

# AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D4E200-BA05-51 ebmpapst Datasheet

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## Nominal data

Type	D4E200-BA05-51	
Motor	M4E068-LA	
Phase		1~
Nominal voltage	VAC	240
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed (rpm)	min <sup>-1</sup>	1040
Power input	W	400
Current draw	A	1.68
Motor capacitor	µF	8
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	2.41

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

	Actual	Request 2015				
01 Overall efficiency $\eta_{es}$	%	33.5	33.5	09 Power input $P_e$	kW	0.22
02 Measurement category	A			09 Air flow $q_v$	m <sup>3</sup> /h	1205
03 Efficiency category	Static			09 Pressure increase $p_{fs}$	Pa	224
04 Efficiency grade N	44	44		10 Speed (rpm) n	min <sup>-1</sup>	1315
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-161528



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## Technical features

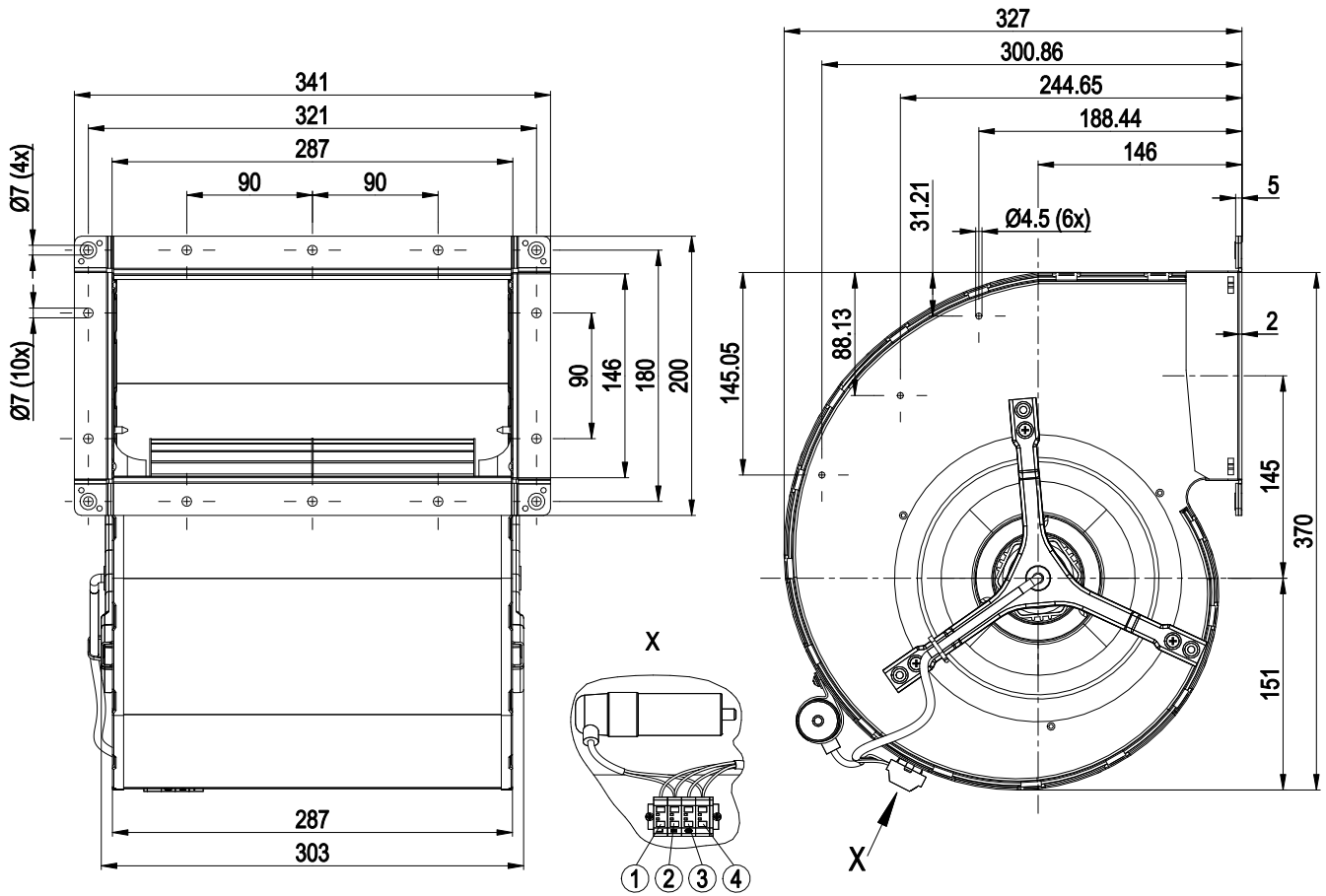
<b>Mass</b>	11 kg
<b>Size</b>	200 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Sheet steel, galvanised
<b>Motor suspension</b>	Motor mounted anti-vibration on both sides
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"B"
<b>Humidity (F)/environmental protection class (H)</b>	F3-1
<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>Electrical leads</b>	Via terminals, capacitor connected via terminals
<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>	S2
<b>Product conforming to standard</b>	EN 60335-1; CE



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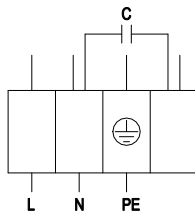
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## Product drawing



1	L (blue)
2	N (black + capacitor)
3	PE (green/yellow)
4	Z (brown + capacitor)

## Connection screen



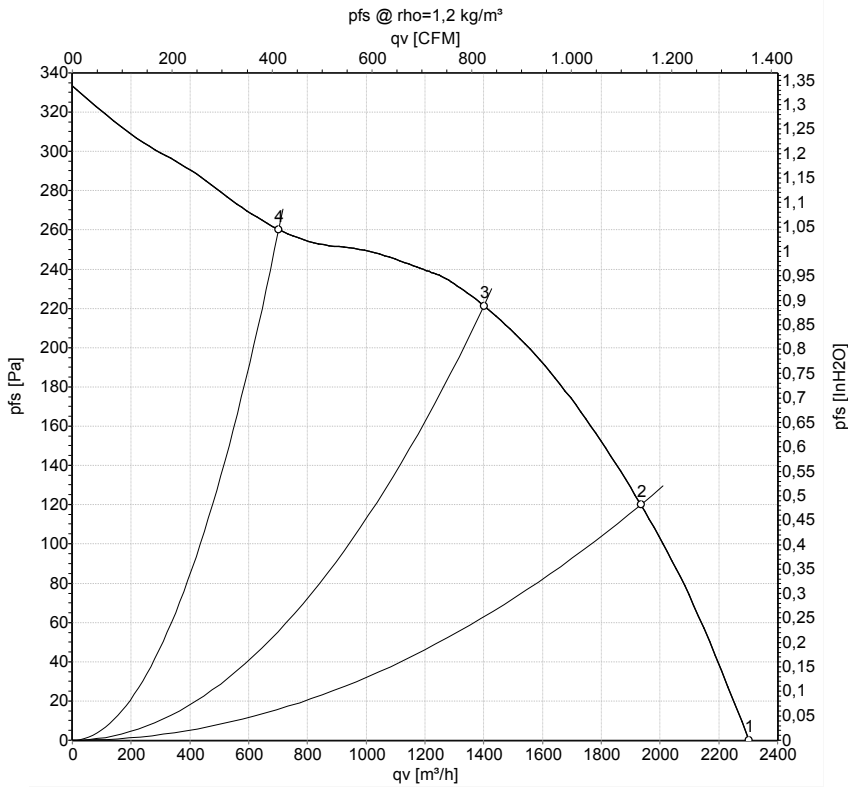
L	blue	N	black	PE	green/yellow
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## Charts: Air flow 50 Hz



Measurement: LU-161784-1

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	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	240	50	1040	400	1.68	2305	0	1355	0.00
2	240	50	1190	320	1.34	1935	120	1140	0.48
3	240	50	1305	254	1.07	1400	220	825	0.88
4	240	50	1385	191	0.82	700	260	415	1.04

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

