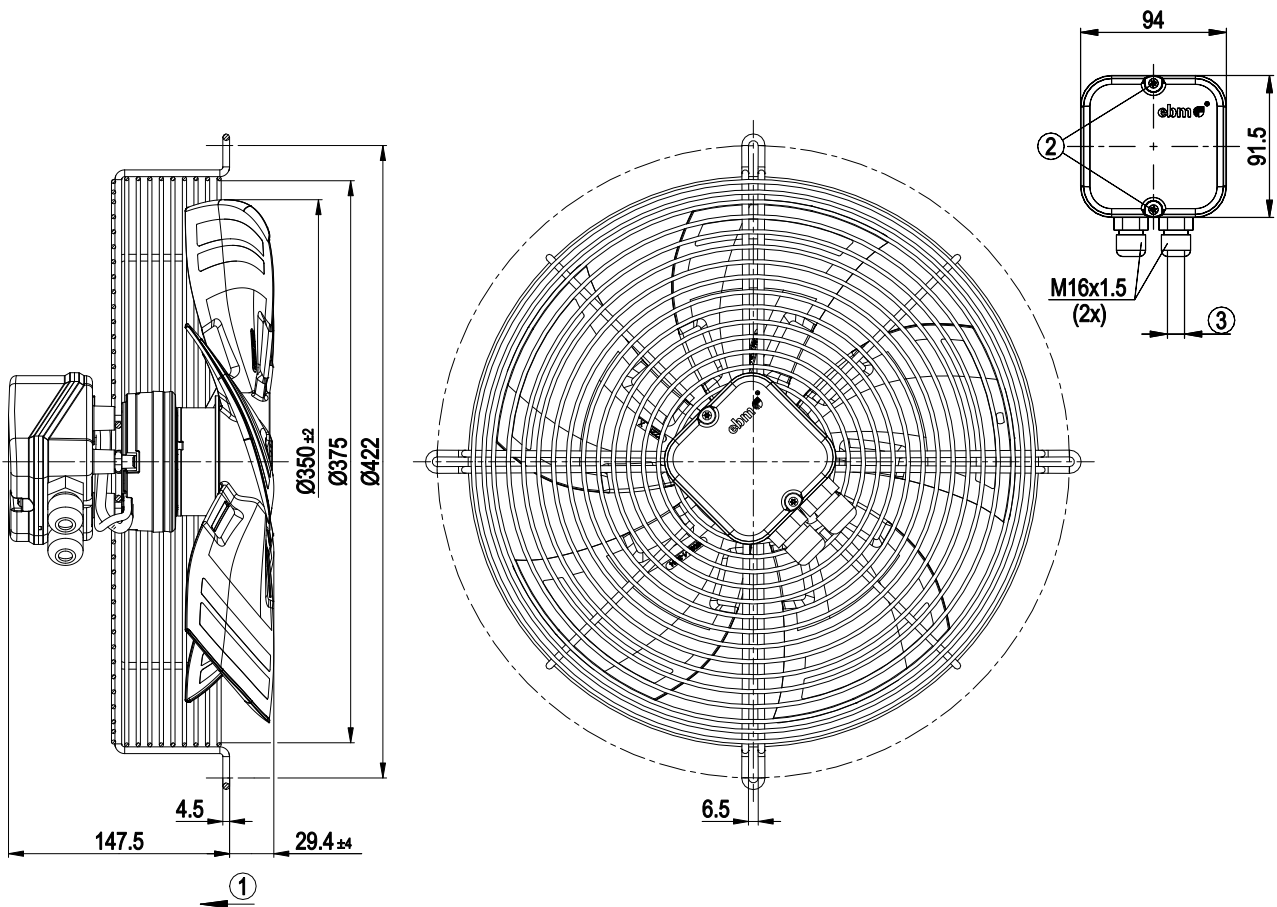
Weight	3.2 kg
Size	350 mm
Motor size	55
Rotor surface	Thick-film passivated
Terminal box material	ABS plastic
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Ambient temperature note	As fan suitable for ambient temperatures between -40°C and +20°C, occasional start-up between +20°C and +40°C is permissible.
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-7 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1



EC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

Product drawing

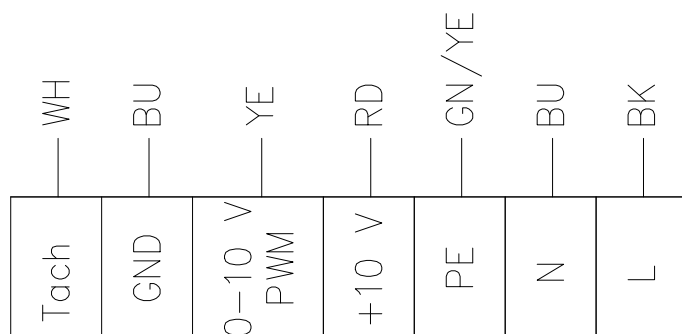


1	Airflow direction "V"
2	Tightening torque 0.5 ± 0.1 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm

EC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

Connection diagram



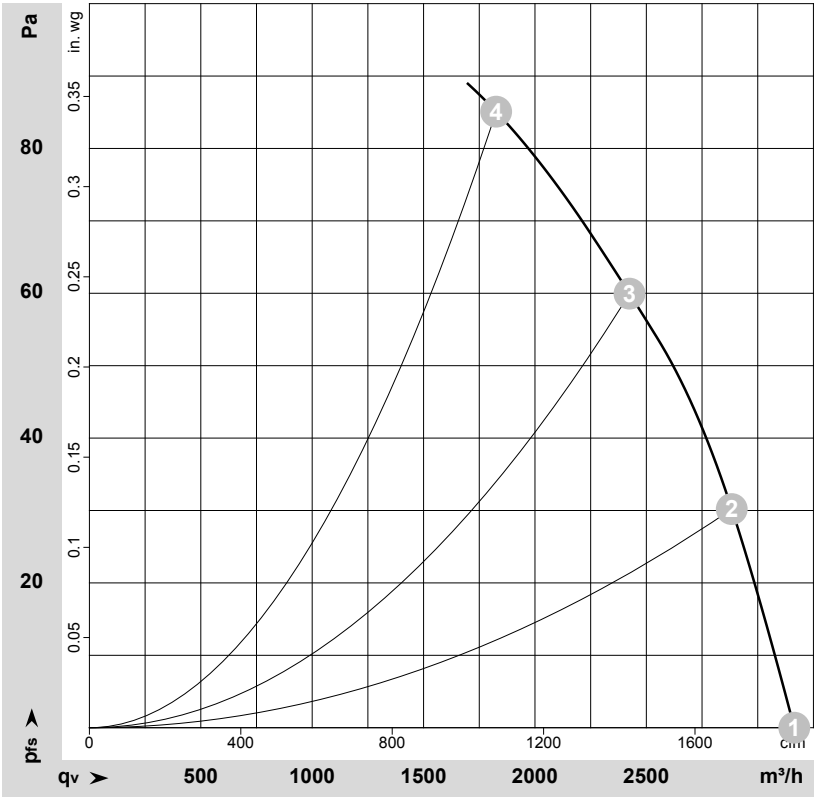
No.	Conn.	Designation	Color	Function/assignment
1	1	Tacho	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
1	2	GND	blue	Reference ground for control interface, SELV
1	3	0-10 V / PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
1	4	+10 V	red	Fixed voltage output 10 VDC +/-3%, I _{max} . 10 mA, short-circuit-proof, power supply for ext. devices (e.g. potentiometers), SELV
1	5	PE	green/yellow	Ground connection
1	6	N	blue	Supply connection, power supply, neutral conductor, voltage range see nameplate, 50/60 Hz
1	7	L	black/brown	Supply connection, power supply, phase, voltage range see nameplate, 50/60 Hz



EC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-185587-1

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 _{ed}	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	1~	230	50	1600	87	0.79	64	70	3165	0	1860	0.00
2	1~	230	50	1600	109	0.97	61	67	2885	30	1695	0.12
3	1~	230	50	1535	115	1.05	58	64	2425	60	1425	0.24
4	1~	230	50	1450	115	1.05	56	62	1825	85	1075	0.34

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase

