

# AC centrifugal fan

forward curved, single inlet

with housing (flange)

G2D146-BF02-29 ebmpapst Datasheet

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Limited partnership · Headquarters Muldingen  
County court Stuttgart · HRA 590344

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## Nominal data

Type	G2D146-BF02-29		
Motor	M2D068-EC		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		fa	ml
Valid for approval / standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	2450	2700
Power input	W	260	300
Current draw	A	0.42	0.47
Min. back pressure	Pa	0	100
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	40
Starting current	A	1.0	1.0

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



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## Technical features

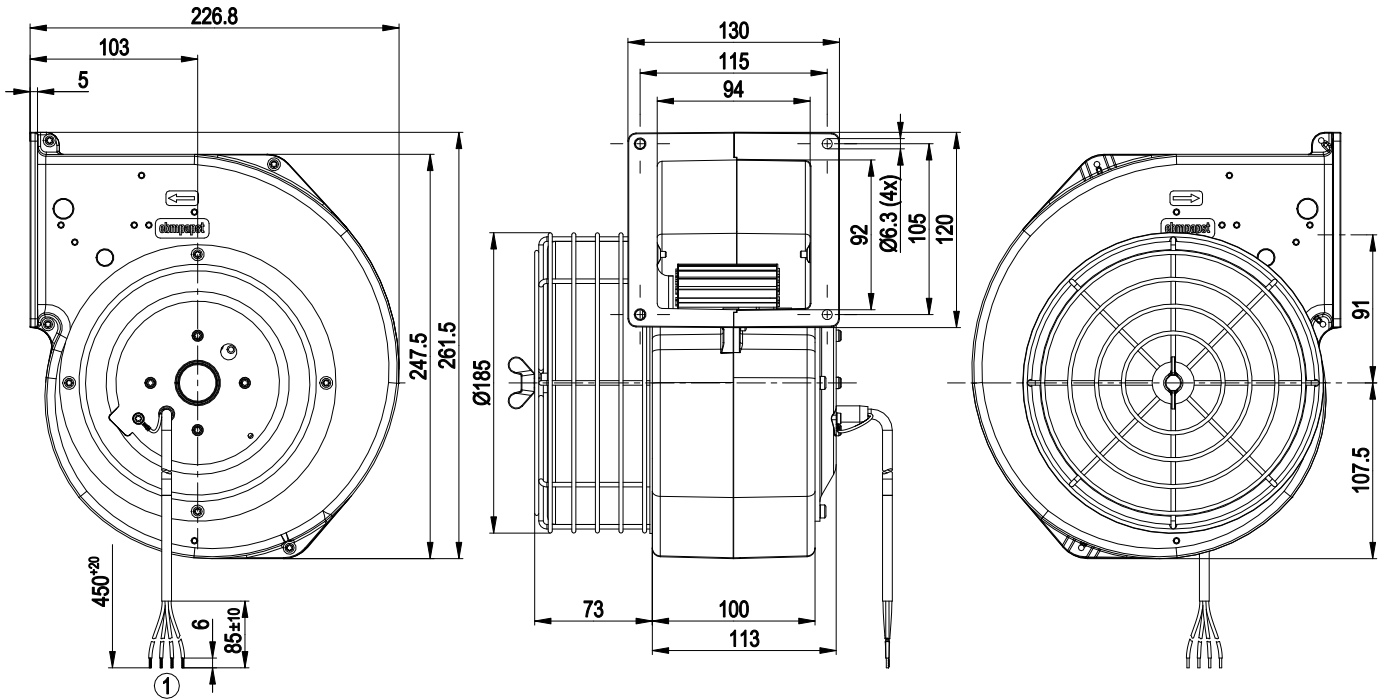
<b>Mass</b>	4.6 kg
<b>Size</b>	146 mm
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Die-cast aluminium
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"B"
<b>Humidity (F)/environmental protection class (H)</b>	F1-1
<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>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1, motor does not have factory-installed overheating protection; CE
<b>Approval</b>	CSA C22.2 No.100; UL 1004-1



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## Product drawing



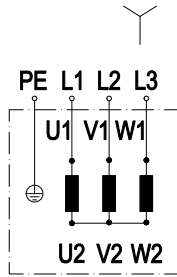
1 Connection line PVC 4G 0.5 mm<sup>2</sup>, 4x lead tips crimped



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## Connection screen



Note: Change in direction of rotation by reversing two phases

Y	Star connection	L1	black 1	L2	black 2
L3	black 3	PE	green / yellow		

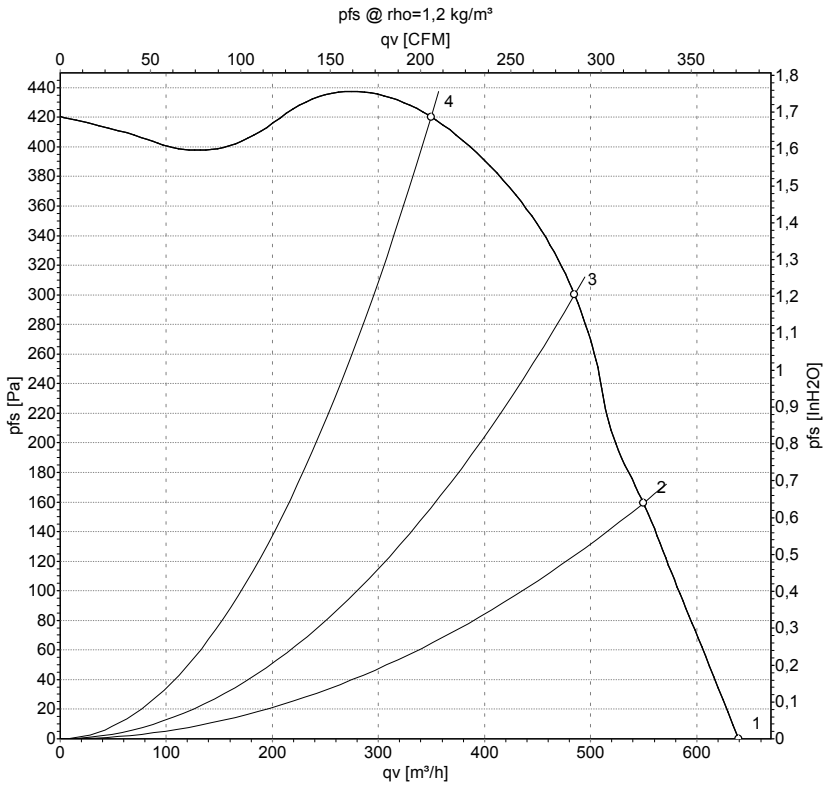


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## Charts: Air flow 50 Hz



Measurement: LU-25552-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH2O
1	400	50	2450	260	0.42	640	0	375	0.00
2	400	50	2620	196	0.32	550	160	325	0.64
3	400	50	2670	175	0.29	485	300	285	1.20
4	400	50	2785	125	0.24	350	420	205	1.69

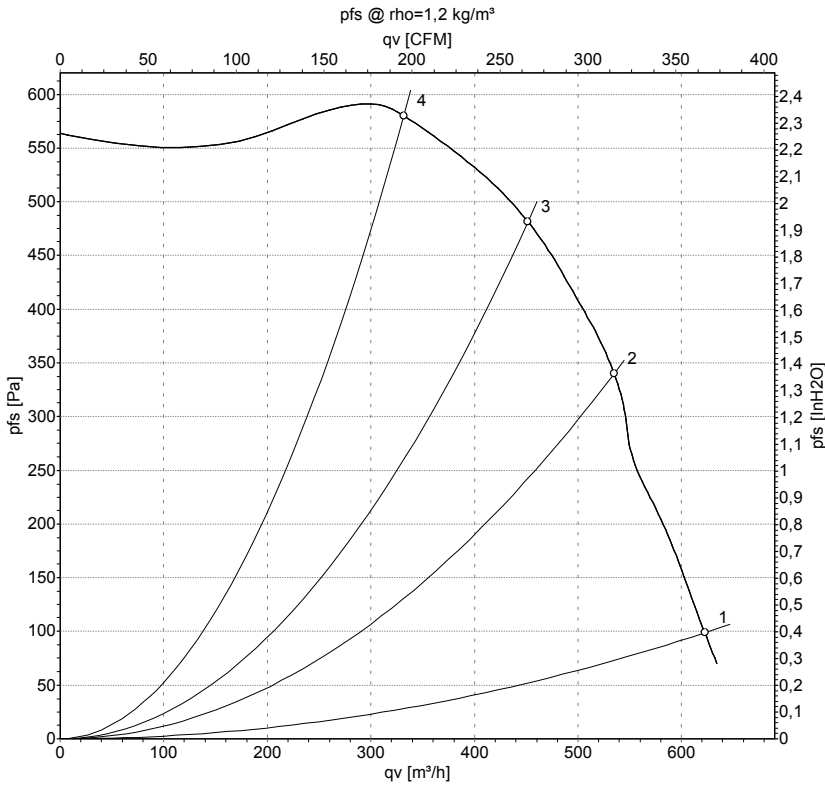
U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



Measurement: LU-25559-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m³/h	Pa	cfm	inH2O
1	400	60	2700	300	0.47	620	100	365	0.40
2	400	60	2900	265	0.41	535	340	315	1.36
3	400	60	3050	221	0.34	450	480	265	1.93
4	400	60	3225	165	0.27	330	580	195	2.33

U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

