R3G250-AD62-30

EC centrifugal fan

backward-curved, single-intake

R3G250-AD62-30 ebmpapst Datasheet

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Nominal data

Type	**R3G250-AD62-30**
Motor	**M3G084-CA**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2645
Power consumption	W	135
Current draw	A	2.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	54.1	43.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		72.4	62
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.18
09 Air flow q_v	m^3/h	870
09 Pressure increase p_{fs}	Pa	360
10 Speed (rpm) n	min^{-1}	2580
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

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

LU-56153

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.

The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

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Technical description

Weight	2.9 kg
Size	250 mm
Motor size	84
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
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	Shaft horizontal or rotor on top; rotor on bottom on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Reverse polarity protection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-3 (household environment)
Motor protection	Thermal switch auto reset, internally connected
With cable	Variable
Protection class assignment	The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 62368-1; CE
Approval	CSA C22.2 No. 100; EAC; UL 1004-1; CCC

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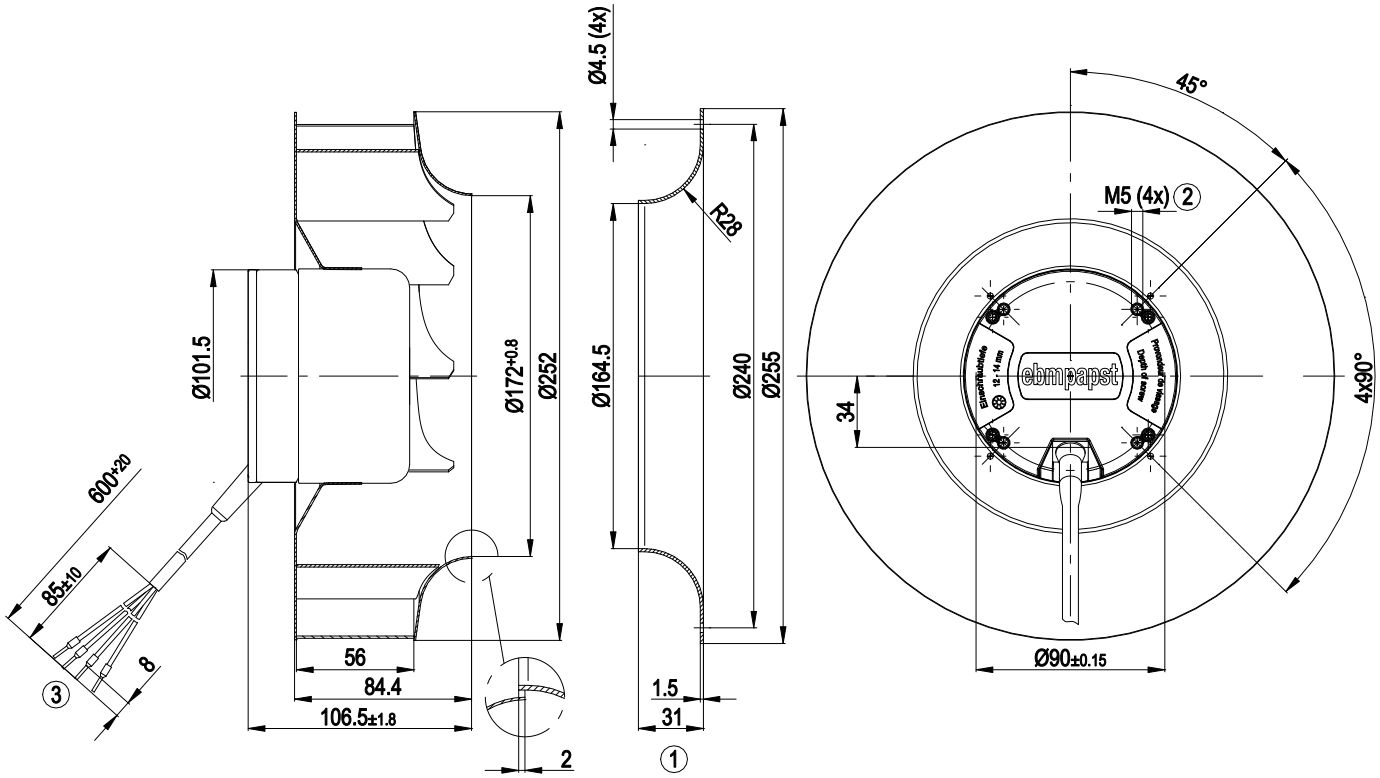
Product drawing



1	Accessory part: inlet ring 96359-2-4013 not included in scope of delivery
2	Clearance for screw 12 - 14 mm
3	Cable PVC AWG16, 4x crimped ferrules

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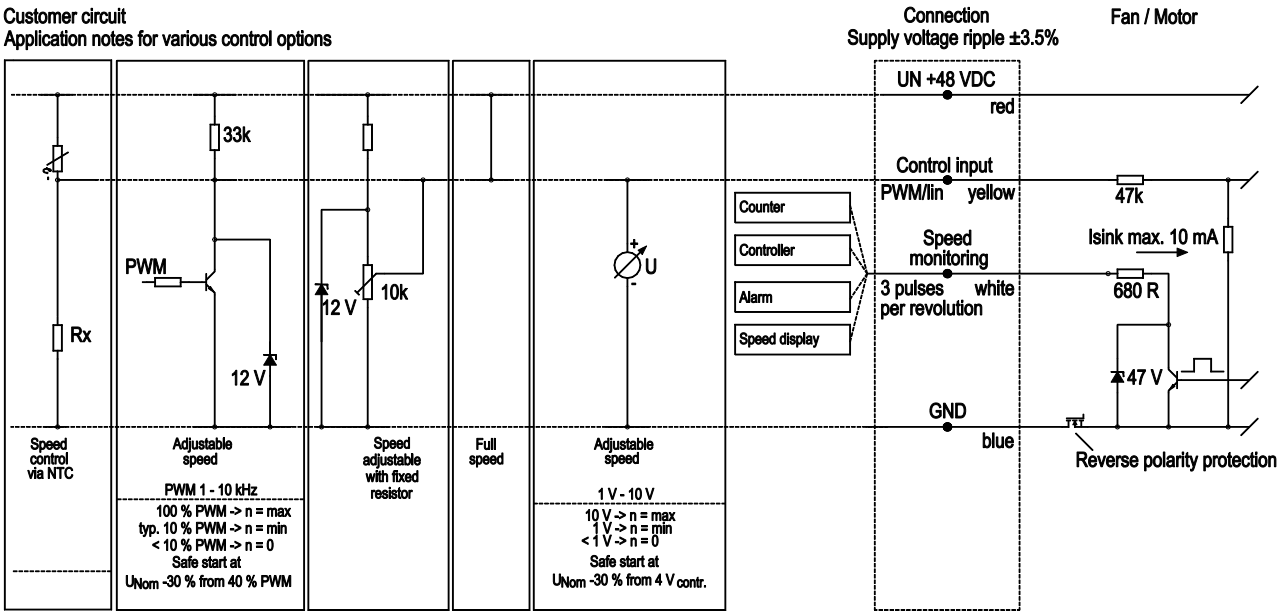
Connection diagram



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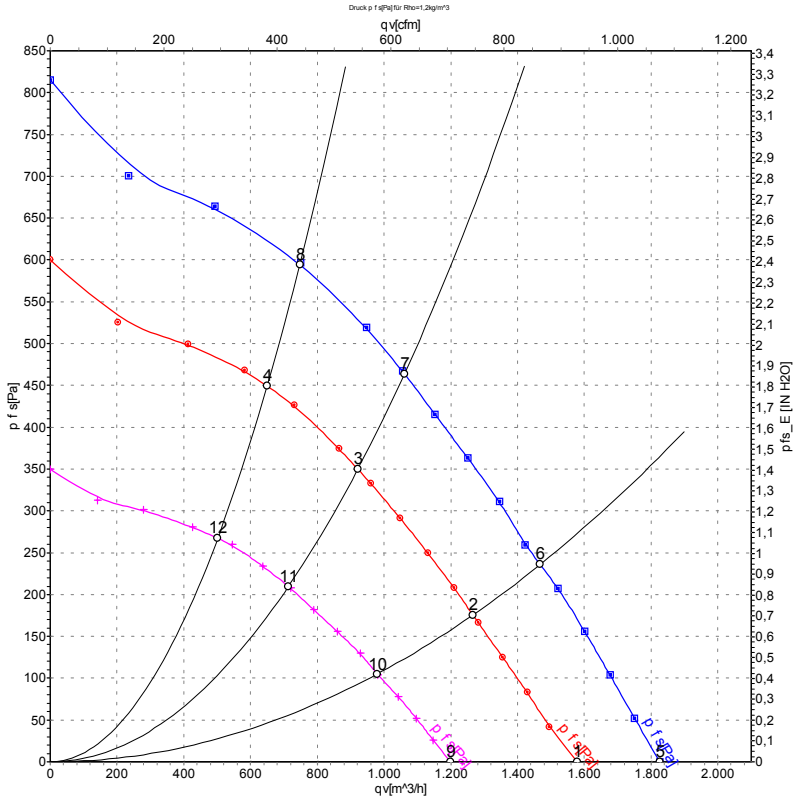
Curves: Air performance



Measurement: LU-56153-1
Date: 2002-09-12
Nozzle: 96359-2-4013

Measurement: LU-56151-1
Date: 2002-09-12
Nozzle: 96359-2-4013

Measurement: LU-56152-1
Date: 2002-09-12
Nozzle: 96359-2-4013

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

	U	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	48	2645	135	2.80	1580	0	930	0.00
2	48	2600	168	3.52	1265	176	745	0.71
3	48	2580	182	3.82	920	350	545	1.41
4	48	2590	177	3.72	650	449	385	1.80
5	57	3055	206	3.64	1825	0	1075	0.00
6	57	2990	257	4.53	1470	236	865	0.95
7	57	2970	276	4.87	1060	464	625	1.86
8	57	2980	270	4.77	750	598	440	2.40
9	36	2035	65	1.83	1200	0	705	0.00
10	36	2005	82	2.31	980	105	575	0.42
11	36	2000	88	2.46	715	210	420	0.84
12	36	2005	85	2.39	500	267	295	1.07

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

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