G2E160-AY50-93

AC centrifugal fan

forward-curved, single-intake

with housing (flange)



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**G2E160-AY50-93**	
Motor	**M2E068-EC**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed	min^{-1}	2280
Power consumption	W	270
Current draw	A	1.18
Capacitor	µF	6
Capacitor voltage	VDB	400
Capacitor standard		P0 (CE)
Min. back pressure	Pa	100
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	4.0

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	32.6	32.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.16
09 Air flow q_v	m^3/h	355
09 Pressure increase p_{fs}	Pa	518
10 Speed n	min^{-1}	2725
11 Specific ratio*		1.01

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-140170

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Technical description

Weight	4 kg
Fan size	160 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
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	F1-1
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 storage	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

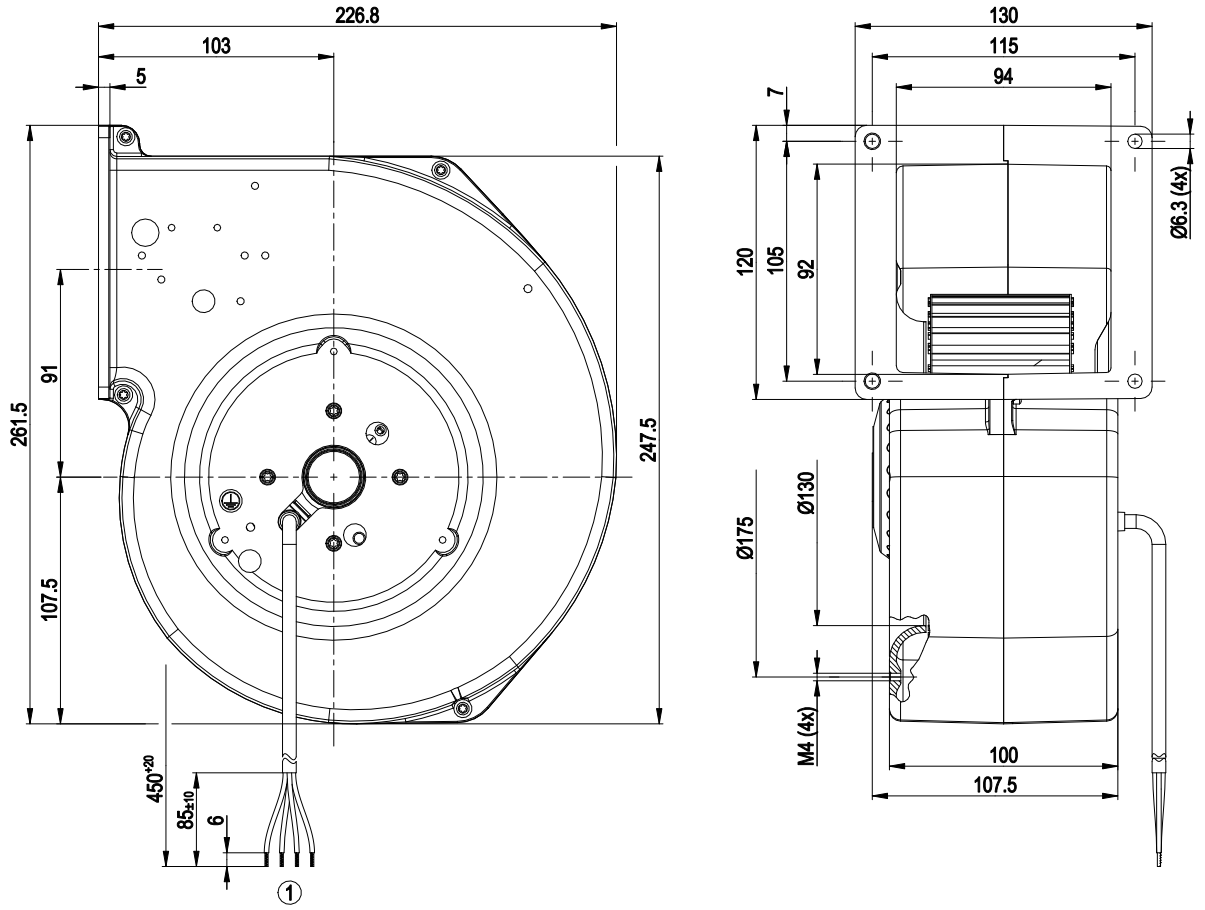
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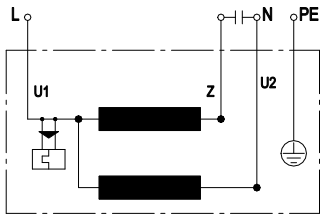
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Product drawing



1	Cable silicone 4G 0.5 mm², 4x crimped splices

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

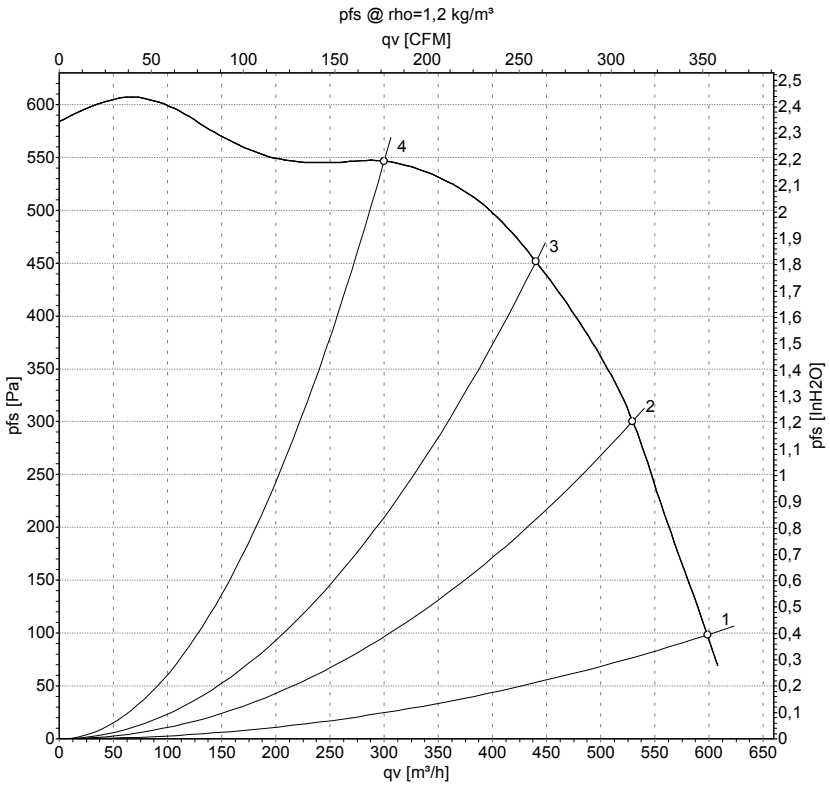
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Curves: Air performance 50 Hz



Measurement: LU-140170

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	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	2280	270	1.18	72	78	600	100
2	230	50	2480	227	0.98	70	77	530	300
3	230	50	2620	192	0.83	68	75	440	450
4	230	50	2750	152	0.66	67	74	300	550

U = Power supply · f = Frequency · n = Speed · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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