EC axial fan - HyBlade

sickle-shaped blades (S series), single-intake

A3G350-AG03-08 ebmpapst Datasheet
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Nominal data

Type	**A3G350-AG03-08**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		me
Speed (rpm)	min^{-1}	1115
Power consumption	W	85
Current draw	A	0.73
Max. back pressure	Pa	60
Max. back pressure	in. wg	0.24
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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	1.7 kg
Size	350 mm
Motor size	55
Rotor surface	Thick-film passivated
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
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 mounting	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

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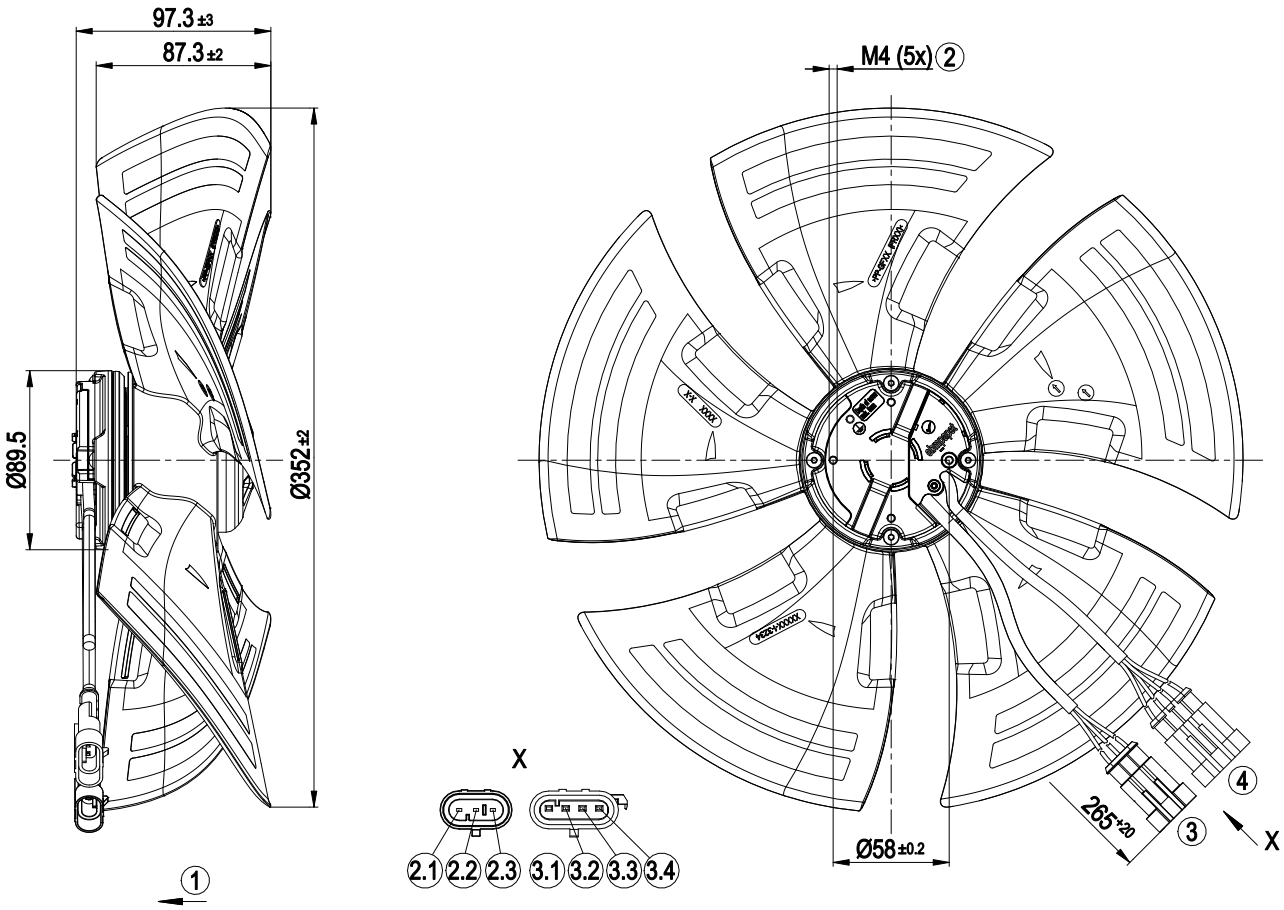
Product drawing



1	Airflow direction "V"
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20
	3-pole connector housing TE 1745082-1, 3x flat plug 282404-1
3.1	PE (green/yellow)
3.2	N (blue)
3.3	L (black)
4	Cable PVC AWG22
	4-pole connector housing TE 282106-1, 4x flat plug 282404-1
4.1	Tach (white)
4.2	GND (blue)
4.3	0-10 V/PWM (yellow)
4.4	+10 V (red)

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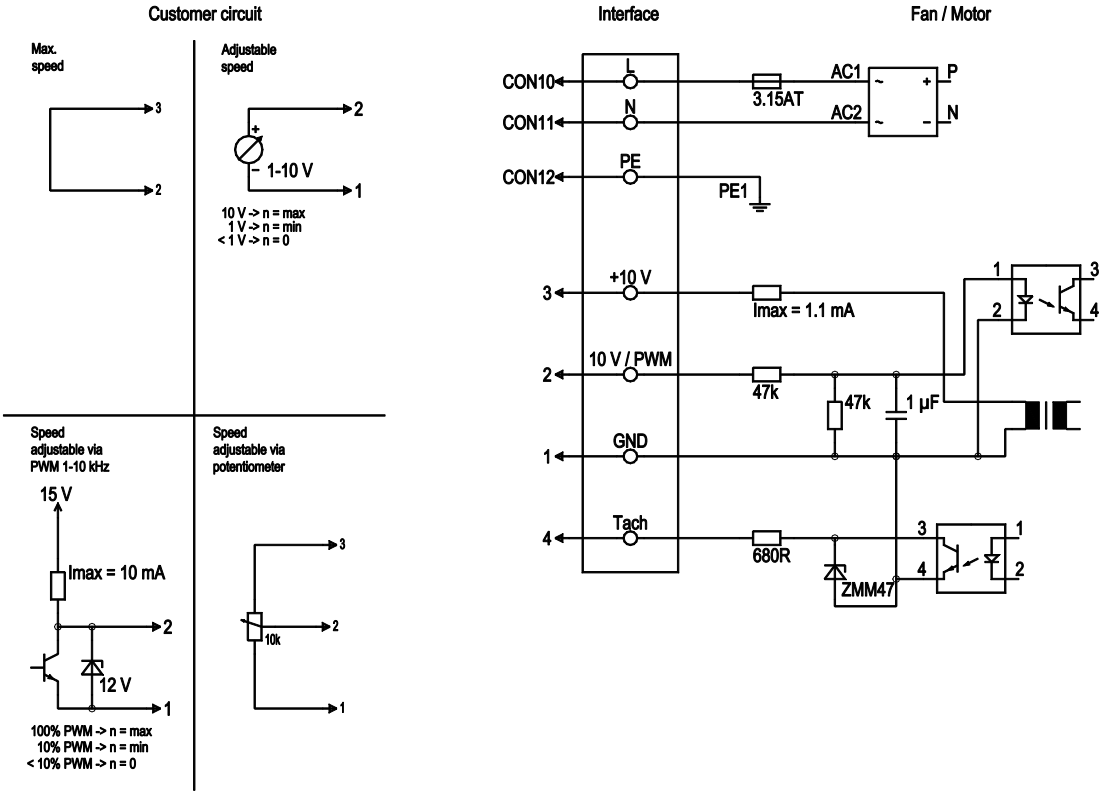
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate 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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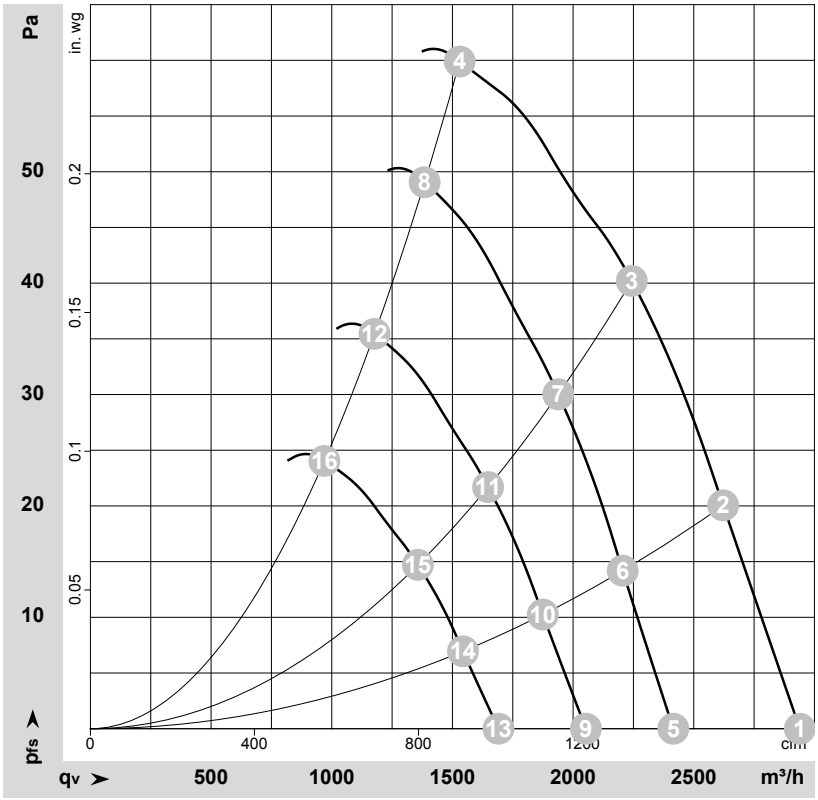
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-132710-1

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	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	2	1~	230	50	1215	75	0.63	59	65	2940	0	1730	0.00
2	2	1~	230	50	1190	80	0.67	56	63	2620	20	1545	0.08
3	2	1~	230	50	1160	84	0.71	54	61	2245	40	1320	0.16
4	2	1~	230	50	1115	85	0.73	50	57	1530	60	900	0.24
5	2	1~	230	50	1000	41	0.35	54	60	2415	0	1420	0.00
6	2	1~	230	50	1000	48	0.40	52	59	2205	14	1300	0.06
7	2	1~	230	50	1000	54	0.46	50	57	1940	30	1140	0.12
8	2	1~	230	50	1000	63	0.52	47	54	1385	49	815	0.20
9	2	1~	230	50	850	25	0.22	50	56	2055	0	1210	0.00
10	2	1~	230	50	850	29	0.25	48	55	1875	10	1105	0.04
11	2	1~	230	50	850	33	0.28	46	53	1650	22	970	0.09
12	2	1~	230	50	850	39	0.32	43	50	1175	35	695	0.14
13	2	1~	230	50	700	14	0.12	45	51	1690	0	995	0.00
14	2	1~	230	50	700	16	0.14	43	50	1545	7	910	0.03
15	2	1~	230	50	700	19	0.16	41	48	1355	15	800	0.06
16	2	1~	230	50	700	22	0.18	38	45	970	24	570	0.10

Wired = Wiring · 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