

# AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D2E133-BI40-55 ebmpapst Datasheet

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## Nominal data

Type	D2E133-BI40-55		
Motor	M2E068-CF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	1700	1850
Power input	W	135	140
Current draw	A	0.6	0.62
Motor capacitor	µF	2	2
Capacitor voltage	VDB	450	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	100
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	55

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

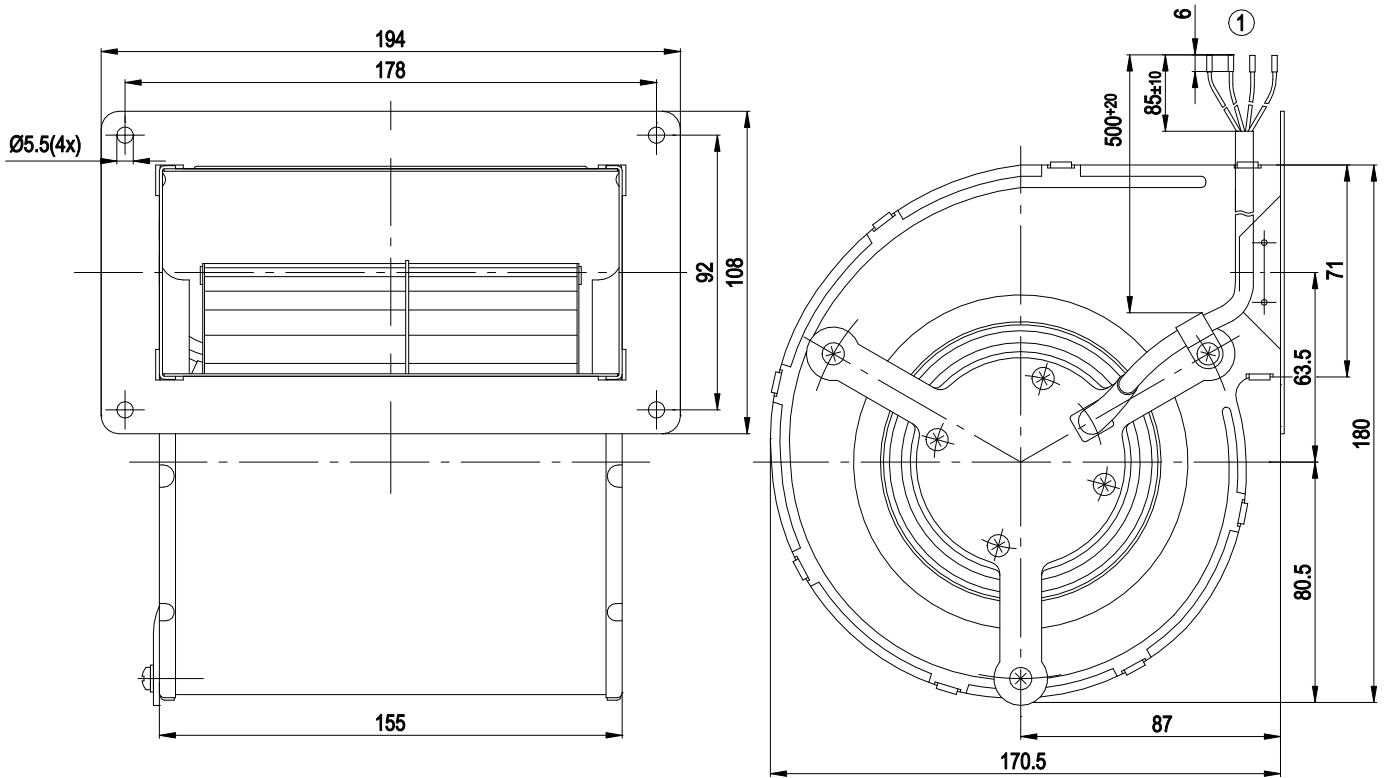
<b>Mass</b>	2.9 kg
<b>Size</b>	133 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	Sheet steel, coated in black
<b>Housing material</b>	Sheet steel, hot-galvanised
<b>Motor suspension</b>	Motor mounted via brackets on one side
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position as per EN 60034-5
<b>Insulation class</b>	"F"
<b>Humidity (F)/environmental protection class (H)</b>	F3-1
<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>	Shaft horizontal or rotor on top; rotor on bottom on request
<b>Condensate discharge holes</b>	Rotor-side
<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>	Axial
<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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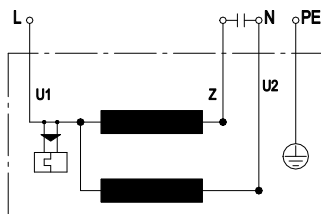
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## Product drawing



1 Connection line halogen-free 4G 0.5 mm<sup>2</sup>, 4x brass lead tips crimped

## Connection screen



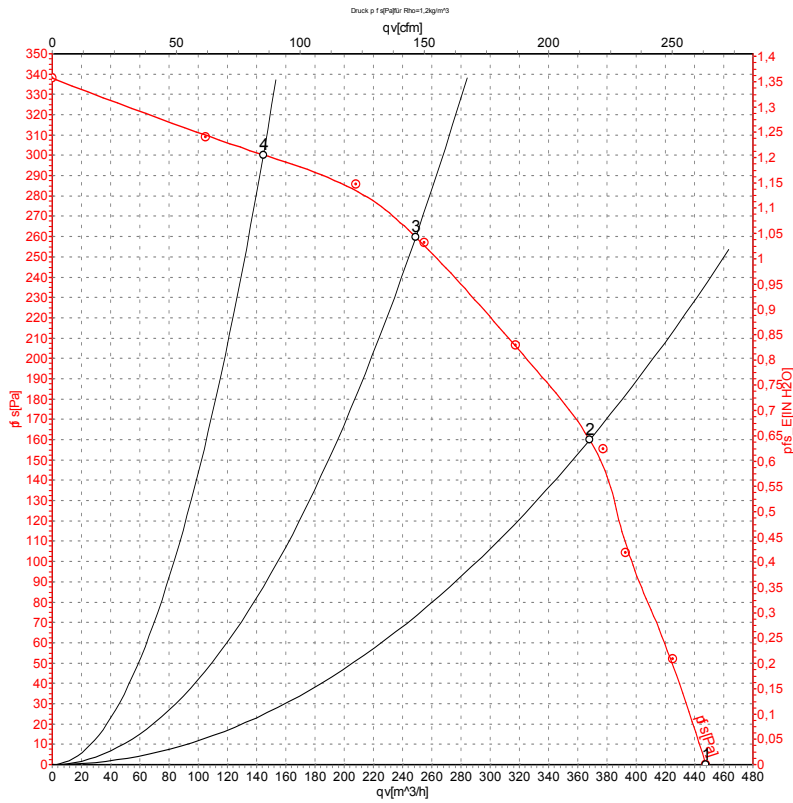
U1	blue	Z	brown	U2	black
PE	green/yellow				



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## Charts: Air flow 50 Hz



Measurement: LU-37131-1

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	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	230	50	1700	135	0.60	450	0	265	0.00
2	230	50	2160	115	0.50	370	160	215	0.64
3	230	50	2520	94	0.41	250	260	145	1.04
4	230	50	2690	80	0.35	145	300	85	1.20

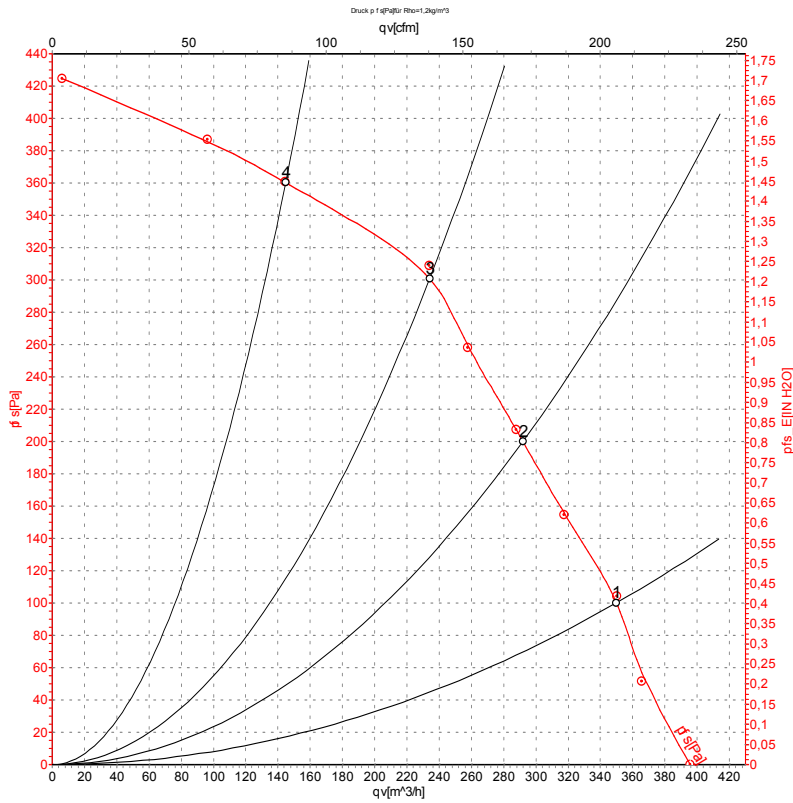
U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



Measurement: LU-37132-1

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	230	60	1850	140	0.62	350	100	205	0.40
2	230	60	2310	131	0.57	290	200	170	0.80
3	230	60	2690	123	0.53	235	300	140	1.20
4	230	60	2965	114	0.50	145	360	85	1.45

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

