

D2E133-DM47-23

# AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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## Nominal data

Type	D2E133-DM47-23		
Motor	M2E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	1650	2200
Power consumption	W	175	185
Current draw	A	0.78	0.82
Capacitor	µF	3	3
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	100	250
Min. back pressure	inH <sub>2</sub> O	0.4	1
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	40

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



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## Technical description

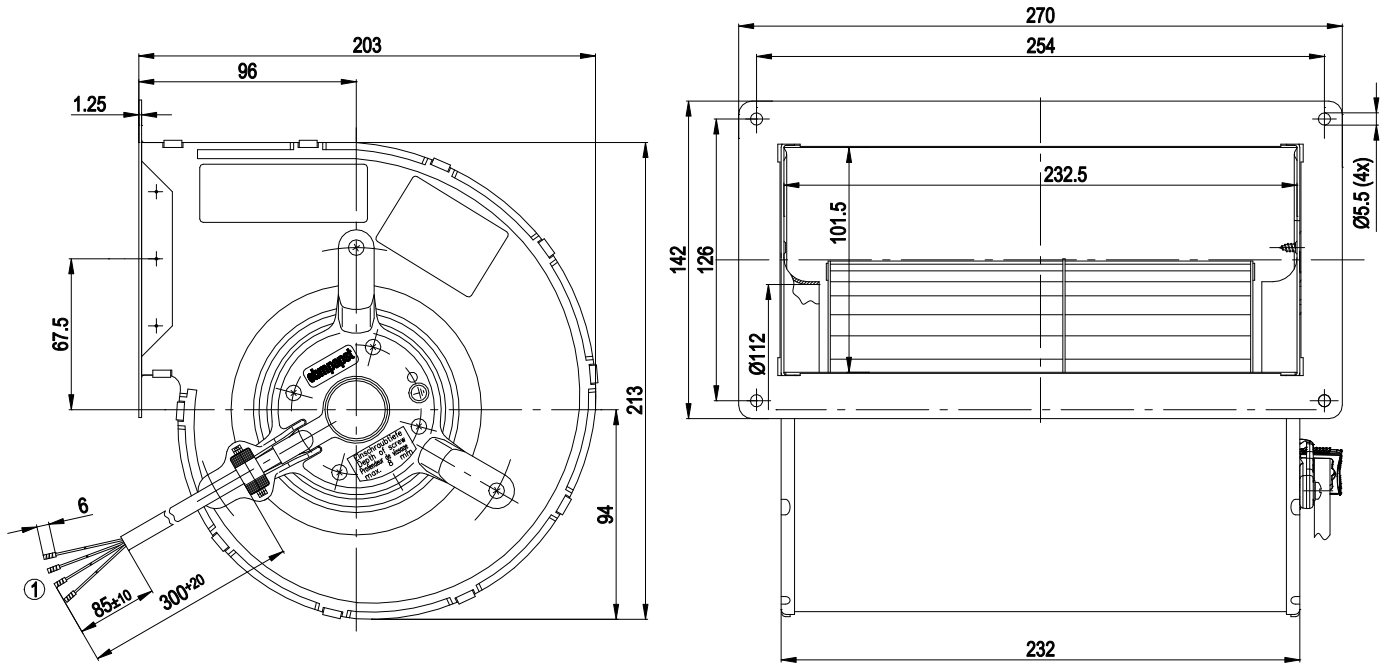
<b>Weight</b>	4. kg
<b>Fan size</b>	133 mm
<b>Rotor surface</b>	Partly cast in aluminum
<b>Impeller material</b>	Sheet steel, hot-dip galvanized
<b>Housing material</b>	Sheet steel, hot-dip galvanized
<b>Motor suspension</b>	Motor mounted with brackets on one side
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H0 - dry environment
<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>	Any
<b>Condensation drainage holes</b>	None
<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) internally connected
<b>With cable</b>	Axial
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	CCC; EAC



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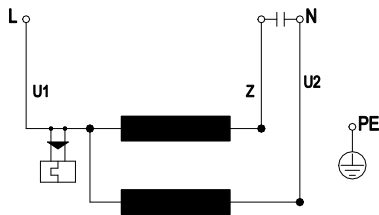
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## Product drawing



1 Cable PVC 0.5 mm<sup>2</sup>, 4x crimped splices

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

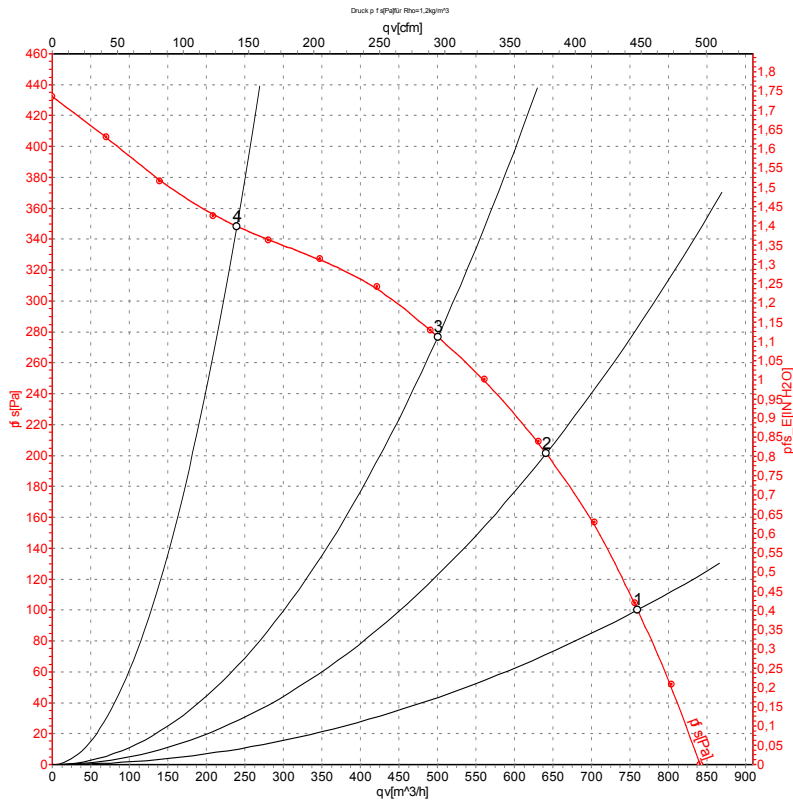


# AC centrifugal fan

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## Curves: Air performance 50 Hz



Measurement: LU-105266-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. 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	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	50	1650	175	0.78	760	100	445	0.40
2	230	50	1990	162	0.70	640	200	375	0.80
3	230	50	2275	146	0.63	500	275	295	1.10
4	230	50	2530	125	0.54	240	350	140	1.41

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

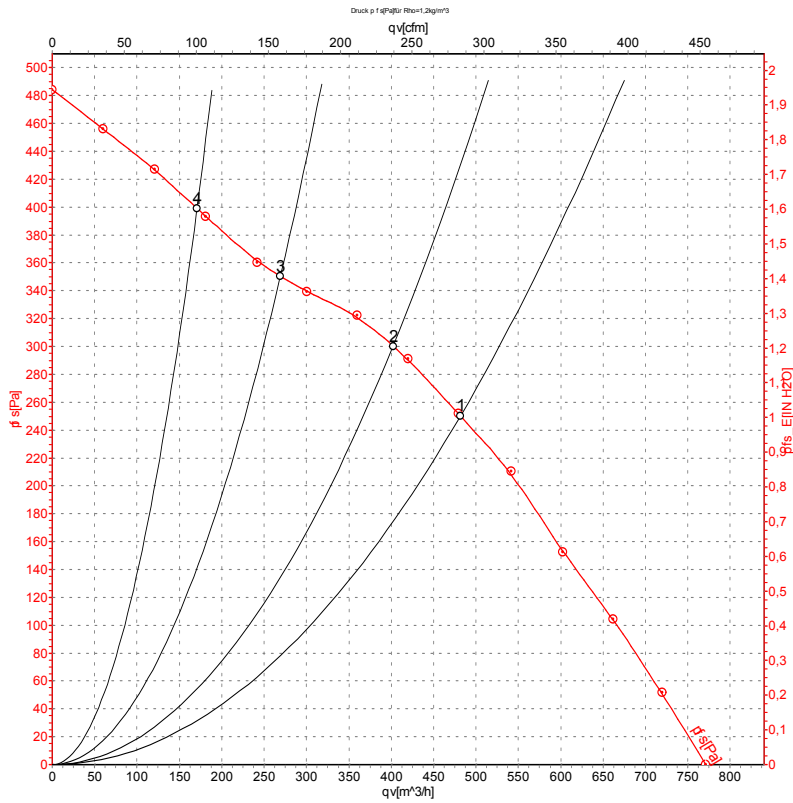


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## Curves: Air performance 60 Hz



Measurement: LU-105267-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. 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	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	60	2200	185	0.82	480	250	285	1.00
2	230	60	2360	181	0.78	400	300	235	1.20
3	230	60	2555	175	0.76	270	350	160	1.41
4	230	60	2685	171	0.74	170	400	100	1.61

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

