

EC axial panel fan - HyBlade

sickle-shaped blades (S series)

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Nominal data

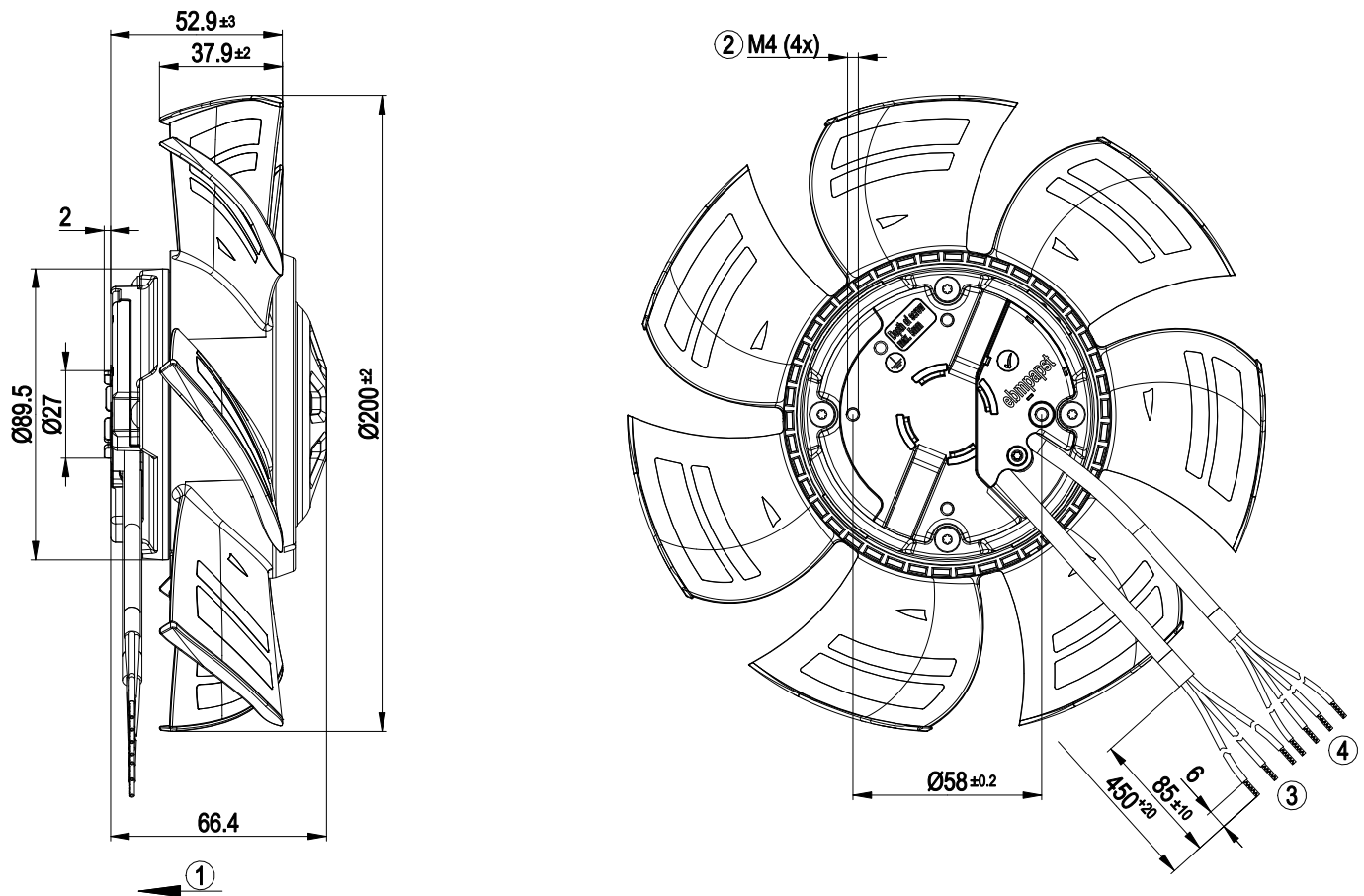
Type	A3G200-AD01-03	
Motor	M3G055-BD	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	2820
Power consumption	W	60
Current draw	A	0.53
Max. back pressure	Pa	110
Max. back pressure	in. wg	0.44
Min. ambient temperature	°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

Technical description

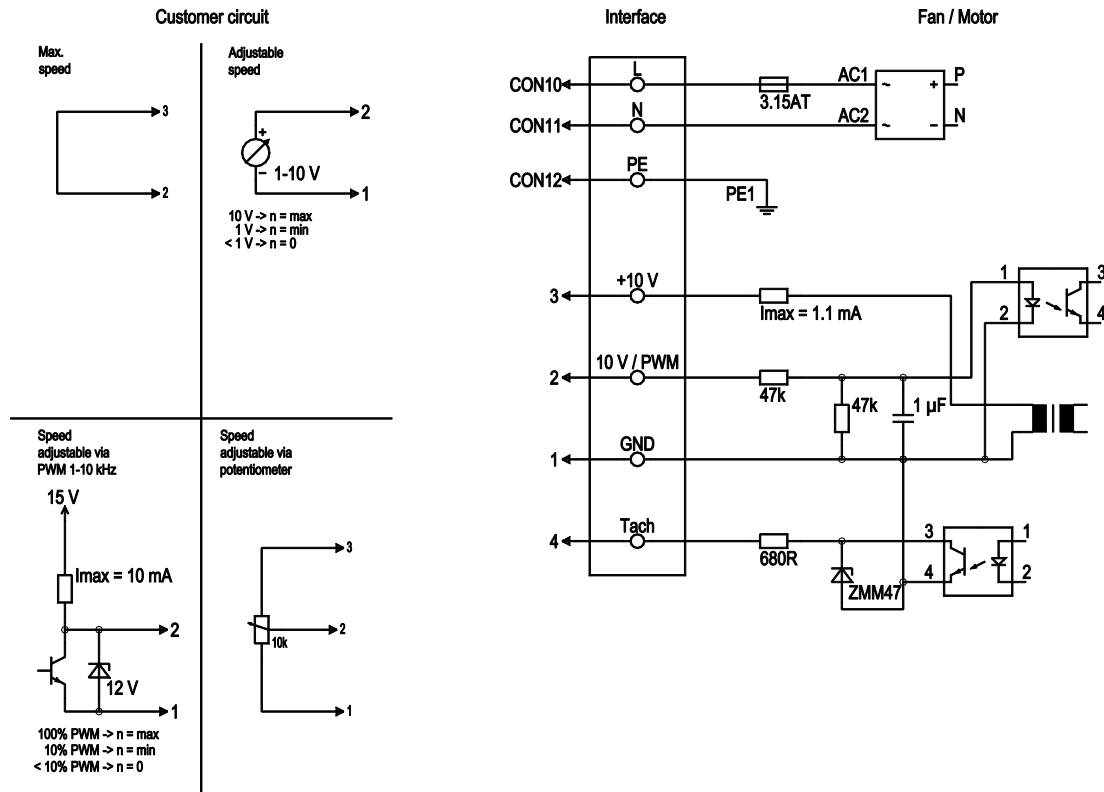
Weight	1 kg
Size	200 mm
Motor size	55
Rotor surface	Thick-film passivated
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / 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	- 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 supply - 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 assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60335-1; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	CCC

Product drawing



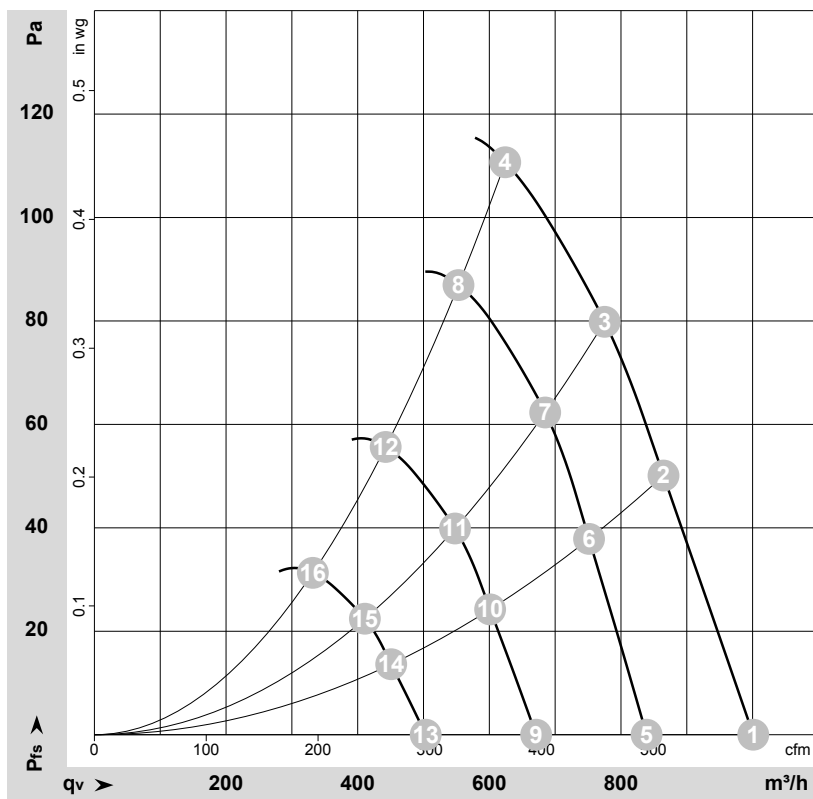
1	Direction of air flow "V"
2	Max. clearance for screw 5 mm
3	Cable PVC 3G AWG20, 3x crimped splices
4	Cable PVC 4x AWG22, 4x crimped splices

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

Curves: Air performance 50 Hz



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

Measurement: LU-147519-1
Date: 2012-08-21
Housing: 18912-2-4037

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	in. wg
1	230	50	2985	50	0.46	58	64	1000	0	590	0.00
2	230	50	2875	55	0.50	58	64	865	50	510	0.20
3	230	50	2830	57	0.52	59	66	775	80	455	0.32
4	230	50	2820	60	0.53	64	72	625	110	365	0.44
5	230	50	2500	29	0.27	53	60	840	0	495	0.00
6	230	50	2500	36	0.33	54	61	750	38	445	0.15
7	230	50	2500	39	0.36	56	63	685	62	405	0.25
8	230	50	2500	39	0.36	61	69	555	87	325	0.35
9	230	50	2000	15	0.14	48	54	670	0	395	0.00
10	230	50	2000	18	0.17	48	55	600	24	355	0.10
11	230	50	2000	20	0.18	50	57	550	40	325	0.16
12	230	50	2000	20	0.18	55	63	445	56	260	0.22
13	230	50	1500	6.0	0.06	41	47	505	0	295	0.00
14	230	50	1500	8.0	0.07	41	48	450	14	265	0.06
15	230	50	1500	8.0	0.08	43	50	410	22	240	0.09
16	230	50	1500	8.0	0.08	48	56	330	31	195	0.12

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