

# AC centrifugal fan

forward-curved, dual-intake  
with housing (without flange)

D2E133-CI33-89 ebmpapst Datasheet  
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## Nominal data

<b>Type</b>	D2E133-CI33-89		
<b>Motor</b>	M2E068-CF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min <sup>-1</sup>	1700	2100
Power consumption	W	175	190
Current draw	A	0.77	0.84
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	50	200
Min. back pressure	in. wg	0.2	0.8
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 = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



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## Technical description

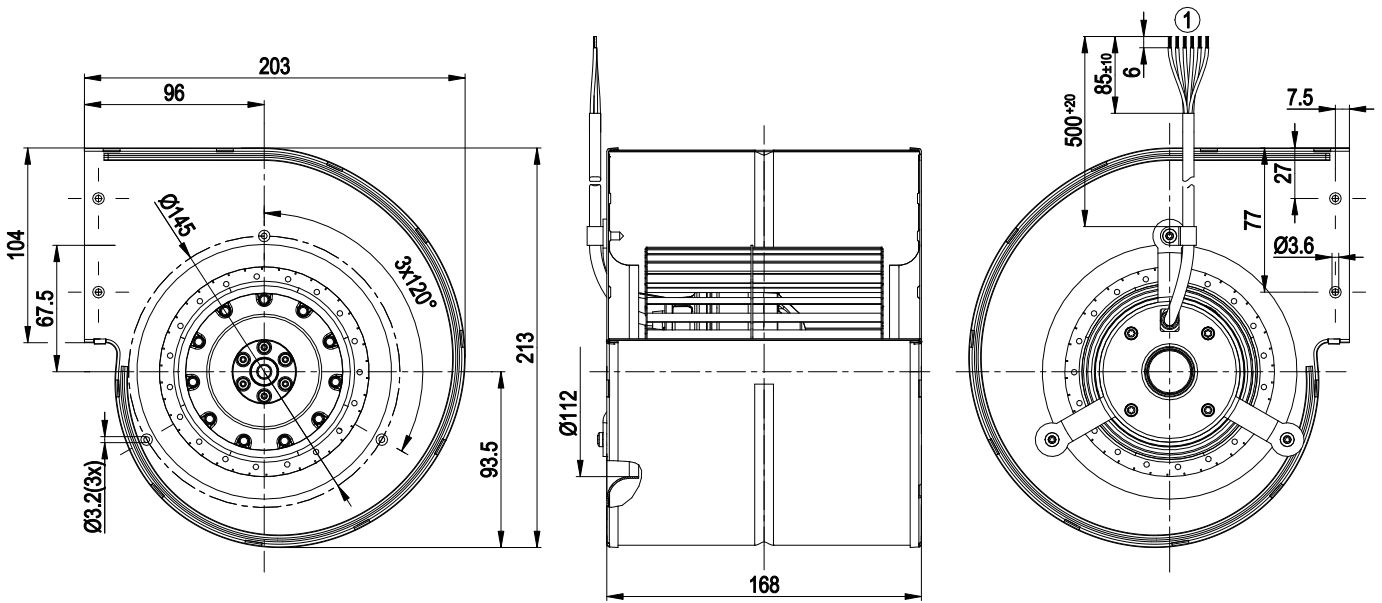
<b>Weight</b>	2.8 kg
<b>Fan size</b>	133 mm
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	Sheet steel, hot-dip galvanized and CDP coated in black
<b>Housing material</b>	Sheet steel, hot-dip galvanized
<b>Support structure material</b>	Sheet steel, hot-dip galvanized
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) with basic insulation
<b>With cable</b>	Axial
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1



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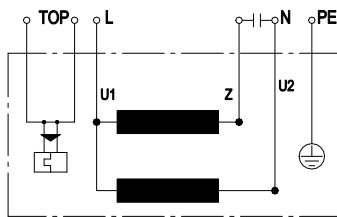
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## Product drawing



1 Cable XLPE/XLPO 6G 0.5 mm<sup>2</sup>, 6x crimped splices

## Connection diagram



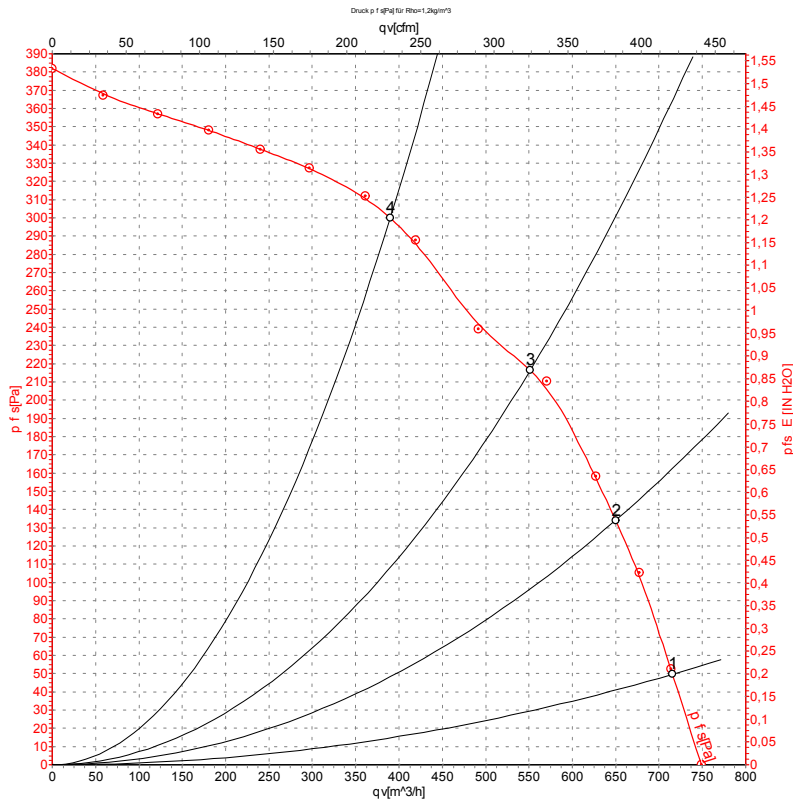
U1	blue	Z	brown	U2	black
PE	green/yellow	TOP	2x gray		



# AC centrifugal fan

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## Curves: Air performance 50 Hz



Measurement: LU-105286-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## 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	in. wg
1	230	50	1700	175	0.77	715	50	420	0.20
2	230	50	1900	159	0.69	650	135	385	0.54
3	230	50	2150	146	0.64	550	220	325	0.88
4	230	50	2415	129	0.56	390	300	230	1.20

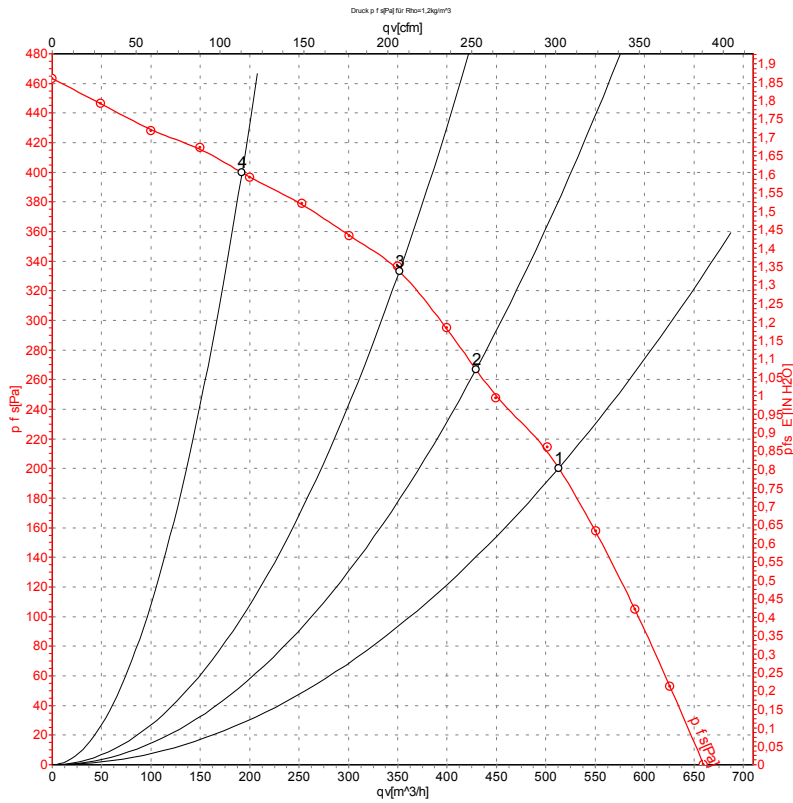
U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase



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## Curves: Air performance 60 Hz



Measurement: LU-105290-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## 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	in. wg
1	230	60	2100	190	0.84	515	200	300	0.80
2	230	60	2330	176	0.77	430	265	250	1.06
3	230	60	2535	171	0.75	350	335	205	1.34
4	230	60	2805	161	0.71	190	400	115	1.61

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

