

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

G2E180-AA09-36 ebmpapst Datasheet

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Nominal data

Type	G2E180-AA09-36		
Motor	M2E068-GA		
Phase		1~	1~
Nominal voltage	VAC	240	240
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	2350	2650
Power consumption	W	330	390
Current draw	A	1.4	1.65
Capacitor	μF	8	8
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	500	700
Min. back pressure	inH ₂ O	2.01	2.81
Max. ambient temperature	°C	55	40
Starting current	A	2.27	2.24

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



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Technical description

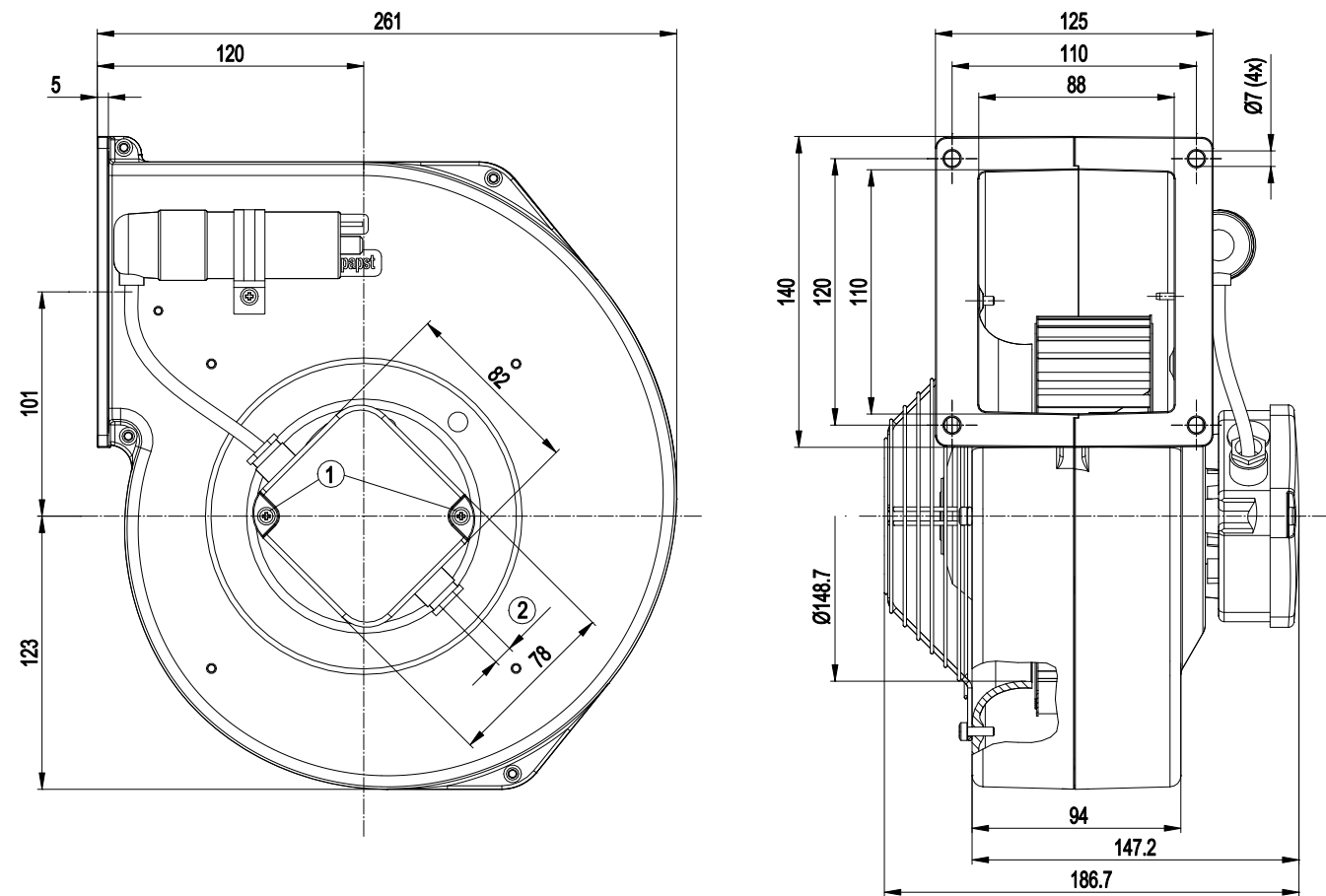
Weight	5.49 kg
Fan size	180 mm
Rotor surface	Unpainted
Terminal box material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Guard grille material	Steel, phosphated and coated with black plastic
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1



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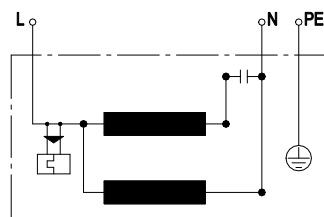
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Product drawing



- | | |
|---|---|
| 1 | Tightening torque 1.3±0.2 Nm |
| 2 | Cable diameter min. 6 mm, max. 7 mm; tightening torque 1.3±0.2 Nm |

Connection diagram



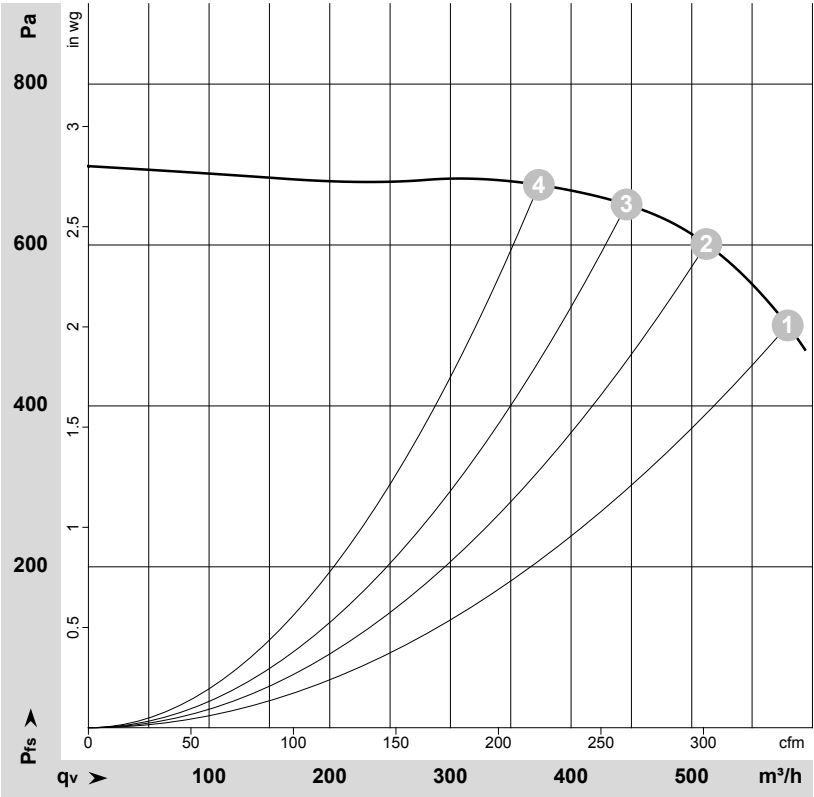
L	blue	N	black	PE	green/yellow
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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-11496-1

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 _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH2O
1	240	50	2350	330	1.40	580	500	340	2.01
2	240	50	2495	292	1.22	510	600	300	2.41
3	240	50	2580	268	1.13	445	650	265	2.61
4	240	50	2660	239	1.00	375	675	220	2.71

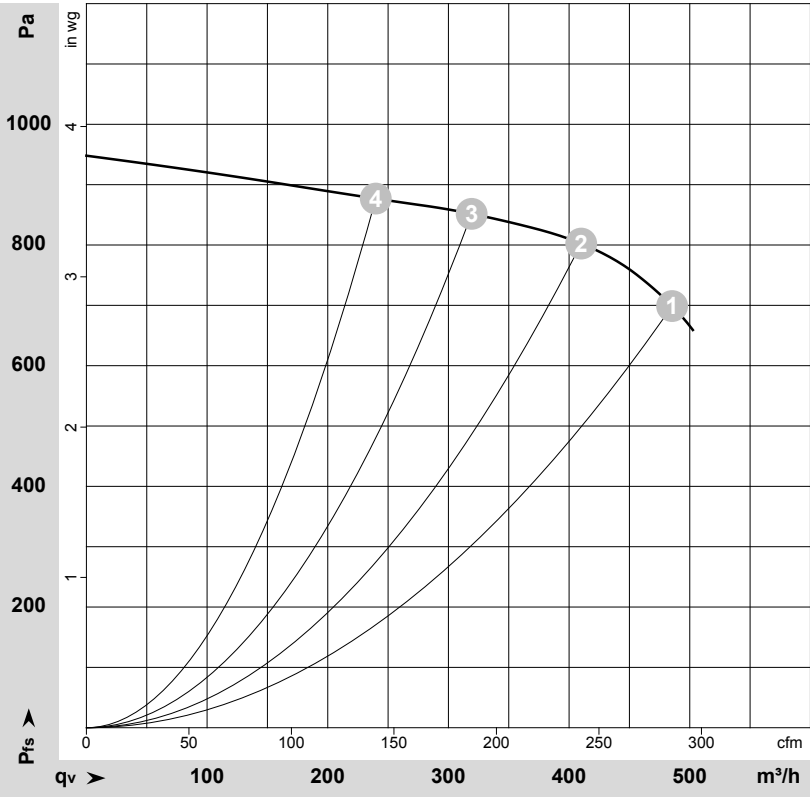
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-11497-1

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 _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	240	60	2650	390	1.65	485	700	285	2.81
2	240	60	2890	346	1.47	410	800	240	3.21
3	240	60	3070	316	1.35	320	850	190	3.41
4	240	60	3160	284	1.27	240	875	140	3.51

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

