

# EC centrifugal fan

forward curved, single inlet

with housing (flange)

G1G160-FX89-06 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	<b>G1G160-FX89-06</b>	
<b>Motor</b>	<b>M1G055-BD</b>	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	1260
Power input	W	29
Current draw	A	0.24
Min. back pressure	Pa	100
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40
Min. temp. of flow medium	°C	-25
Max. temp. of flow medium	°C	40

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

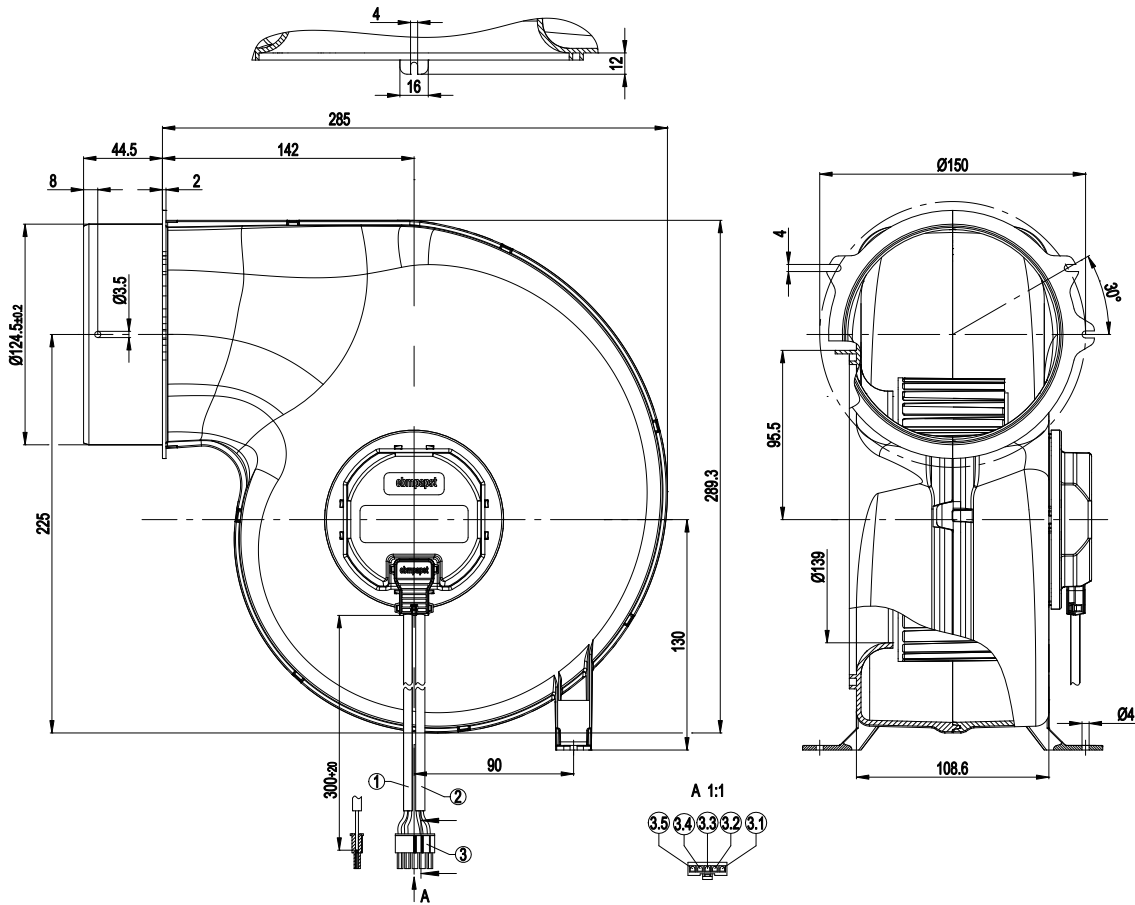
Mass	1.54 kg
Size	160 mm
Surface of rotor	Cast in PA plastic
Material of impeller	Plastic PA6, fibreglass-reinforced
Housing material	PP plastic, black
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Humidity class	F2-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"><li>- Soft start</li><li>- PWM control input</li><li>- Over-temperature protected motor</li></ul>
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	II
Product conforming to standard	EN 60335-1; CE
Approval	CCC



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## Product drawing



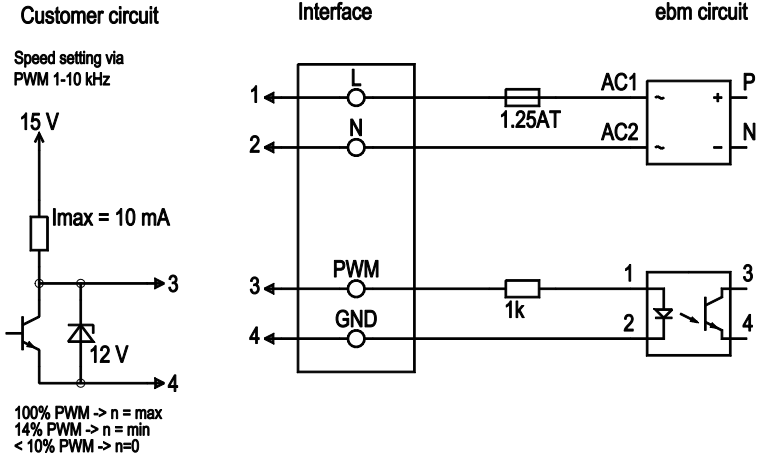
1	Connection line AWG22, with 2x female terminal RBB8230020
2	Connection line PVC 2X 0.5 mm <sup>2</sup> , 2 x female terminal RBB8230020
3	Connector shell EH705-005-003-960
3.1	PWM (yellow)
3.2	GND - Connection for control interface (white)
3.3	Not assigned
3.4	N (blue)
3.5	L (brown)
A	View A



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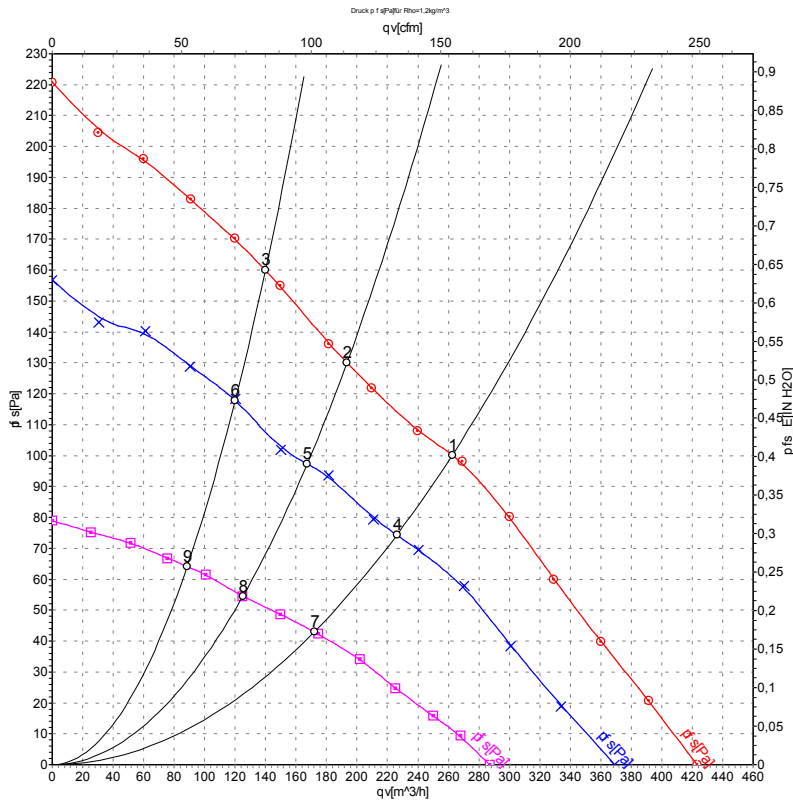
## Connection screen



Line	No.	Signal	Colour	Function / assignment
	L	1	brown	Power supply 230 VAC, 50-60Hz, see type plate for voltage range
	N	2	blue	Neutral conductor
	PWM	3	yellow	PWM control input, electrically isolated
	GND	4	white	GND - Connection for control interface



## Charts: Air flow 50 Hz



Measurement: LU-115730  
 Measurement: LU-115731  
 Measurement: LU-115732

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>ed</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1260	29	0.24	260	100
2	230	50	1350	24	0.20	195	130
3	230	50	1450	22	0.17	140	160
4	230	50	1070	19	0.15	225	74
5	230	50	1170	16	0.13	165	97
6	230	50	1230	14	0.11	120	118
7	230	50	805	8.6	0.07	170	43
8	230	50	875	7.4	0.06	125	54
9	230	50	935	6.7	0.06	90	64

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase

