

# AC centrifugal fan

forward-curved, single-intake

with housing (flange)

G2E133-DN38-42 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	<b>G2E133-DN38-42</b>		
<b>Motor</b>	<b>M2E068-BF</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	2400	2400
Power consumption	W	80	100
Current draw	A	0.36	0.45
Capacitor	µF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	100	100
Min. back pressure	inH <sub>2</sub> O	0.4	0.4
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	50

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



G2E133-DN38-42

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## Technical description

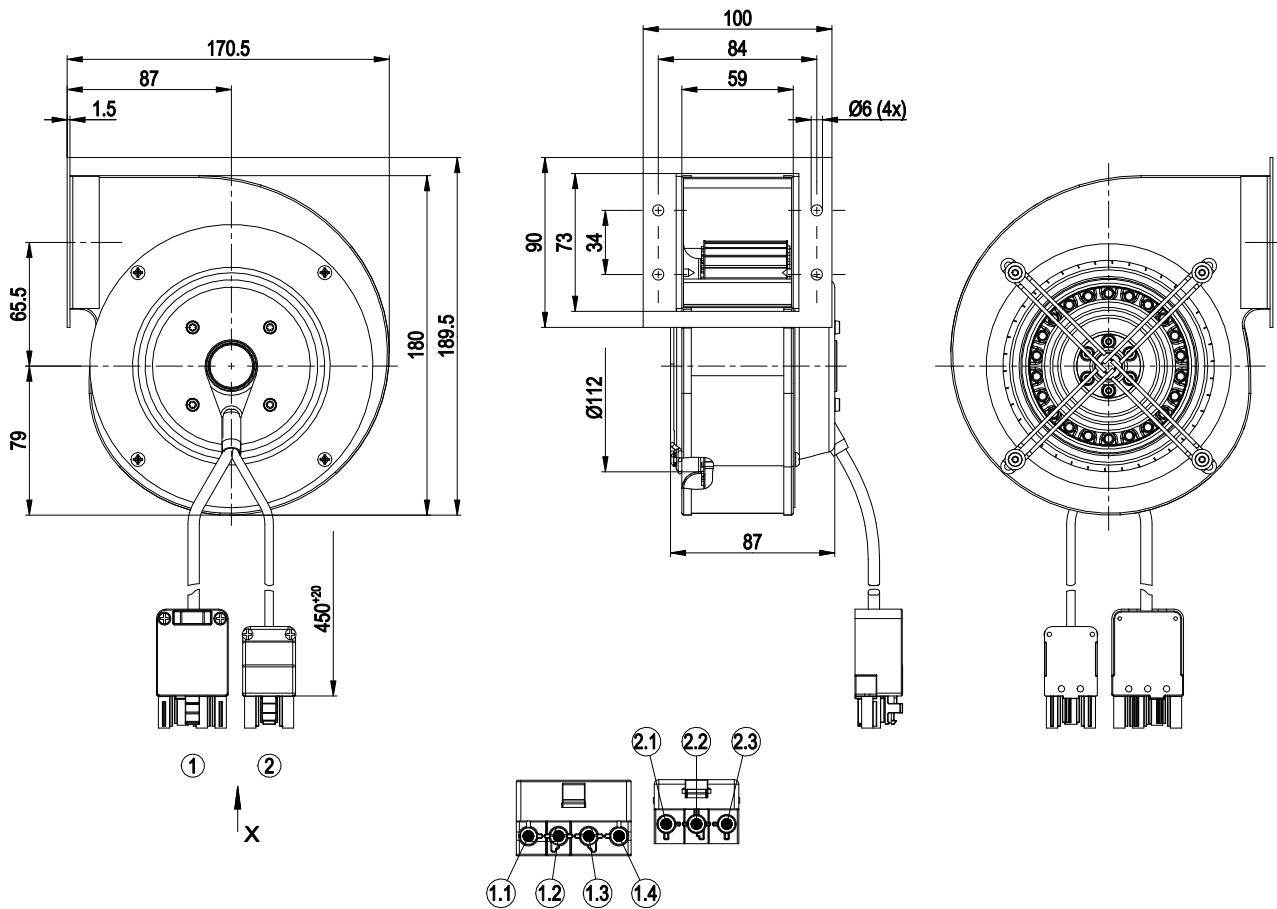
Weight	2 kg
Fan size	133 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE



## AC centrifugal fan

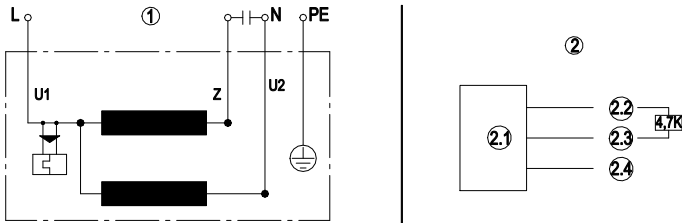
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## Product drawing



1	Cable silicone 4G 0.5 mm <sup>2</sup> , 4-pole connector housing Wieland 93.932.4857.0
1.1	L1 (blue)
1.2	PE (green/yellow)
1.3	N (black)
1.4	Z (brown)
2	Cable Raychem Spec. 44, AWG24, 3-pole connector housing Wieland 93.832.4357.0
2.1	+5 V (red)
2.2	0 V (black)
2.3	out (white)

## Connection diagram



1	Fan connection diagram
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U1	blue
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Z	brown
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U2	black
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PE	green/yellow
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2	Hall IC circuit
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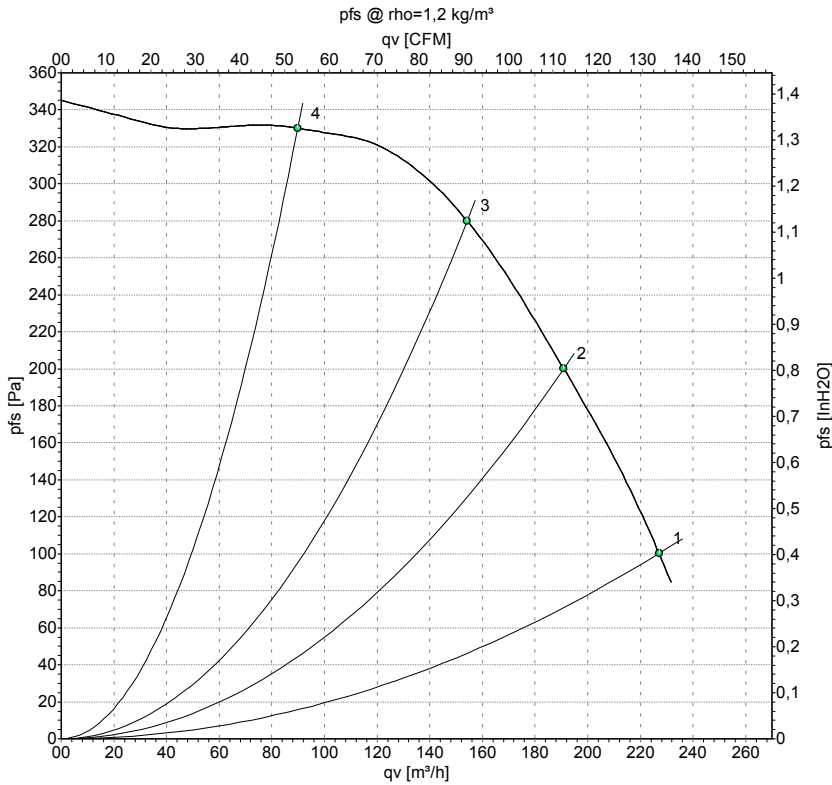
2.1	Hall IC
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2.2	red (+5 V)
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2.3	white (out)
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2.4	black (0 V)
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## Curves: Air performance 50 Hz



Measurement: LU-121734-1

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>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	50	2400	80	0.36	225	100	135	0.40
2	230	50	2495	73	0.32	190	200	110	0.80
3	230	50	2610	69	0.31	155	280	90	1.12
4	230	50	2740	63	0.29	90	330	55	1.32

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

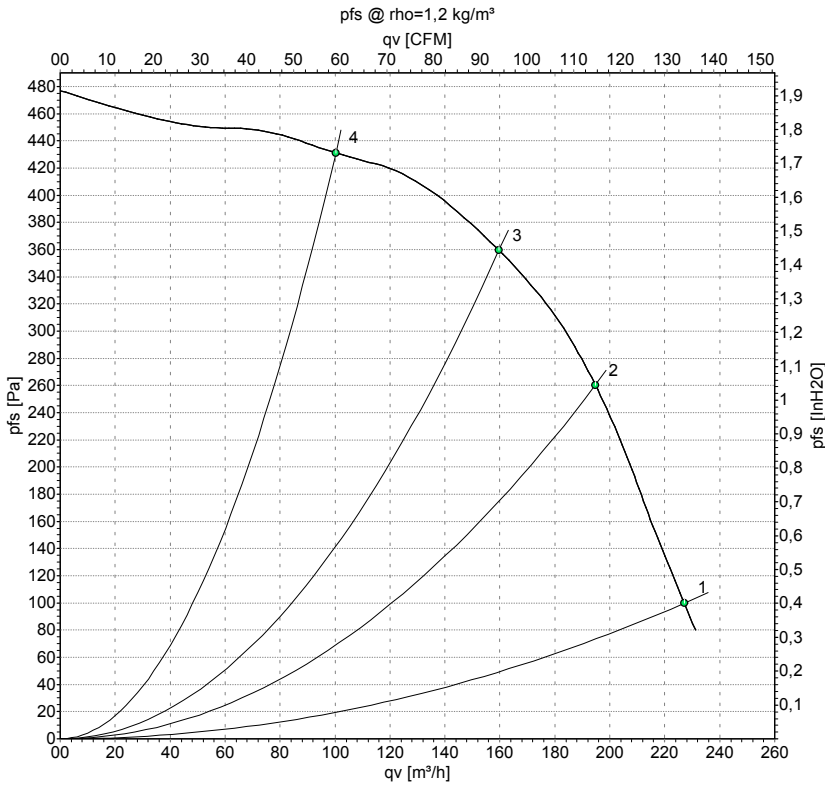


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## Curves: Air performance 60 Hz



Measurement: LU-121737-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH2O
1	230	60	2400	100	0.45	225	100	135	0.40
2	230	60	2690	95	0.42	195	260	115	1.04
3	230	60	2895	89	0.39	160	360	95	1.45
4	230	60	3145	80	0.35	100	430	60	1.73

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

