

# AC centrifugal fan

forward-curved, single-intake  
with housing (flange)

G2D146-BF02-07 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

## Nominal data

<b>Type</b>	<b>G2D146-BF02-07</b>				
<b>Motor</b>	<b>M2D068-EC</b>				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	ml	fa	ml
Valid for approval/standard		CE	CE	CE	CE
Speed	min <sup>-1</sup>	2450	2700	2450	2700
Power consumption	W	260	300	260	300
Current draw	A	0.73	0.82	0.42	0.47
Min. back pressure	Pa	0		0	
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	55	40	55	40
Starting current	A	1.73	1.73	1.0	1.0

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



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## Technical description

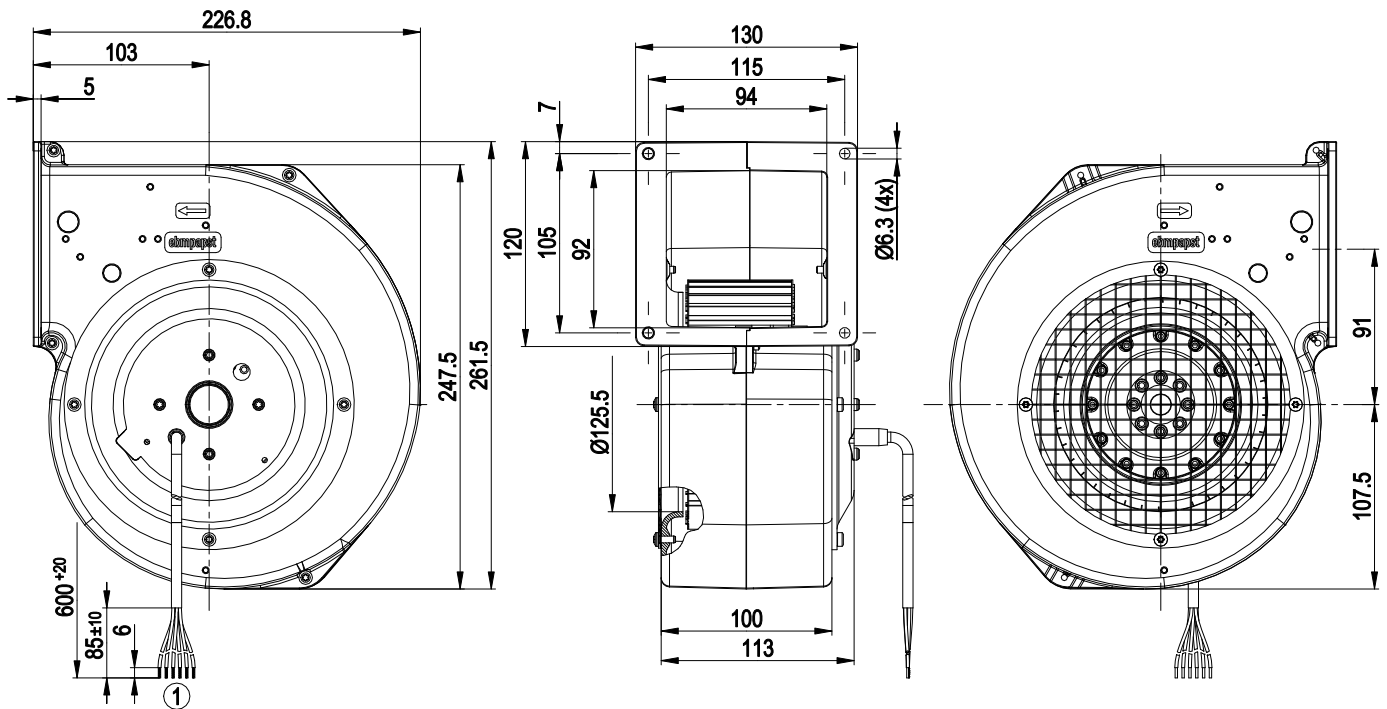
<b>Weight</b>	4.1 kg
<b>Fan size</b>	146 mm
<b>Rotor surface</b>	Unpainted
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Die-cast aluminum
<b>Guard grille material</b>	Hot-dip galvanized and spot-welded net
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	F1-1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1, motor does not have factory-installed overheating protection; CE
<b>Approval</b>	EAC



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## Product drawing

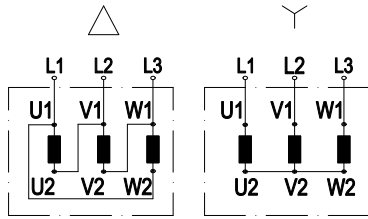


1 Cable PVC 6x 0.5 mm<sup>2</sup>, 6x crimped splices

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## Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow

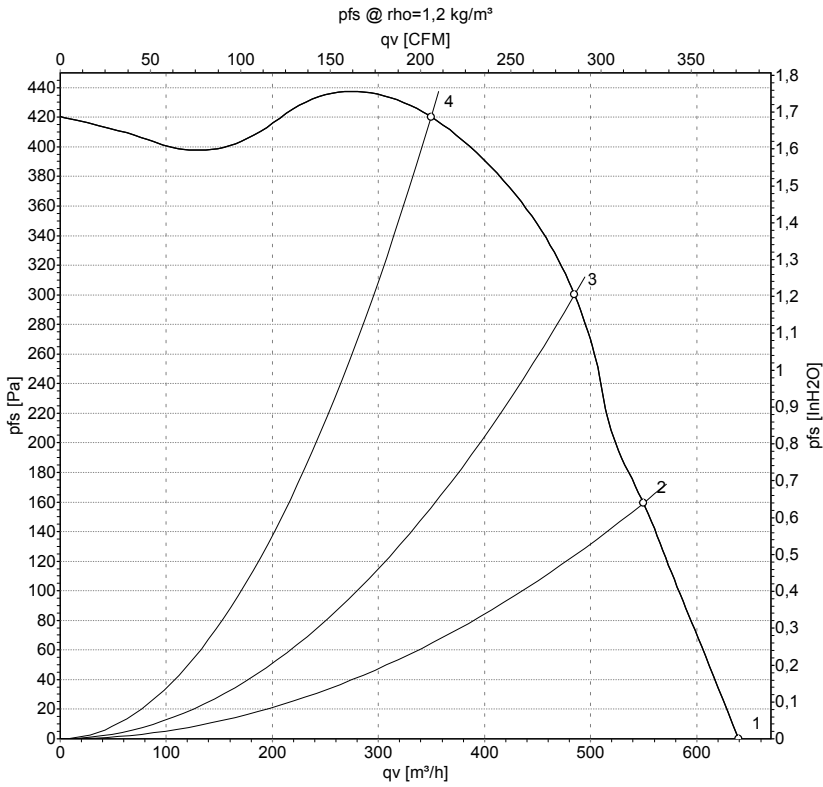


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## Curves: Air performance 50 Hz



Measurement: LU-25552-1

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 <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m³/h	Pa
1	400	50	2450	260	0.42	640	0
2	400	50	2620	196	0.32	550	160
3	400	50	2670	175	0.29	485	300
4	400	50	2785	125	0.24	350	420

U = Power supply · f = Frequency · n = Speed · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

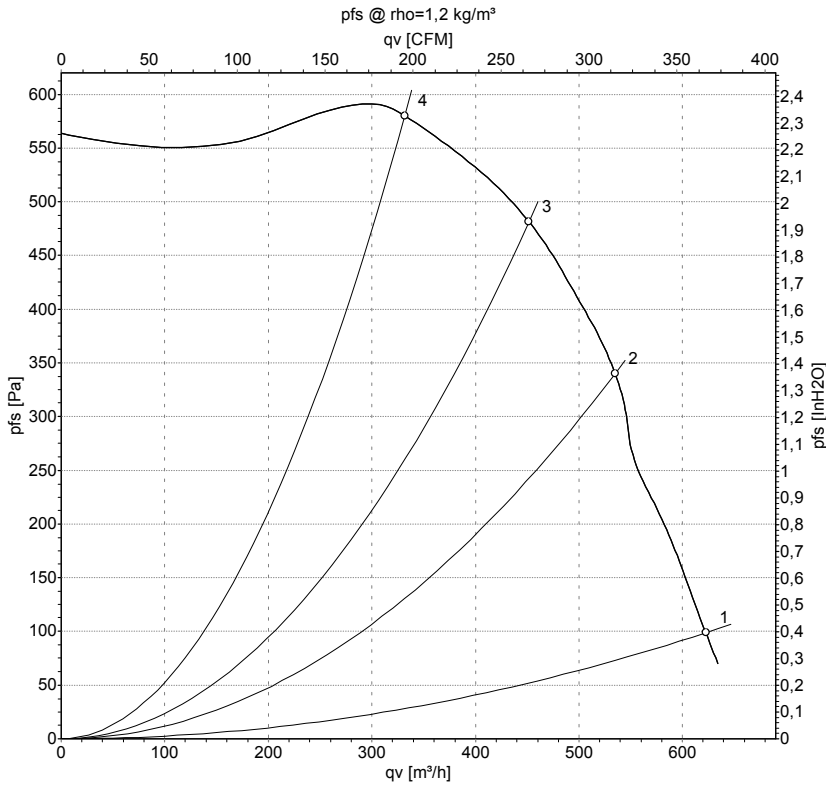


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## Curves: Air performance 60 Hz



Measurement: LU-25559-1

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 <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	400	60	2700	300	0.47	620	100
2	400	60	2900	265	0.41	535	340
3	400	60	3050	221	0.34	450	480
4	400	60	3225	165	0.27	330	580

U = Power supply · f = Frequency · n = Speed · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

