EC axial fan - HyBlade

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Nominal data

Type	**S3G300-BC53-16**
Motor	**M3G055-CF**

Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz		50/60
Method of obtaining data			ml
Speed (rpm)	min^{-1}	1200	1500
Power consumption	W		65
Current draw	A		1.0
Max. back pressure	Pa		80
Max. back pressure	in. wg		0.32
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	40

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

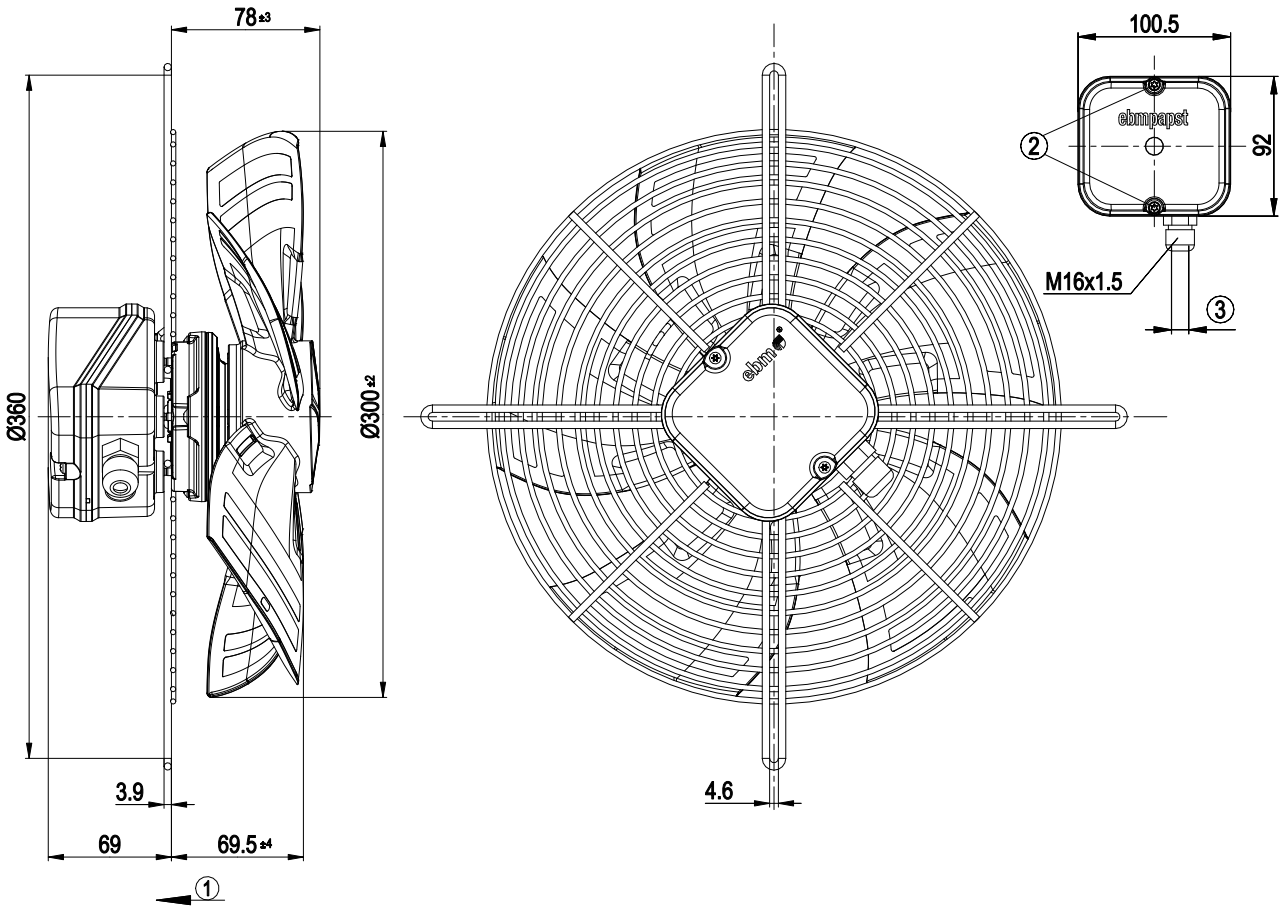
Technical description

Weight	2.1 kg
Size	300 mm
Motor size	55
Rotor surface	Cast in PA plastic
Terminal box material	PP plastic
Blade material	PA 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
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed setting input (230 V) - Power limiter - Motor current limitation - Soft start - Overvoltage detection - Thermal overload protection for electronics/motor
Speed levels	2
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial 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	CE
Approval	UL 1004-7 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1

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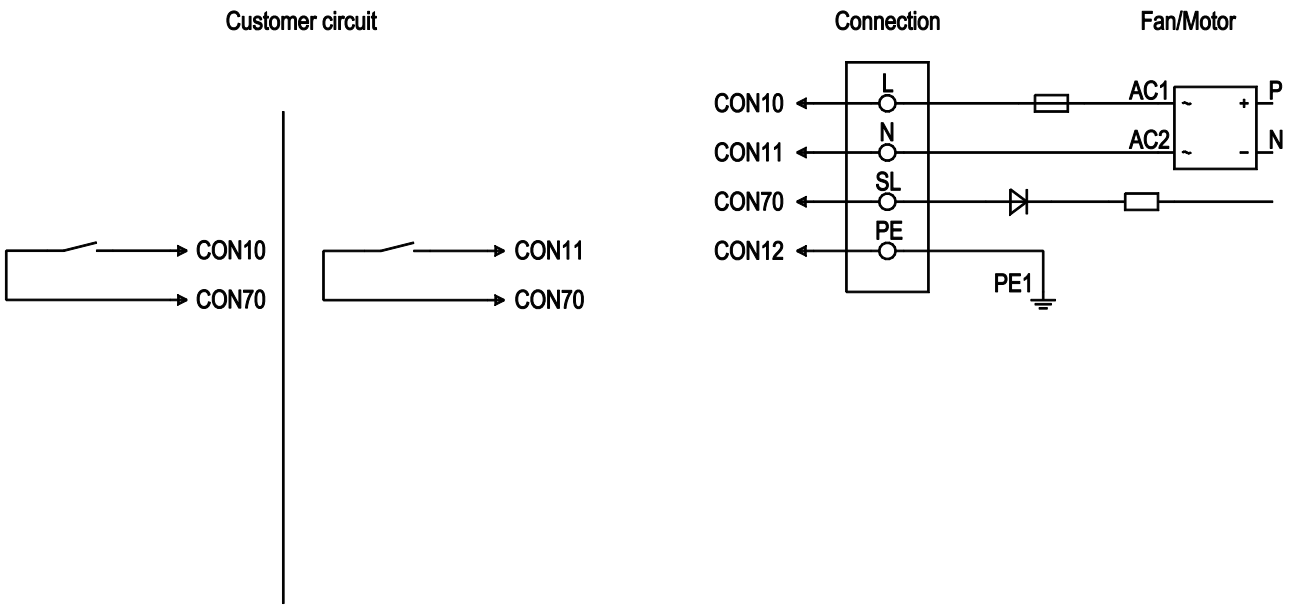
Product drawing



1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 4 mm, max. 10 mm, tightening torque 2.5 ± 0.4 Nm

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Connection diagram

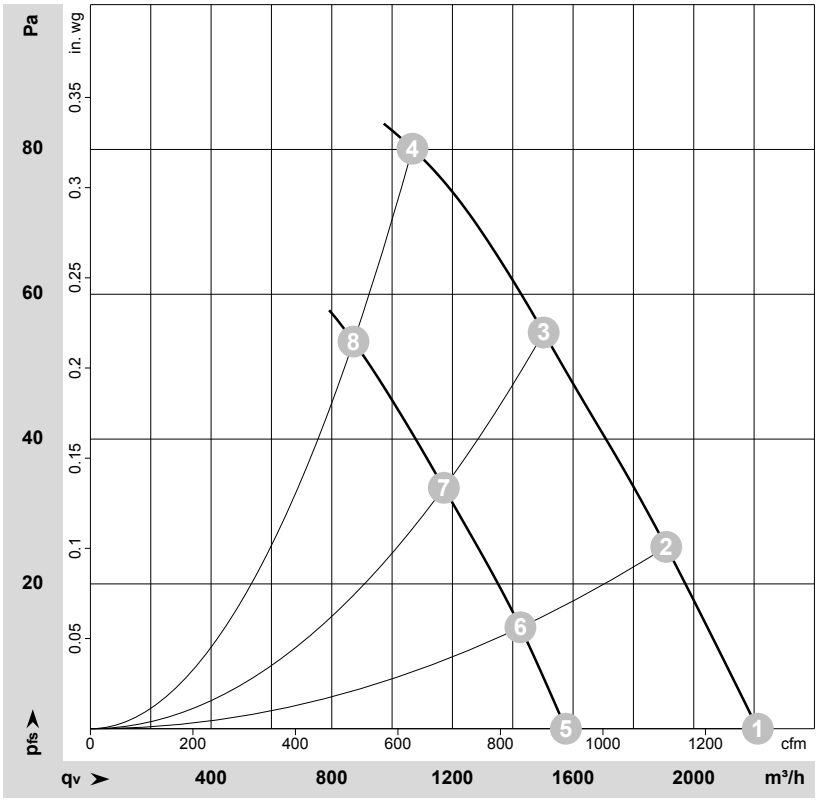


No.	Conn.	Designation	Color	Function/assignment
	CON 10	L	black	Power supply 115 VAC, 50 - 60 Hz, see nameplate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth
	CON 70	SL	brown	Speed selection: switch open speed 1 (fast), switch closed speed 2 (slow)

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-192705-1
Measurement: LU-193260-1

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

	Stage	Wired	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
			V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1	1~	115	60	1835	65	1.00	2210	0	1300	0.00
2	1	1~	115	60	1710	65	1.00	1910	25	1125	0.10
3	1	1~	115	60	1610	65	1.00	1500	55	885	0.22
4	1	1~	115	60	1500	65	1.00	1070	80	630	0.32
5	2	1~	115	50	1295	25	0.44	1575	0	930	0.00
6	2	1~	115	50	1275	28	0.49	1425	14	840	0.06
7	2	1~	115	50	1250	31	0.55	1170	33	690	0.13
8	2	1~	115	50	1225	35	0.60	870	54	515	0.22

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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