G2E160-AY50-96

AC centrifugal fan

forward curved, single inlet

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**G2E160-AY50-96**
Motor	**M2E068-EC**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	2280
Power input	W	270
Current draw	A	1.18
Motor 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	40
Starting current	A	1.8

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.01

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

		Actual	Request 2015
Overall efficiency η_{es}	%	32.6	32.6
Efficiency grade N		44	44
Power input P_e	kW	0.16	
Air flow q_v	m^3/h	355	
Pressure increase p_{fs}	Pa	518	
Speed n	min^{-1}	2725	

Data definition with optimum efficiency. LU-140170
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

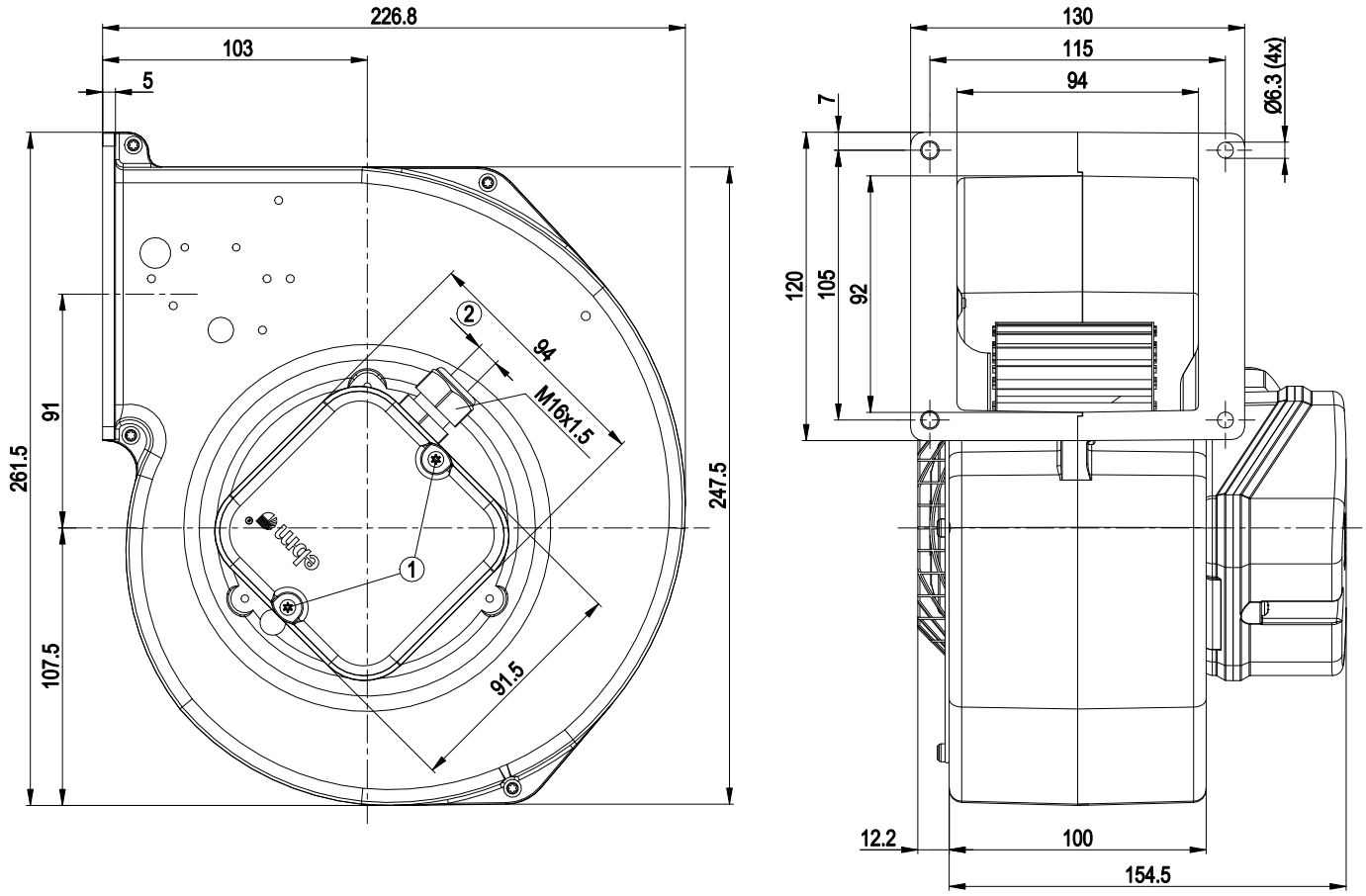
Mass	4.3 kg
Size	160 mm
Surface of rotor	Coated in black
Material of terminal box	PC / ABS plastic
Material of impeller	Sheet steel, coated in black
Housing material	Die-cast aluminium
Material of guard grille	Hot-galvanised and spot-welded net
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
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
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	P0/S0
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 Nr.77

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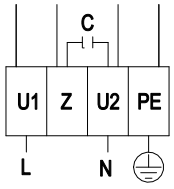
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Product drawing



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

Connection screen



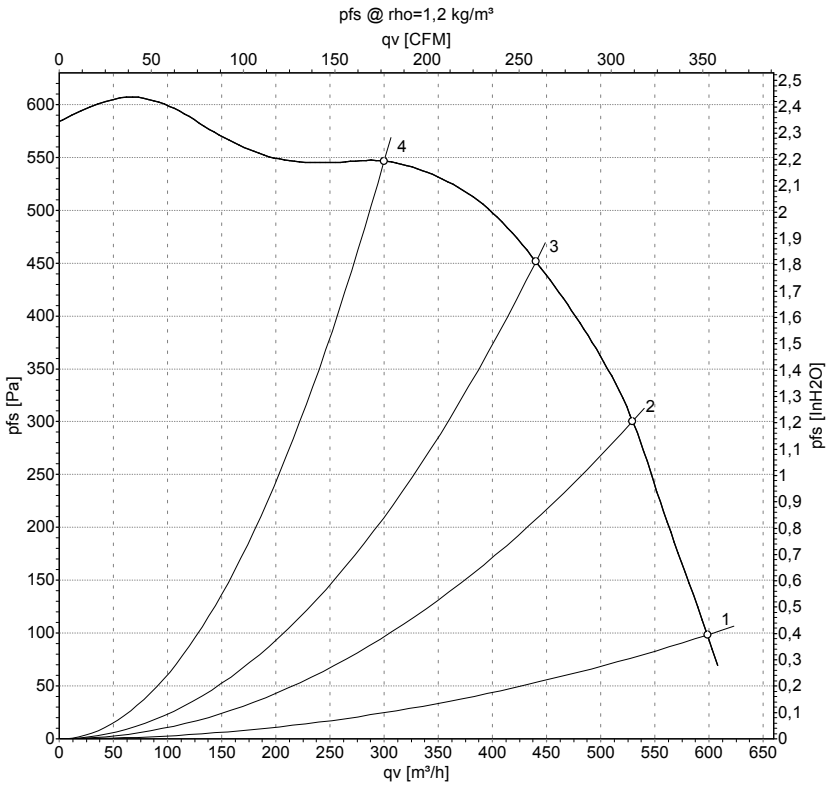
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-140170

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. 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	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 = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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