R3G250-AD62-20

EC centrifugal fan

backward curved, single inlet

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G250-AD62-20**	
Motor	**M3G084-CA**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min^{-1}	2700
Power input	W	140
Current draw	A	3.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	+70

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		54.1	39.7	43.7
Efficiency grade N		72.4	58	62
Power input P_e	kW	0.18		
Air flow q_v	m³/h	870		
Pressure increase p_{fs}	Pa	360		
Speed n	min^{-1}	2580		

Data established at point of optimum efficiency

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Technical features

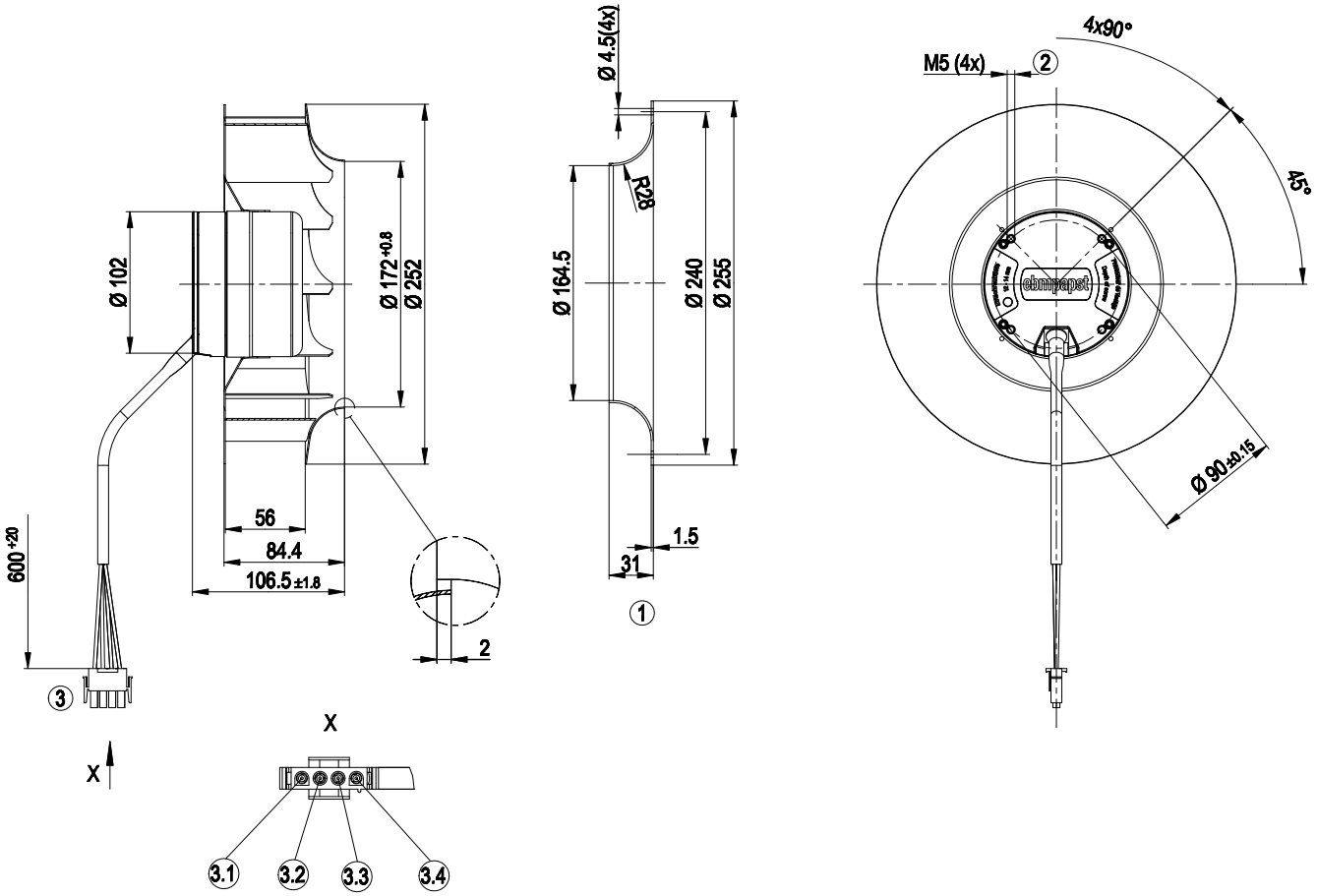
Mass	3 kg
Size	250 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Soft start - Control input 0-10 VDC / PWM - Over-temperature protected motor
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	UL 1004-1; CSA C22.2 Nr.100

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Product drawing



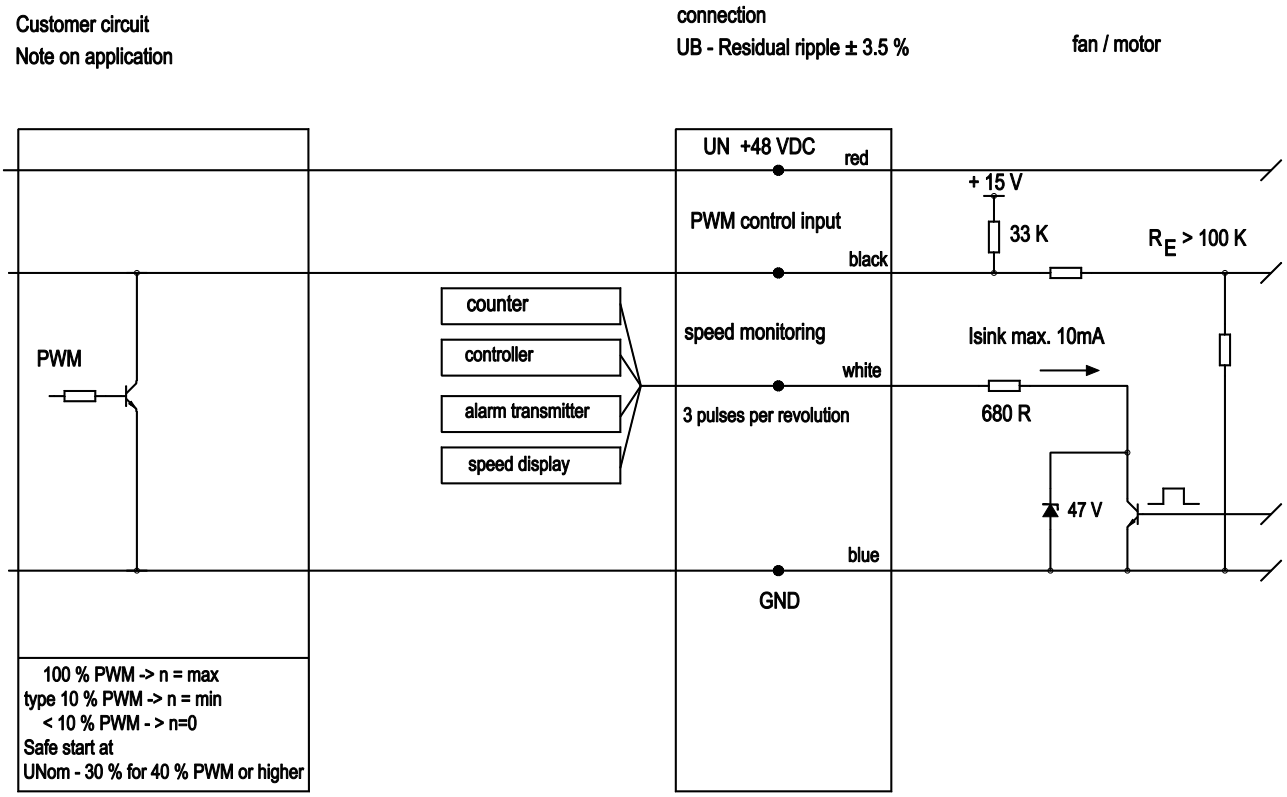
1	Accessory part: Inlet nozzle 96359-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 14 mm
3	Connection line PVC AWG16 with connector shell AMP 350779-1, 4x plug pin 926887-1 crimped.
3.1	blue (GND)
3.2	yellow (PWM) control input
3.3	white (tach) speed monitoring
3.4	red (+48V)

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Connection screen

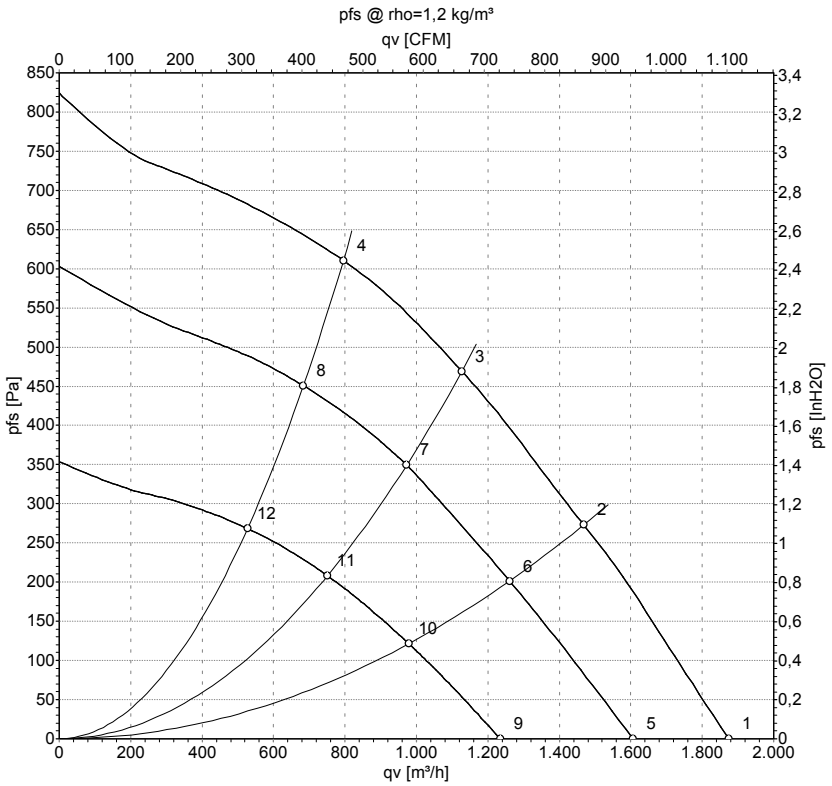


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Charts: Air flow



Measurement: LU-55813
Measurement: LU-55811
Measurement: LU-55814

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	n	P_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	57	3120	218	3.86	1875	0
2	57	3045	276	4.89	1470	273
3	57	3015	301	5.33	1125	469
4	57	3035	287	5.08	795	611
5	48	2700	140	3.00	1605	0
6	48	2620	179	3.77	1260	200
7	48	2600	196	4.12	975	350
8	48	2615	185	3.88	685	450
9	36	2065	68	1.92	1235	0
10	36	2035	86	2.41	980	121
11	36	2020	94	2.64	750	210
12	36	2030	89	2.49	525	270

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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