

D4E180-BA04-18

AC centrifugal fan

forward curved, dual inlet
with housing (flange)



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Nominal data

Type	D4E180-BA04-18			
Motor	M4E068-LA			
Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		CE	CE	UL
Speed	min ⁻¹	1280	1320	1320
Power input	W	310	440	480
Current draw	A	2.75	3.85	4.05
Motor capacitor	µF	30	30	30
Capacitor voltage	VDB	220	220	220
Min. back pressure	Pa	0	0	0
Max. ambient temperature	°C	65	35	35
Starting current	A	6.0	5.6	5.6

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



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Technical features

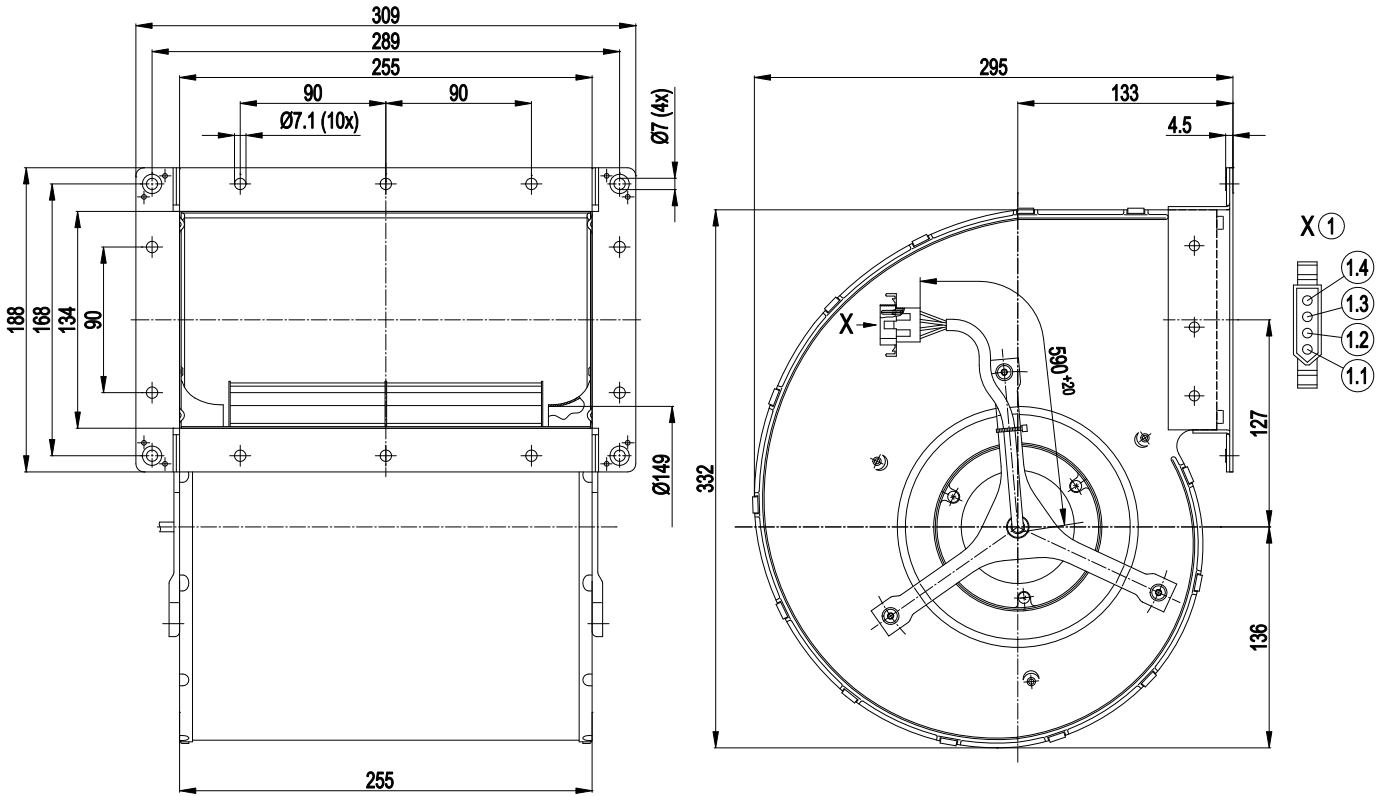
Mass	10 kg
Size	180 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-galvanised
Housing material	Sheet steel, hot-galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor 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
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 Nr.77



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Product drawing



1	Connection line PVC AWG20 with Connector housing Molex 03-09-2041
1.1	U1 (blue)
1.2	U2 (black)
1.3	Z (brown)
1.4	PE (green / yellow)

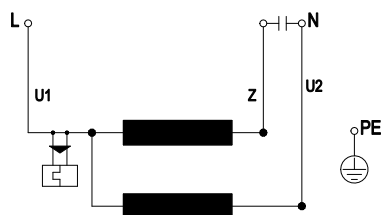


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Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

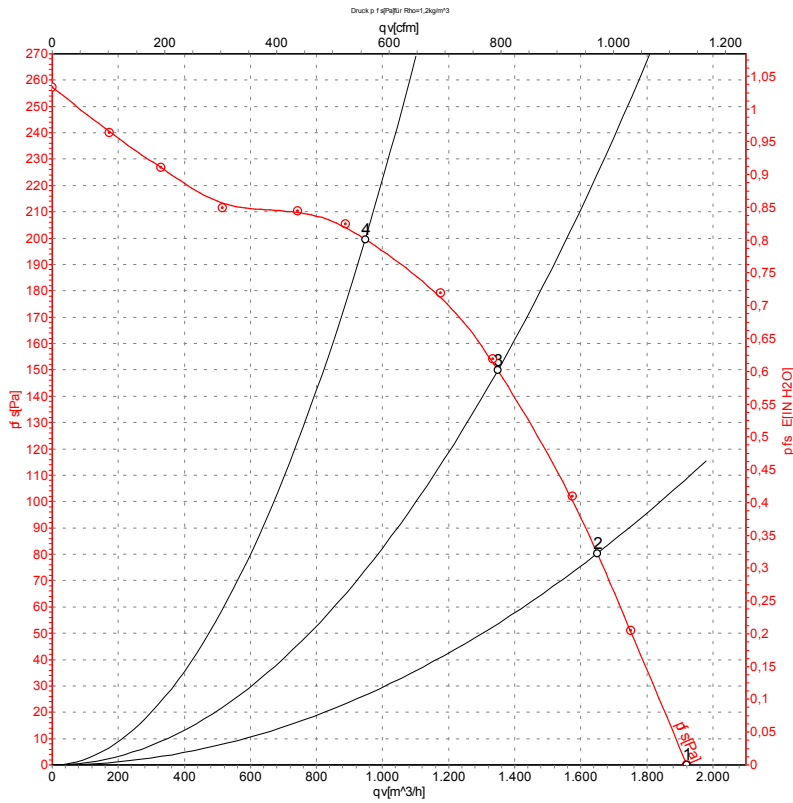


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Charts: Air flow 50 Hz



Measurement: LU-47823

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	115	50	1280	310	2.75	1920	0
2	115	50	1340	265	2.36	1650	80
3	115	50	1380	222	2.00	1350	150
4	115	50	1420	176	1.65	950	200

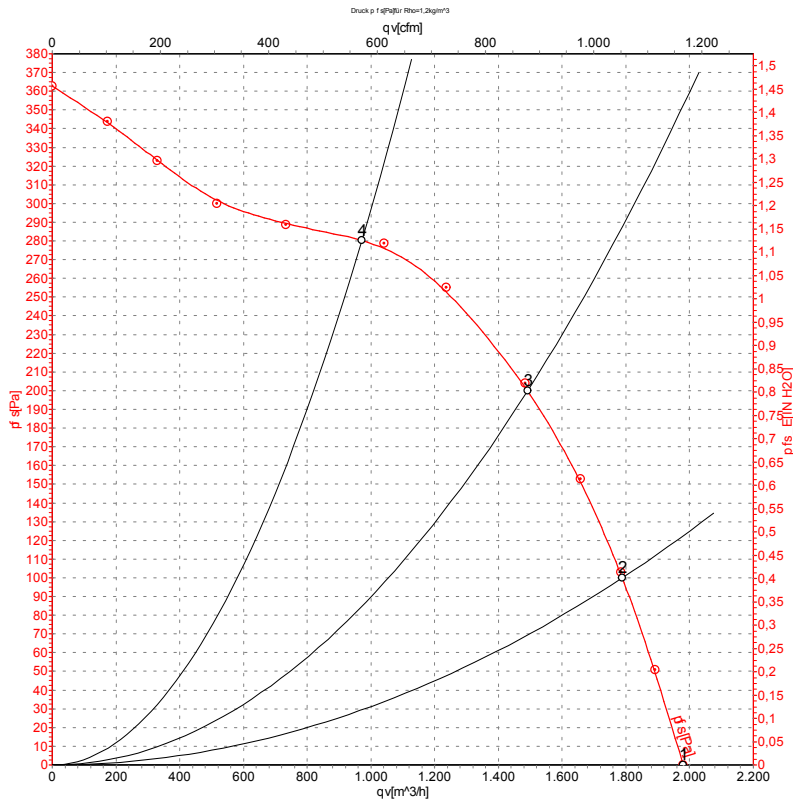
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz



Measurement: LU-47822

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	115	60	1320	440	3.85	1980	0
2	115	60	1465	376	3.27	1790	100
3	115	60	1570	311	2.71	1490	200
4	115	60	1665	229	2.03	970	280

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

