W3G250-HH07-10

EC axial compact fan

sickled blades (S series)

W3G250-HH07-10 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**W3G250-HH07-10**
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	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	2.77 kg
Size	250 mm
Surface of rotor	Thick layer passivated
Material of blades	PP plastic
Material of wall ring	Die-cast aluminium
Material of guard grille	Steel, coated in grey plastic (RAL 9006)
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 - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor
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 55022 (Class B, 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

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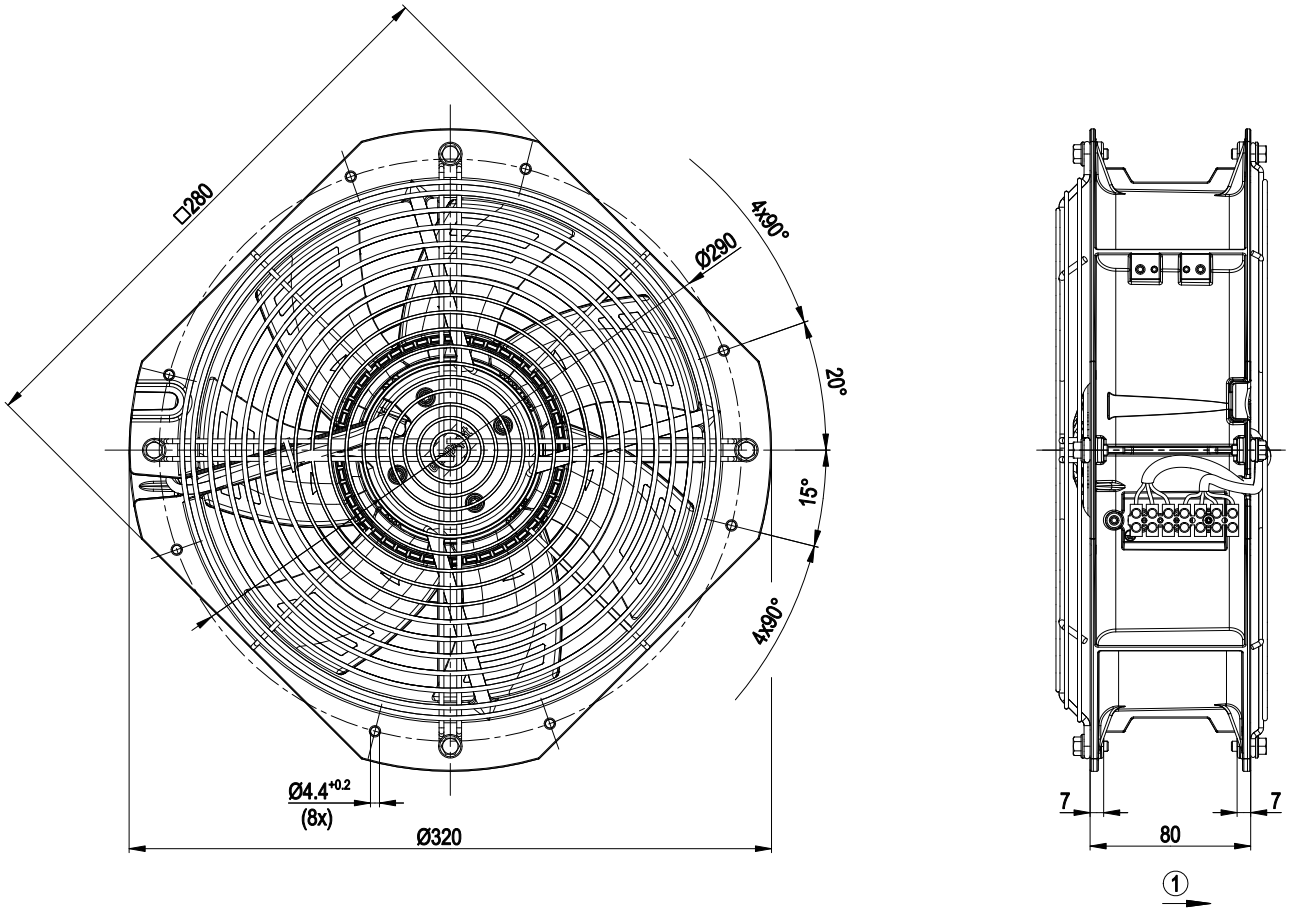
Product drawing



1	Direction of air flow "V"

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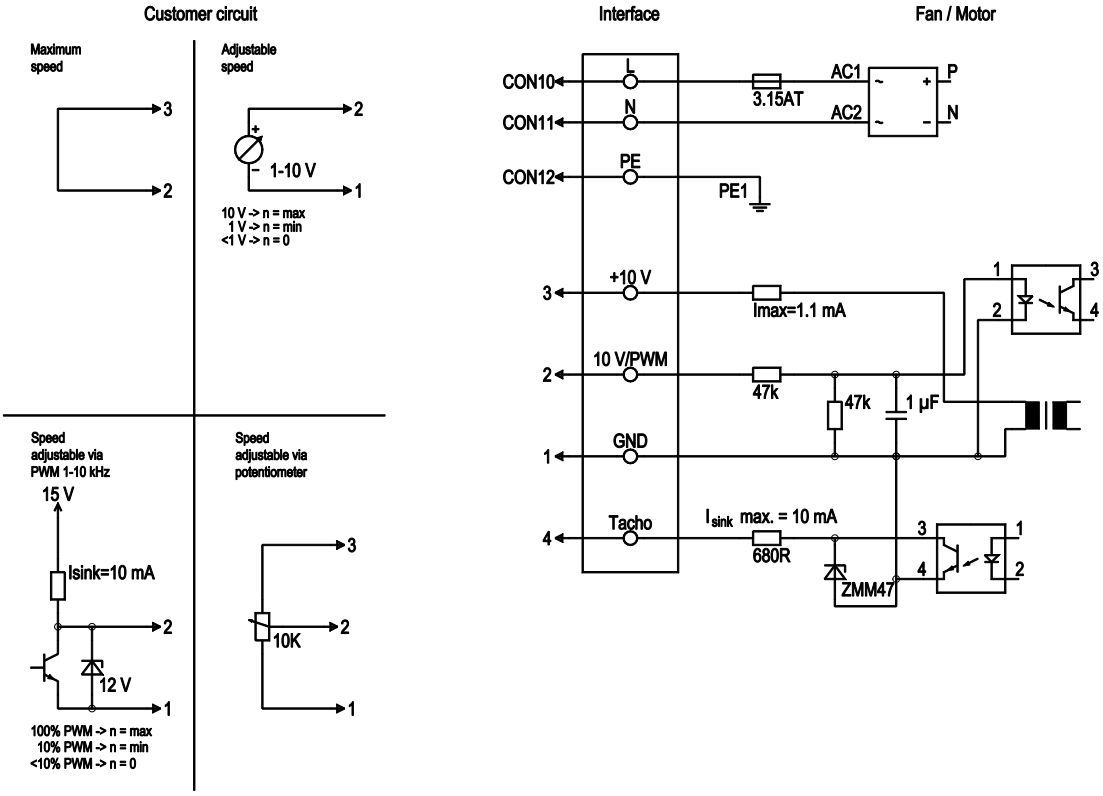
Connection screen



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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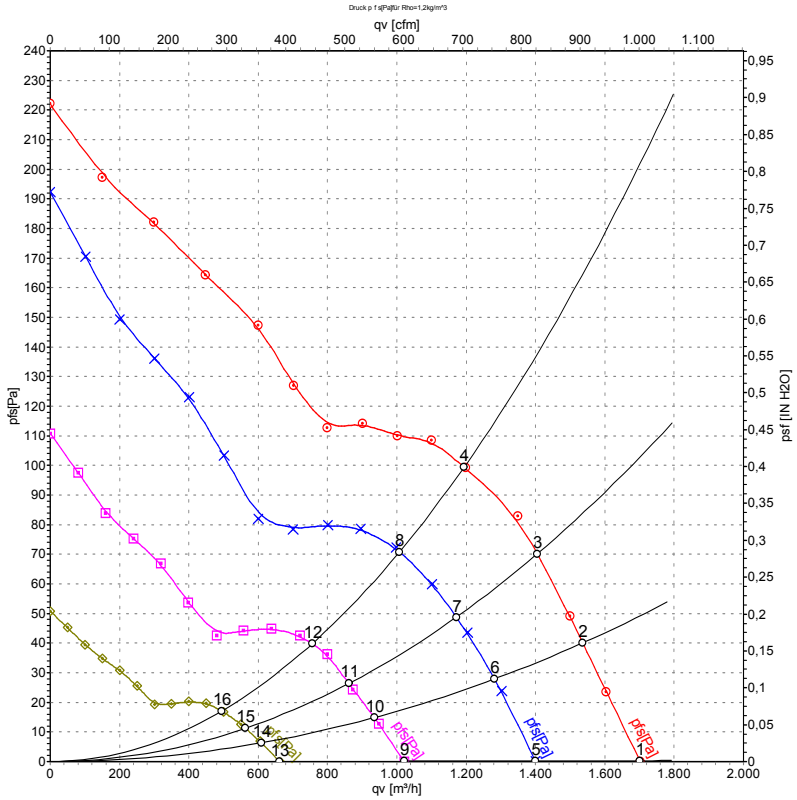
Charts: Air flow 50 Hz



Measurement: LU-140462
Measurement: LU-140463
Measurement: LU-140466
Measurement: LU-140467

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}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	2465	67	0.59	62	69	1700	0
2	230	50	2410	75	0.65	61	69	1535	40
3	230	50	2375	80	0.68	61	68	1405	70
4	230	50	2330	83	0.72	60	68	1195	100
5	230	50	2055	39	0.40	57	65	1400	0
6	230	50	2025	45	0.44	57	65	1280	28
7	230	50	2000	48	0.47	57	65	1170	49
8	230	50	1970	51	0.48	56	64	1005	71
9	230	50	1530	19	0.22	49	57	1020	0
10	230	50	1495	20	0.23	49	57	935	15
11	230	50	1485	22	0.24	49	57	860	26
12	230	50	1475	23	0.27	49	57	755	40
13	230	50	1010	7.7	0.10	38	46	660	0
14	230	50	1000	8.5	0.11	38	46	610	6
15	230	50	995	8.7	0.12	38	46	565	11
16	230	50	990	9.0	0.12	39	47	495	17

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