S3G315-AE13-56

EC axial fan

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S3G315-AE13-56**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1325
Power input	W	85
Current draw	A	0.8
Max. back pressure	Pa	65
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	2.5 kg
Size	315 mm
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing with anti-freezing grease
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	CE
Approval	UL 2111; CSA C22.2 No.77

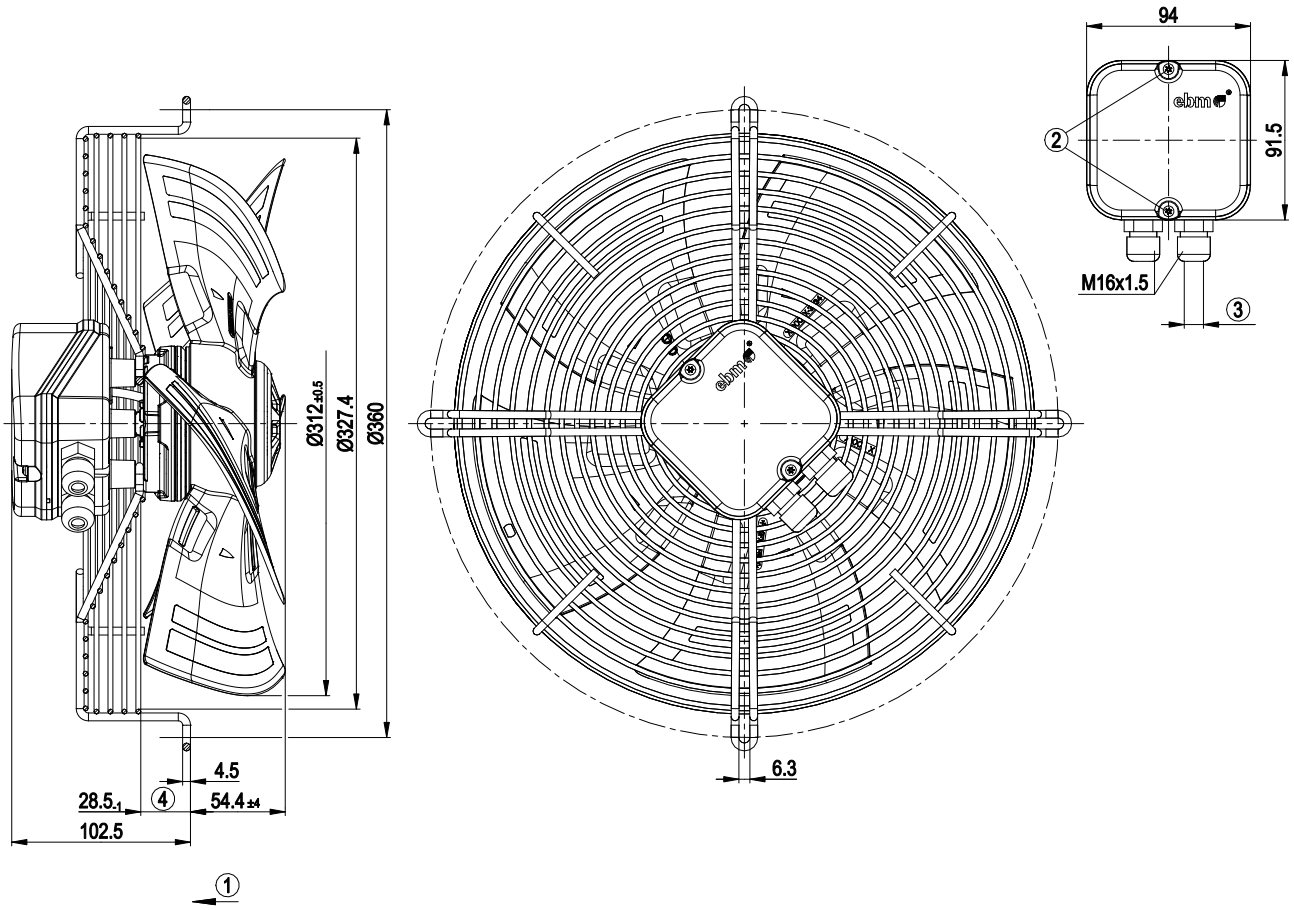
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Product drawing



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
4	Contact protection can only be guaranteed when the guard grille is mounted on the corresponding nozzle.

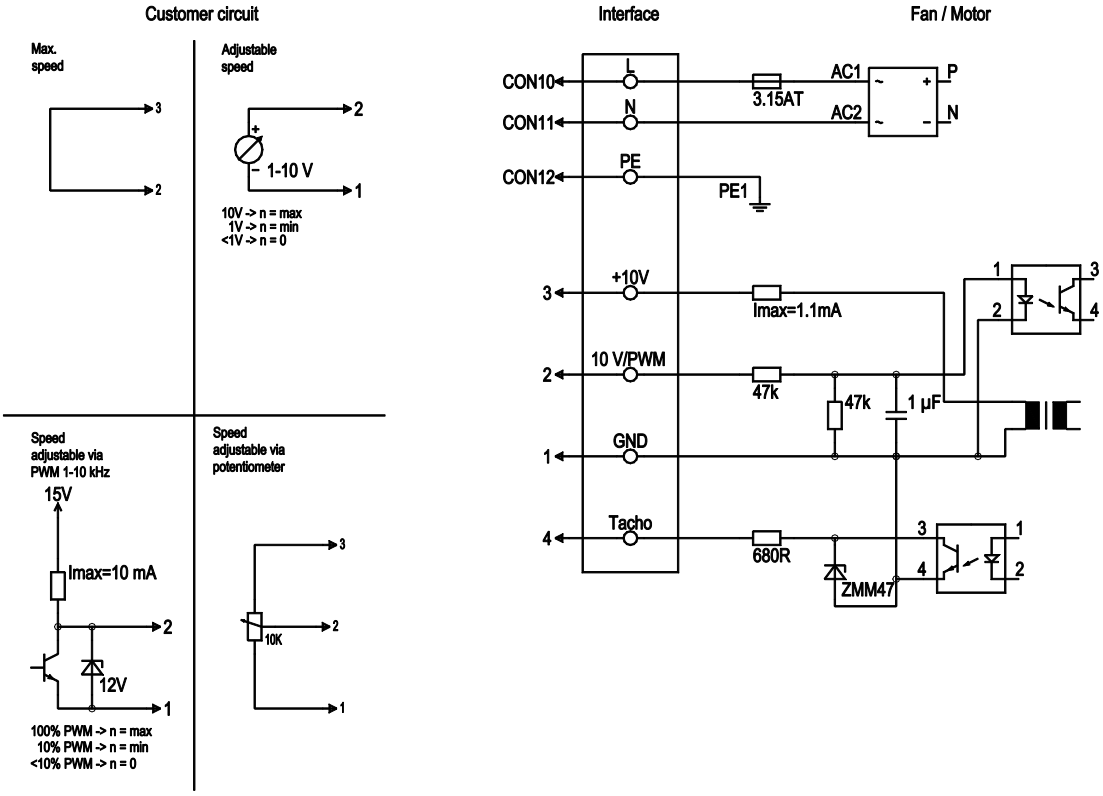
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated

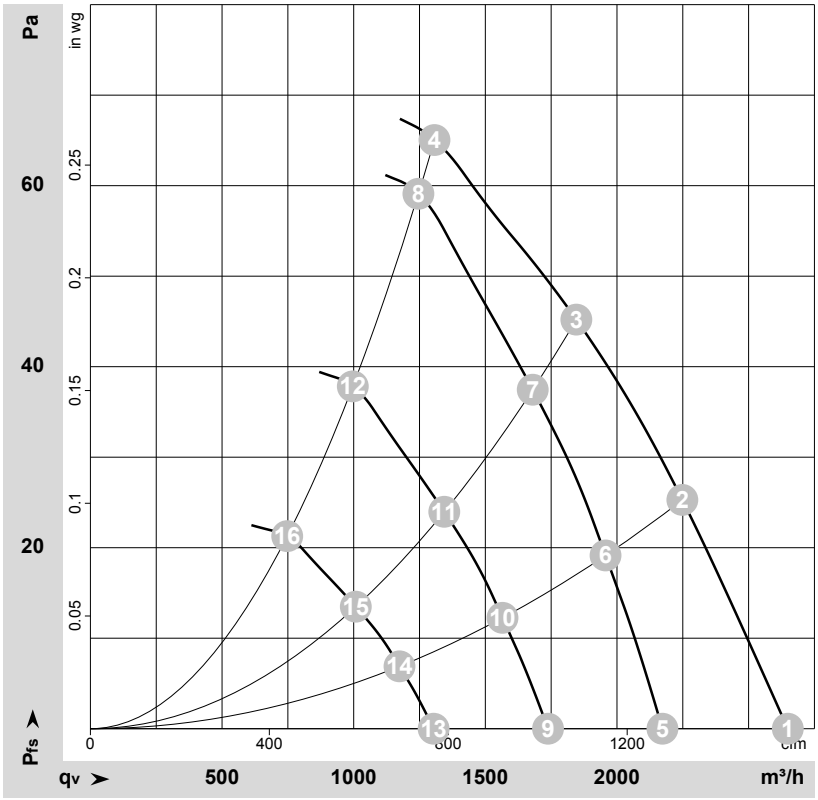
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-164675-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	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	inH2O
1	Y	230	50	1525	85	0.80	2650	0	1560	0.00
2	Y	230	50	1435	85	0.80	2250	25	1325	0.10
3	Y	230	50	1375	85	0.80	1845	45	1085	0.18
4	Y	230	50	1325	85	0.80	1305	65	770	0.26
5	Y	230	50	1250	45	0.40	2175	0	1280	0.00
6	Y	230	50	1250	54	0.48	1955	19	1150	0.08
7	Y	230	50	1250	62	0.55	1680	37	990	0.15
8	Y	230	50	1250	71	0.63	1245	60	735	0.24
9	Y	230	50	1000	23	0.21	1740	0	1025	0.00
10	Y	230	50	1000	28	0.25	1565	12	920	0.05
11	Y	230	50	1000	32	0.28	1345	24	790	0.10
12	Y	230	50	1000	36	0.32	995	38	585	0.15
13	Y	230	50	750	10.0	0.09	1305	0	770	0.00
14	Y	230	50	750	12	0.10	1175	7	690	0.03
15	Y	230	50	750	13	0.12	1010	13	595	0.05
16	Y	230	50	750	15	0.14	745	21	440	0.08

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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