R3G200-AG02-07

EC centrifugal fan

forward curved

R3G200-AG02-07 ebmpapst Datasheet
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Nominal data

Type	**R3G200-AG02-07**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml/cu
Speed (rpm)	min^{-1}	2400
Power input	W	165
Current draw	A	1.32
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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 kg
Size	200 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
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 - Over-temperature protected electronics / motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
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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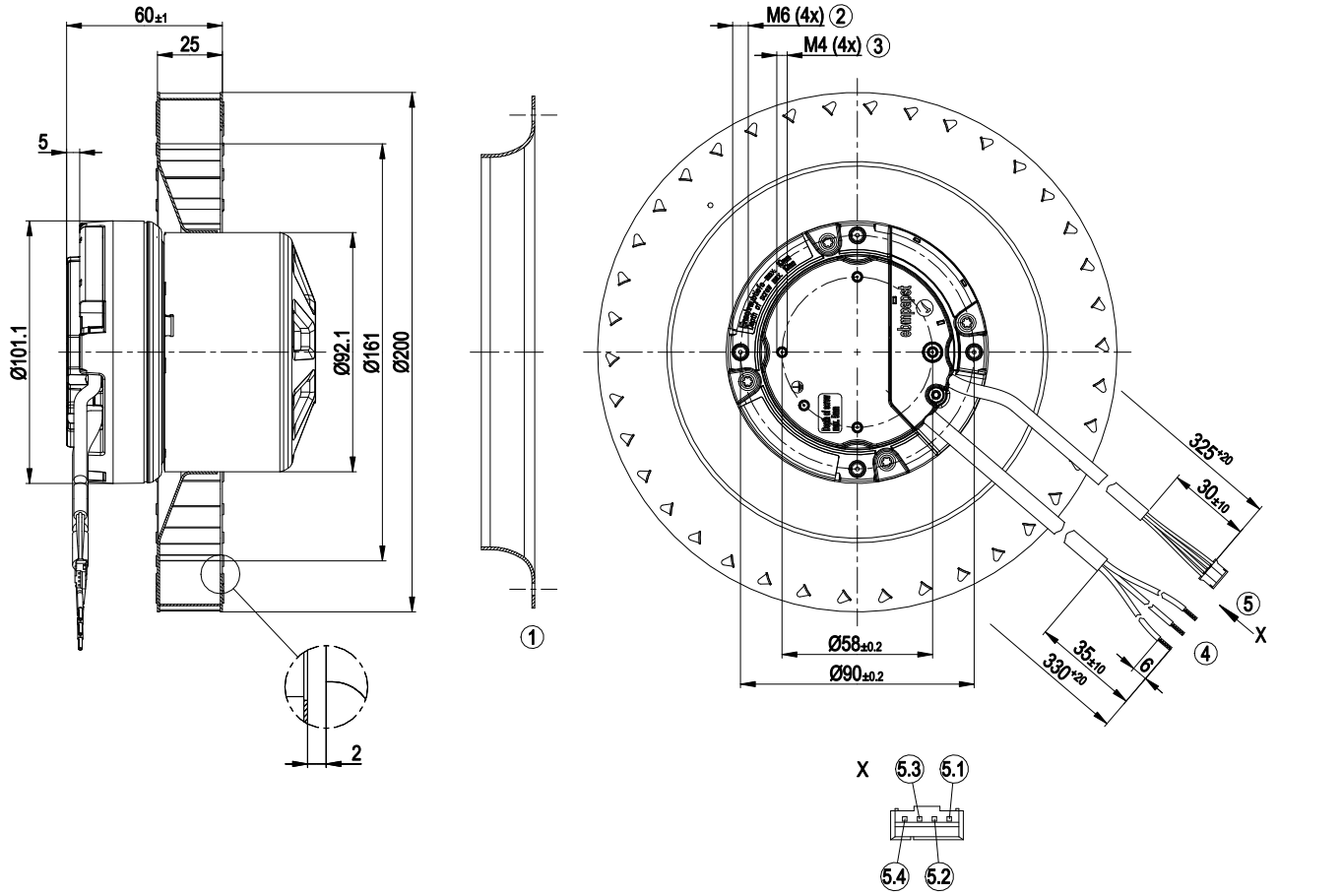
Product drawing



1	Inlet nozzle 09605-2-4013 not included in scope of delivery
2	Thread reach max. 10 mm
3	Thread reach max. 5 mm
4	Connection line PVC AWG20, 3x lead tips crimped
5	Connection line PVC AWG22, 1x connector housing 4-pole JST PHR-4, 4x female connector JST SPH-002T-P0.5S crimped
5.1	red
5.2	blue
5.3	yellow
5.4	white

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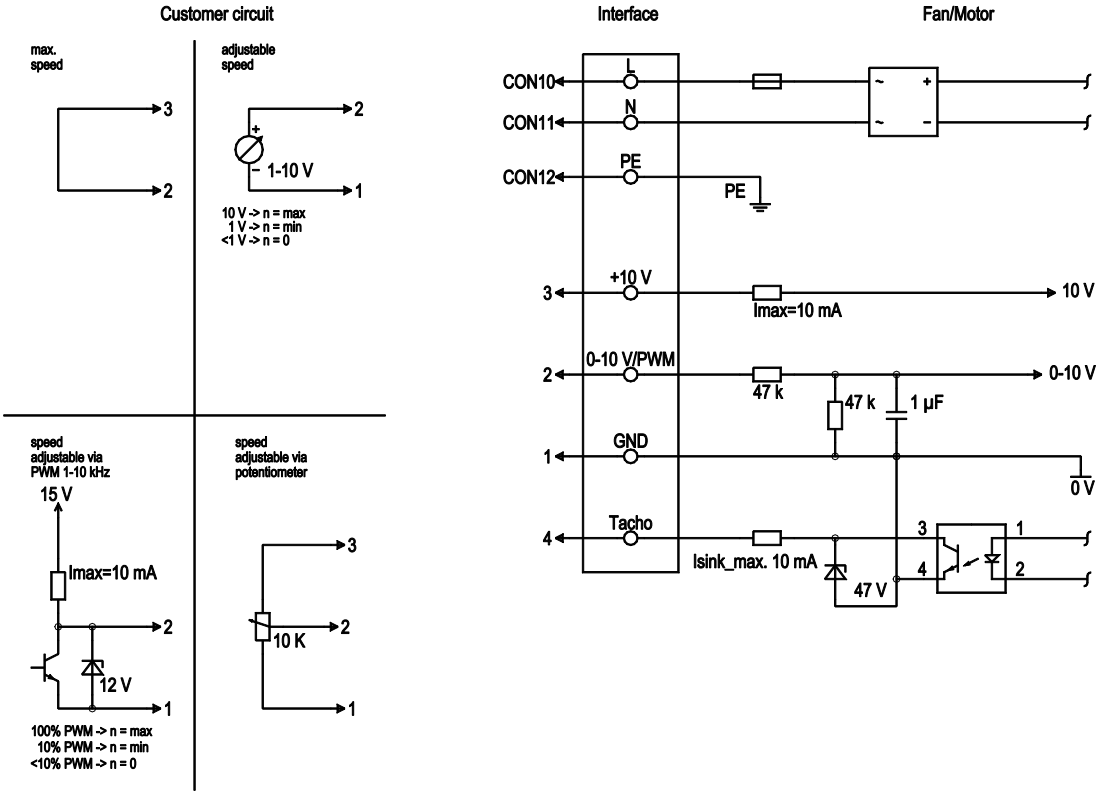
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Mains connection, power supply, phase, see type plate for voltage range
	CON11	N	blue	Mains connection, power supply, neutral conductor, see type plate for voltage range
	CON12	PE	green/yellow	Earth connection
	2	0- 10V PWM	yellow	0-10 V/PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Speed monitoring 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. potentiometer), SELV
	1	GND	blue	Signal ground for control interface, SELV

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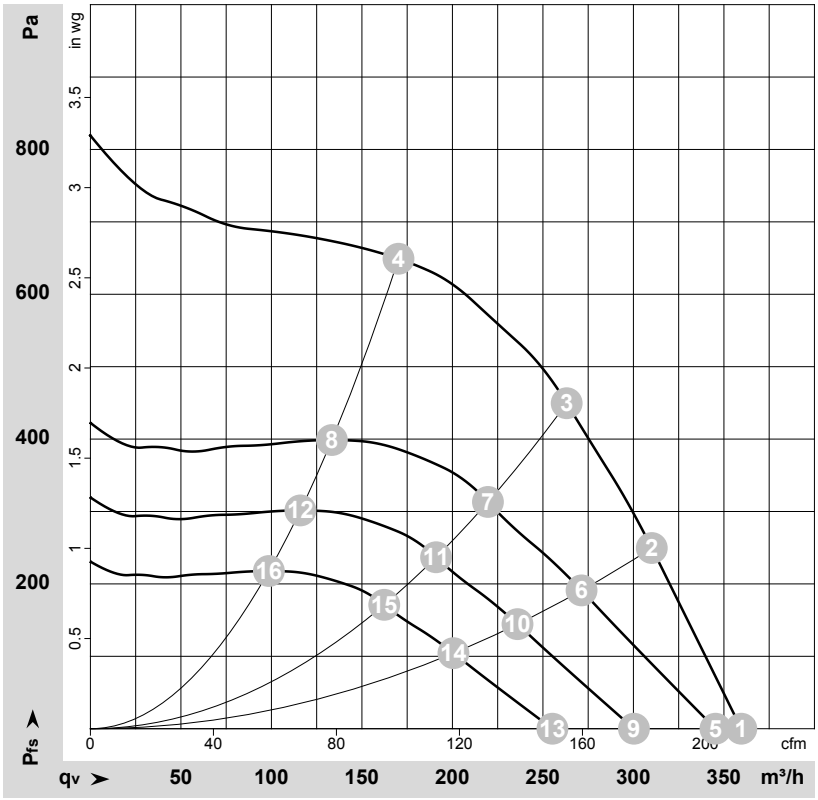
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-153700-1

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	2400	165	1.32	74	80	360	0	210	0.00
2	230	50	2625	159	1.31	73	79	310	250	180	1.00
3	230	50	2755	142	1.19	72	77	265	450	155	1.81
4	230	50	2935	109	0.92	70	75	170	650	100	2.61
5	230	50	2300	145	1.17	73	79	345	0	205	0.00
6	230	50	2300	107	0.88	70	75	270	191	160	0.77
7	230	50	2300	83	0.69	68	73	220	313	130	1.26
8	230	50	2300	52	0.45	64	69	135	399	80	1.60
9	230	50	2000	95	0.77	69	75	300	0	175	0.00
10	230	50	2000	70	0.58	66	72	235	145	140	0.58
11	230	50	2000	54	0.45	64	69	190	237	110	0.95
12	230	50	2000	34	0.29	60	66	115	302	70	1.21
13	230	50	1700	59	0.47	65	71	255	0	150	0.00
14	230	50	1700	43	0.36	62	68	200	105	120	0.42
15	230	50	1700	33	0.28	60	65	160	171	95	0.69
16	230	50	1700	21	0.18	56	62	100	218	60	0.88

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