G2E160-AY47-83

AC centrifugal fan

forward-curved

with housing (flange)

G2E160-AY47-83 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**G2E160-AY47-83**
Motor	**M2E068-EC**

Phase		1~	1~
Nominal voltage	VAC	230	240
Frequency	Hz	50	60
Method of obtaining data		fa	cs
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	2100	2600
Power consumption	W	240	280
Current draw	A	1.05	1.18
Capacitor	µF	6	6
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	310
Min. back pressure	inH2O	0	1.24
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	-

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

AC centrifugal fan

forward-curved

with housing (flange)

Technical description

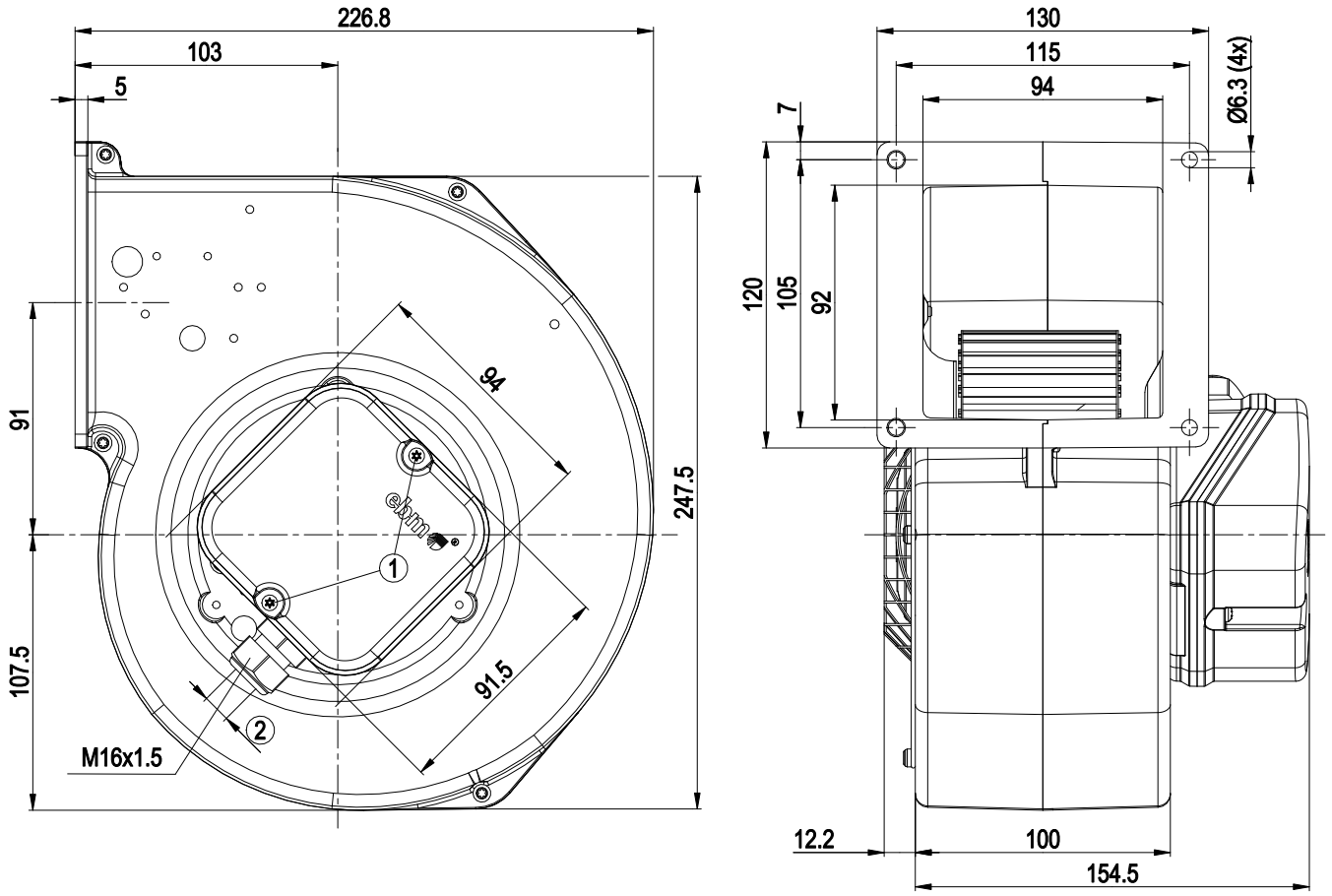
Weight	4.4 kg
Fan size	160 mm
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F5
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

AC centrifugal fan

forward-curved

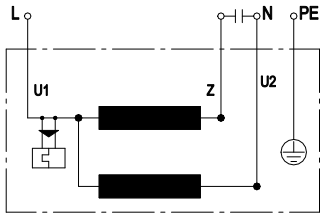
with housing (flange)

Product drawing



1	Tightening torque 0.5 ± 0.1 Nm
2	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm

Connection diagram



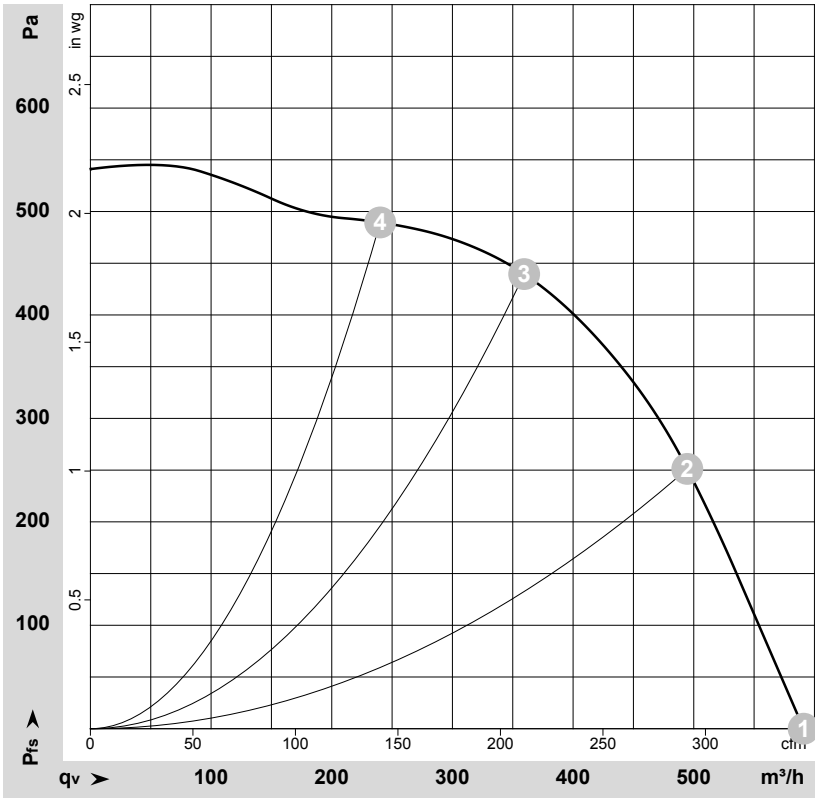
U1	blue	Z	brown	U2	black
PE	green/yellow				

AC centrifugal fan

forward-curved

with housing (flange)

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-104987-1

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	inH2O
1	230	50	2100	240	1.05	590	0	350	0.00
2	230	50	2385	199	0.86	495	250	290	1.00
3	230	50	2595	161	0.70	360	440	210	1.77
4	230	50	2715	137	0.59	240	490	140	1.97

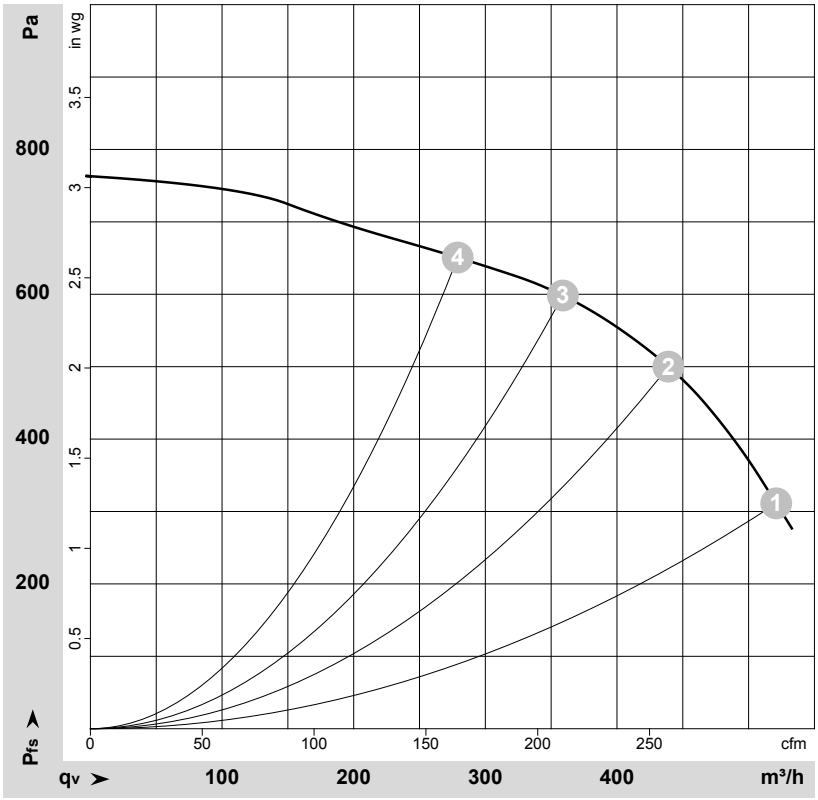
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

AC centrifugal fan

forward-curved

with housing (flange)

Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-56312-1

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	inH2O
1	240	60	2600	280	1.18	520	310	305	1.24
2	240	60	2855	250	1.06	440	500	260	2.01
3	240	60	3015	224	0.97	360	600	210	2.41
4	240	60	3120	207	0.90	280	650	165	2.61

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