R3G250-AK41-73

EC centrifugal fan

backward-curved, single-intake



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G250-AK41-73**
Motor	**M3G084-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	3550
Power consumption	W	528
Current draw	A	3.4
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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	54.2	48.4
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		67.8	62
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.51
09 Air flow q_v	m^3/h	1510
09 Pressure increase p_{fs}	Pa	601
10 Speed (rpm) n	min^{-1}	3520
11 Specific ratio*		1.01

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-78061

ebmpapst

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Technical description

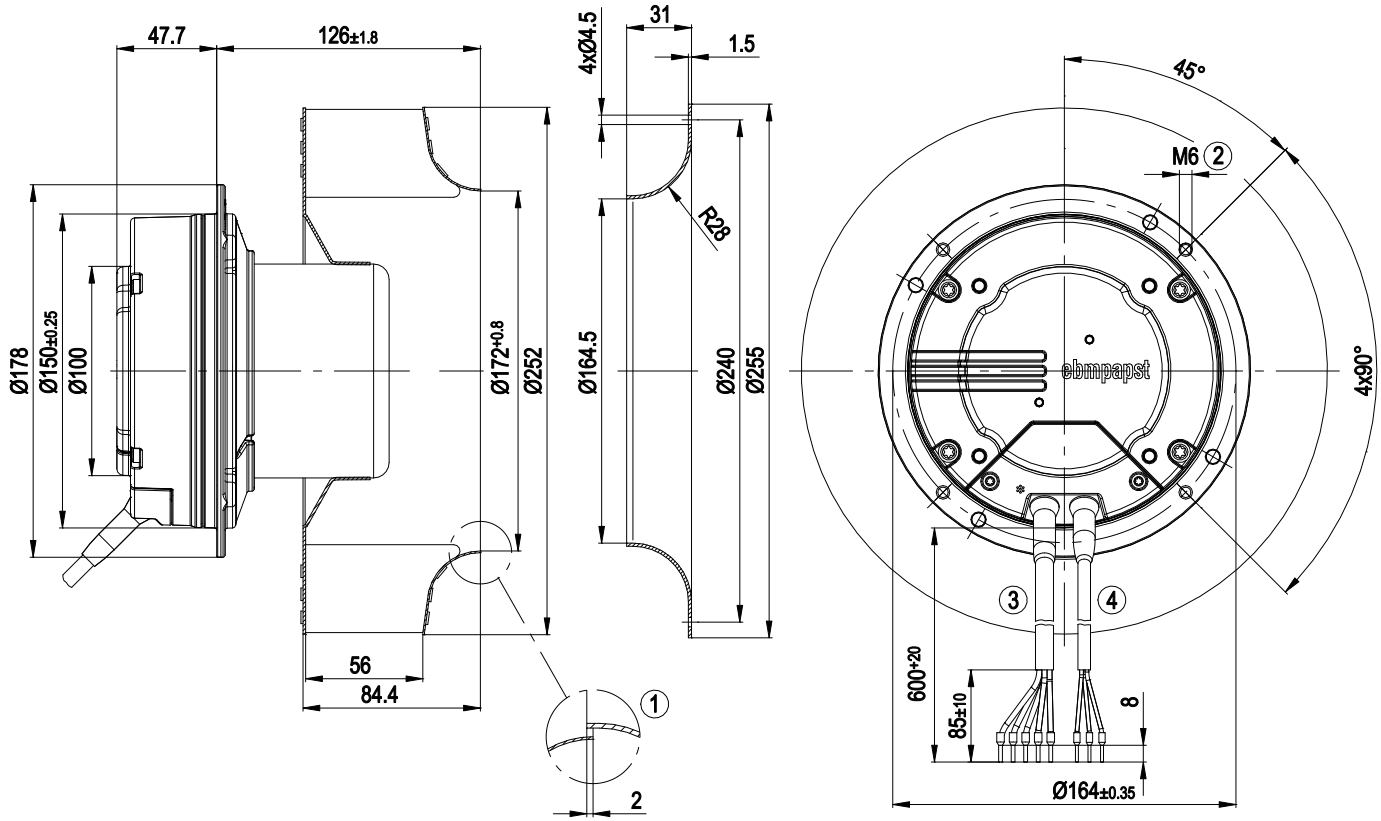
Weight	4.5 kg
Fan size	250 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, hot-dip galvanized
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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	- Control input 0-10 VDC / PWM - Output 10 VDC max. 1.1 mA - Alarm relay - Thermal overload protection for motor - Thermal overload protection for electronics/motor
EMC immunity to interference	According to EN 61000-6-2
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1

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Product drawing



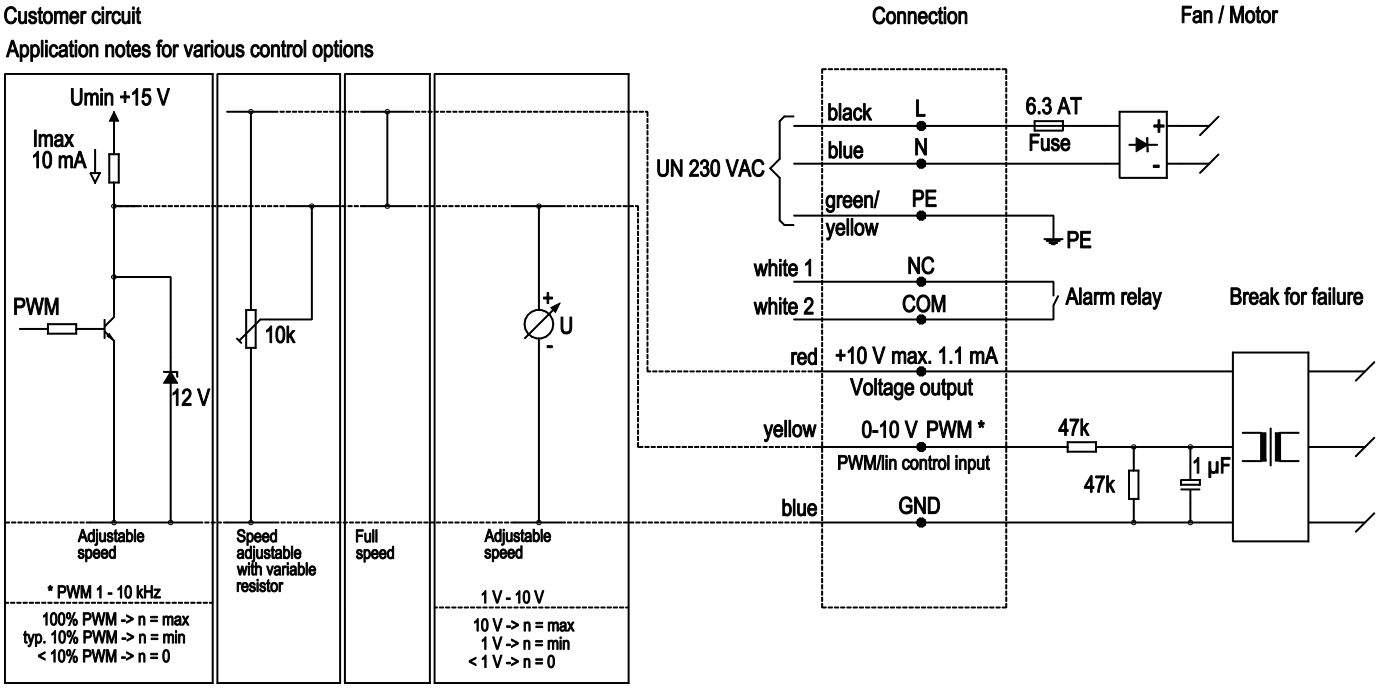
1	Accessory part: Inlet ring 96359-2-4013 not included in scope of delivery, other inlet rings on request
2	Clearance for screw 8-10 mm; tightening torque 8±0.8 Nm; gluing the screws is recommended
3	Cable AWG18, 5 x crimped ferrules
4	Cable AWG22, 3 x crimped ferrules

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Connection diagram

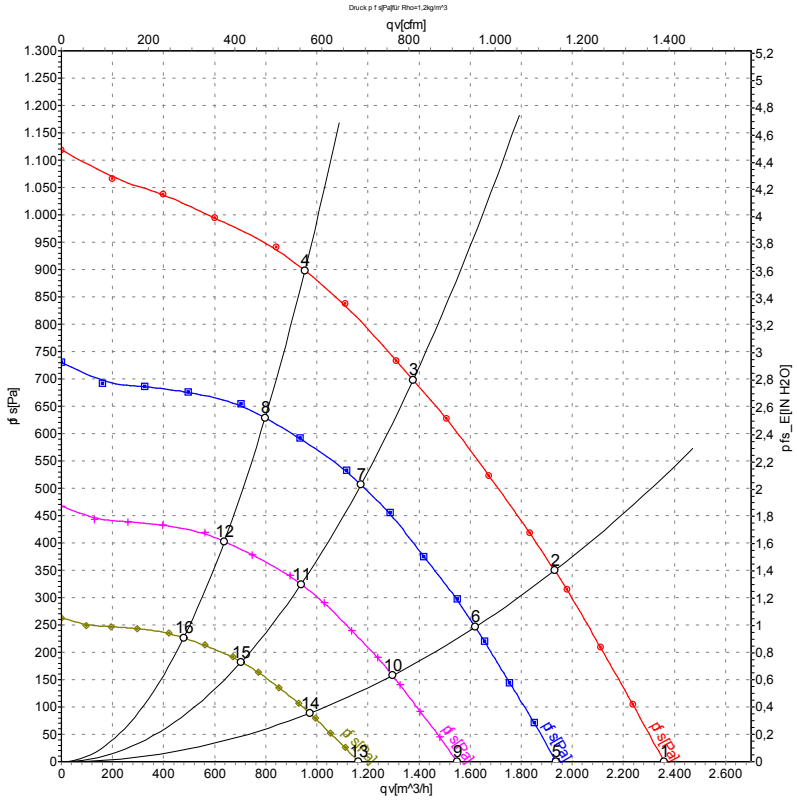


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Curves: Air performance 50 Hz



Measurement: LU-78061-1

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

	U	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	3655	369	2.36	2360	0	1390	0.00
2	230	50	3575	463	2.99	1930	350	1135	1.41
3	230	50	3550	528	3.40	1375	700	810	2.81
4	230	50	3585	497	3.19	955	900	560	3.61
5	230	50	3000	204	1.30	1935	0	1140	0.00
6	230	50	3000	274	1.76	1620	246	955	0.99
7	230	50	3000	324	2.09	1175	507	690	2.04
8	230	50	3000	292	1.87	795	629	470	2.53
9	230	50	2400	104	0.67	1550	0	910	0.00
10	230	50	2400	140	0.90	1295	158	765	0.63
11	230	50	2400	166	1.07	940	324	550	1.30
12	230	50	2400	149	0.96	640	403	375	1.62
13	230	50	1800	44	0.28	1160	0	685	0.00
14	230	50	1800	59	0.38	970	89	570	0.36
15	230	50	1800	70	0.45	705	182	415	0.73
16	230	50	1800	63	0.40	480	226	280	0.91

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

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