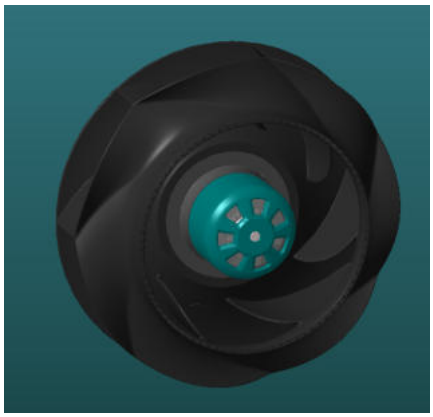
R3G250-8317086881 Sample

EC centrifugal fan - RadiCal

backward-curved, single-intake



ebm-papst Ventilator (Xi'an) Co.,Ltd.

No.2555,No.5 Weishui Road,Weibei Industry Park, Lintong District,
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Tel: +86(0)29-81366100
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Nominal data

Type	**R3G250-8317086881**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	220
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2534
Power consumption	W	170
Current draw	A	1.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	1.9 kg
Size	250 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	IP44 (Air inlet upward or horizontal)
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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - PWM control input
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (if protective earth is connected by customer)
Conformity with standards	GB12350; CCC

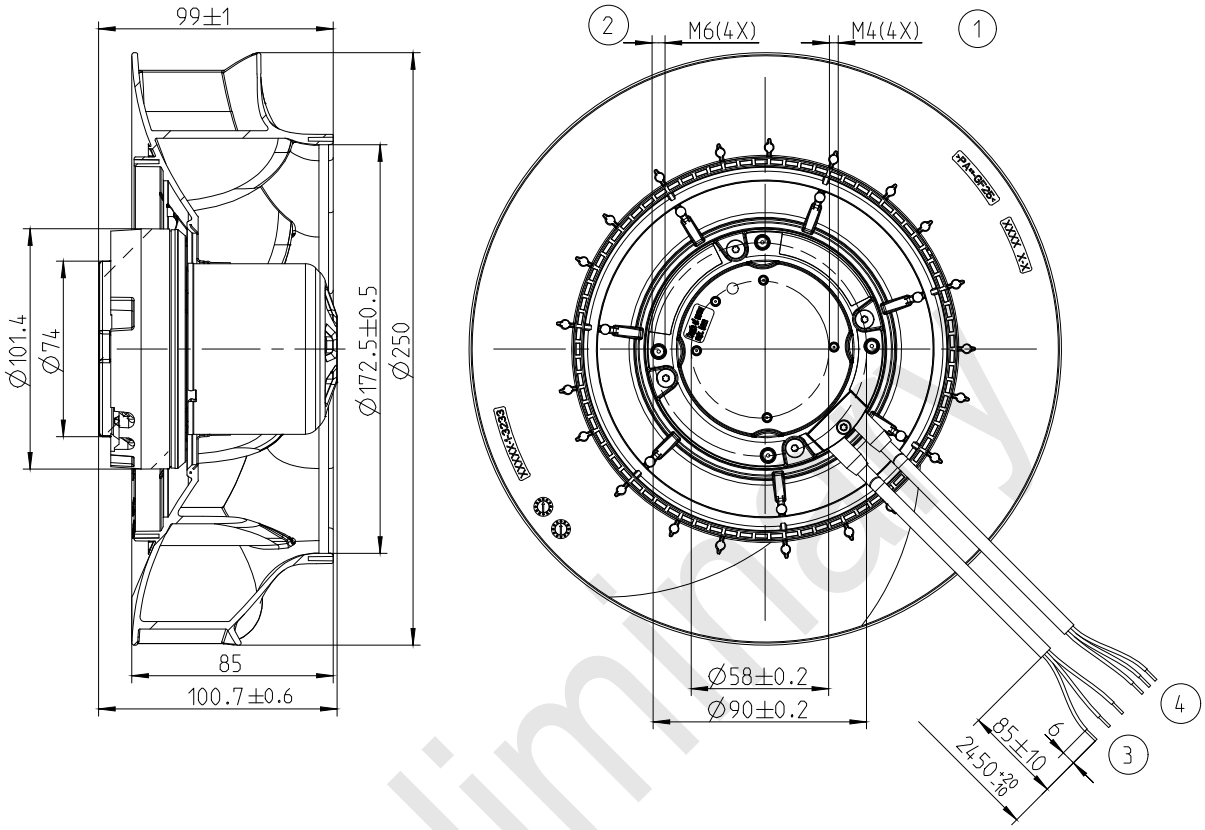
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Product drawing



	Accessory part: inlet ring 96359-2-4013 not included in scope of delivery
1	Max. clearance for screw 6mm
2	Max. clearance for screw 10mm
3	Cable PVC 3x 0.25 mm²
4	Cable PVC 3x 0.5 mm²

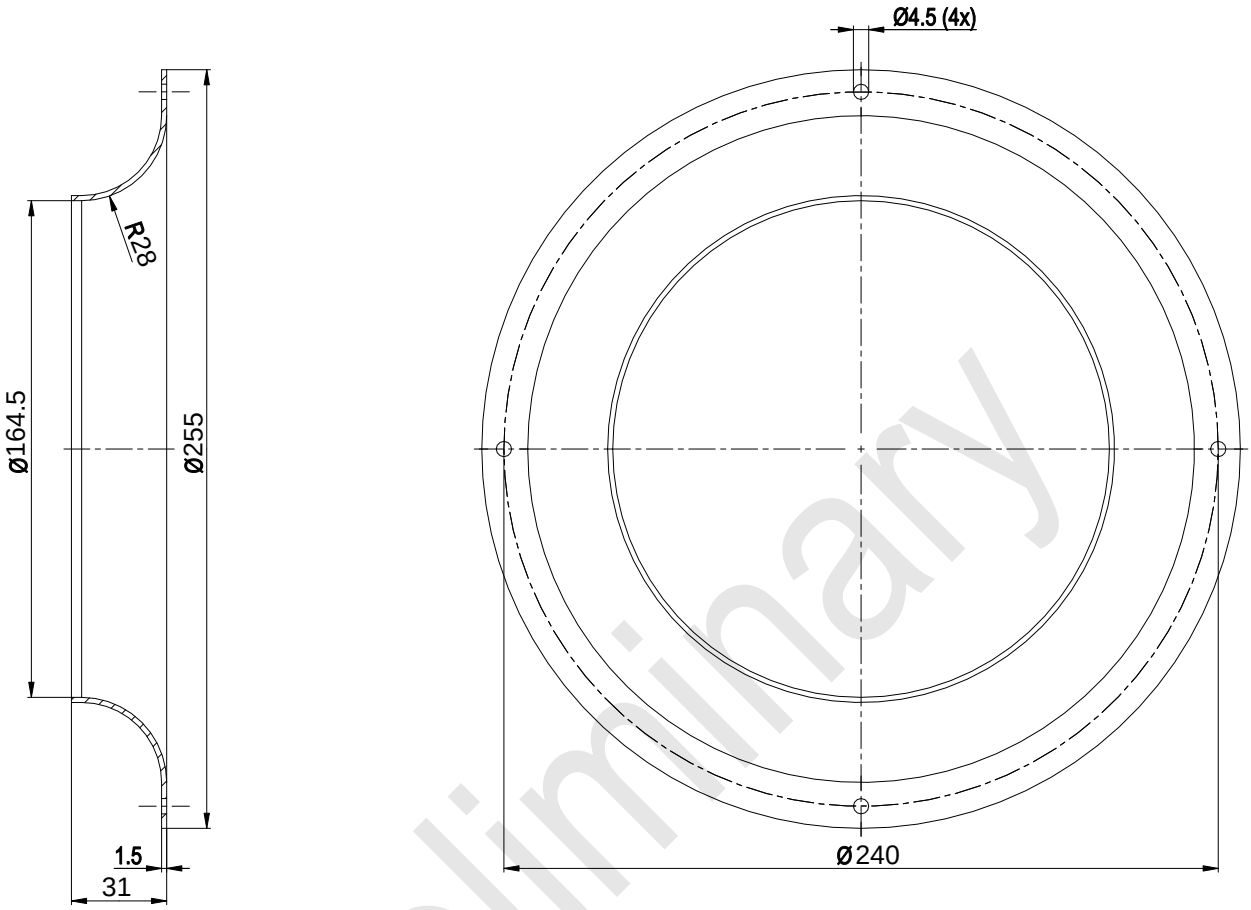
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Accessory part



1	Accessory part: inlet ring 96359-2-4013 not included in scope of delivery

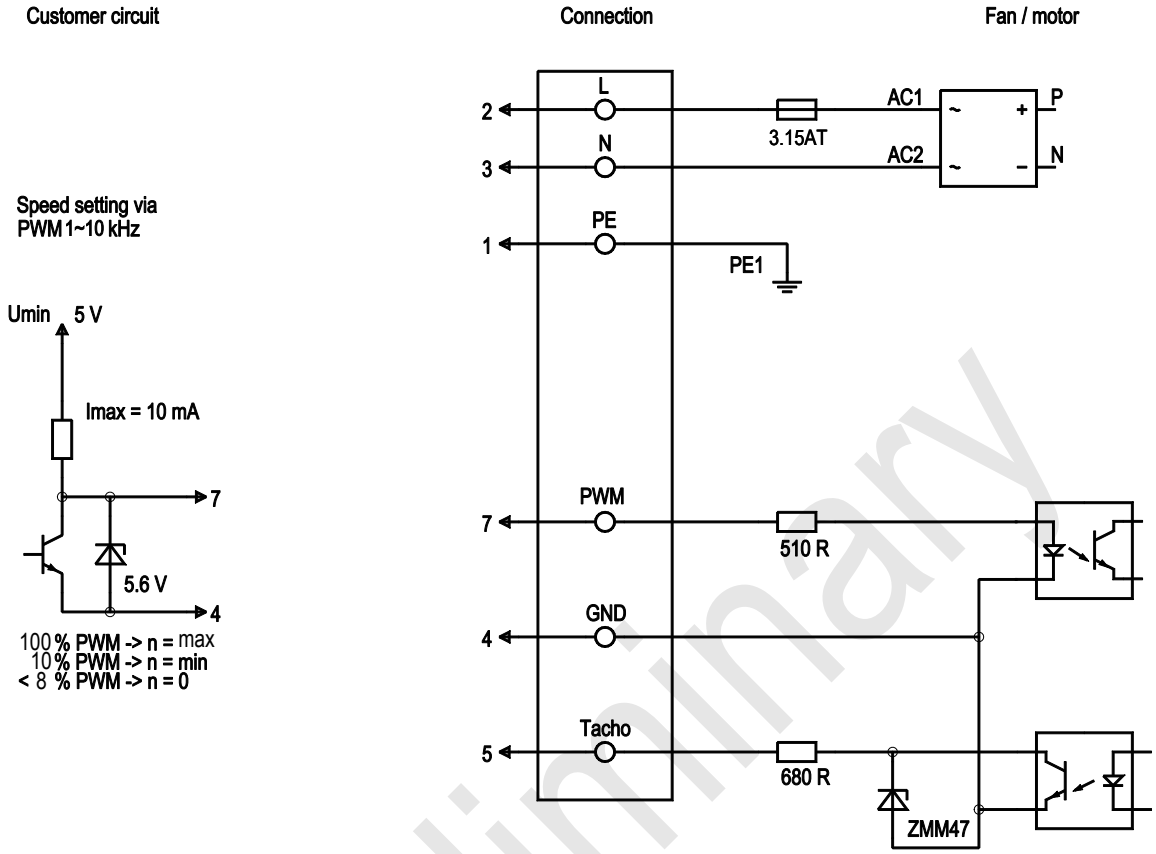
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Connection diagram



Line	No.	Signal	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 220 VAC, 50 - 60 Hz
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tacho	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	7	PWM	yellow	PWM control input, electrically isolated

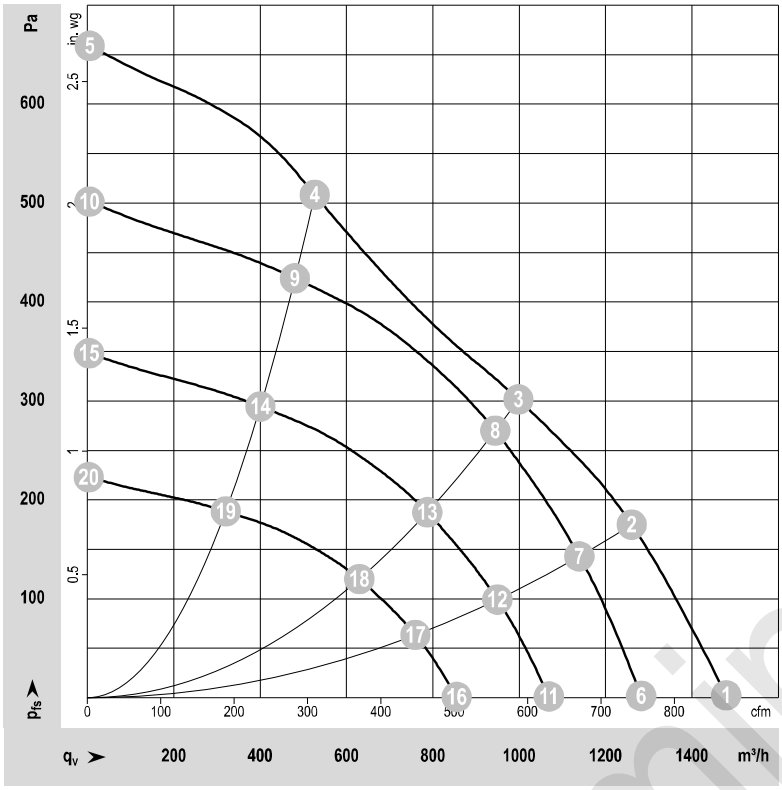
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Curves: Air performance 50 Hz



ρ = 1.2 kg/m³ ± 2%

Measurement:9165

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.

preliminary

Fan performance

Index	U	f	n	P_{ed}	I	LpA_{out}	LwA_{out}	q_v	p_{fs}	q_v	p_{fs}
	v	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in.wg
01	220	50	2770	165	1.40	70	81	1482	0	872	0.00
02	220	50	2657	177	1.49	68	79	1260	175	741	0.70
03	220	50	2537	175	1.48	64	75	995	302	585	1.21
04	220	50	2625	176	1.48	61	71	526	507	309	2.04
05	220	50	2751	89	0.79			0	659	0	2.64
06	220	50	2400	107	0.91	67	78	1284	0	755	0.00
07	220	50	2400	131	1.10	65	76	1138	143	669	0.58
08	220	50	2400	149	1.26	62	73	933	275	549	1.11
09	220	50	2400	135	1.14	60	70	482	423	283	1.70
10	220	50	2400	59	0.52			0	501	0	2.01
11	220	50	2000	62	0.53	62	73	1070	0	629	0.00
12	220	50	2000	76	0.64	60	71	942	103	554	0.41
13	220	50	2000	86	0.73	57	68	778	191	457	0.77
14	220	50	2000	77	0.65	55	66	393	295	231	1.19
15	220	50	2000	34	0.30			0	348	0	1.40
16	220	50	1600	32	0.27	57	67	856	0	504	0.00
17	220	50	1600	39	0.33	55	65	749	69	441	0.28
18	220	50	1600	44	0.37	52	62	612	126	360	0.51
19	220	50	1600	40	0.33	49	60	314	189	185	0.76
20	220	50	1600	18	0.16			0	223	0	0.89

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed}= Power consumption · I = Current draw · LpA_{out}= Sound pressure level outtake side · LwA_{out} = Sound power level outtake side
q_V = Air flow · p_{fs} = Pressure increase

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