

G2E160-AY50-91

# AC centrifugal fan

forward curved, single inlet

with housing (flange)



G2E160-AY50-91 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

## Nominal data

Type	G2E160-AY50-91	
Motor	M2E068-EC	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min <sup>-1</sup>	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	60

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 =  $1 + p_g / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	%	32.6	25.6	32.6
Efficiency grade N		44	37	44
Power input $P_e$	kW	0.16		
Air flow $q_v$	m <sup>3</sup> /h	355		
Pressure increase $p_{fs}$	Pa	518		
Speed n	min <sup>-1</sup>	2725		

Data definition with optimum efficiency.

The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

LU-140170



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## Technical features

<b>Mass</b>	4 kg
<b>Size</b>	160 mm
<b>Surface of rotor</b>	Uncoated
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Die-cast aluminium
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F5
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE

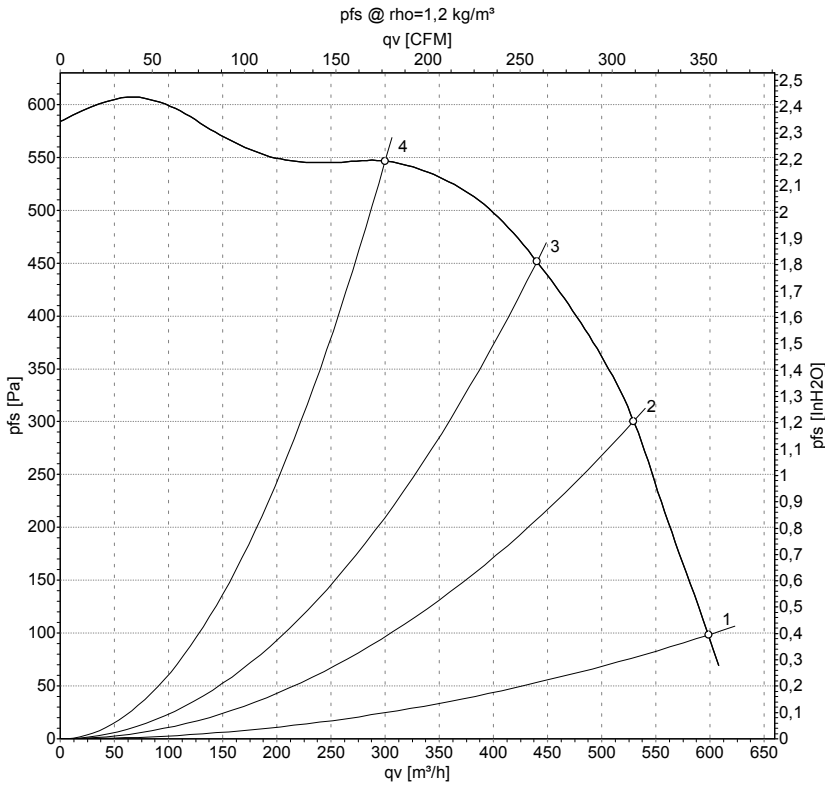




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## Charts: Air flow 50 Hz



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 <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /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<sub>e</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · qv = Air flow  
p<sub>fs</sub> = Pressure increase

