

G2E160-AY50-95

AC centrifugal fan

forward-curved, single-intake
with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	G2E160-AY50-95		
Motor	M2E068-EC		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	2280	2700
Power consumption	W	270	275
Current draw	A	1.18	1.2
Capacitor	µF	6	6
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S2 (CE)
Min. back pressure	Pa	100	405
Min. back pressure	in. wg	0.4	1.63
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	50
Starting current	A	4.0	1.6

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



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Technical description

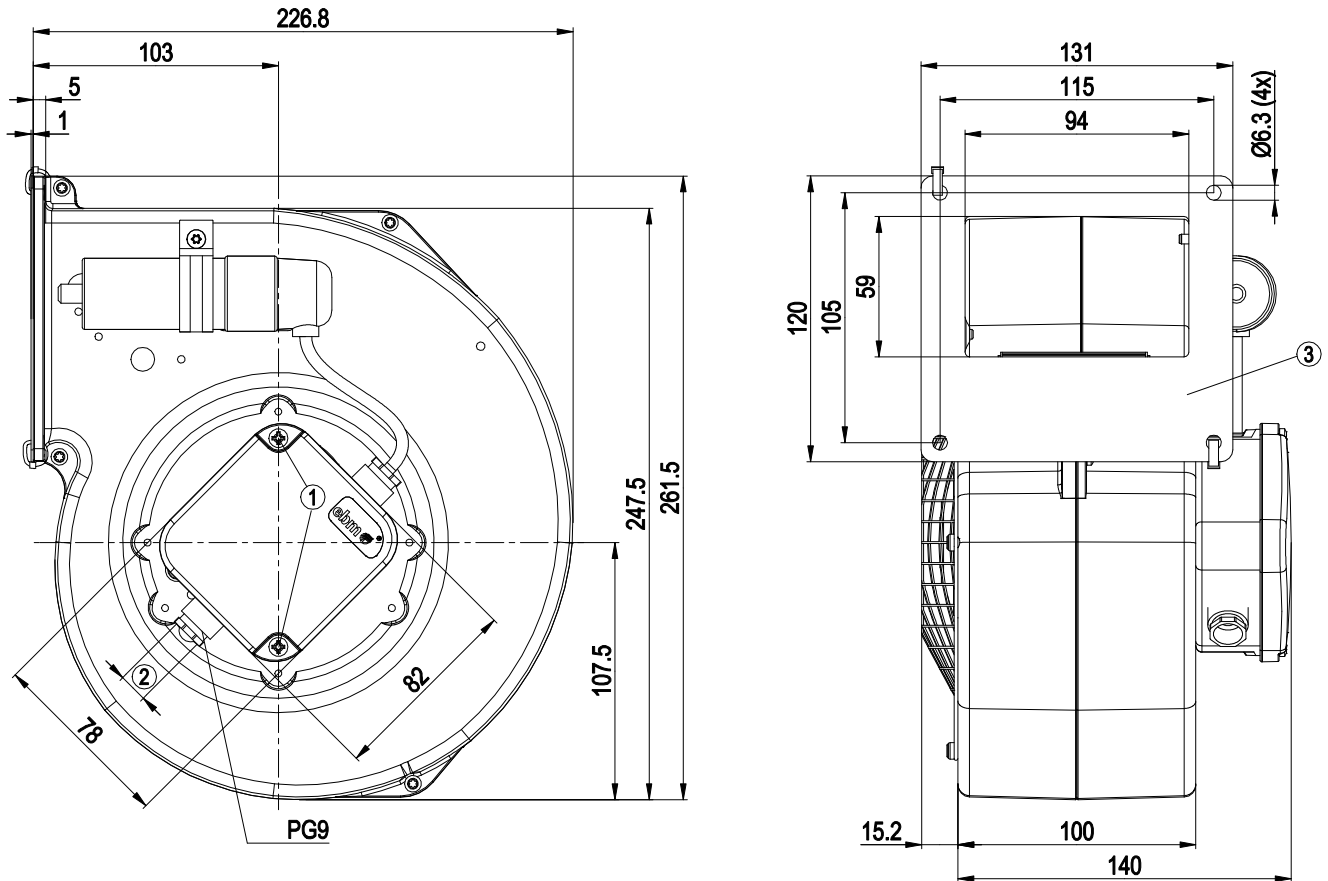
Weight	4.46 kg
Size	160 mm
Motor size	68
Rotor surface	Unpainted
Terminal box material	Die-cast aluminum
Impeller material	Sheet steel
Housing material	Die-cast aluminum
Guard grille material	Hot-dip galvanized and spot-welded net
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
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	Terminal box
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60034-1; EN 60204-1
Comment on CE	Commissioning not permitted in the European Economic Area



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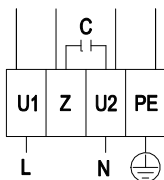
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Product drawing



- | | |
|---|--|
| 1 | Tightening torque 1.3 ± 0.2 Nm |
| 2 | Cable diameter min. 6 mm, max. 8 mm, tightening torque 2 ± 0.3 Nm |
| 3 | For 60 Hz applications, use can optionally be made of the restrictor plate provided for minimum back pressure. |

Connection diagram



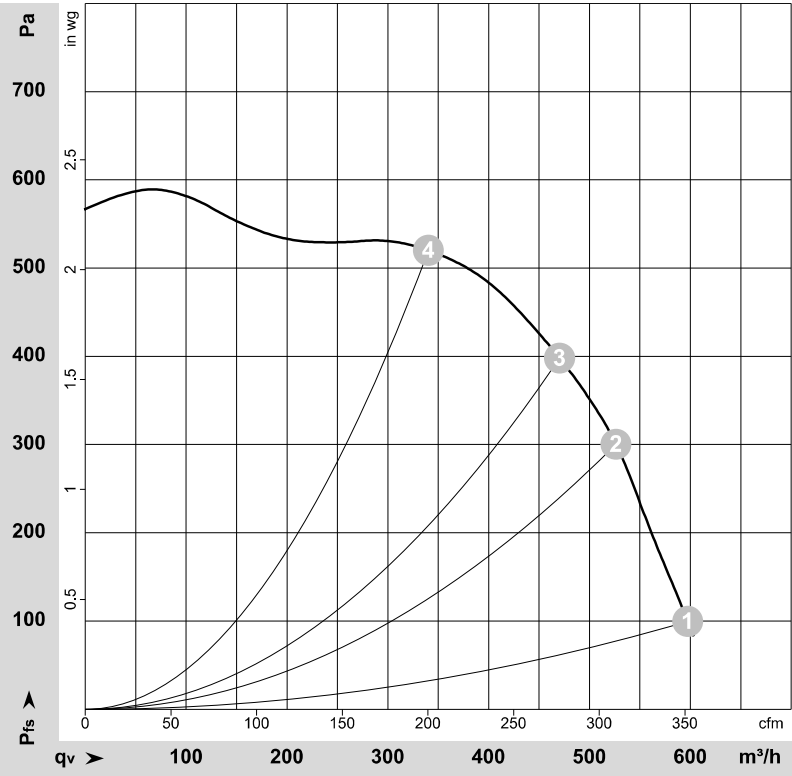
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				



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Curves: Air performance 50 Hz



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

Measurement: LU-140170-1

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	in. wg
1	230	50	2280	270	1.18	595	100	350	0.40
2	230	50	2485	226	0.98	525	300	310	1.20
3	230	50	2580	202	0.88	470	400	275	1.61
4	230	50	2730	159	0.69	340	520	200	2.09

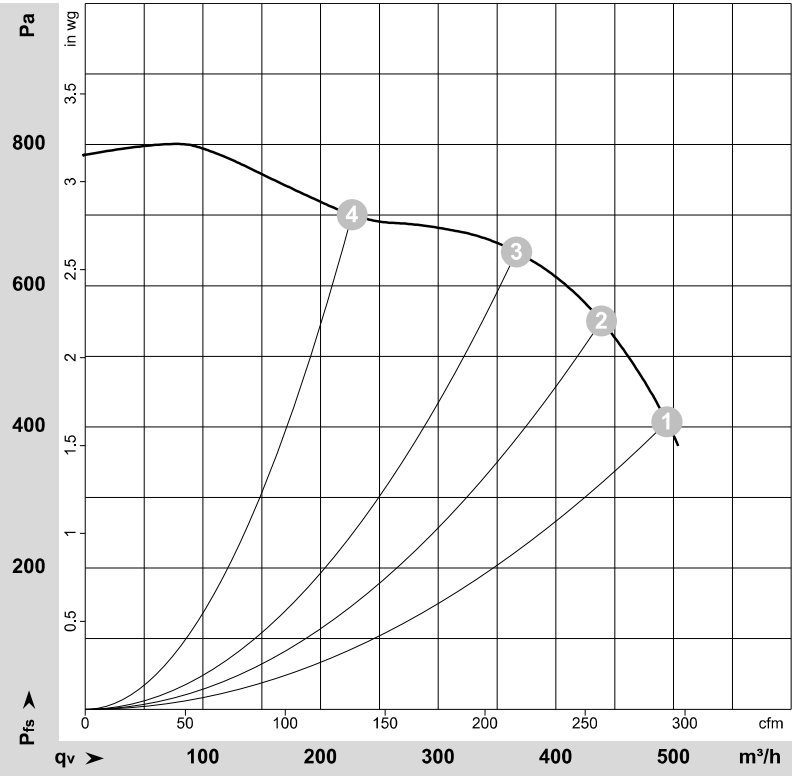
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



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

Measurement: LU-168444-1

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	in. wg
1	230	60	2700	275	1.20	495	405	290	1.63
2	230	60	2910	249	1.10	440	550	260	2.21
3	230	60	3080	220	0.98	365	650	215	2.61
4	230	60	3270	181	0.83	225	700	135	2.81

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

