R3G225-AE17-25

EC centrifugal fan

backward-curved, single-intake

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**R3G225-AE17-25**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2250
Power consumption	W	90
Current draw	A	0.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

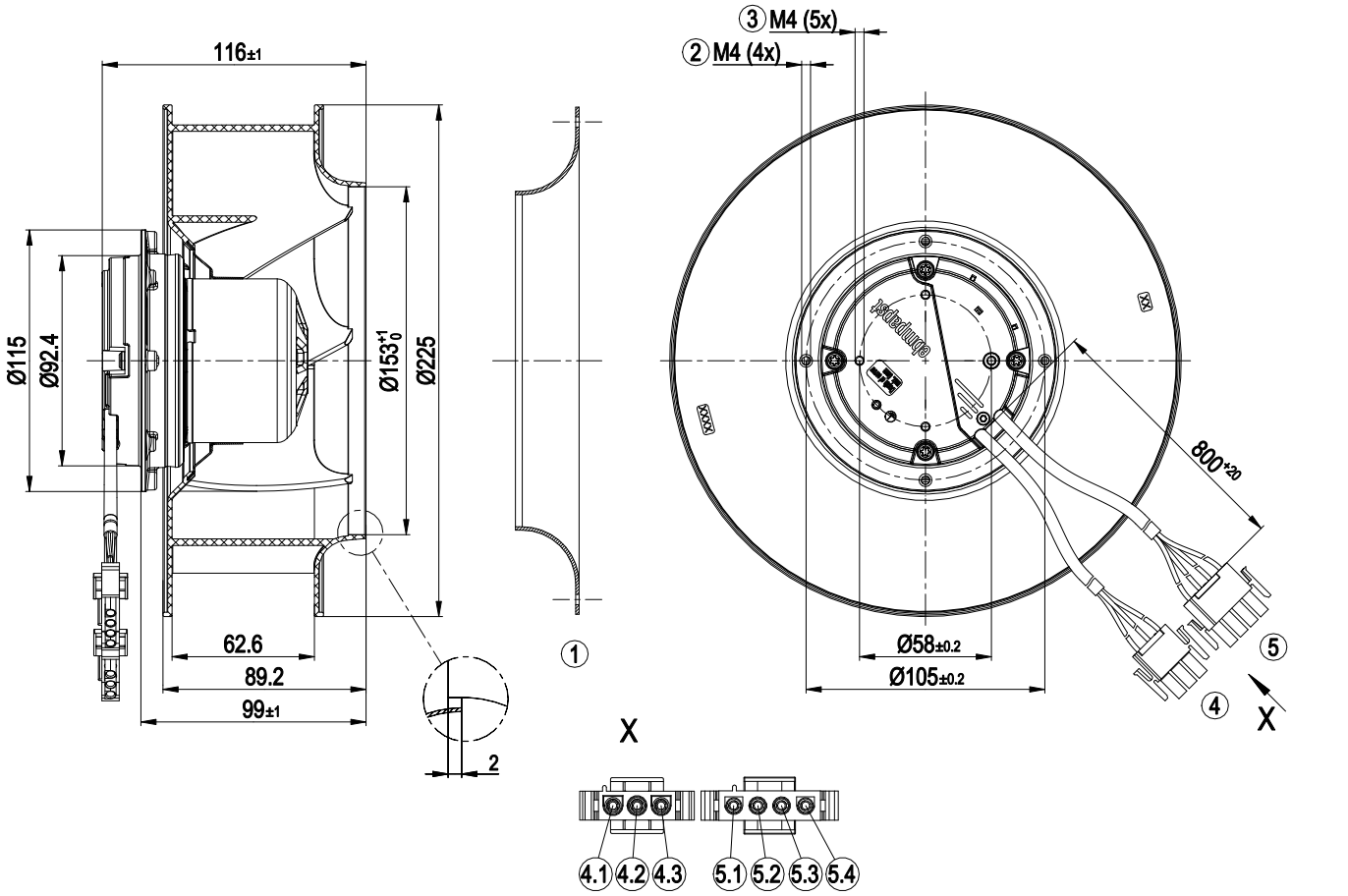
Weight	1.5 kg
Size	225 mm
Motor size	55
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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	- Output 10 VDC, max. 10 mA - 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 - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Connector with cable
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; CE

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Product drawing



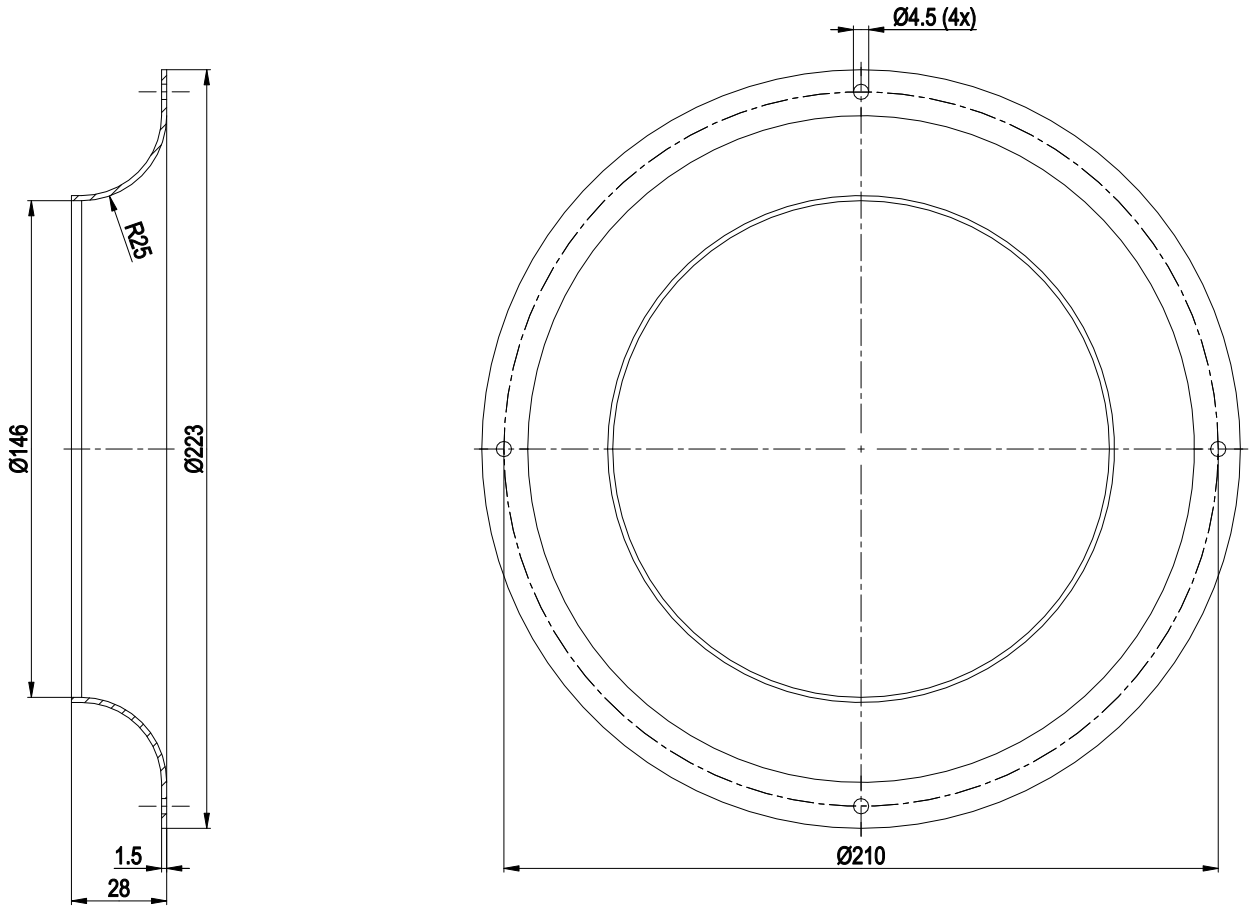
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Max. clearance for screw 5 mm
4	Cable PVC 3G 0.5 mm²
	3-pole connector housing TE 2178473-2, 3x plug pin TE 926885-3
4.1	L (brown)
4.2	N (blue)
4.3	PE (green/yellow)
5	Cable PVC 4x 0.25 mm²
	4-pole connector housing TE 1-480702-0, 4x plug pin TE 926885-3
5.1	+10 V (red)
5.2	0-10 V/PWM (yellow)
5.3	GND (blue)
5.4	Tach (white)

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Accessory part



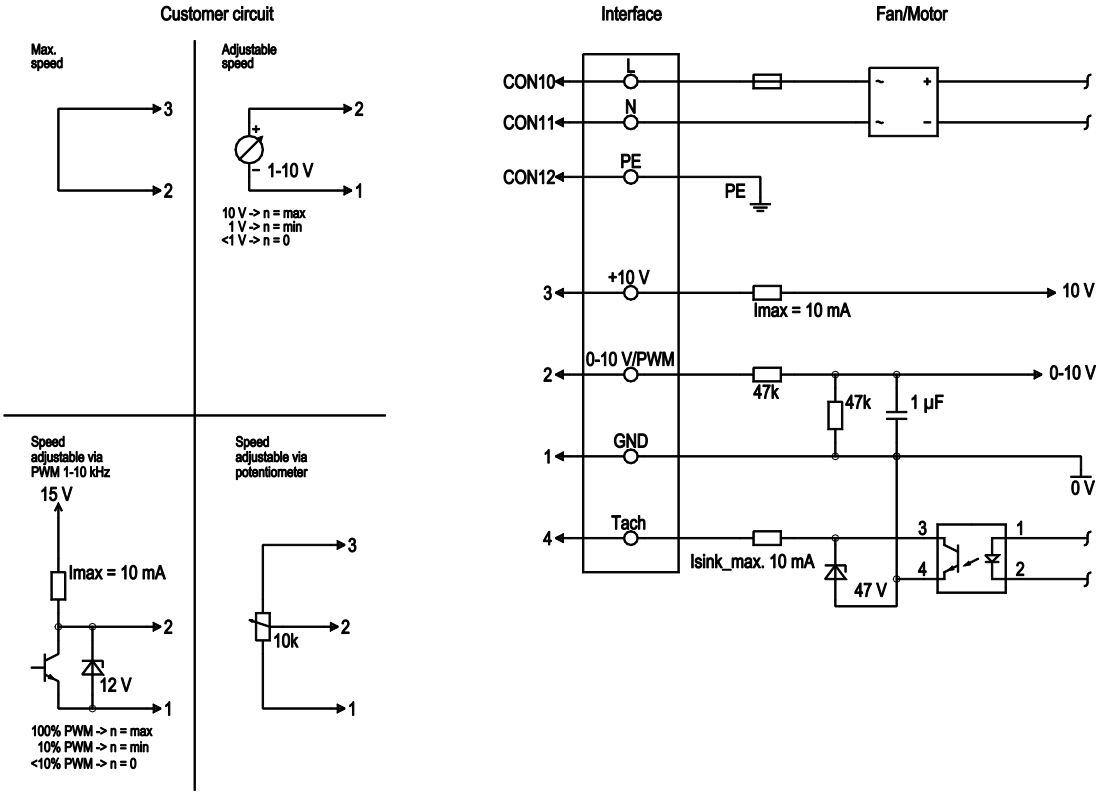
Inlet ring 96358-2-4013 not included in scope of delivery

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Connection diagram



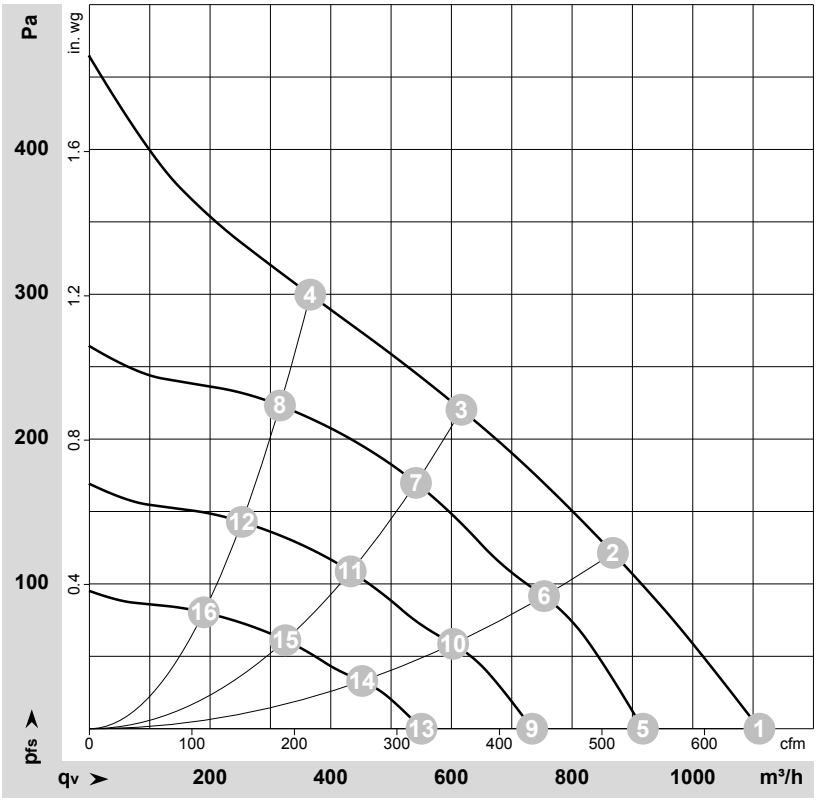
No.	Conn.	Designation	Color	Function/assignment
	CON10	L	brown	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach 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. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-182704-1

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~	230	50	2420	79	0.71	1110	0	655	0.00
2	1~	230	50	2300	88	0.78	870	120	510	0.48
3	1~	230	50	2250	90	0.80	615	220	365	0.88
4	1~	230	50	2315	86	0.77	365	300	215	1.20
5	1~	230	50	2000	45	0.40	915	0	540	0.00
6	1~	230	50	2000	58	0.51	755	92	445	0.37
7	1~	230	50	2000	61	0.54	540	170	320	0.68
8	1~	230	50	2000	55	0.49	315	223	185	0.90
9	1~	230	50	1600	23	0.20	735	0	430	0.00
10	1~	230	50	1600	30	0.26	605	59	355	0.24
11	1~	230	50	1600	31	0.28	435	109	255	0.44
12	1~	230	50	1600	28	0.25	255	143	150	0.57
13	1~	230	50	1200	10.0	0.09	550	0	325	0.00
14	1~	230	50	1200	12	0.11	450	33	265	0.13
15	1~	230	50	1200	13	0.12	325	61	190	0.24
16	1~	230	50	1200	12	0.11	190	80	110	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

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