D4D180-CB01-02

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D4D180-CB01-02**
Motor	**M4D068-GA**

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}	1050	1030	1050	1030
Power input	W	290	360	290	360
Current draw	A	0.92	1.04	0.53	0.6
Min. back pressure	Pa	0	0	0	0
Max. ambient temperature	°C	55	30	55	30

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
Efficiency category	Total
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_f / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_e		37.1	30.1	37.1
Efficiency grade N		49	42	49
Power input P_e	kW	0.13		
Air flow q_v	m^3/h	900		
Pressure increase p_f	Pa	198		
Speed n	min^{-1}	1330		

Data established at point of optimum efficiency

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Technical features

Mass	9.5 kg
Size	180 mm
Surface of rotor	Uncoated
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
Approval	CCC

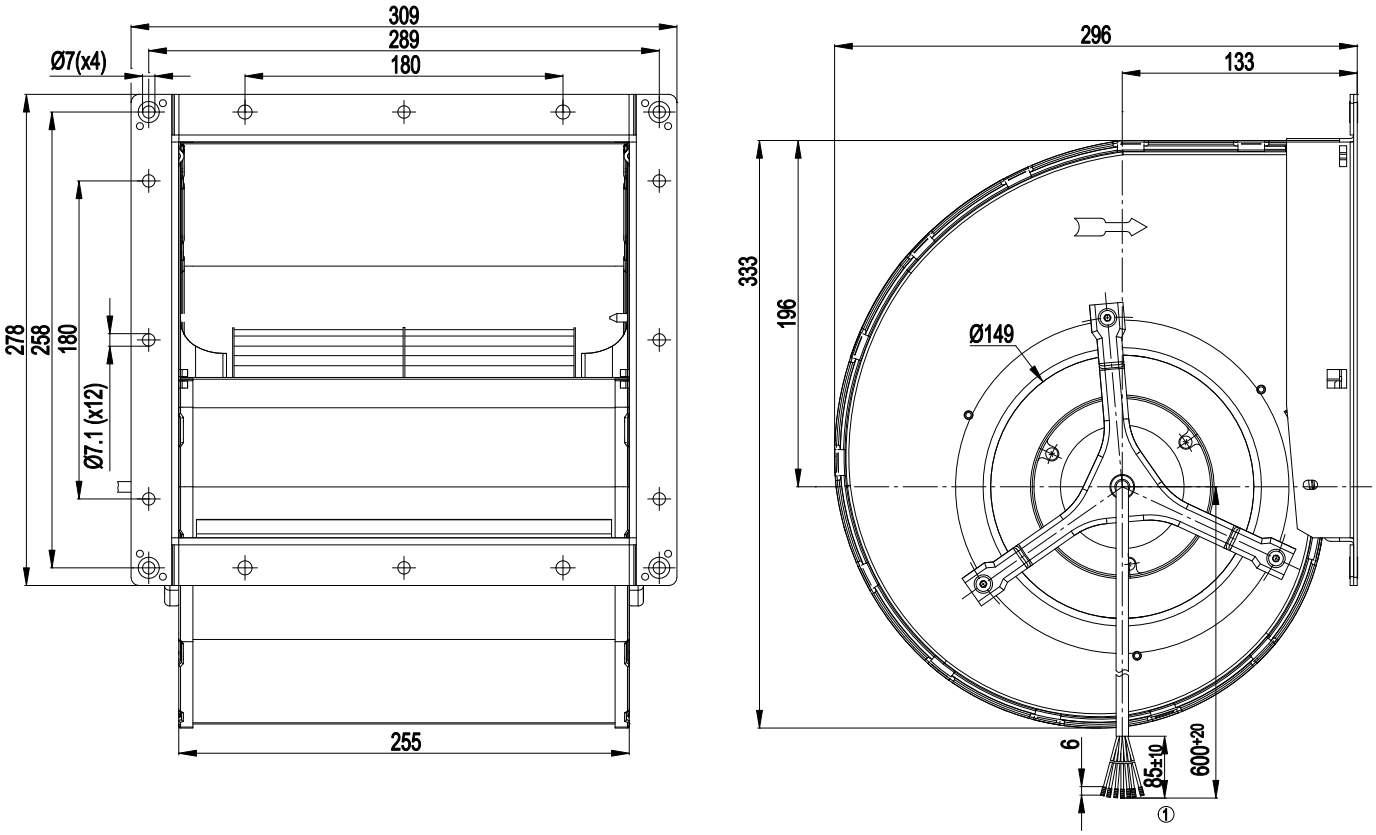
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Product drawing



1	Connection line halogen- and silicone-free AWG20; 7x brass lead tips crimped

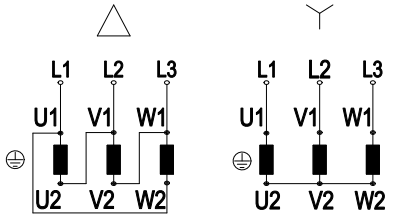
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Connection screen



Note: Direction of rotation changes when two phases are reversed

Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow		

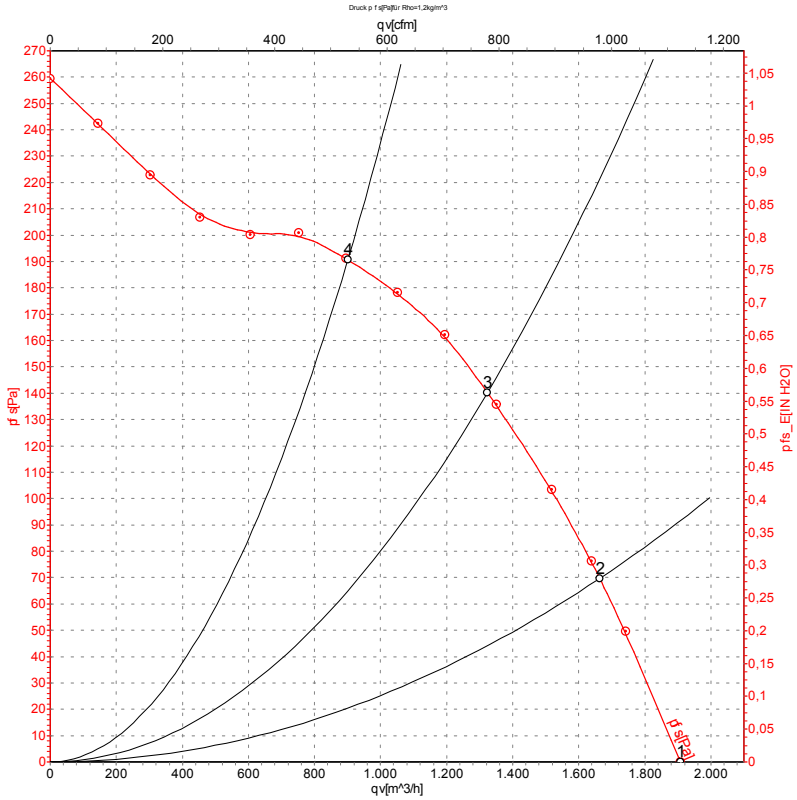
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Charts: Air flow 50 Hz



Measurement: LU-105049

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: 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

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Y	400	50	1050	290	0.53	1910	0
2	Y	400	50	1150	238	0.47	1665	70
3	Y	400	50	1240	190	0.42	1325	140
4	Y	400	50	1330	138	0.37	900	190

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

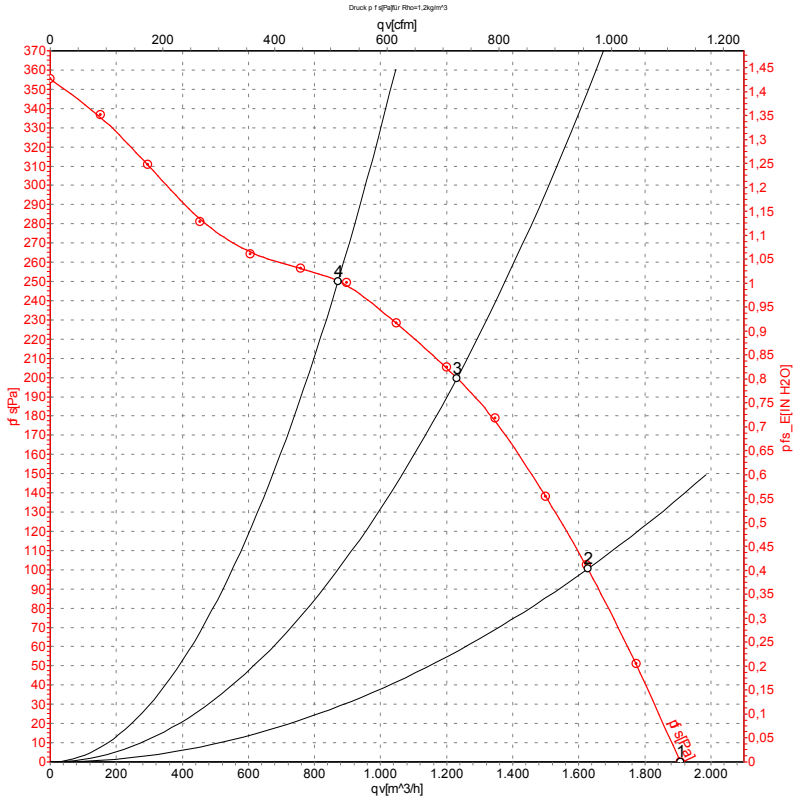
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Charts: Air flow 60 Hz



Measurement: LU-105050

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: 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

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Y	400	60	1030	360	0.60	1910	0
2	Y	400	60	1230	280	0.50	1625	100
3	Y	400	60	1390	219	0.41	1230	200
4	Y	400	60	1515	166	0.34	870	250

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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