

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

G2E160-AY47-77 ebmpapst Datasheet

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Nominal data

Type	G2E160-AY47-77		
Motor	M2E068-EC		
Phase		1~	
Nominal voltage	VAC	240	240
Frequency	Hz	50	60
Method of obtaining data			ml
Valid for approval/standard		-	UL
Speed (rpm)	min ⁻¹	2230	2340
Power consumption	W	260	305
Current draw	A	1.1	1.28
Capacitor	μF	6	6
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	-	-

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



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Technical description

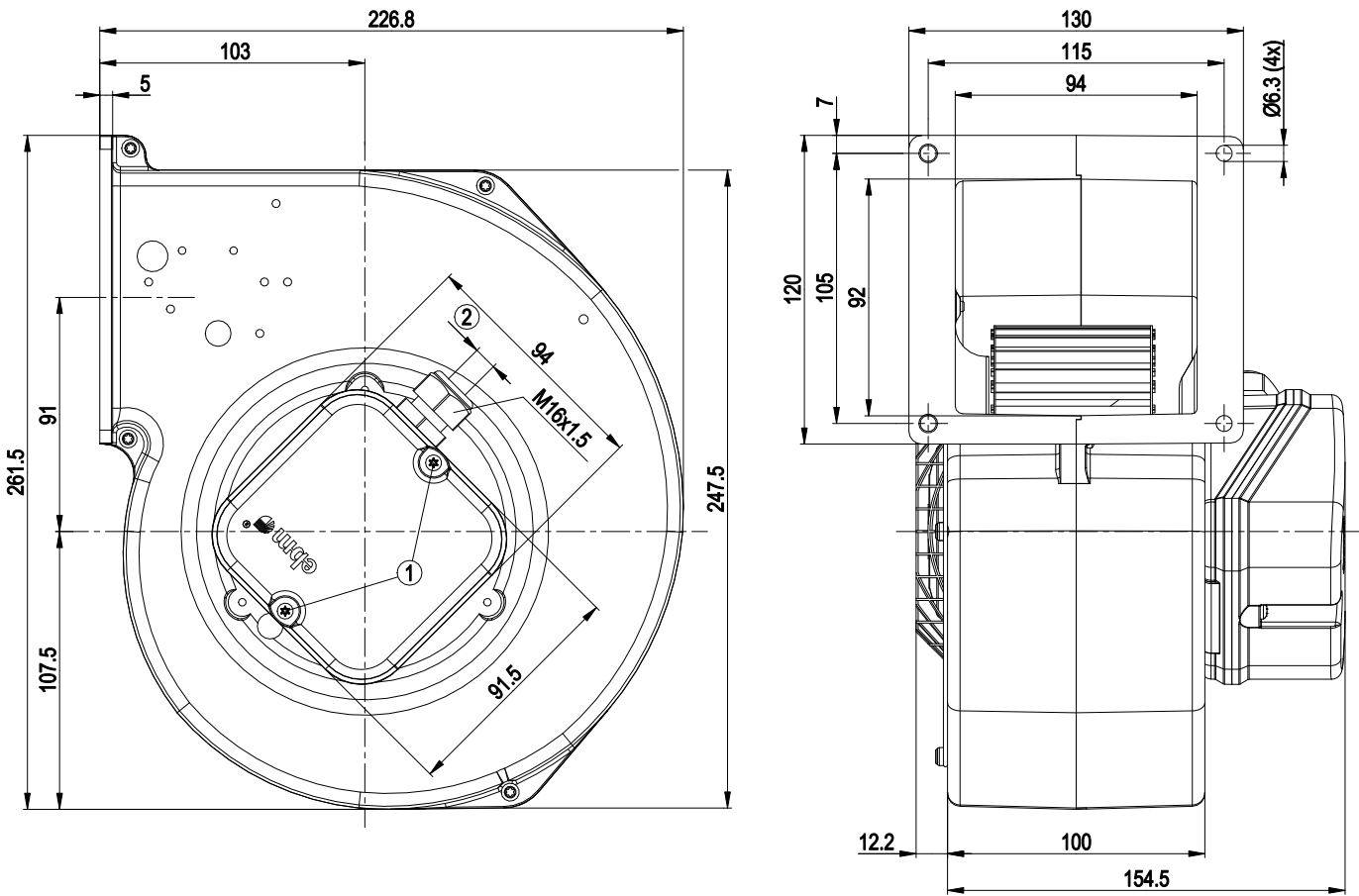
Weight	4.3 kg
Fan size	160 mm
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum
Guard grille material	Hot-dip galvanized and spot-welded net
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
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
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1
Approval	CSA C22.2 No. 77; UL 2111



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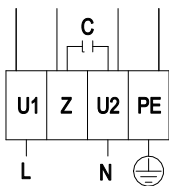
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Product drawing



- | | |
|---|--|
| 1 | Tightening torque 0.5 ± 0.1 Nm |
| 2 | Cable diameter min. 5 mm, max. 10 mm, tightening torque 2 ± 0.3 Nm |

Connection diagram



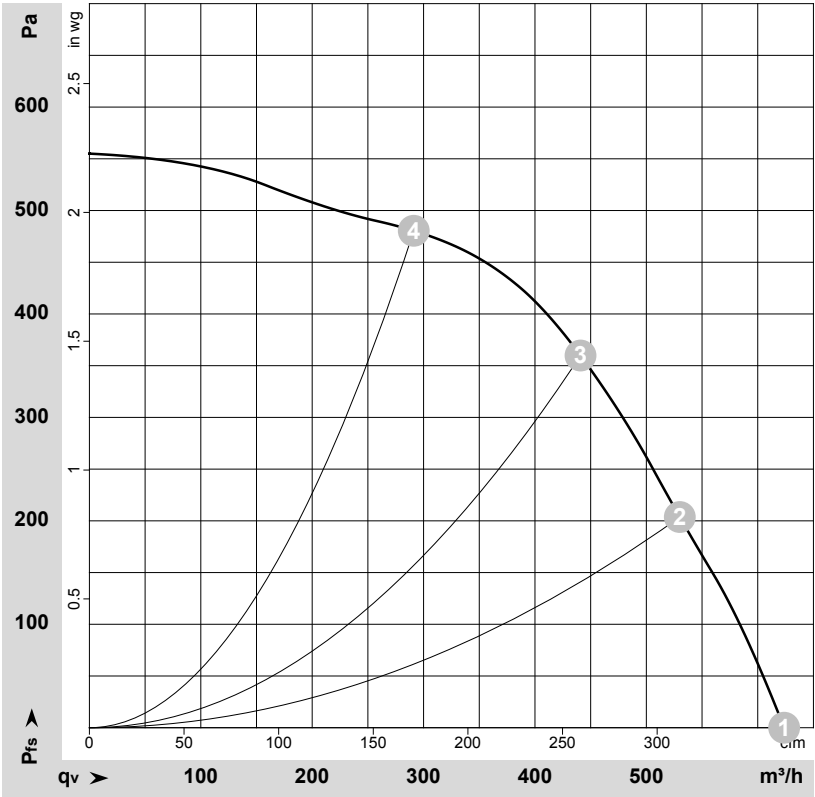
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				



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Curves: Air performance 50 Hz



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

Measurement: LU-56311-1

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	50	2230	260	1.10	625	0	365	0.00
2	240	50	2405	224	0.93	530	200	310	0.80
3	240	50	2540	195	0.81	440	360	260	1.45
4	240	50	2695	156	0.66	290	480	170	1.93

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

