W3G250-CH07-32

EC axial fan - HyBlade

sickled blades (S series), single inlet

Wall ring with guard grille

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Nominal data

Type	**W3G250-CH07-32**
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}	2330
Power input	W	83
Current draw	A	0.72
Max. back pressure	Pa	120
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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	3.5 kg
Size	250 mm
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of wall ring	Sheet steel, galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
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
Motor protection	Electronic motor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	C22.2 Nr.77 + CAN/CSA-E60730-1; UL 1004-7 + 60730

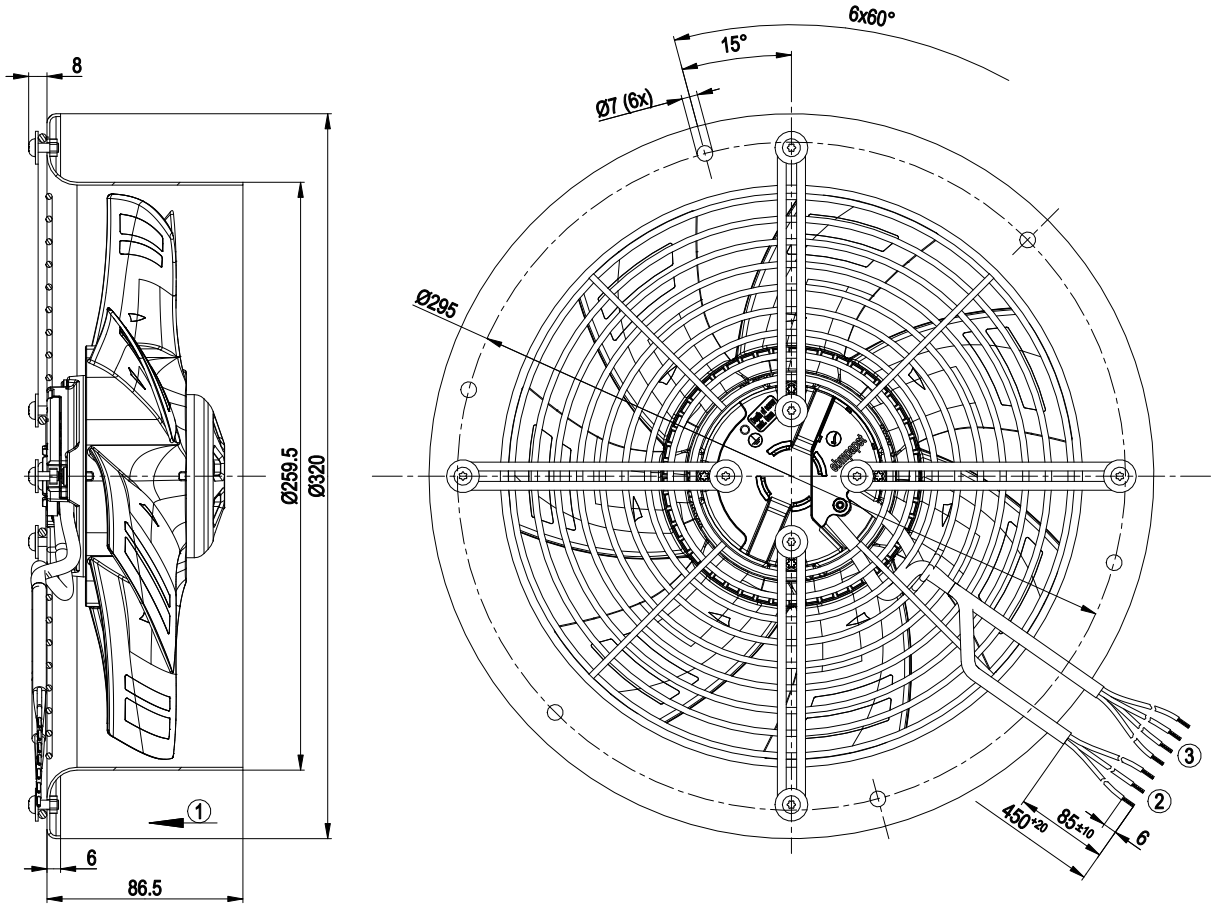
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Product drawing



1	Direction of air flow "V"
2	Connection line PVC AWG20, 3x lead tips crimped
3	Connection line PVC AWG22, 4x lead tips crimped

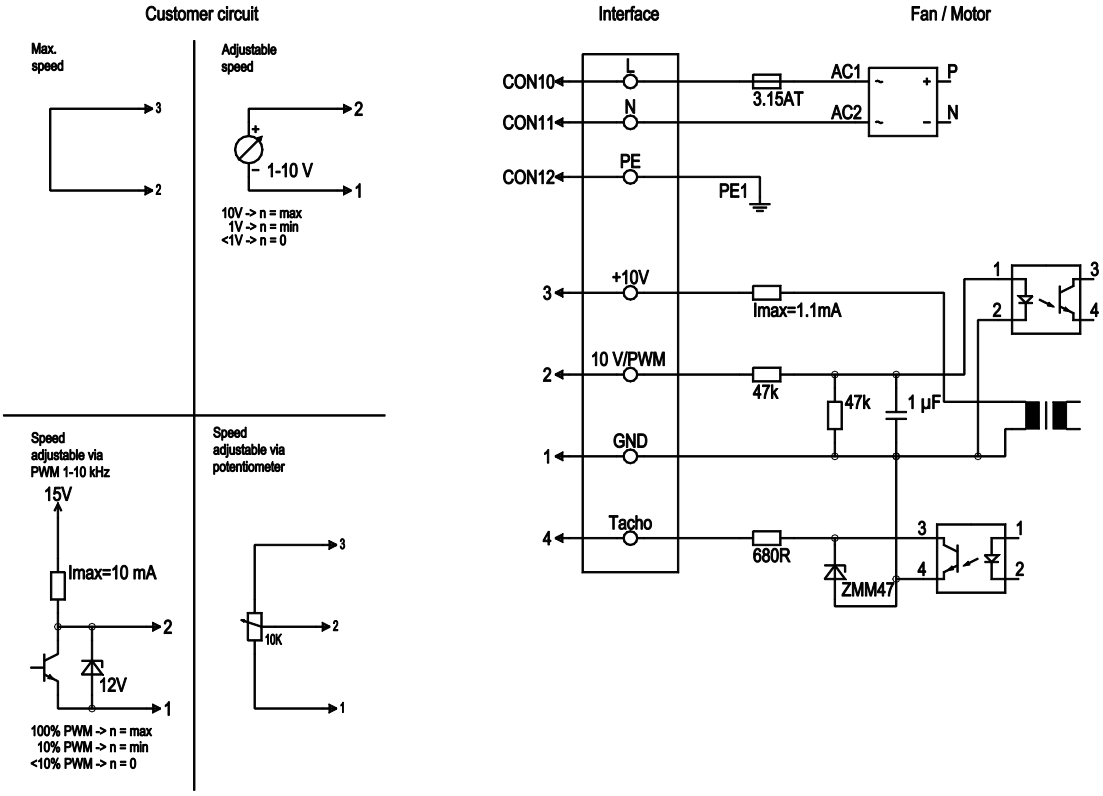
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Connection screen



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

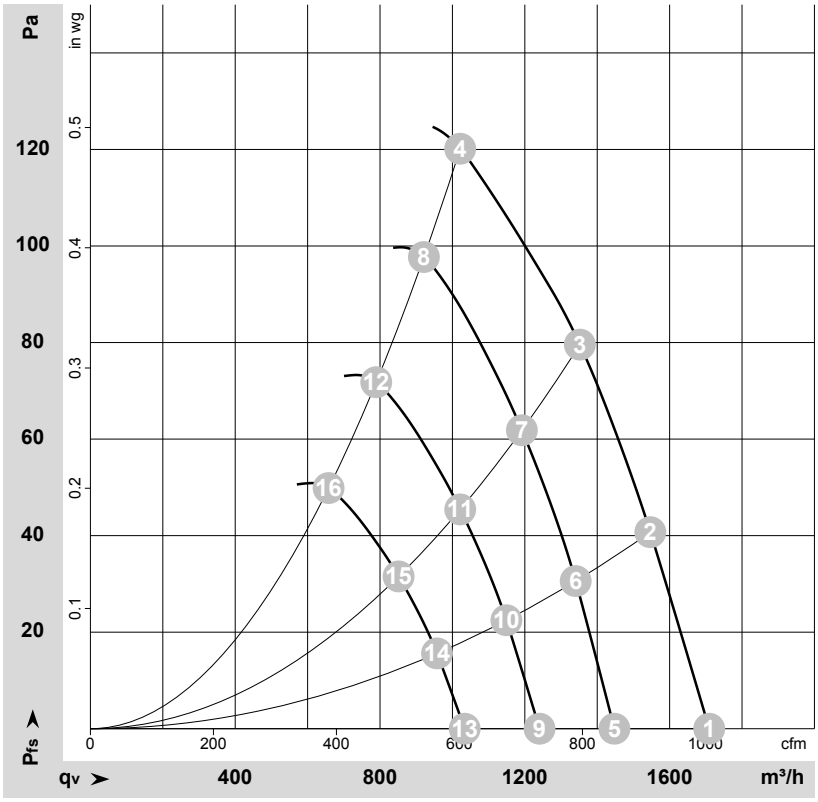
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-140478-1

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

	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	2480	70	0.63	64	71	1710	0	1005	0.00
2	230	50	2425	79	0.67	64	70	1545	40	910	0.16
3	230	50	2385	84	0.71	64	71	1350	80	795	0.32
4	230	50	2330	83	0.72	66	74	1020	120	600	0.48
5	230	50	2100	43	0.38	60	66	1445	0	850	0.00
6	230	50	2100	51	0.44	60	67	1340	31	790	0.12
7	230	50	2100	57	0.48	60	67	1190	62	700	0.25
8	230	50	2100	61	0.52	64	71	920	98	540	0.39
9	230	50	1800	27	0.24	56	63	1240	0	730	0.00
10	230	50	1800	32	0.27	56	63	1150	22	675	0.09
11	230	50	1800	36	0.30	57	63	1020	46	600	0.18
12	230	50	1800	39	0.33	60	68	790	72	465	0.29
13	230	50	1500	16	0.14	51	58	1035	0	610	0.00
14	230	50	1500	19	0.16	52	58	955	16	565	0.06
15	230	50	1500	21	0.18	52	59	850	32	500	0.13
16	230	50	1500	22	0.19	55	63	660	50	385	0.20

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow p_{fs} = Pressure increase

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