W3G250-HH07-13

EC axial compact fan

sickled blades (S series), single inlet

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Nominal data

Type	**W3G250-HH07-13**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	V	230
Nominal voltage range	V	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed (rpm)	min^{-1}	2330
Power input	W	83
Current draw	A	0.72
Max. back pressure	Pa	100
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

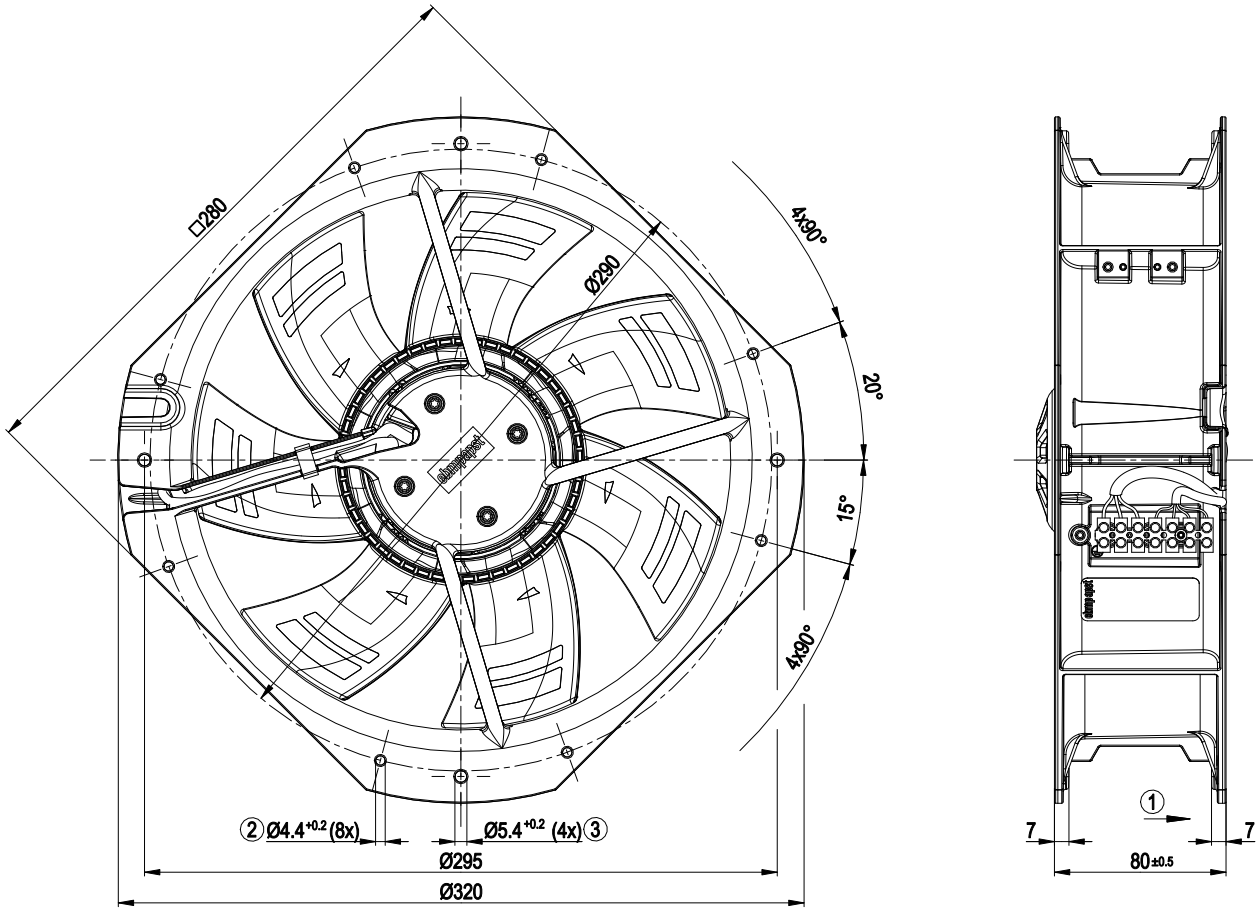
Mass	2.1 kg
Size	250 mm
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of wall ring	Die-cast aluminium
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge 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), on account of the installation conditions, ferritic damping in the connection line may be required for the application.
Electrical leads	Via terminal strip
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 No.77; UL 2111

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Product drawing



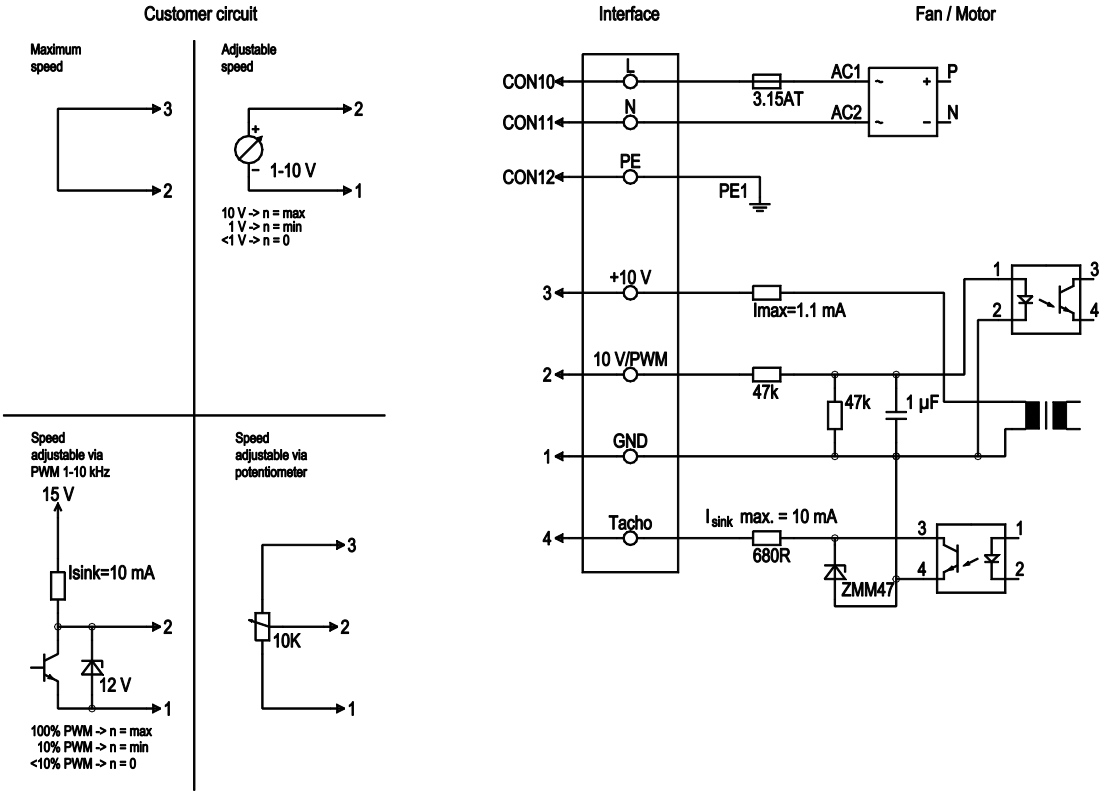
1	Direction of air flow "V"
2	For self-tapping M5 screws
3	For self-tapping M6 screws

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Connection screen



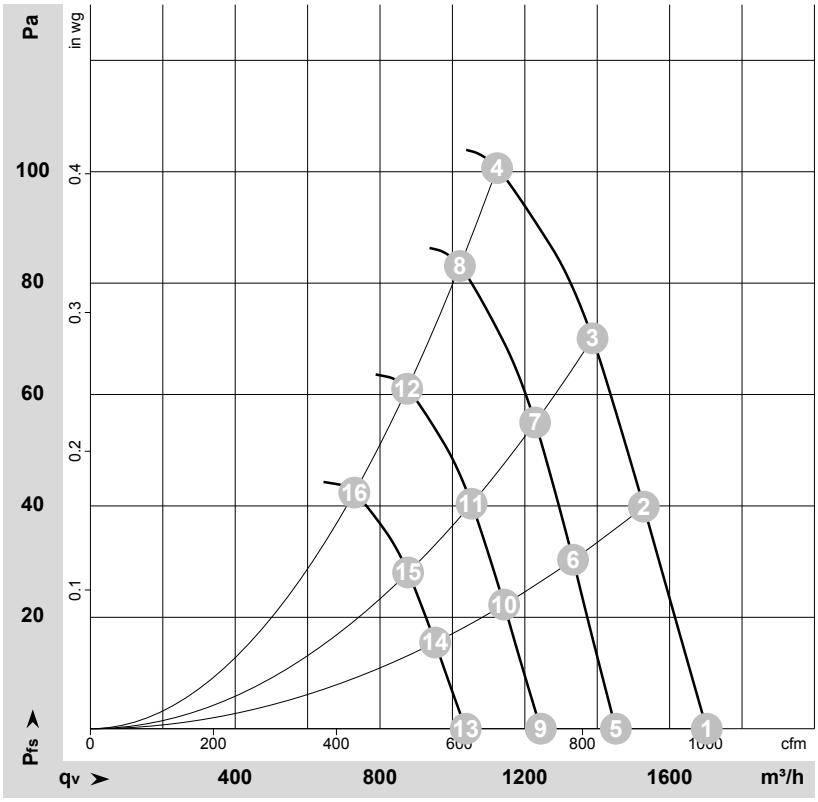
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND - Connection for control interface
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-140462-1

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	inH2O
1	230	50	2465	67	0.59	62	69	1700	0	1000	0.00
2	230	50	2410	75	0.65	61	69	1530	40	900	0.16
3	230	50	2370	81	0.68	61	68	1385	70	815	0.28
4	230	50	2330	83	0.72	62	69	1125	100	660	0.40
5	230	50	2100	42	0.36	58	65	1450	0	855	0.00
6	230	50	2100	50	0.43	58	65	1335	30	785	0.12
7	230	50	2100	56	0.47	58	65	1230	55	725	0.22
8	230	50	2100	62	0.52	59	66	1020	83	600	0.33
9	230	50	1800	26	0.23	54	61	1245	0	730	0.00
10	230	50	1800	31	0.27	54	61	1145	22	675	0.09
11	230	50	1800	35	0.30	54	61	1055	41	620	0.16
12	230	50	1800	39	0.33	55	62	875	61	515	0.24
13	230	50	1500	15	0.13	49	57	1035	0	610	0.00
14	230	50	1500	18	0.16	50	57	950	16	560	0.06
15	230	50	1500	20	0.17	49	57	880	28	515	0.11
16	230	50	1500	23	0.19	50	58	730	43	430	0.17

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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