S3G315-AE13-55

EC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S3G315-AE13-55**
Motor	**M3G055-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}	1325
Power consumption	W	85
Current draw	A	0.8
Max. back pressure	Pa	50
Max. back pressure	inH2O	0.2
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40

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

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Technical description

Weight	2.8 kg
Fan size	315 mm
Rotor surface	Thick-film passivated
Terminal box material	PC/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; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
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	None, open rotor
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Technical features	- Speed setting input (230 V) - Power limiter - Motor current limitation - Soft start - Thermal overload protection for electronics/motor - Line undervoltage detection
Speed levels	2
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 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE
Approval	UL 2111; CSA C22.2 No. 77; EAC

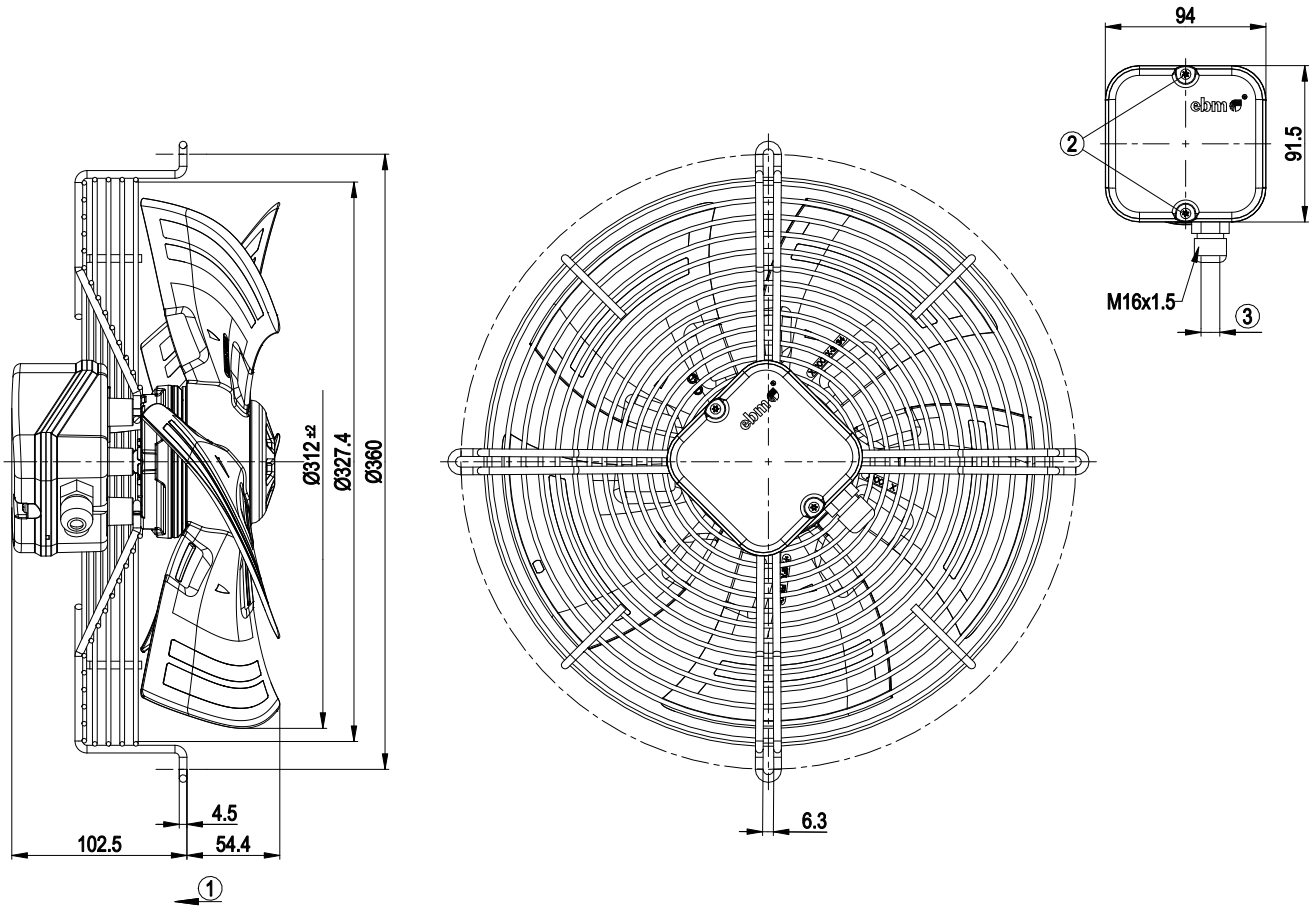
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Product drawing



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

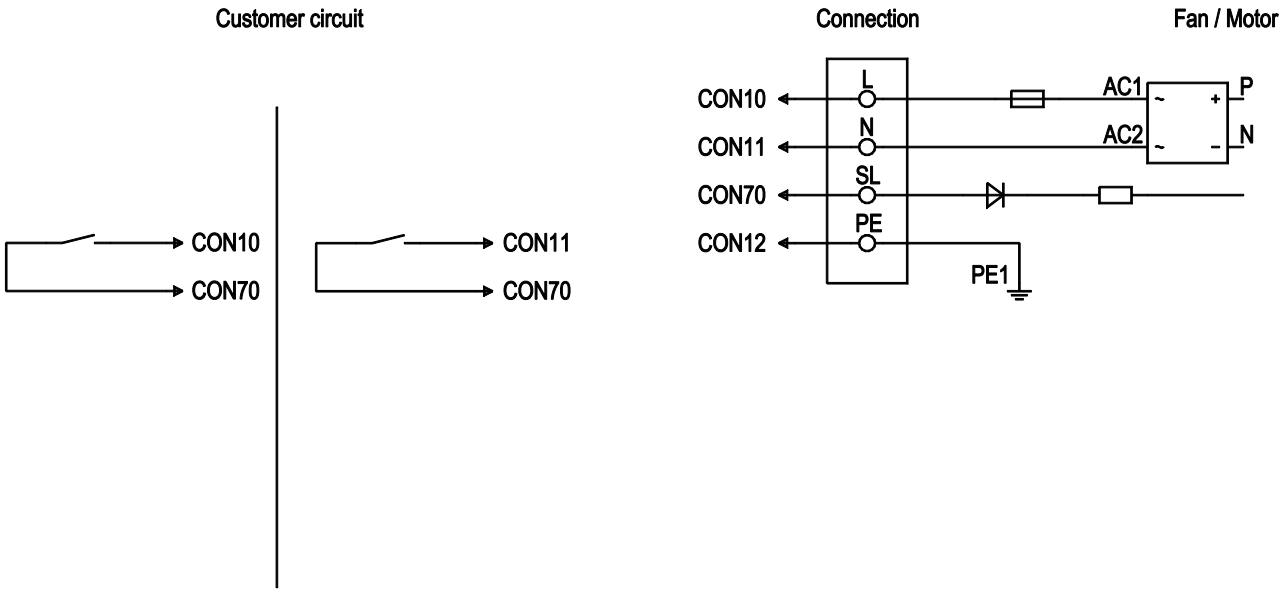
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Connection diagram



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

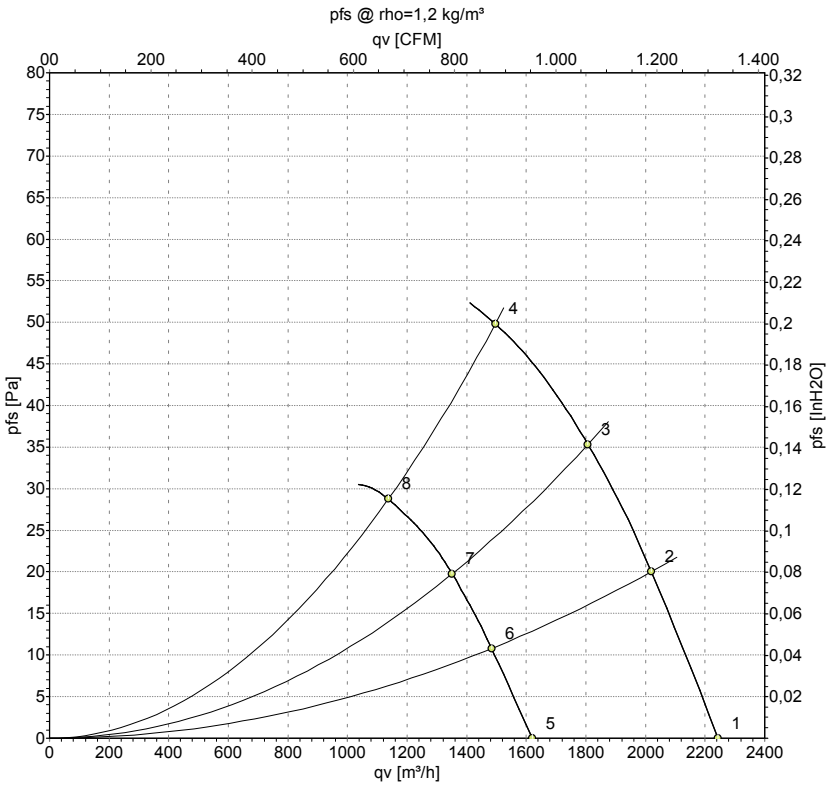
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Curves: Air performance 50 Hz



Measurement: LU-154301-1
Measurement: LU-154304-1

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)	m^3/h	Pa	cfm	inH2O
1	230	50	1430	85	0.80	56	63	2245	0	1320	0.00
2	230	50	1400	85	0.80	55	63	2020	20	1190	0.08
3	230	50	1380	85	0.80	54	61	1805	35	1065	0.14
4	230	50	1325	85	0.80	54	62	1495	50	880	0.20
5	230	50	1040	32	0.33	47	55	1620	0	955	0.00
6	230	50	1035	33	0.34	47	55	1485	11	875	0.04
7	230	50	1025	34	0.35	46	54	1350	20	795	0.08
8	230	50	1010	36	0.36	46	54	1135	29	670	0.12

U = Power supply · 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

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