

# AC centrifugal fan

forward curved, dual inlet  
with housing and angle bracket

D2E133-DM64-H5 ebmpapst Datasheet  
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County court Stuttgart · HRB 590142

## Nominal data

Type	D2E133-DM64-H5		
Motor	M2E068-DF		
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 (rpm)	min <sup>-1</sup>	2200	2500
Power input	W	230	255
Current draw	A	1.05	1.12
Motor capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	220	330
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations

## Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015			
01 Overall efficiency $\eta_{es}$	%	32.6	32.6	09 Power input $P_e$	kW	0.16
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	560
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	343
04 Efficiency grade N		44	44	10 Speed (rpm) n	min <sup>-1</sup>	2535
05 Variable speed drive		No		11 Specific ratio*		1.00

Data definition with optimum efficiency.  
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-150660



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## Technical features

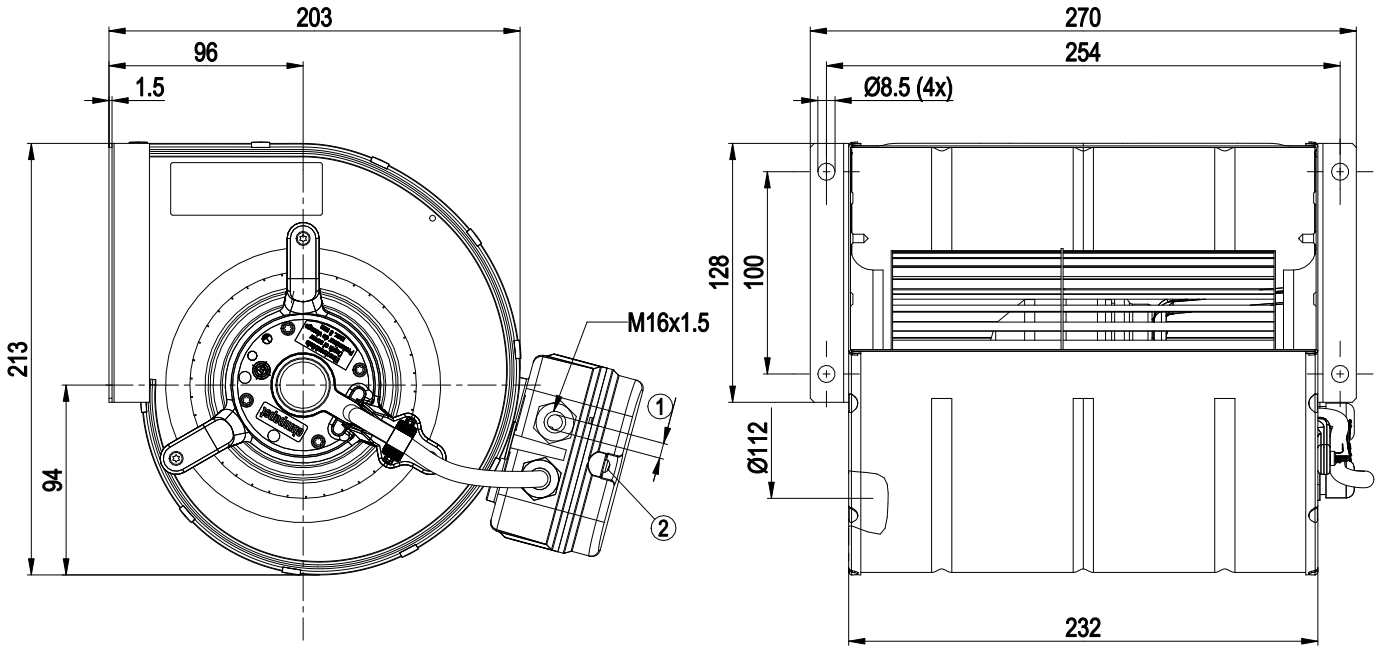
<b>Mass</b>	4 kg
<b>Size</b>	133 mm
<b>Surface of rotor</b>	Uncoated
<b>Material of terminal box</b>	PC / ABS plastic
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Sheet steel, galvanised
<b>Motor suspension</b>	Motor mounted via brackets on one side
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"F"
<b>Humidity (F)/environmental protection class (H)</b>	H0+
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 70 °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 with anti-freezing grease
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Electrical leads</b>	Via terminal box, integrated capacitor connected via terminal box
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Motor capacitor according to EN 60252-1 in safety protection class</b>	S0
<b>Product conforming to standard</b>	EN 60335-1; CE



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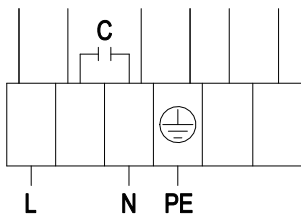
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## Product drawing



- 1 Cable diameter max. 7.5 mm, tightening torque 1.3±0.2 Nm
- 2 Tightening torque 1.3±0.2 Nm

## Connection screen



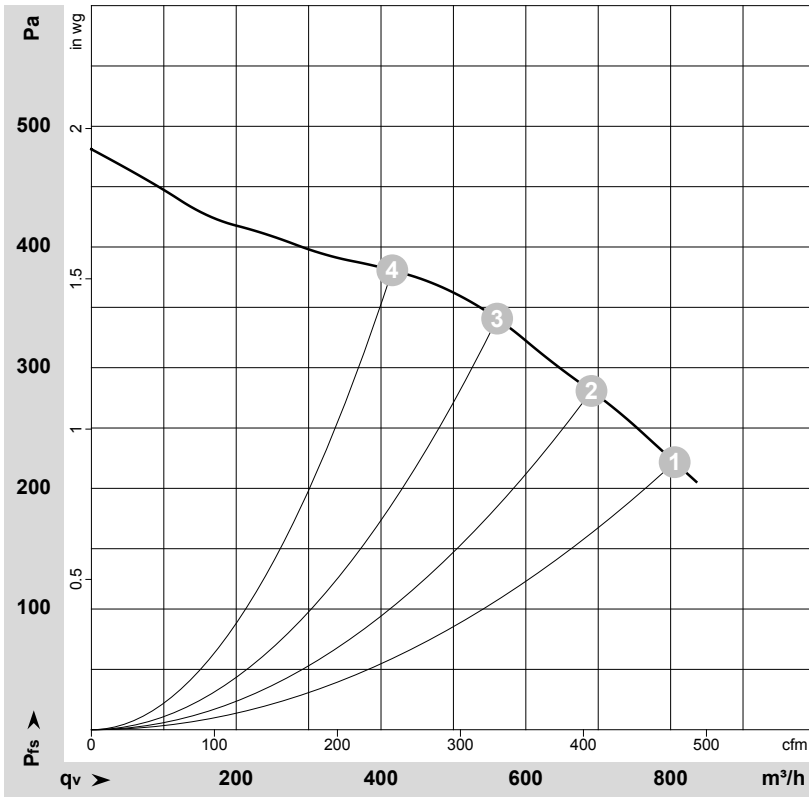
L	blue	N	black	PE	green / yellow
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## Charts: Air flow 50 Hz



$\rho = 1.18 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-150660-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	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	inH2O
1	230	50	2200	230	1.05	805	220	475	0.88
2	230	50	2370	196	0.85	690	280	405	1.12
3	230	50	2535	169	0.74	560	340	330	1.36
4	230	50	2630	150	0.66	415	380	245	1.53

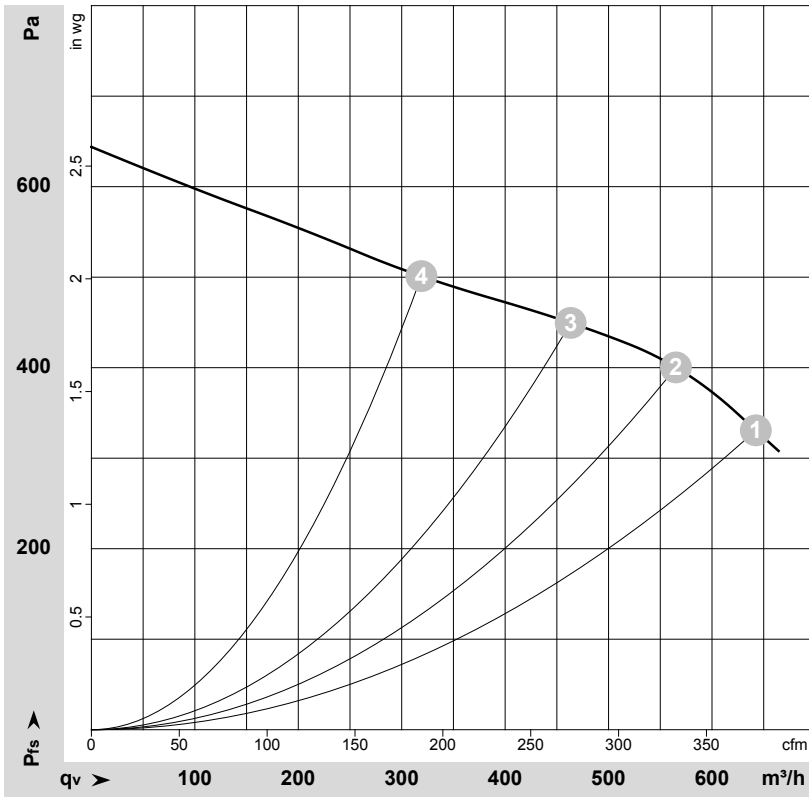
U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-20679-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	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	inH <sub>2</sub> O
1	230	60	2500	255	1.12	640	330	380	1.32
2	230	60	2795	234	1.01	565	405	335	1.63
3	230	60	2935	217	0.94	465	451	275	1.81
4	230	60	3080	198	0.86	320	499	190	2.00

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

