

D2E097-BI52-A4

# AC centrifugal fan

forward curved, dual inlet  
with housing (without flange)

## ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

## Nominal data

Type	D2E097-BI52-A4		
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>	2450	2700
Power input	W	45	58
Current draw	A	0.2	0.26
Motor capacitor	µF	1.5	1.5
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	85	90

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



# AC centrifugal fan

forward curved, dual inlet  
with housing (without flange)

## Technical features

<b>Material of support structure</b>	Sheet steel, hot-galvanised
<b>Mass</b>	1.5 kg
<b>Size</b>	97 mm
<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 20
<b>Insulation class</b>	"F"
<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>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Leakage current</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
<b>Approval</b>	CCC

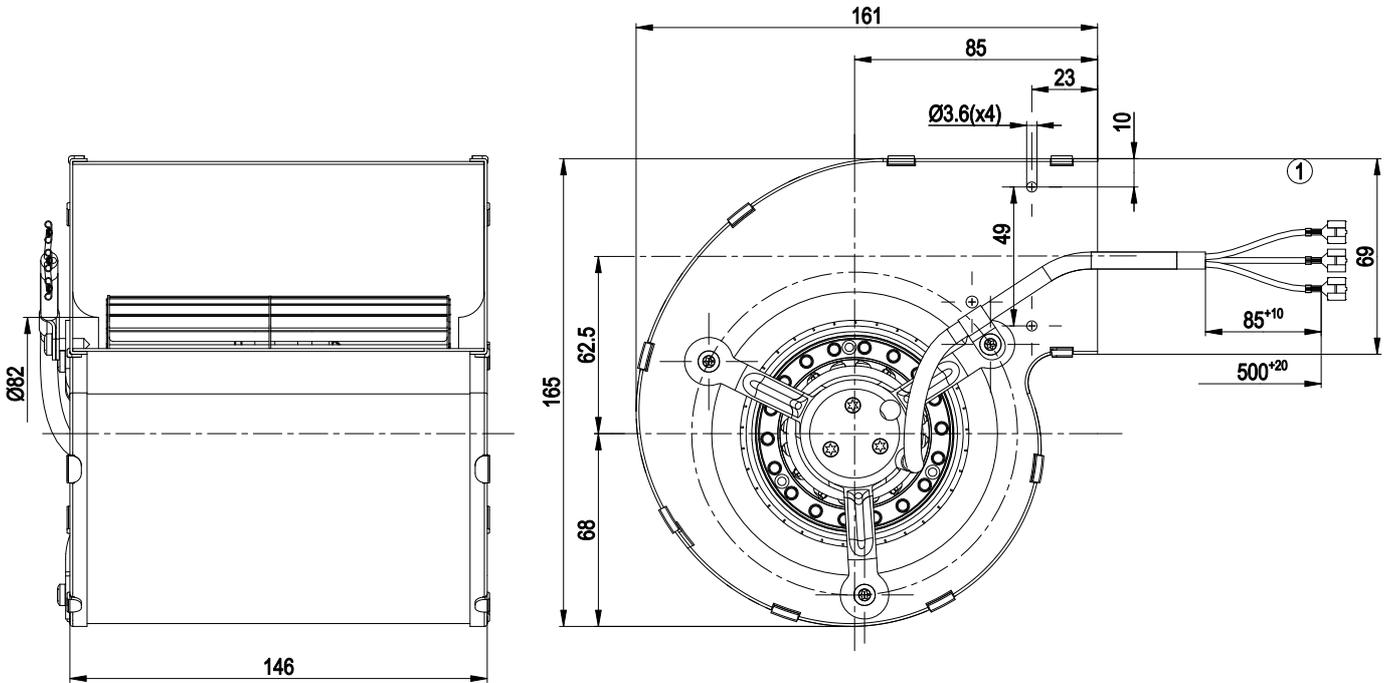


D2E097-BI52-A4

# AC centrifugal fan

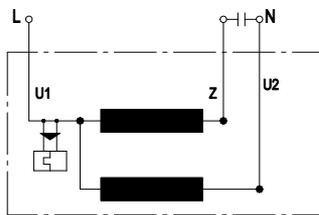
forward curved, dual inlet  
with housing (without flange)

## Product drawing



1 Connection line ETFE AWG 20, 3x receptacles for tabs 2.8 x 1

## Connection screen



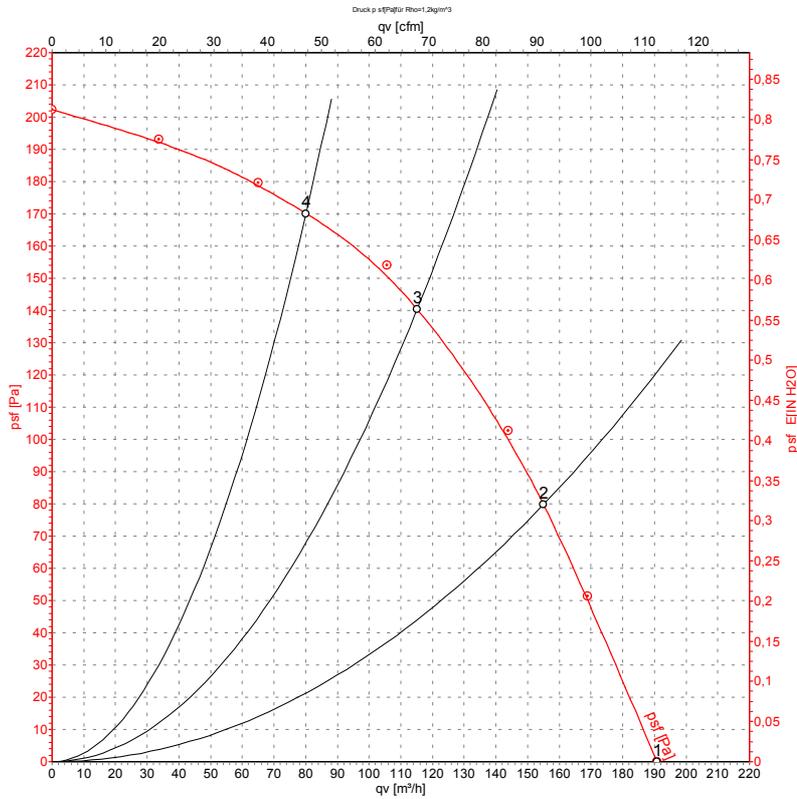
U1	Blue	Z	brown	U2	black
----	------	---	-------	----	-------



# AC centrifugal fan

forward curved, dual inlet  
with housing (without flange)

## Charts: Air flow 50 Hz



Measurement: LU-46916

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

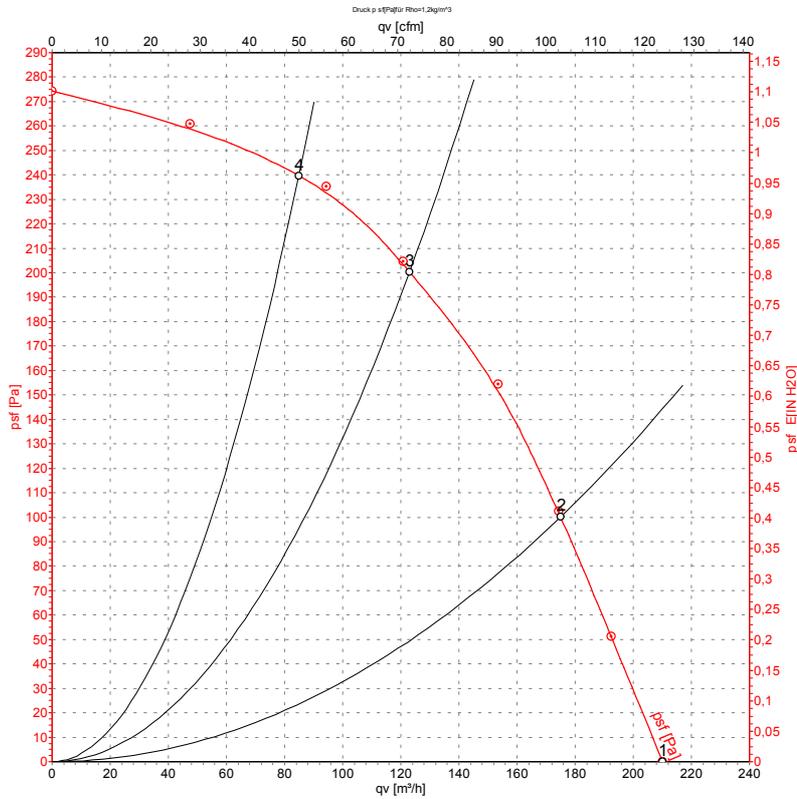
	U	f	n	P <sub>e</sub>	I	qv	p <sub>sf</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	2450	45	0.20	190	0
2	230	50	2580	42	0.19	155	80
3	230	50	2675	40	0.18	115	140
4	230	50	2735	38	0.18	80	170



# AC centrifugal fan

forward curved, dual inlet  
with housing (without flange)

## Charts: Air flow 60 Hz



Measurement: LU-47108

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>sf</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	2700	58	0.26	210	0
2	230	60	2895	54	0.24	175	100
3	230	60	3085	49	0.21	125	200
4	230	60	3170	46	0.20	85	240



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ebm-papst:](#)

[D2E097-BI52-A4](#)