

EC axial fan - HyBlade

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

Fan housing with guard grille

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Nominal data

Type	W3G200-CD01-32	
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



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Technical description

Weight	3.5 kg
Fan size	200 mm
Rotor surface	Thick-film passivated
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
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 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; CE
Approval	C22.2 No.77 + CAN/CSA-E60730-1; UL 1004-7 + 60730

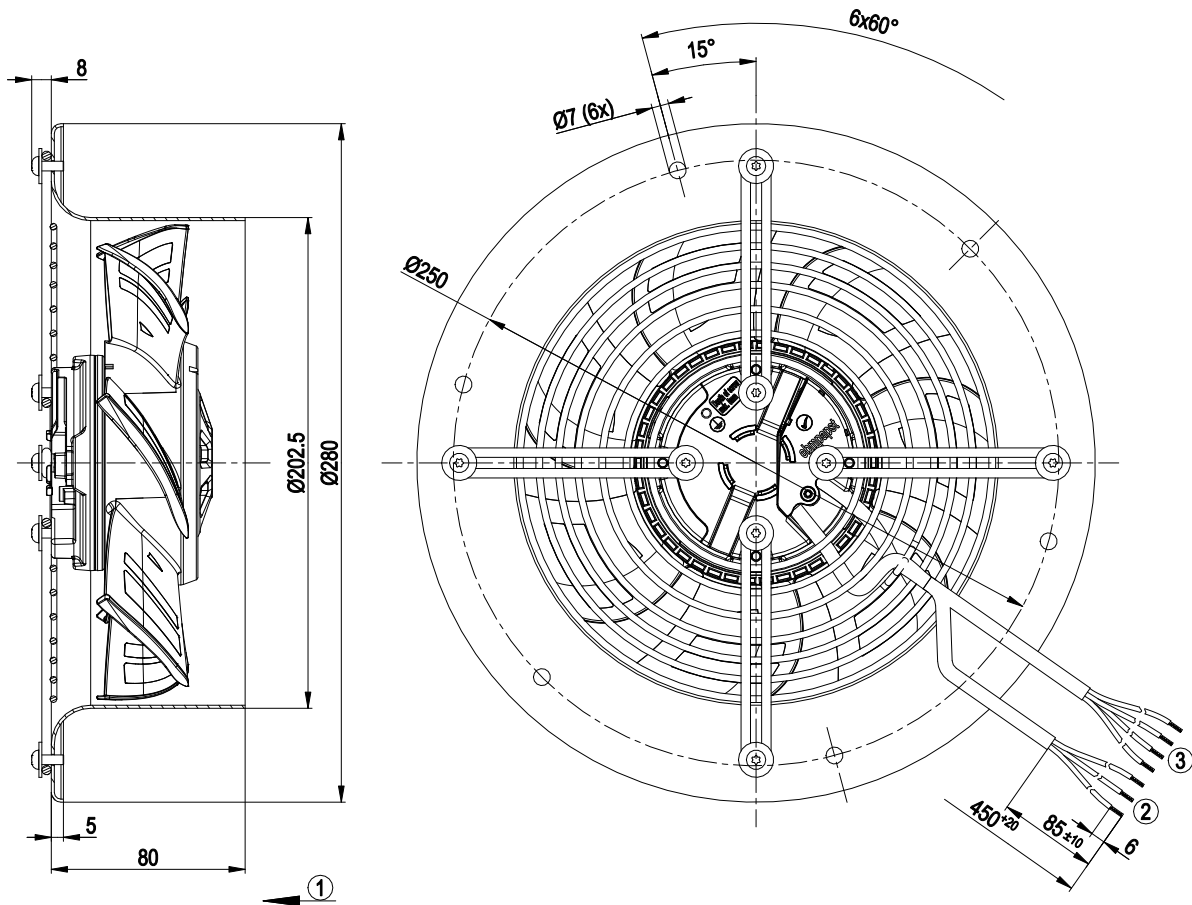


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Product drawing



1	Direction of air flow "V"
2	Cable PVC AWG20, 3x crimped splices
3	Cable PVC AWG22, 4x crimped splices

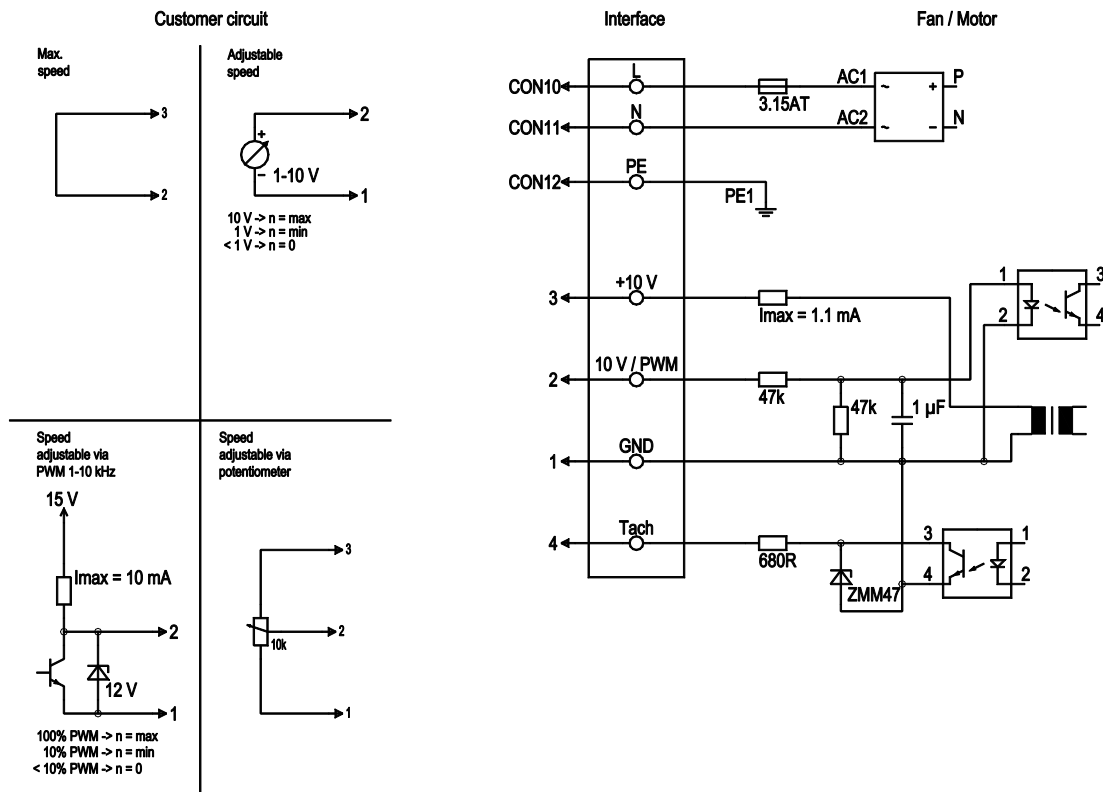


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Connection diagram



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

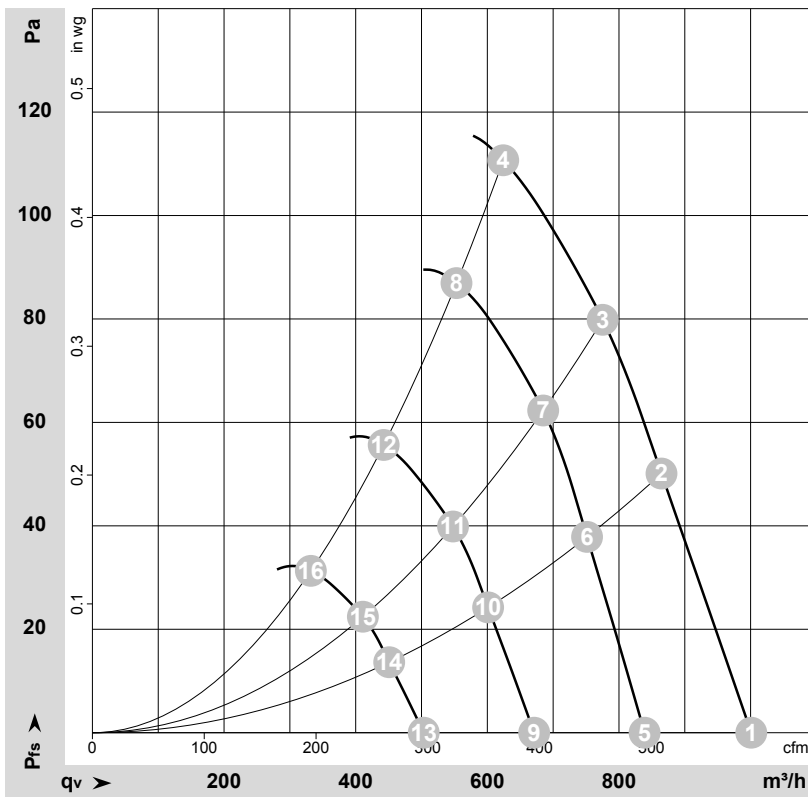


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Curves: Air performance 50 Hz



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

Measurement: LU-147519-1

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)	m³/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 = 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

