

AC centrifugal fan

forward curved
with housing (flange)

G2E160-AY51-87 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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Nominal data

Type	G2E160-AY51-87		
Motor	M2E068-EC		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min ⁻¹	2060	2000
Power input	W	250	300
Current draw	A	2.2	2.55
Motor capacitor	µF	25	25
Capacitor voltage	VDB	220	220
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	65	45

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



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Technical features

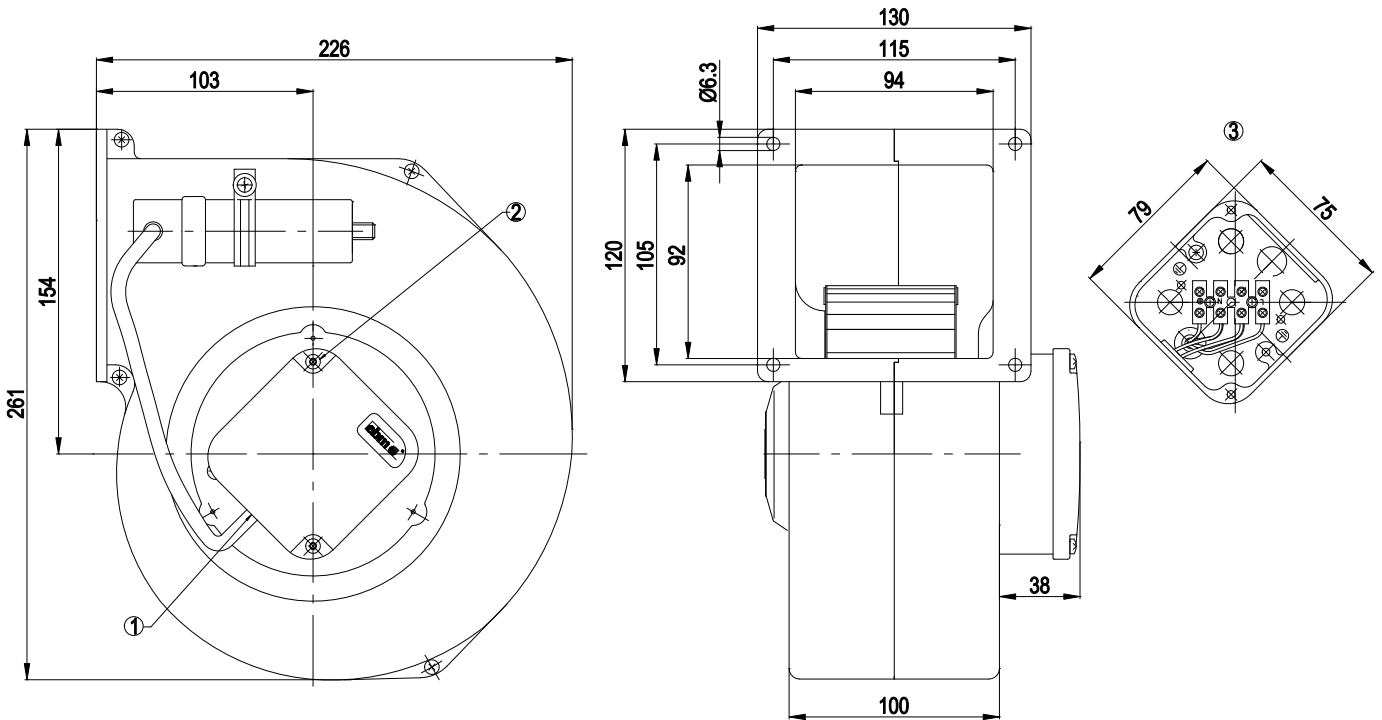
Size	160 mm
Material of terminal box	Die-cast aluminium
Material of impeller	Sheet steel, hot-dip galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F1-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 Nr.77



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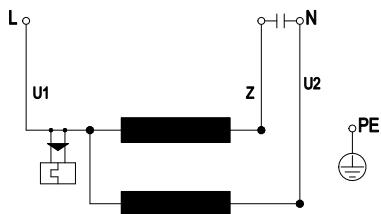
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Product drawing



- | | |
|---|----------------------------------|
| 1 | No screwed cable gland installed |
| 2 | Tightening torque 1.3 Nm |
| 3 | Shown without terminal box cover |

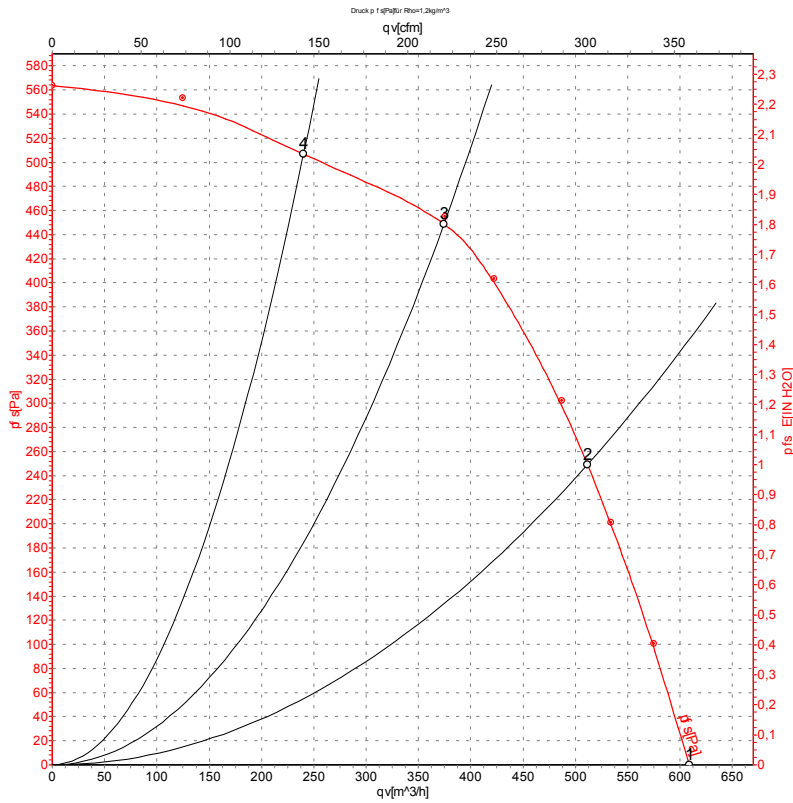
Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				



Charts: Air flow 50 Hz



Measurement: LU-41340

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

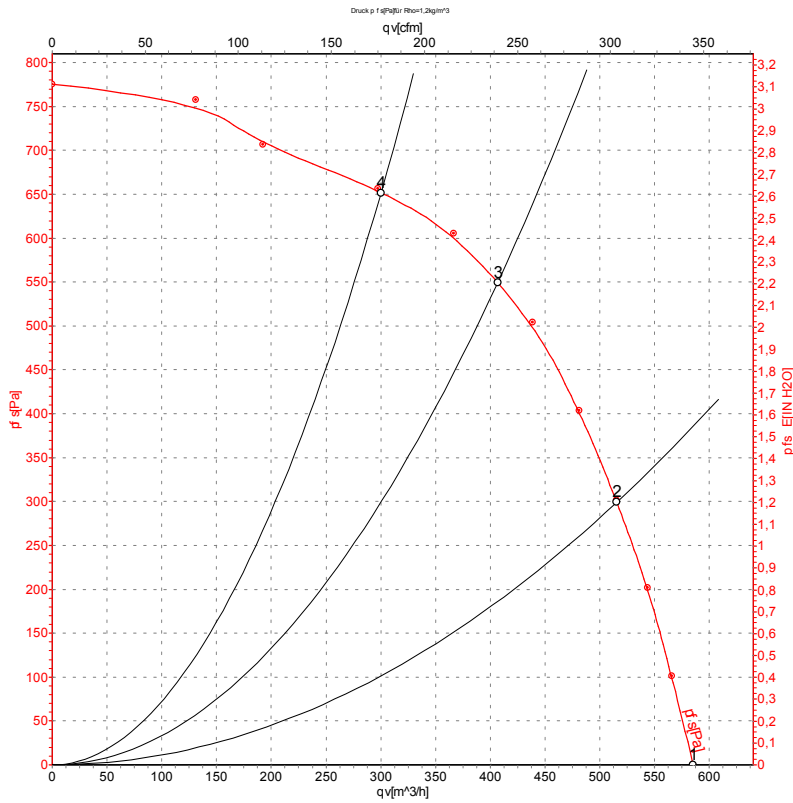
Measured values

	U	f	n	P _e	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	115	50	2060	250	2.20	610	0
2	115	50	2350	207	1.79	510	249
3	115	50	2555	168	1.46	375	455
4	115	50	2700	138	1.19	240	506

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase



Charts: Air flow 60 Hz



Measurement: LU-41341

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L_{wA} measured as per ISO 13347 / L_{pA} measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	115	60	2000	300	2.55	585	0
2	115	60	2465	265	2.31	515	301
3	115	60	2815	232	2.06	405	549
4	115	60	3035	201	1.85	300	654

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

