

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

D4D200-CA01-02 ebmpapst Datasheet
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Nominal data

Type	D4D200-CA01-02				
Motor	M4D068-LA				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	1080	1200	1080	1200
Power input	W	480	500	480	500
Current draw	A	1.54	1.50	0.89	0.87
Min. back pressure	Pa	0	100	0	100
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	30	35	30	35

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 (EN 17166)

		Actual	Request 2015		
01 Overall efficiency η_e	%	40	38.7	09 Power input P_e	kW
02 Measurement category		B		09 Air flow q_v	m ³ /h
03 Efficiency category		Total		09 Pressure increase p_f	Pa
04 Efficiency grade N		50.3	49	10 Speed (rpm) n	min ⁻¹
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 = $1 + p_f / 100\,000\text{ Pa}$

LU-105309



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Technical features

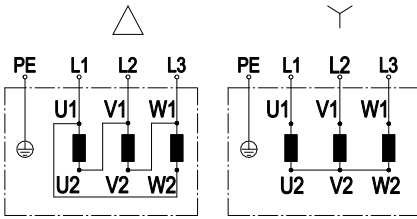
Mass	11 kg
Size	200 mm
Motor size	68
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP54
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H1+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	EAC; CCC



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Connection screen



Change direction of rotation by reversing two phases

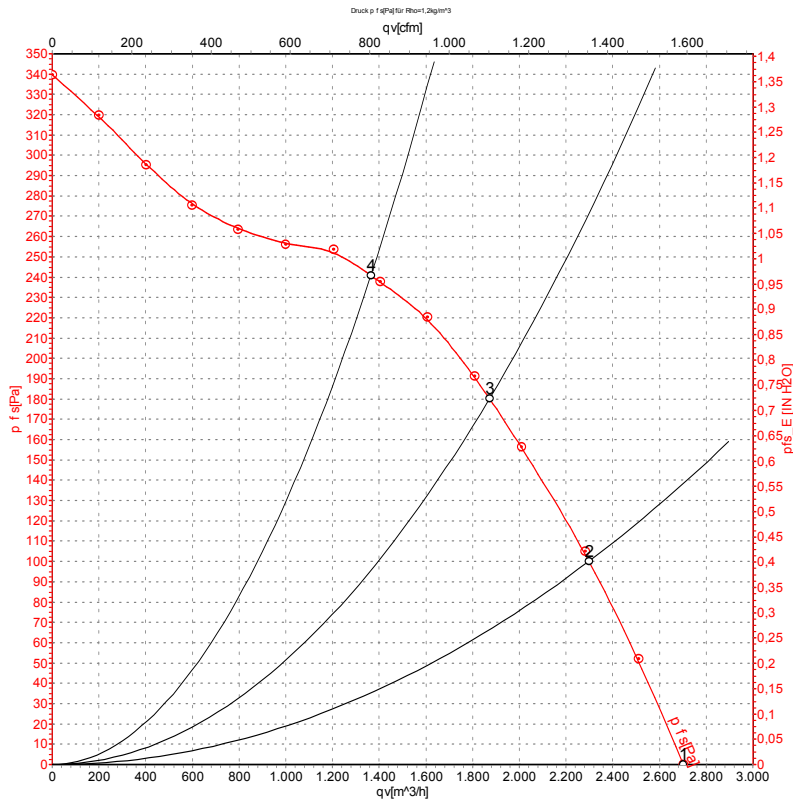
	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	green/yellow				



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Charts: Air flow 50 Hz



Measurement: LU-105309-1

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_{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

	Conn.	U	f	n	P _e	I	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	Y	400	50	1080	480	0.89	2705	0	1590	0.00
2	Y	400	50	1155	373	0.73	2300	100	1355	0.40
3	Y	400	50	1235	302	0.64	1870	180	1100	0.72
4	Y	400	50	1310	234	0.58	1365	240	805	0.96

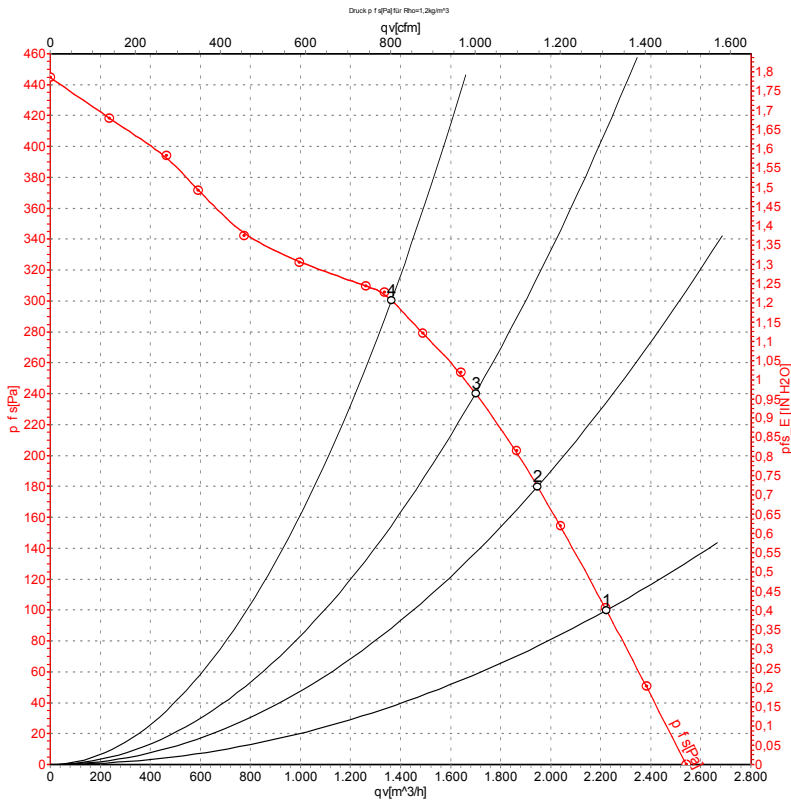
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz



Measurement: LU-16389-1

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_{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}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	400	60	1200	500	0.87	2225	100	1310	0.40
2	400	60	1280	439	0.78	1945	180	1145	0.72
3	400	60	1355	394	0.71	1700	240	1000	0.96
4	400	60	1445	332	0.63	1365	300	800	1.20

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

