EC centrifugal fan

backward-curved, single-intake

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**R3G200-BH11-07**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2700
Power consumption	W	65
Current draw	A	1.0
Max. ambient temperature	°C	50

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	1.4 kg
Size	200 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
Mode	S1
Motor bearing	Ball bearing
Technical features	- 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 - Thermal overload protection for motor
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
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-7 + 60730; CCC; CSA C22.2 No. 77 + CAN/CSA-E60730-1

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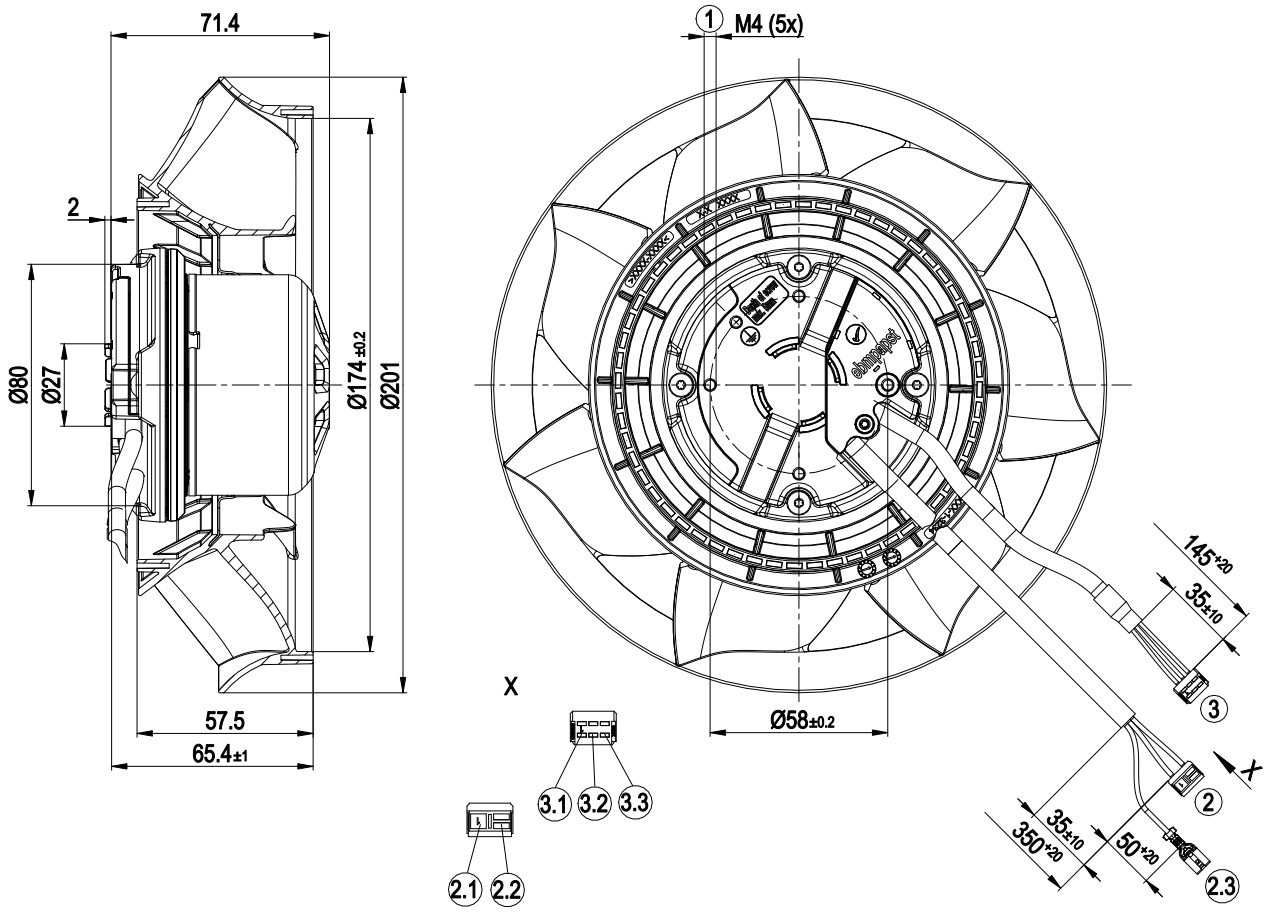
Product drawing



1	Max. clearance for screw 5 mm
2	Cable PVC AWG20, 2-pole connector housing Stocko MFMP 7260-002-008-960-000-00-G
2.1	N (blue)
2.2	L (black)
2.3	PE (green/yellow), flat push-on receptacle Stocko RSB 8028 F4.8-1
3	Cable PVC AWG22, 3-pole connector housing Stocko MFMP 7238-003-065-960-000-00-G
3.1	Tach (white)
3.2	0-5 V / PWM (yellow)
3.3	GND (blue)

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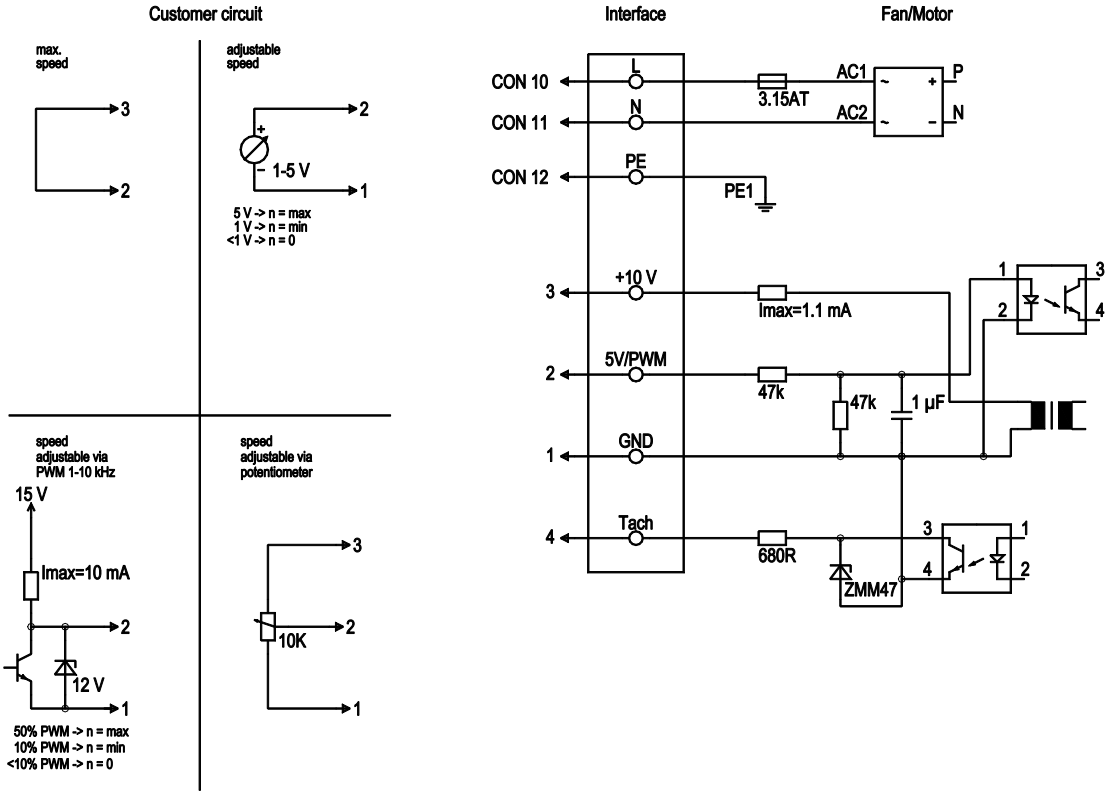
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 115 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	2	0- 5 V / PWM	yellow	Control input 0-5 V or PWM, electrically isolated
	1	GND	blue	GND connection of control interface
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

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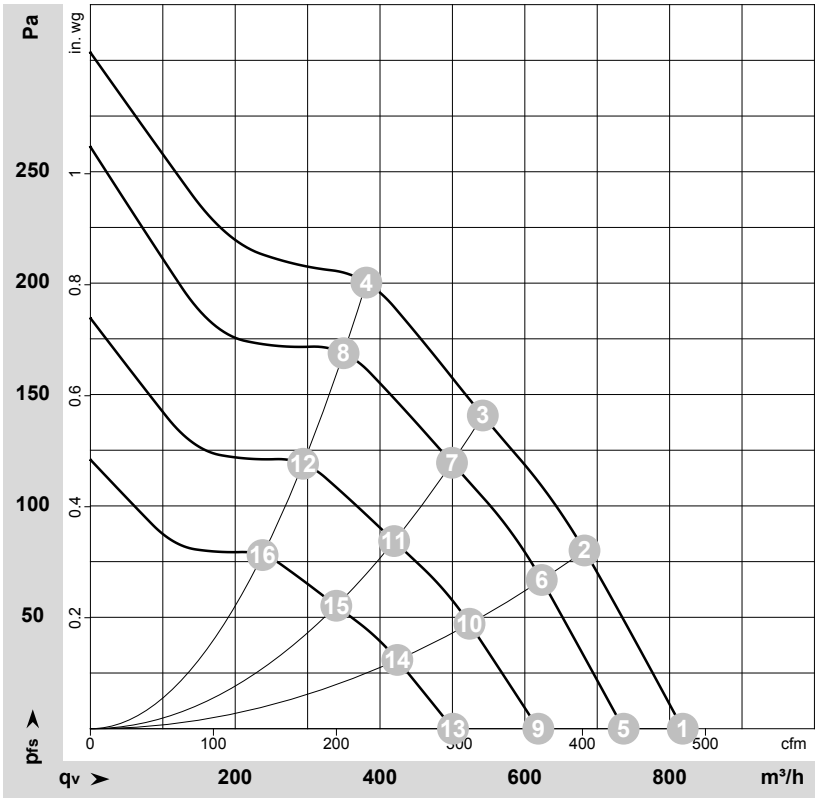
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-188065-1

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~	115	50	2775	56	0.92	820	0	480	0.00
2	1~	115	50	2735	61	0.99	680	80	400	0.32
3	1~	115	50	2700	65	1.00	540	140	320	0.56
4	1~	115	50	2720	62	1.00	380	200	225	0.80
5	1~	115	50	2500	41	0.67	735	0	435	0.00
6	1~	115	50	2500	47	0.75	625	67	365	0.27
7	1~	115	50	2500	49	0.80	500	119	295	0.48
8	1~	115	50	2500	48	0.77	350	172	205	0.69
9	1~	115	50	2100	24	0.40	620	0	365	0.00
10	1~	115	50	2100	28	0.44	525	47	310	0.19
11	1~	115	50	2100	29	0.47	420	84	245	0.34
12	1~	115	50	2100	28	0.46	295	121	175	0.49
13	1~	115	50	1700	13	0.21	500	0	295	0.00
14	1~	115	50	1700	15	0.24	425	31	250	0.12
15	1~	115	50	1700	16	0.25	340	55	200	0.22
16	1~	115	50	1700	15	0.24	240	80	140	0.32

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