

# AC centrifugal fan

forward curved, dual inlet  
with housing (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

Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142



## Nominal data

Type	D2E133-CI33-22		
Motor	M2E068-CF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1700	2100
Power input	W	175	190
Current draw	A	0.77	0.84
Motor capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	50	200
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	35	25
Starting current	A	0.84	0.88

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

## Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

\* Specific ratio =  $1 + p_g / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	25.1	25.1	32.1
Efficiency grade N	37	37	44
Power input $P_e$	kW	0.13	
Air flow $q_v$	m <sup>3</sup> /h	420	
Pressure increase $p_{fs}$	Pa	274	
Speed n	min <sup>-1</sup>	2365	

Data established at point of optimum efficiency



# AC centrifugal fan

forward curved, dual inlet  
with housing (flange)

## Technical features

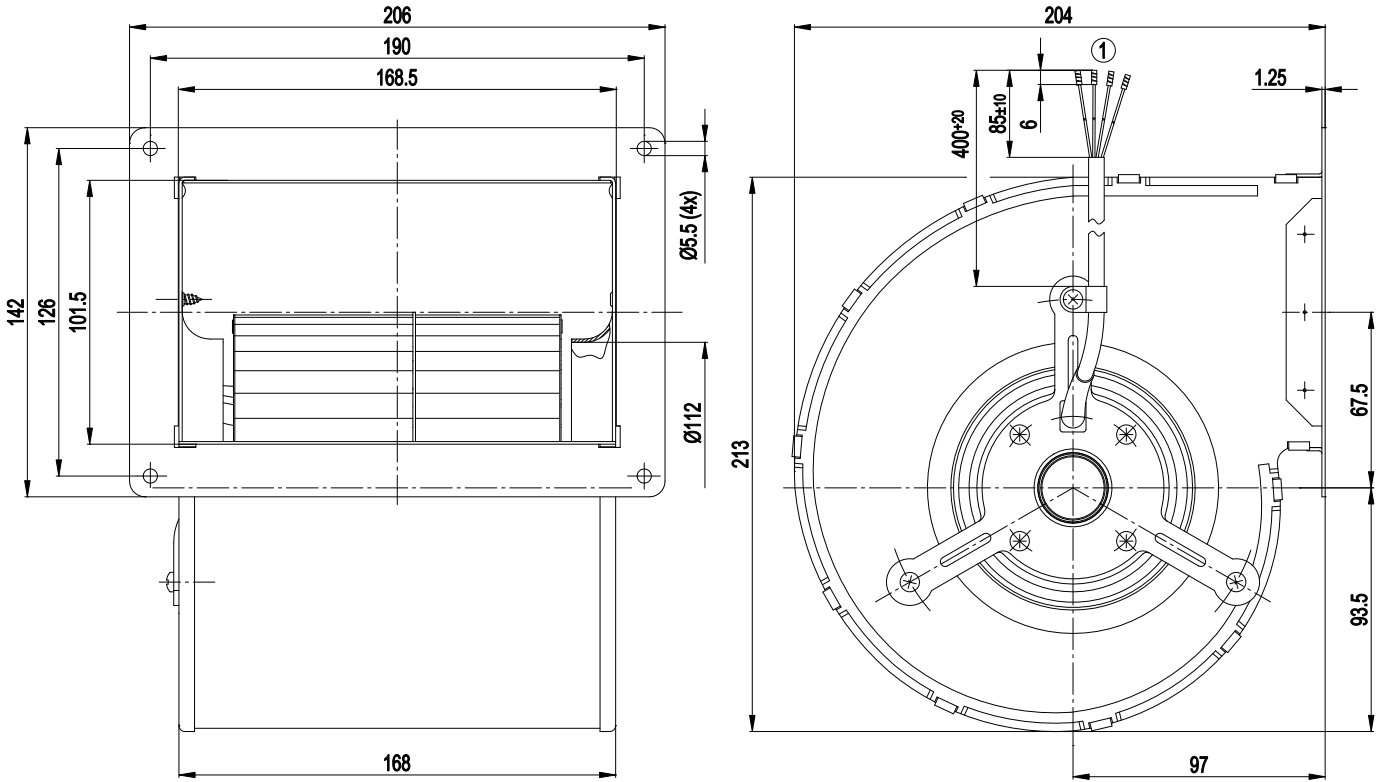
<b>Mass</b>	3.1 kg
<b>Size</b>	133 mm
<b>Surface of rotor</b>	Partially cast in aluminium
<b>Material of impeller</b>	Sheet steel, hot-galvanised
<b>Housing material</b>	Sheet steel, hot-galvanised
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F0
<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>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



# AC centrifugal fan

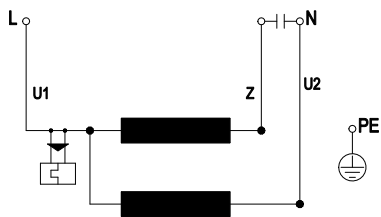
forward curved, dual inlet  
with housing (flange)

## Product drawing



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

## Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

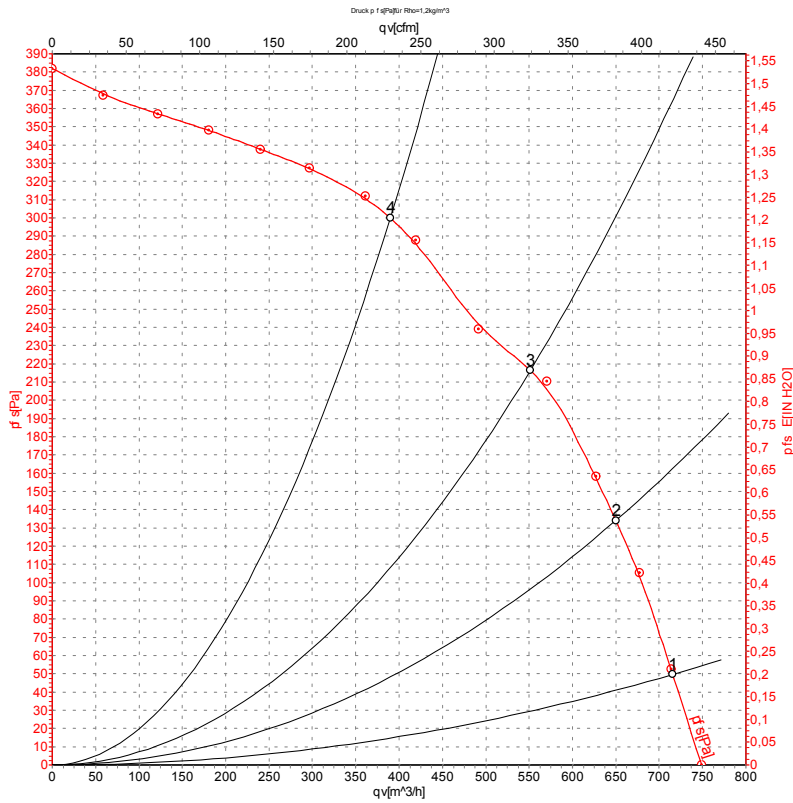


# AC centrifugal fan

forward curved, dual inlet

with housing (flange)

## Charts: Air flow 50 Hz



Measurement: LU-105286

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	1700	175	0.77	715	50
2	230	50	1900	159	0.69	650	135
3	230	50	2150	146	0.64	550	220
4	230	50	2415	129	0.56	390	300

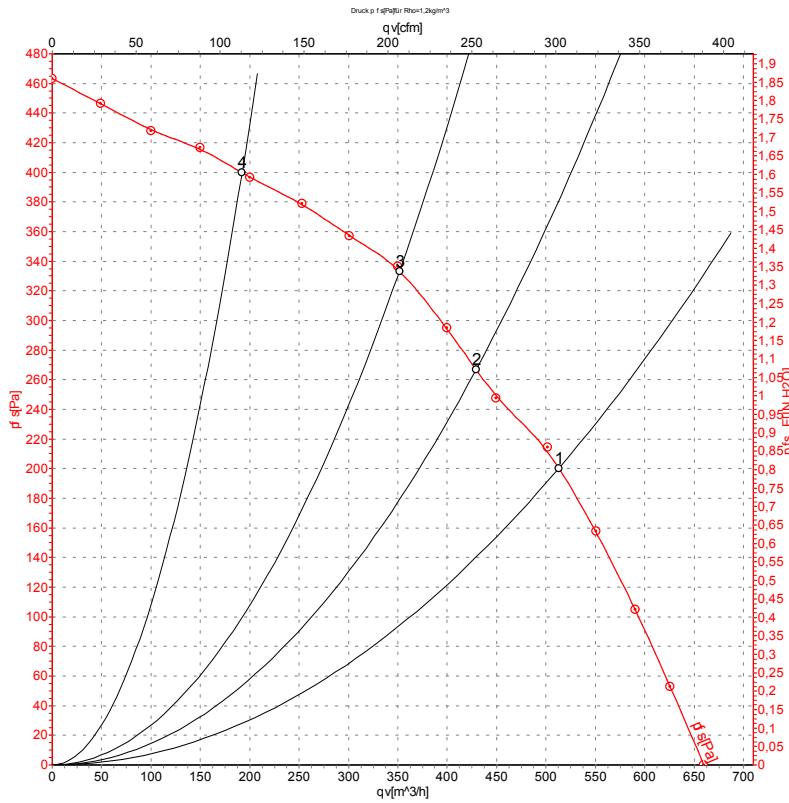
U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



# AC centrifugal fan

forward curved, dual inlet  
with housing (flange)

## Charts: Air flow 60 Hz



Measurement: LU-105290

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	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	2100	190	0.84	515	200
2	230	60	2330	176	0.77	430	265
3	230	60	2535	171	0.75	350	335
4	230	60	2805	161	0.71	190	400

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

