W3G250-CL53-12

EC axial fan - HyBlade

sickle-shaped blades (S series)

Fan housing with guard grille

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Nominal data

Type	**W3G250-CL53-12**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min^{-1}	2600
Power consumption	W	95
Current draw	A	0.8
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	3.2 kg
Size	250 mm
Motor size	74
Rotor surface	Thick-film passivated
Blade material	PP V0 plastic
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Number of blades	7
Airflow direction	A
Direction of rotation	Clockwise, 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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 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
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
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	Connector with cable
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

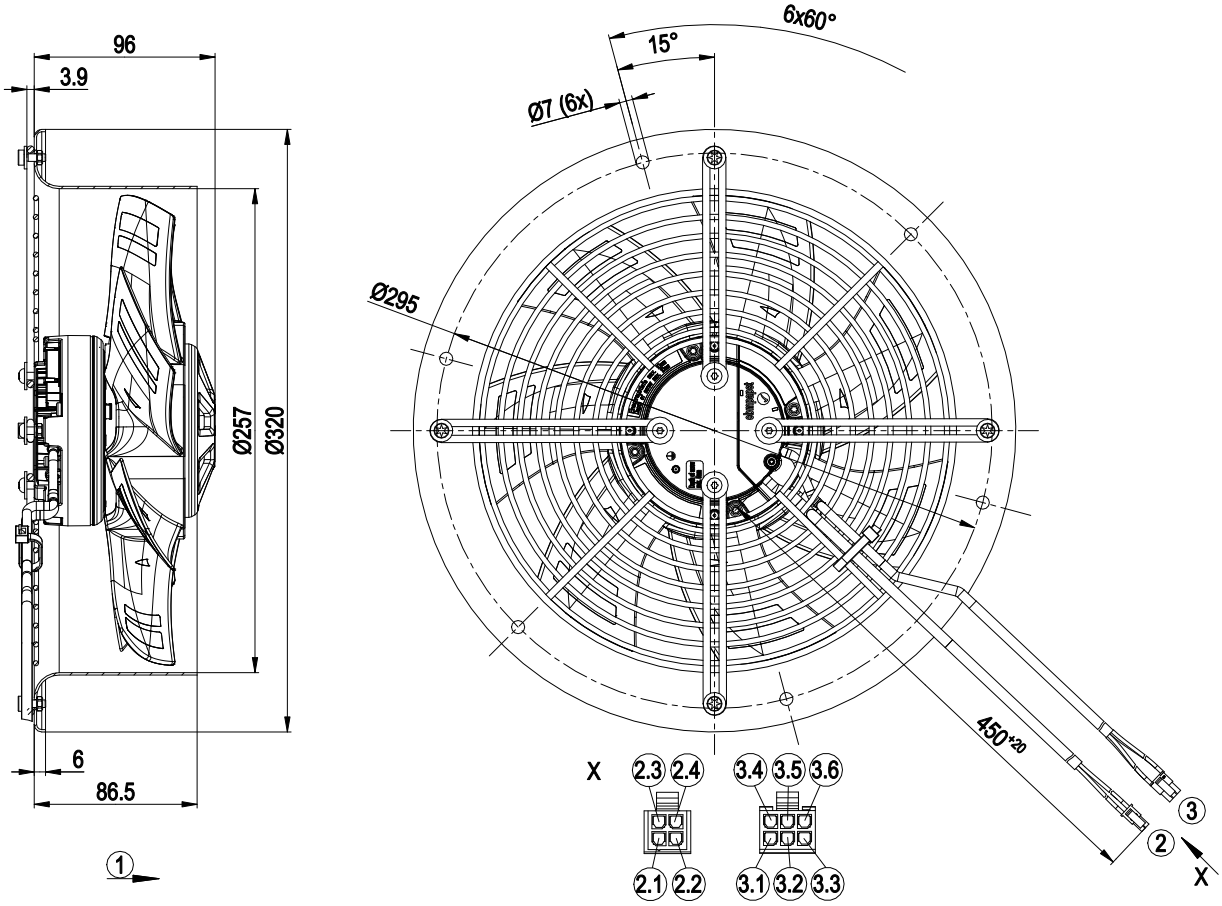
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Product drawing



1	Direction of air flow "A"
2	Cable PVC AWG20
	4-pole connector housing Molex 43025-0400, 4x socket Molex 43030-0001
2.1	L (black)
2.2	PE (green/yellow)
2.3	not used
2.4	N (blue)
2	Cable PVC AWG22
	4-pole connector housing Molex 43025-0600, 4x socket Molex 43030-0001
3.1	+10 V (red)
3.2	not used
3.3	Tach (white)
3.4	0-10 V/PWM (yellow)
3.5	not used
3.6	GND (blue)

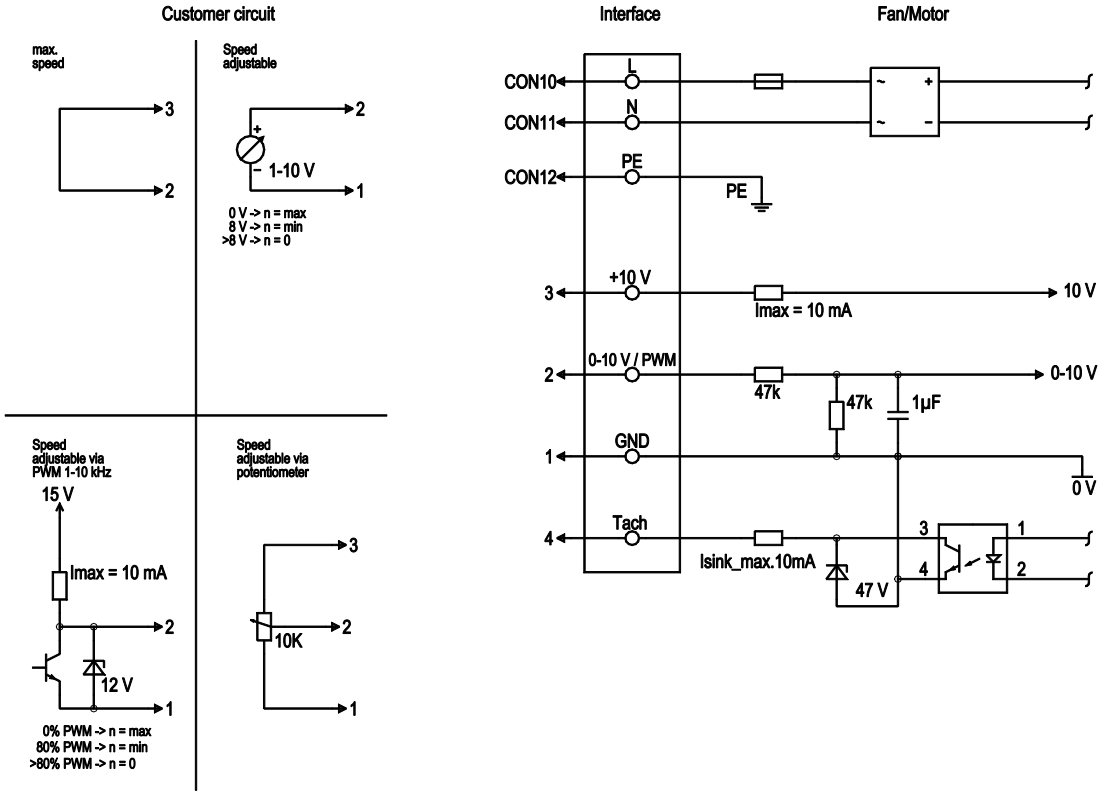
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3%, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. potentiometers), SELV
	1	GND	blue	Reference ground for control interface, SELV

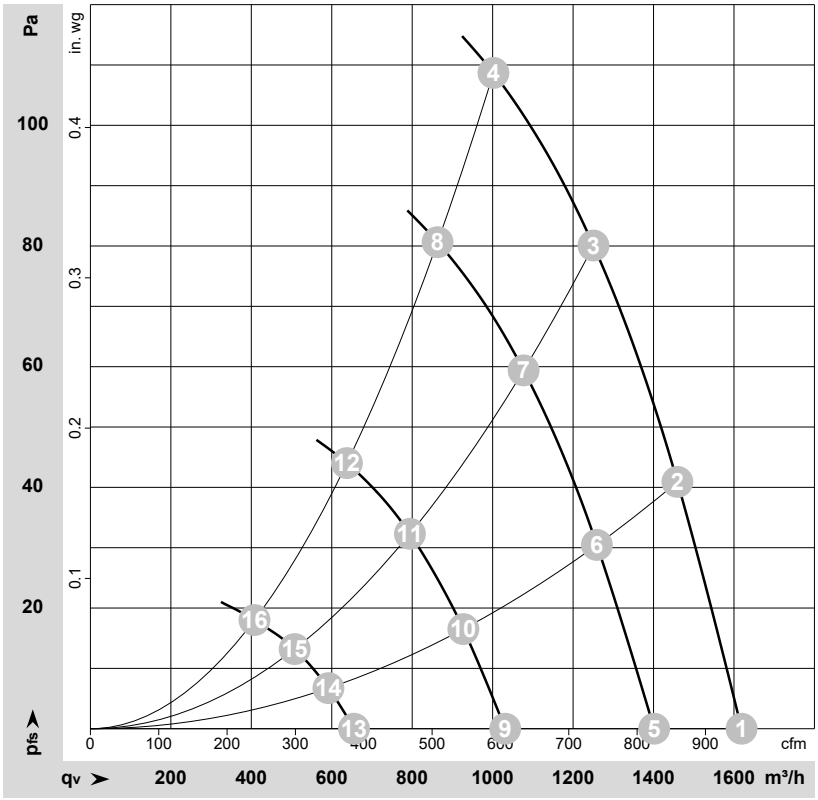
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-198972-1

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

	Wired	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	in. wg
1	1~	230	50	2600	80	0.69	1620	0	955	0.00
2	1~	230	50	2600	88	0.74	1460	40	860	0.16
3	1~	230	50	2600	94	0.79	1250	80	735	0.32
4	1~	230	50	2600	95	0.80	1000	110	590	0.44
5	1~	230	50	2265	55	0.49	1400	0	825	0.00
6	1~	230	50	2255	59	0.51	1260	31	740	0.12
7	1~	230	50	2245	61	0.53	1075	59	635	0.24
8	1~	230	50	2245	62	0.54	865	81	510	0.33
9	1~	230	50	1685	26	0.25	1030	0	605	0.00
10	1~	230	50	1680	27	0.25	925	17	545	0.07
11	1~	230	50	1675	29	0.26	795	32	465	0.13
12	1~	230	50	1670	29	0.27	640	44	375	0.18
13	1~	230	50	1095	10.0	0.10	655	0	385	0.00
14	1~	230	50	1095	11	0.10	590	7	350	0.03
15	1~	230	50	1090	11	0.11	510	13	300	0.05
16	1~	230	50	1090	11	0.11	410	18	240	0.07

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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