

Product Data Sheet RG125-19/56

ebmpapst

The engineer's choice



RG125-19/56

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1 General

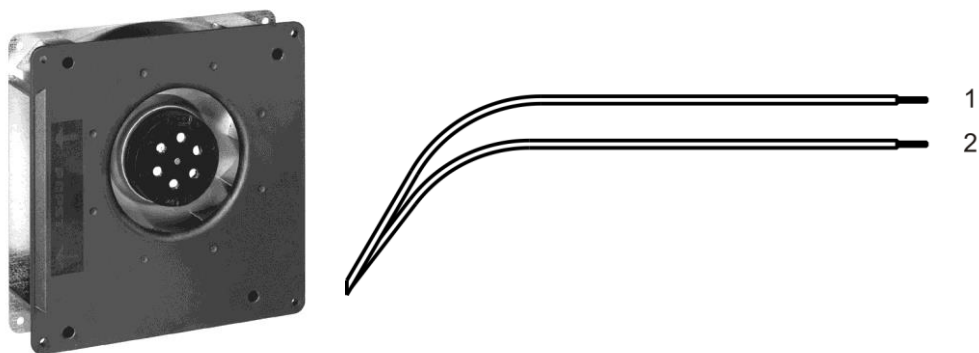
Fan type	Blower
Rotating direction looking at rotor	Clockwise
Airflow direction	Air in axially, Air out radially
Bearing system	Ball bearing
Mounting position - shaft	Any
Balancing grade	6,3

2 Mechanics**2.1 General**

Width	180,0 mm	
Height	180,0 mm	
Depth	40,0 mm	
Diameter	0,0 mm	
Mass	0,850 kg	
Housing material	Plastic	
Impeller material	Mixed	
Max. torque when mounted across both mounting flanges; Metal flange on mounting plate Screw size	Wire outlet corner: 70 Ncm Remaining corners: 70 Ncm ISO 4762 - M4 degreased, without an additional brace and without washer	

2.2 Connections

Electrical connection	Wires	
Lead wire length	L = 310,0 mm	
Tolerance	+/- 10,0 mm	
Tube length	S = 270,0 mm	
Tolerance	+/- 10,0 mm	
Wire size (AWG)	22	
Insulation diameter	1,09 mm	
Plug	See drawing	
Contact	See drawing	



	Color	Operation
1	blue	L
2	blue	N

3 Operating Data

3.1 Electrical Operating Data

Measurement conditions: Normal air density = 1,2 kg/m³; Temperature 23°C +/- 3°C; Motor axis horizontal; warm-up time before measuring 5 minutes (unless otherwise specified).
In the intake and outlet area should not be any solid obstruction within 0,5 m.

$\Delta p = 0$: corresp. to free air flow (see chapter aerodynamics)

I: corresp. to RMS line current

Features	Condition	Symbol	Values	
Frequency	$\Delta p = 0$	f	50 Hz	60 Hz
Nominal voltage Tolerance	$\Delta p = 0$	U_N	230 V +/- 10 %	230 V +/- 10 %
Power consumption Tolerance	$\Delta p = 0$	P	20 W + 5 % - 10 %	19 W + 5 % - 10 %
Speed Tolerance	$\Delta p = 0$	n	2.550 1/min +/- 3 %	2.750 1/min +/- 3 %

3.4 Sound Data

Measurement conditions: Sound pressure level: 1 meter distance between microphone and the air intake.
 Sound power level: Acc. to DIN 45635 part 38 (ISO 10302) Sound power level: Acc. to DIN 45635 part 38 (ISO 10302)
 Measured in a semianchoic chamber with a background noise level of $L_p(A) < 5 \text{ dB(A)}$
 For further measurement conditions see chapter aerodynamics.

a.) Operation condition:
 2.550 1/min at free air flow Frequency: 50 Hz

Optimal operating point	12,0 m ³ /h @ 122 Pa	
Sound power level at the optimal operating point	5,5 bel(A)	
Sound pressure level at free air flow, measured in rubber bands		

b.) Operation condition:
 2.750 1/min at free air flow Frequency: 60 Hz

Optimal operating point	14,0 m ³ /h @ 162 Pa	
Sound power level at the optimal operating point	6,0 bel(A)	
Sound pressure level at free air flow, measured in rubber bands		

4 Environment

4.1 General

Min. permitted ambient temperature TU min.	-30 °C / 50 Hz -30 °C / 60 Hz	
Max. permitted ambient temperature TU max.	70 °C / 50 Hz 80 °C / 60 Hz	
Min. permitted storage temperature TL min.	-40 °C	
Max. permitted storage temperature TL max.	80 °C	

4.2 Climatic Requirements *)

Humidity requirements	humid heat, constant; according to DIN EN 60068-2-78, 14 days	
Water exposure	None	
Dust requirements	None	
Salt fog requirements	None	

Permitted application area:
 The product is intended for use in sheltered rooms with controlled temperature and controlled humidity. Directly exposure to water must be avoided.

Pollution degree 1 (according DIN EN 60664-1)
 There is either no pollution or it occurs only dry, non-conductive pollution. The pollution has no negative impact.

5 Safety

5.1 Electrical Safety

Dielectric strength DIN EN 60950 (VDE 0805) and DIN EN 60335 (VDE 0700) A.) Type test Measuring conditions: After 48h of storage at 95% R.H. and 25°C. No arcing or breakdown is allowed! All connections together to ground.	1500 VAC / 1 Min.
B.) Routine test Measuring conditions: At indoor climate. No arcing or breakdown is allowed! All connections together to ground.	1500 VAC / 1 Sec.
Isolation resistance Measuring conditions: After 48h of storage at 95% R.H. and 25°C measured with U=500 VDC for 1 min.	RI > 50 MOhm
Clearance / creepage distance	2,0 mm / 1,8 mm
Protection class	I

5.2 Approval Tests

CE	EC Declaration of Conformity	Yes
EAC	Eurasian Conformity	Yes
UL	Underwriters Laboratories	Yes / UL507, Electric Fans
VDE	Association for Electrical, Electronic and Information Technologies	Yes / Approval acc. to EN 60950 (VDE 0805) - Information technology equipment
CSA	Canadian Standards Association	Yes / C22.2 No. 113 Fans and Ventilators
CCC	China Compulsory Certification	Yes / GB 12350 Safety Requirements for small Power Motors

The approval tests are observed to:

U approval max.: 230 V / f: 60 Hz @ TU approval max.: 80 °C

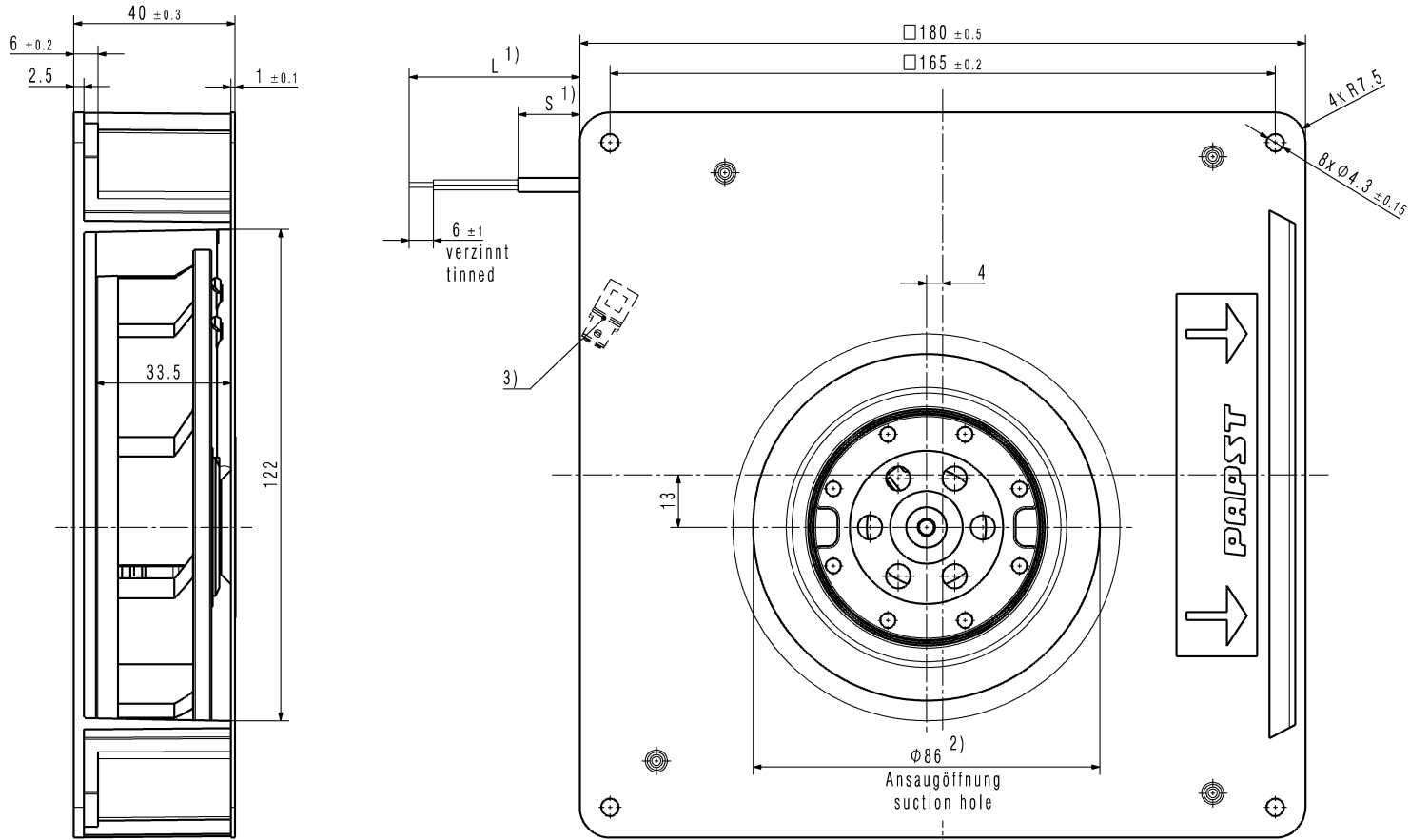
6 Reliability

6.1 General

Life expectancy L10 at TU = 40 °C	37.500 h / 50 Hz 40.000 h / 60 Hz	
Life expectancy L10 at TU max.	20.000 h / 50 Hz 15.000 h / 60 Hz	

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Schutzmerkmal nach DIN ISO 16016 (Anzeichen) / Refer to protection notice DIN ISO 16016



- 1) Anzahl und Länge der Litzen sowie Länge des Schlauchs siehe Produktspezifikation.
- 2) Öffnung für Montagewand ≥ 100 mm
- 3) Flachstecker 6,3 x 0,8 für Schutzleiter
 - Axialspiel mit Feder spielfrei verspannt.

- 1) number and length of wires and length of tube see design specification
- 2) opening for mounting plate ≥ 100 mm
- 3) flat pin 6,3 x 0,8 for ground wire
 - without axial clearance by a preloaded spring

BSP-Status/State		Änd.-Nr./ Change-No.		CATIA-System-Version/ CATIA-system-Version		CAD-Umgebung/ CAD-Environment		Werkstoff / Material:		Volumen / Volume (mm ³):	
		9544014114 CP9000-		3D-Referenzmodell / 3D-Reference Model		Datum		Name		Gewicht / Mass (g):	
		Tolerierung / Tolerances:		Begr. / Exam		Zchg.-Nr. / Drawing No:		Ers.-f.Zchg. / Replaces:		Artikel / Title:	
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