

D2E133-CI33-89

AC centrifugal fan

forward curved, dual inlet
with housing (without flange)

ebm-papst Muldingen GmbH & Co. KG

Bachmühle 2 · D-74673 Muldingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Muldingen
County court Stuttgart · HRA 590344

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



Nominal data

Type	D2E133-CI33-89		
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 ⁻¹	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 = $1 + p_{fs} / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency η_{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 ³ /h	420	
Pressure increase p_{fs}	Pa	274	
Speed n	min ⁻¹	2365	

Data established at point of optimum efficiency



AC centrifugal fan

forward curved, dual inlet
with housing (without flange)

Technical features

Mass	2.8 kg
Size	133 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-galvanised and cataphoresis coated in black
Housing material	Sheet steel, hot-galvanised
Material of support structure	Sheet steel, hot-galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

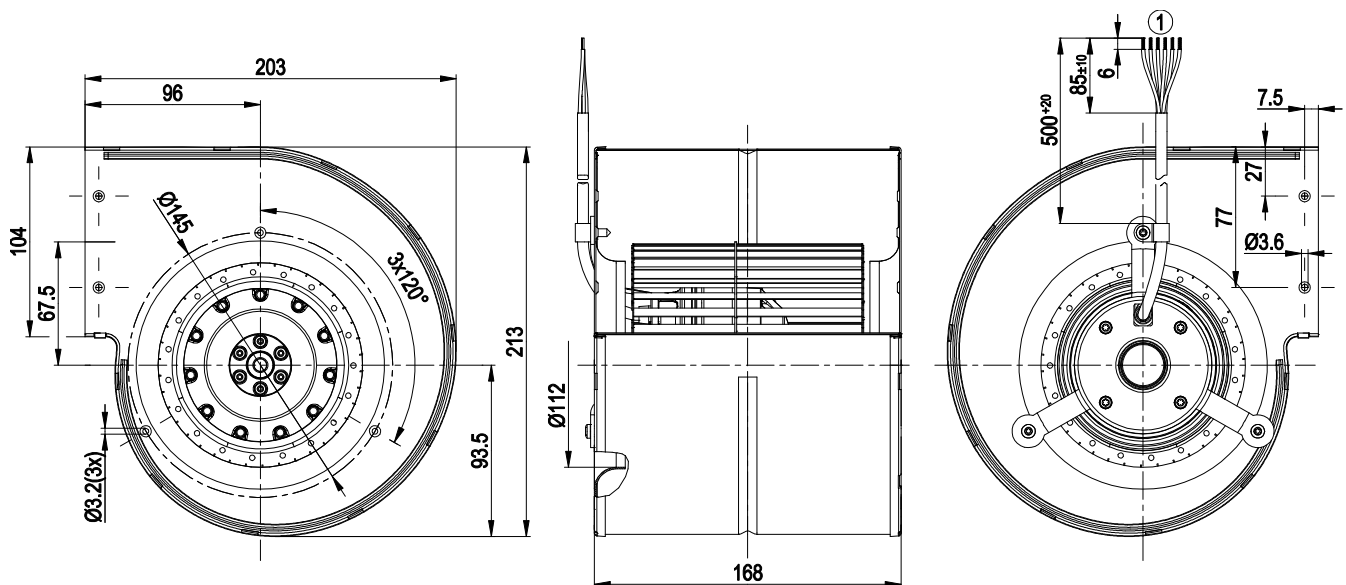


D2E133-CI33-89

AC centrifugal fan

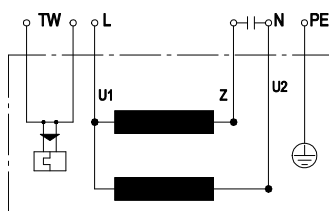
forward curved, dual inlet
with housing (without flange)

Product drawing



1 Connection line PVC 6G 0.5 mm², 6x brass lead tips crimped

Connection screen



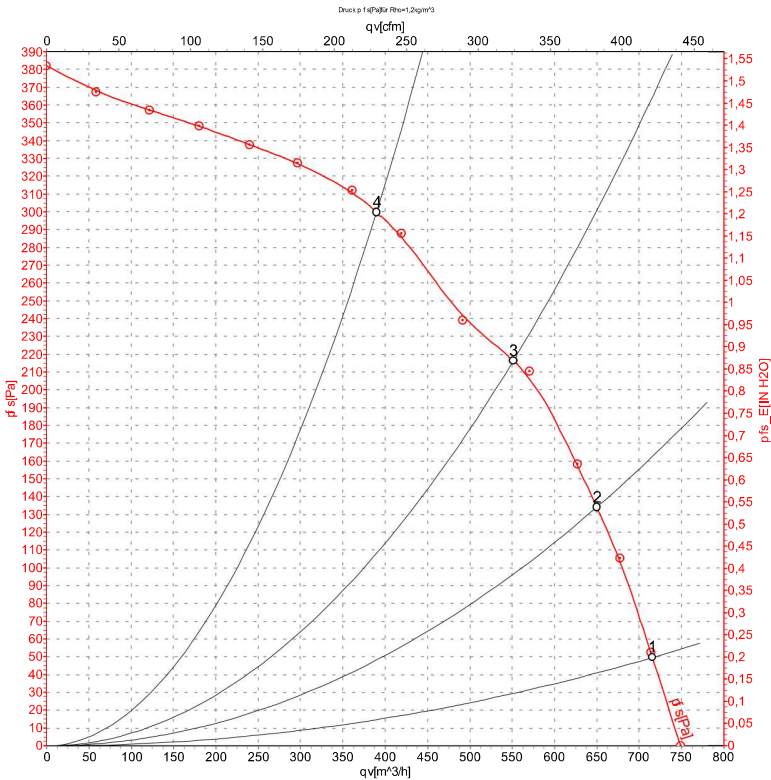
U1	Blue	Z	brown	U2	black
PE	green/yellow	TOP	2 x grey		



AC centrifugal fan

forward curved, dual inlet
with housing (without 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: 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 _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/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

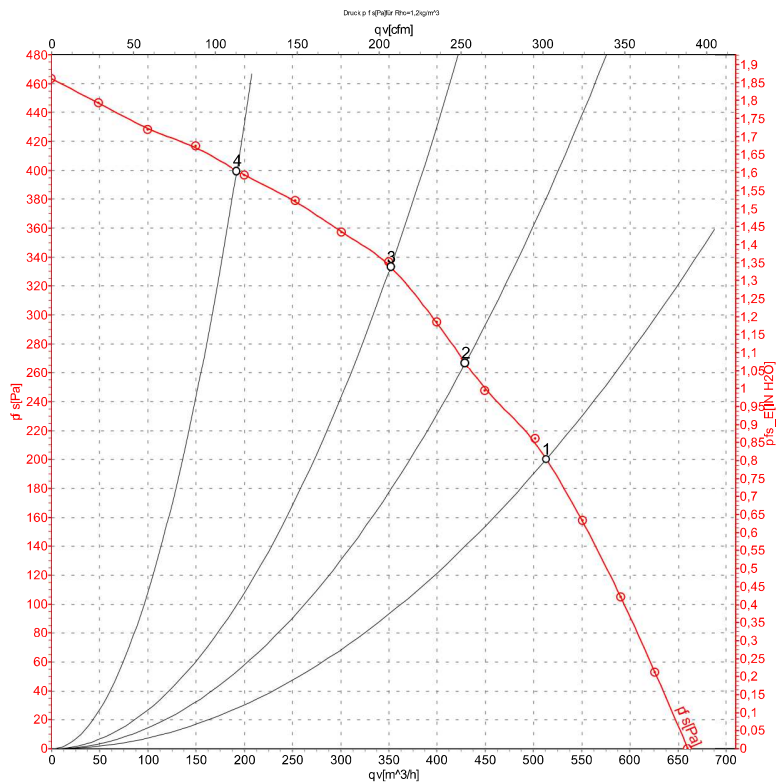
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



AC centrifugal fan

forward curved, dual inlet
with housing (without 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: L_{wA} measured as per ISO 13347 / L_{pA} 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_e	I	q_v	p_{fs}
	V	Hz	min ⁻¹	W	A	m³/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_e = Power input · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

