

D4E225-DH01-01

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)



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Nominal data

Type	D4E225-DH01-01		
Motor	M4E094-LA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min ⁻¹	1230	1370
Power input	W	1060	1120
Current draw	A	5.38	5.4
Motor capacitor	µF	10	10
Capacitor voltage	VDB	450	500
Min. back pressure	Pa	100	250
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	45

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

		Actual	Request 2013	Request 2015
Overall efficiency η_e	%	40.9	33.9	40.9
Efficiency grade N		49	42	49
Power input P_e	kW	0.52		
Air flow q_v	m ³ /h	2020		
Pressure increase p_f	Pa	371		
Speed n	min ⁻¹	1415		

Data definition with optimum efficiency. LU-41783
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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Technical features

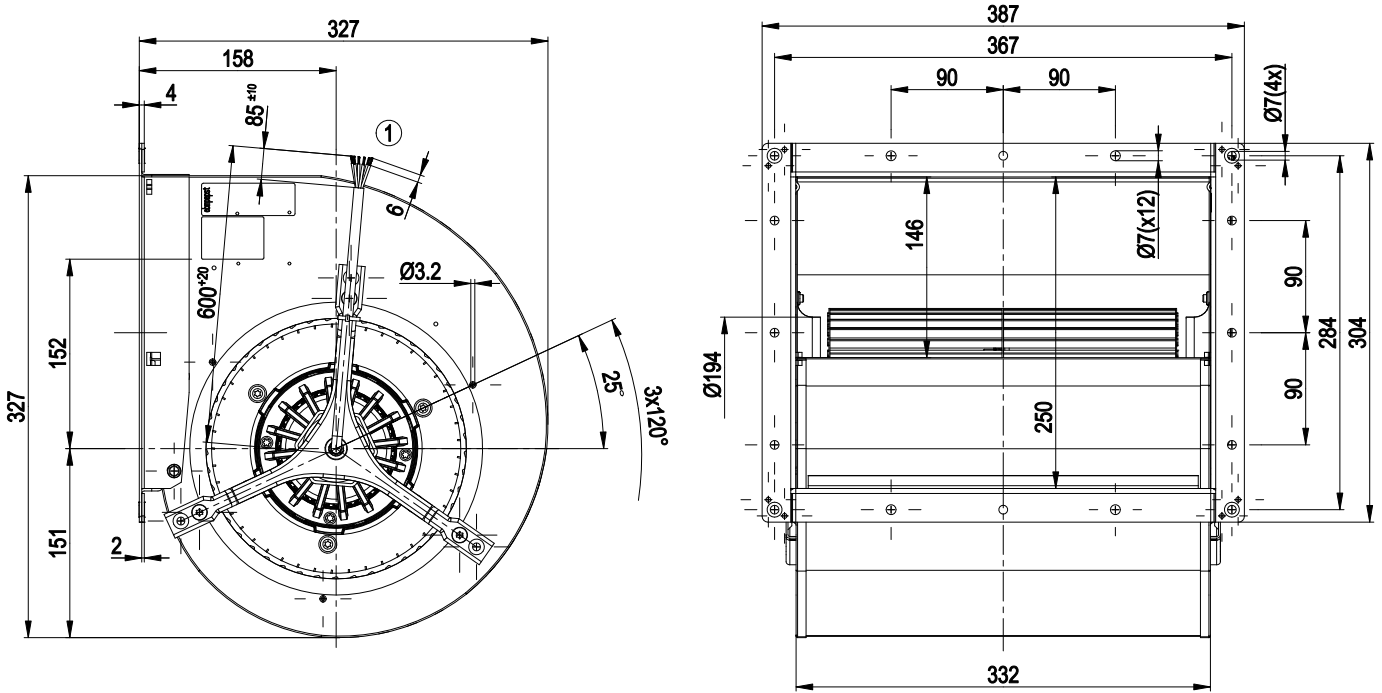
Mass	16.5 kg
Size	225 mm
Material of impeller	Sheet steel, hot-galvanised
Housing material	Sheet steel, hot-galvanised
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 10; Depending on installation and position
Insulation class	"F"
Humidity class	F0
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, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2004); CE
Approval	CCC; EAC



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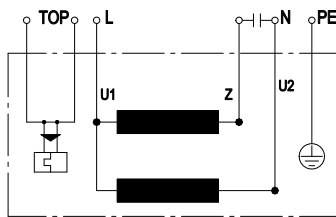
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Product drawing



1 Connection line PFA 0.5 mm², 6x brass lead tips crimped

Connection screen



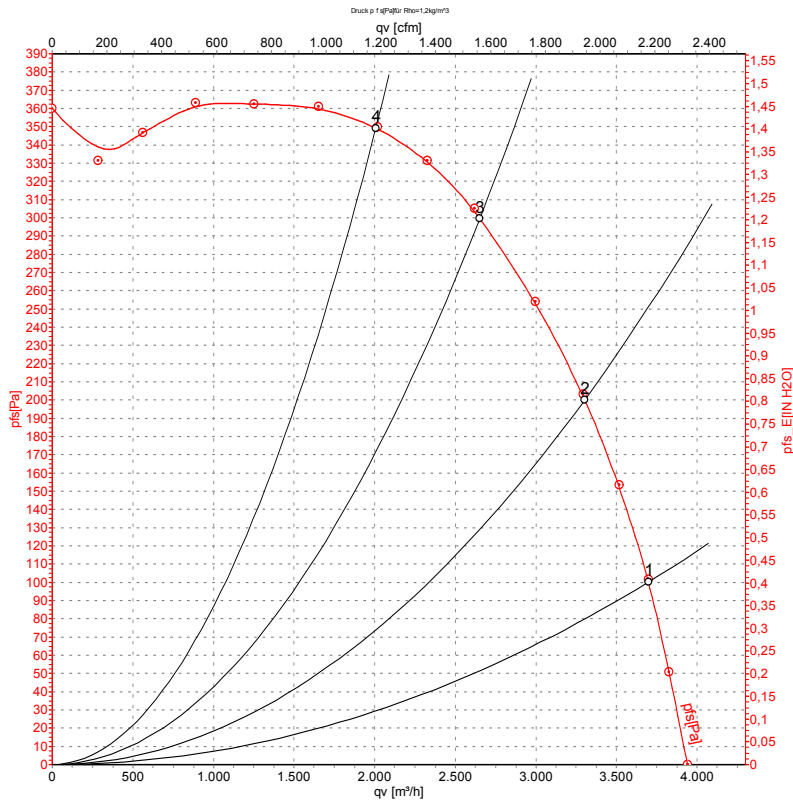
U1	blue	Z	brown	U2	black
PE	green/yellow	TOP	2 x white		



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Charts: Air flow 50 Hz



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	230	50	1230	1060	5.38	3700	100
2	230	50	1310	858	4.39	3300	200
3	230	50	1375	661	3.55	2650	300
4	230	50	1415	519	3.02	2005	350

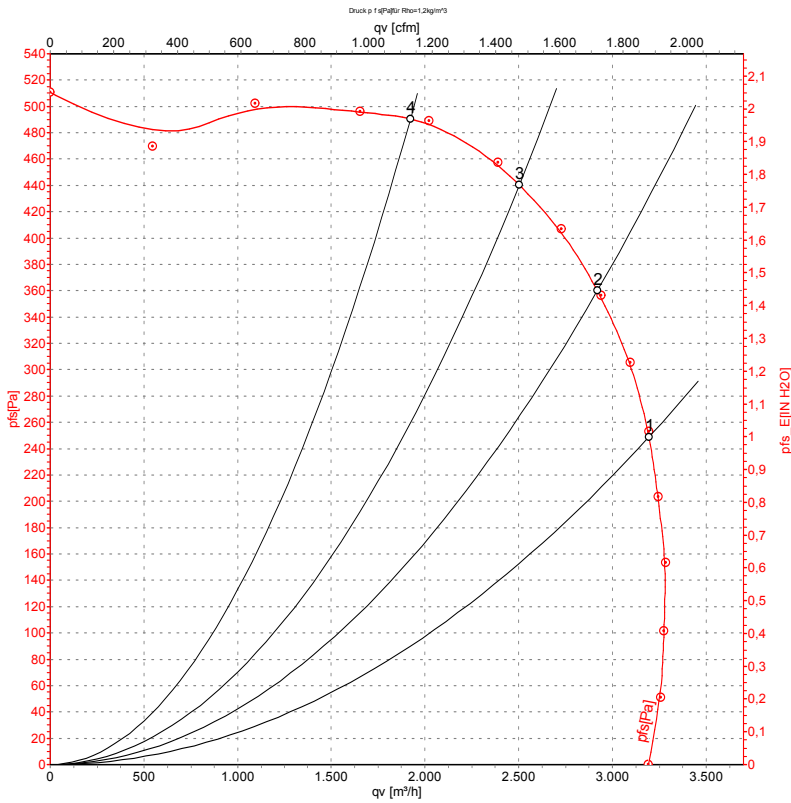
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase



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Charts: Air flow 60 Hz



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

	U	f	n	P _e	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	60	1370	1120	5.40	3195	250
2	230	60	1505	958	4.51	2920	360
3	230	60	1595	805	3.70	2505	440
4	230	60	1670	640	2.90	1920	490

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

