

EC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S3G350-AN01-50	
Motor	M3G074-CF	
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	1475
Power consumption	W	165
Current draw	A	1.35
Max. back pressure	Pa	100
Max. back pressure	in. wg	0.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	32.7	28.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	40
05 Variable speed drive		Yes	

Data obtained at optimum efficiency level.

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

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m³/h	1805
09 Pressure increase p_{fs}	Pa	95
10 Speed (rpm) n	min ⁻¹	1505
11 Specific ratio*		1.00

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

LU-197725



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Technical description

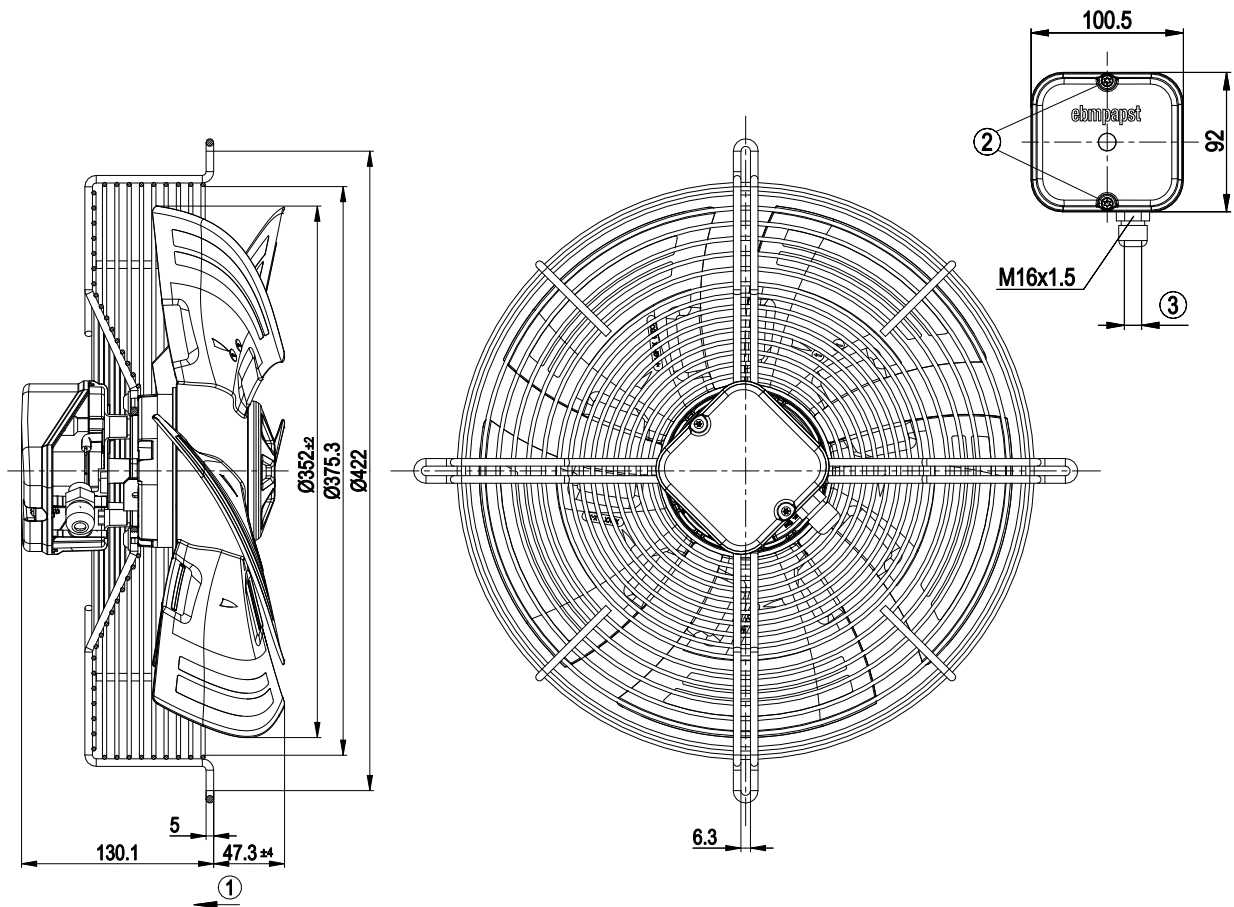
Weight	3.8 kg
Size	350 mm
Motor size	74
Terminal box material	PP plastic
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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, open rotor
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed setting input (230 V) - Power limit - Motor current limitation - Soft start - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Speed levels	2
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 60034-1; EN 60204-1; EN 60335-1; CE
Approval	EAC; CCC



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Product drawing

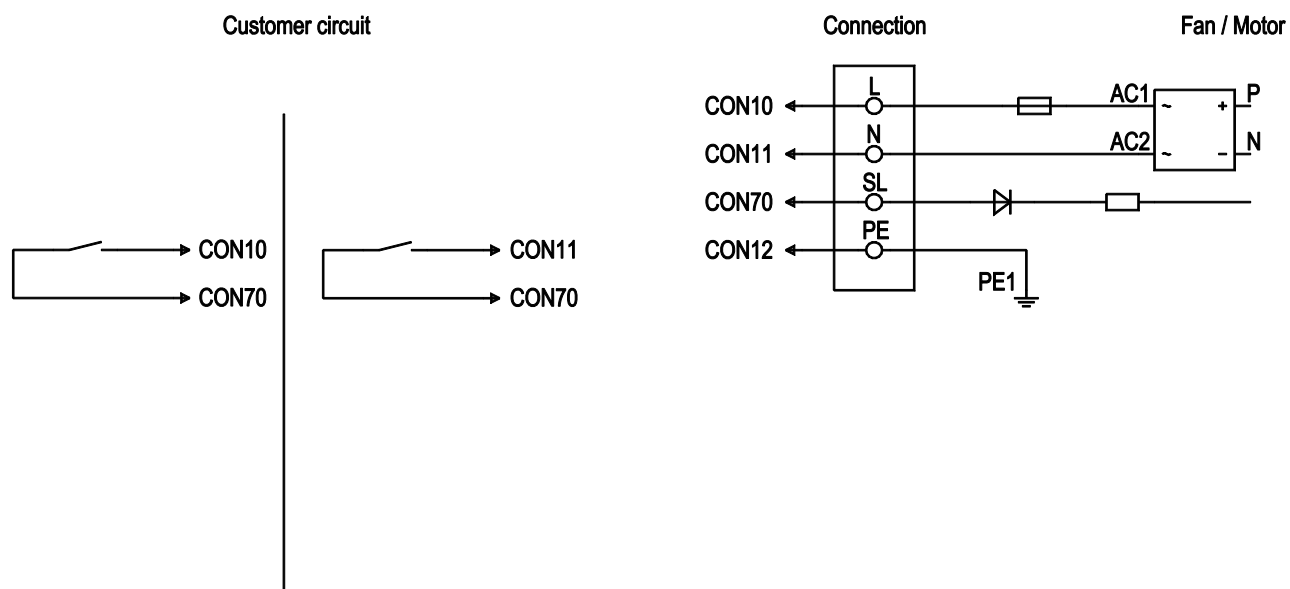


1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter: 7.5 mm; tightening torque 1.3 ± 0.2 Nm

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Connection diagram



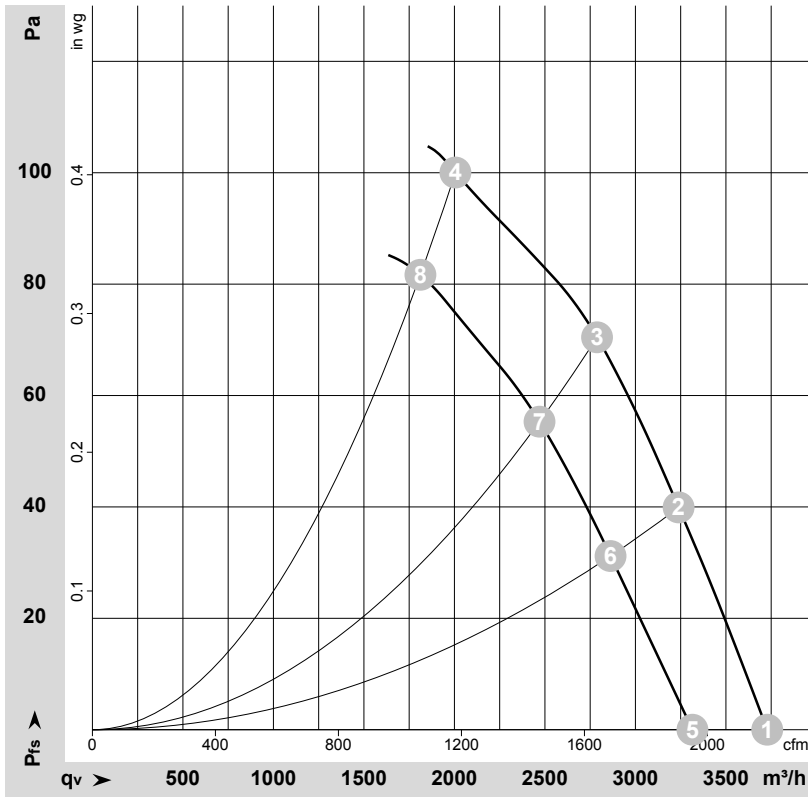
No.	Conn.	Designation	Color	Function/assignment
	CON 10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth
	CON 70	SL	brown	Speed selection: switch open speed 1; switch closed speed 2

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Curves: Air performance 50 Hz



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

Measurement: LU-134592-1
Measurement: LU-134596-1

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 _{ed}	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	in. wg
1	230	50	1575	141	1.15	64	71	3730	0	2195	0.00
2	230	50	1545	155	1.24	61	68	3240	40	1905	0.16
3	230	50	1525	164	1.32	58	66	2790	70	1640	0.28
4	230	50	1475	165	1.35	59	67	2005	100	1180	0.40
5	230	50	1395	98	0.82	60	68	3315	0	1950	0.00
6	230	50	1370	108	0.90	58	65	2865	31	1685	0.12
7	230	50	1350	115	0.99	56	63	2470	56	1455	0.22
8	230	50	1335	123	1.06	56	64	1810	83	1065	0.33

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

