

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

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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	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 according to ErP directive

Installation category	B	Overall efficiency η_e	%	Actual 40	Request 2013 31.6	Request 2015 38.6
Efficiency category	Total	Efficiency grade N		50.6	42	49
Variable speed drive	No	Power input P_e	kW	0.21		
Specific ratio*	1.00	Air flow q_v	m ³ /h	1205		
		Pressure increase p_f	Pa	256		
		Speed n	min ⁻¹	1330		

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

Data definition with optimum efficiency. LU-105309
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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Technical features

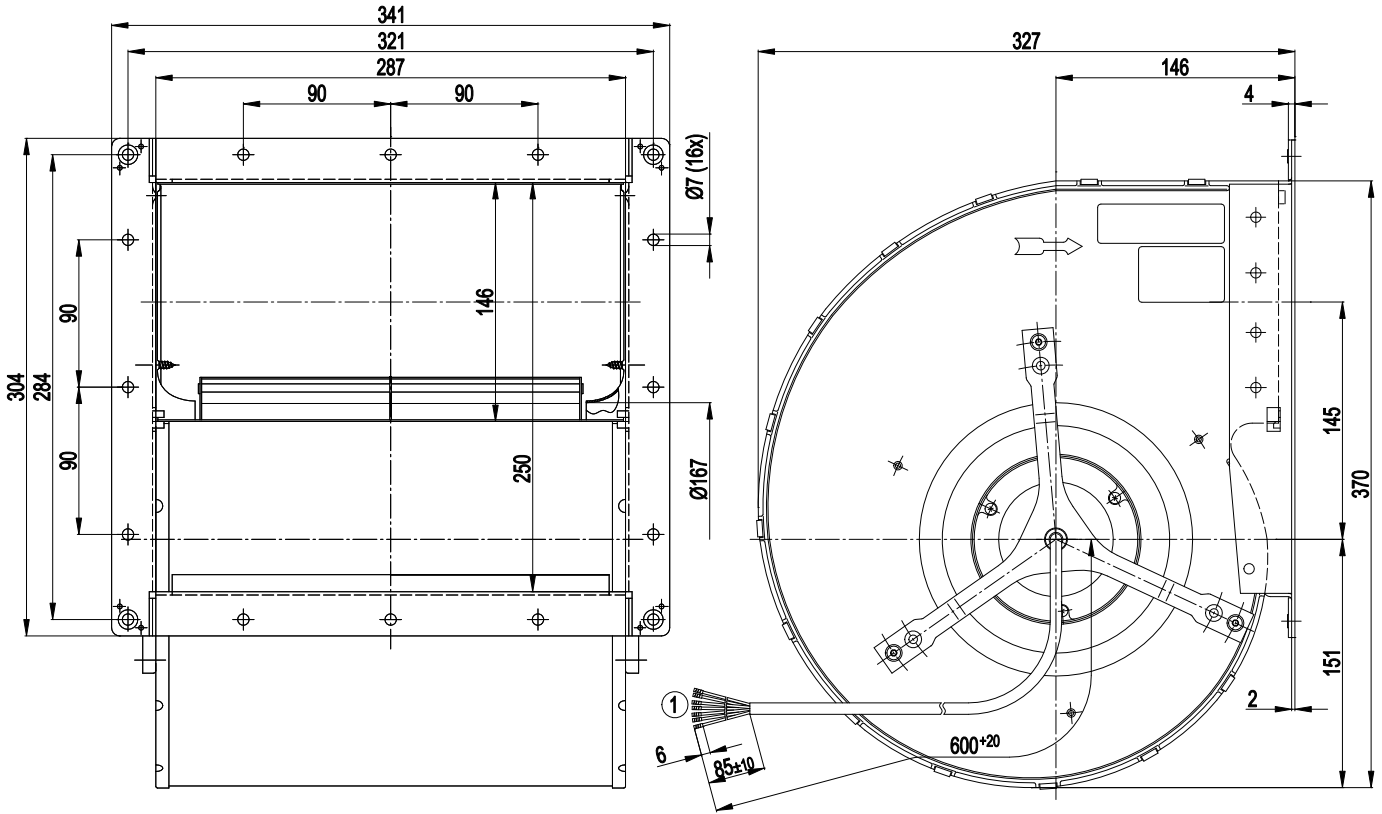
Mass	11 kg
Size	200 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-galvanised
Housing material	Sheet steel, hot-galvanised
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge 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	CCC



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Product drawing



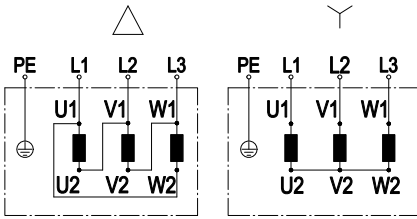
1 Connection line ETFE AWG20, 7 x brass lead tips crimped



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Connection screen



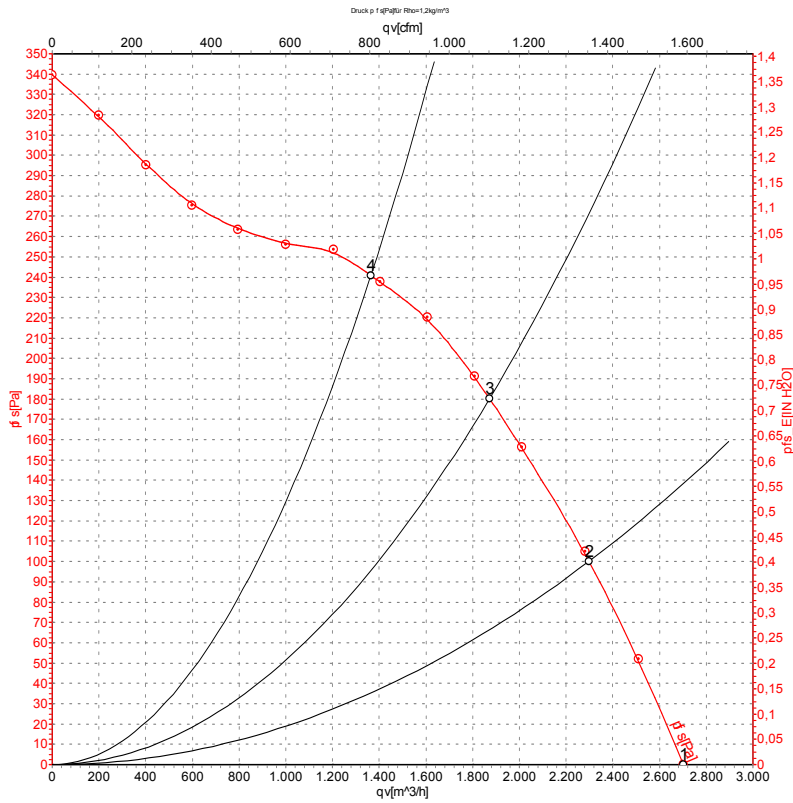
Change direction of rotation by reversing two phases

	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

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	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	Y. aus	400	50	1080	480	0.89	2705	0
2	Y. aus	400	50	1155	373	0.73	2300	100
3	Y. aus	400	50	1235	302	0.64	1870	180
4	Y. aus	400	50	1310	234	0.58	1365	240

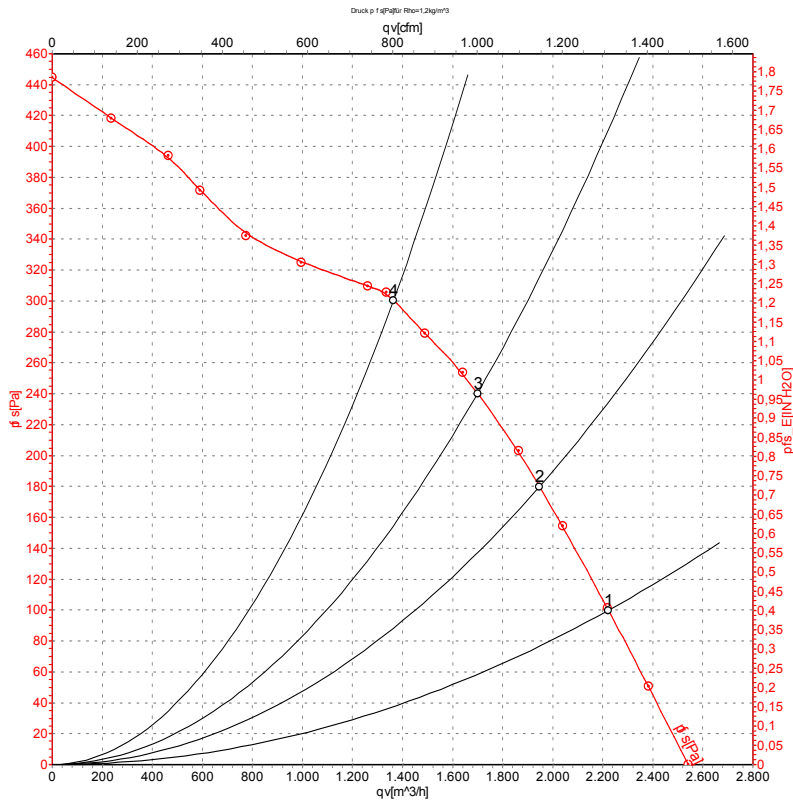
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz



Measurement: LU-16389

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	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	400	60	1200	500	0.87	2225	100
2	400	60	1280	439	0.78	1945	180
3	400	60	1355	394	0.71	1700	240
4	400	60	1445	332	0.63	1365	300

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase

