

D2E097-BI56-02

# AC centrifugal fan

forward curved, dual inlet  
with housing (without flange)

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## Nominal data

Type	D2E097-BI56-02		
Motor	M2E052-CA		
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	min <sup>-1</sup>	1950	1850
Power input	W	87	100
Current draw	A	0.39	0.45
Motor capacitor	µF	2	2
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	40	35

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

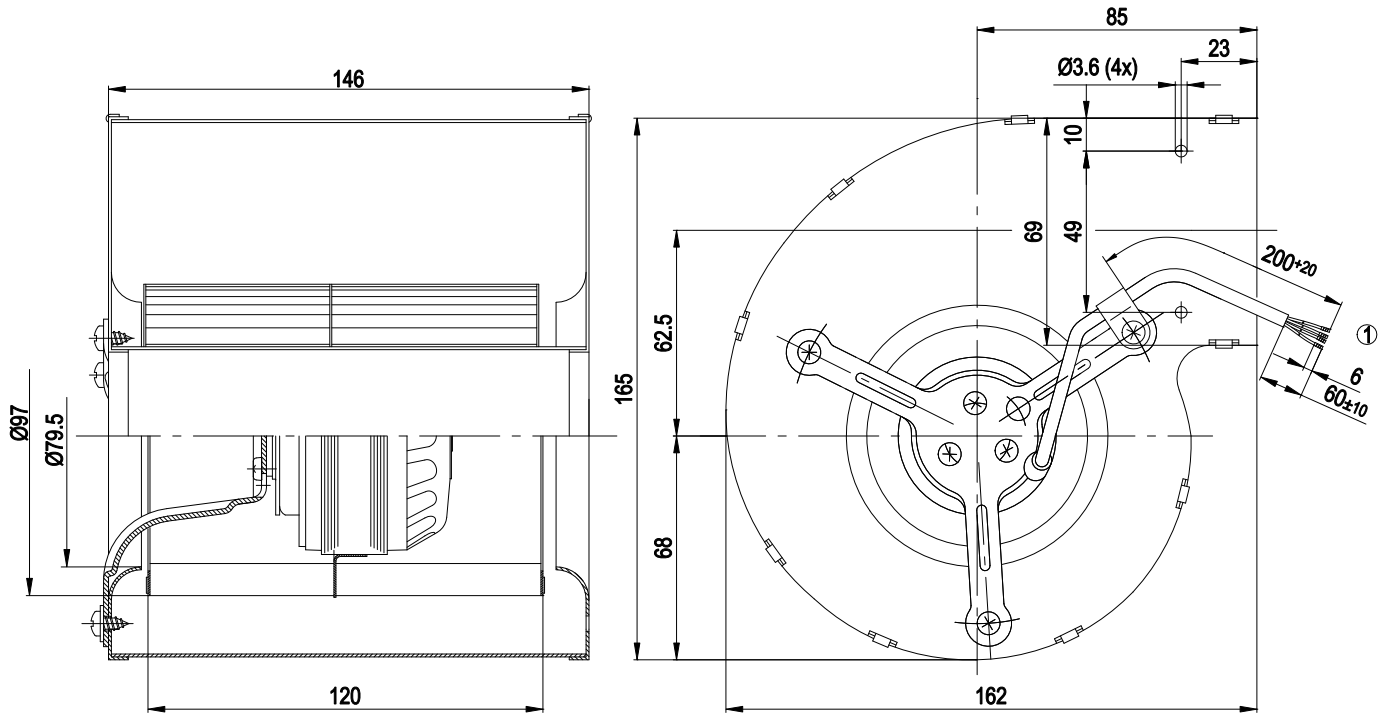
<b>Mass</b>	1.5 kg
<b>Size</b>	97 mm
<b>Surface of rotor</b>	Partially cast in aluminium
<b>Material of impeller</b>	Sheet steel, hot-galvanised
<b>Housing material</b>	Sheet steel, hot-galvanised
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 20
<b>Insulation class</b>	"B"
<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>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE
<b>Approval</b>	CCC; GOST



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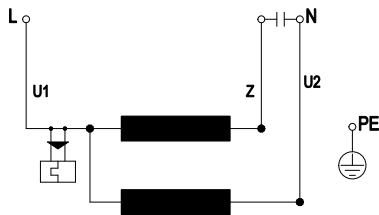
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## Product drawing



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

## Connection screen



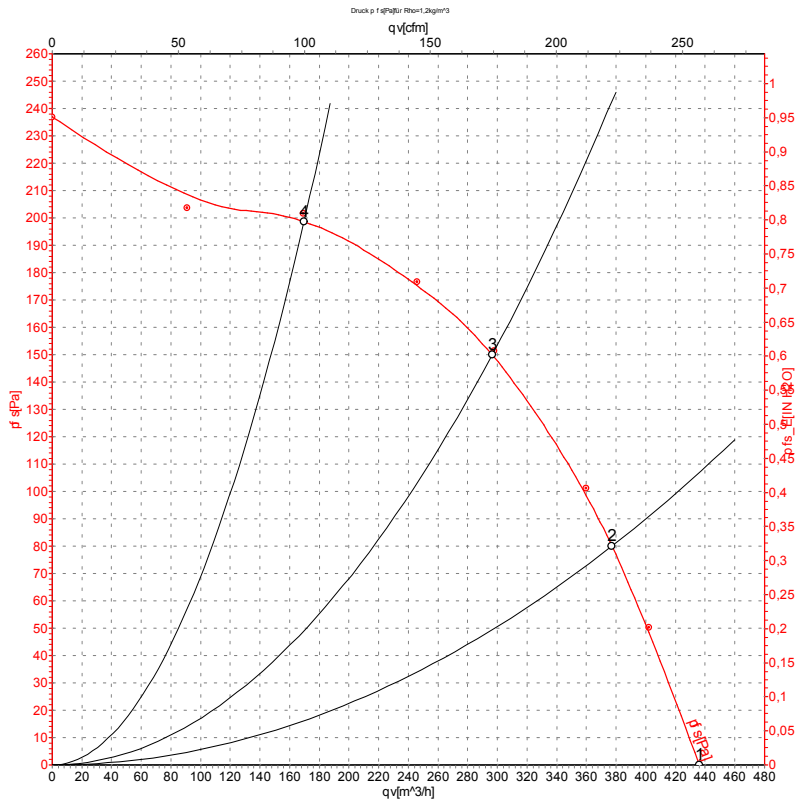
U1	blue	Z	brown	U2	black
PE	green/yellow				



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## Charts: Air flow 50 Hz



Measurement: LU-34651

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: L<sub>WA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1950	87	0.39	435	0
2	230	50	2235	81	0.35	375	80
3	230	50	2470	73	0.32	295	150
4	230	50	2710	67	0.31	170	200

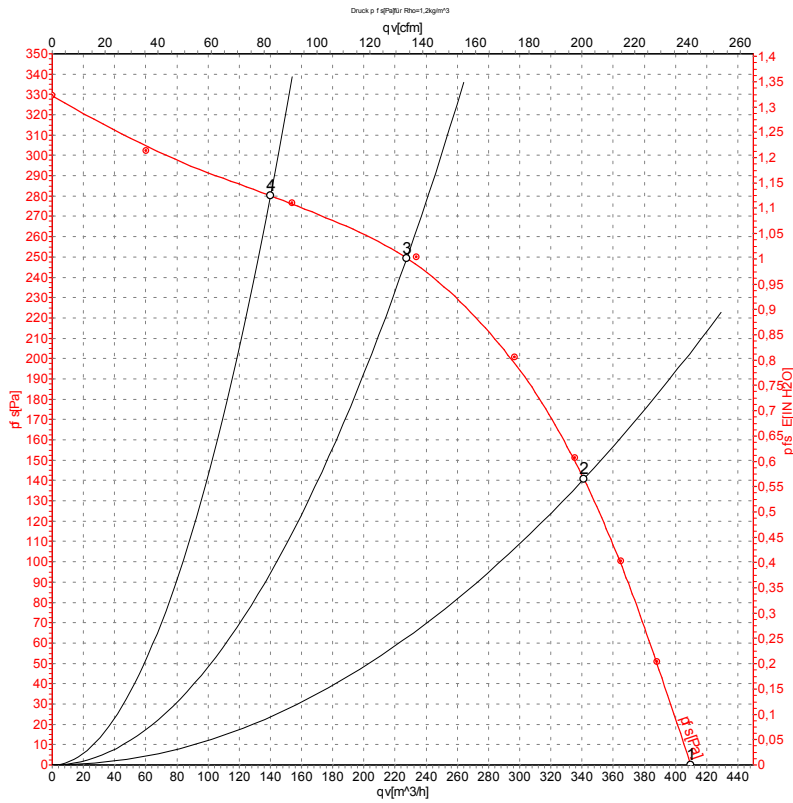
U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



Measurement: LU-34652

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: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	1850	100	0.45	410	0
2	230	60	2500	93	0.40	340	140
3	230	60	2995	81	0.35	230	250
4	230	60	3210	74	0.32	140	280

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

