D4E225-CA02-42

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2013 EXCEEDS THE NORM

Nominal data

Type	**D4E225-CA02-42**
Motor	**M4E068-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}	1100	1300
Power input	W	455	465
Current draw	A	2.0	2.05
Motor capacitor	µF	10	10
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	200	300
Max. ambient temperature	°C	30	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		36.5	32.8	39.8
Efficiency grade N		45.7	42	49
Power input P_e	kW	0.35		
Air flow q_v	m^3/h	1465		
Pressure increase p_f	Pa	319		
Speed n	min^{-1}	1270		

Data established at point of optimum efficiency

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Technical features

Mass	11.4 kg
Size	225 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, sendzimir galvanised
Housing material	Sheet steel, hot-dip galvanised
Motor suspension	Motor mounted with anti-vibration 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, open rotor
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) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

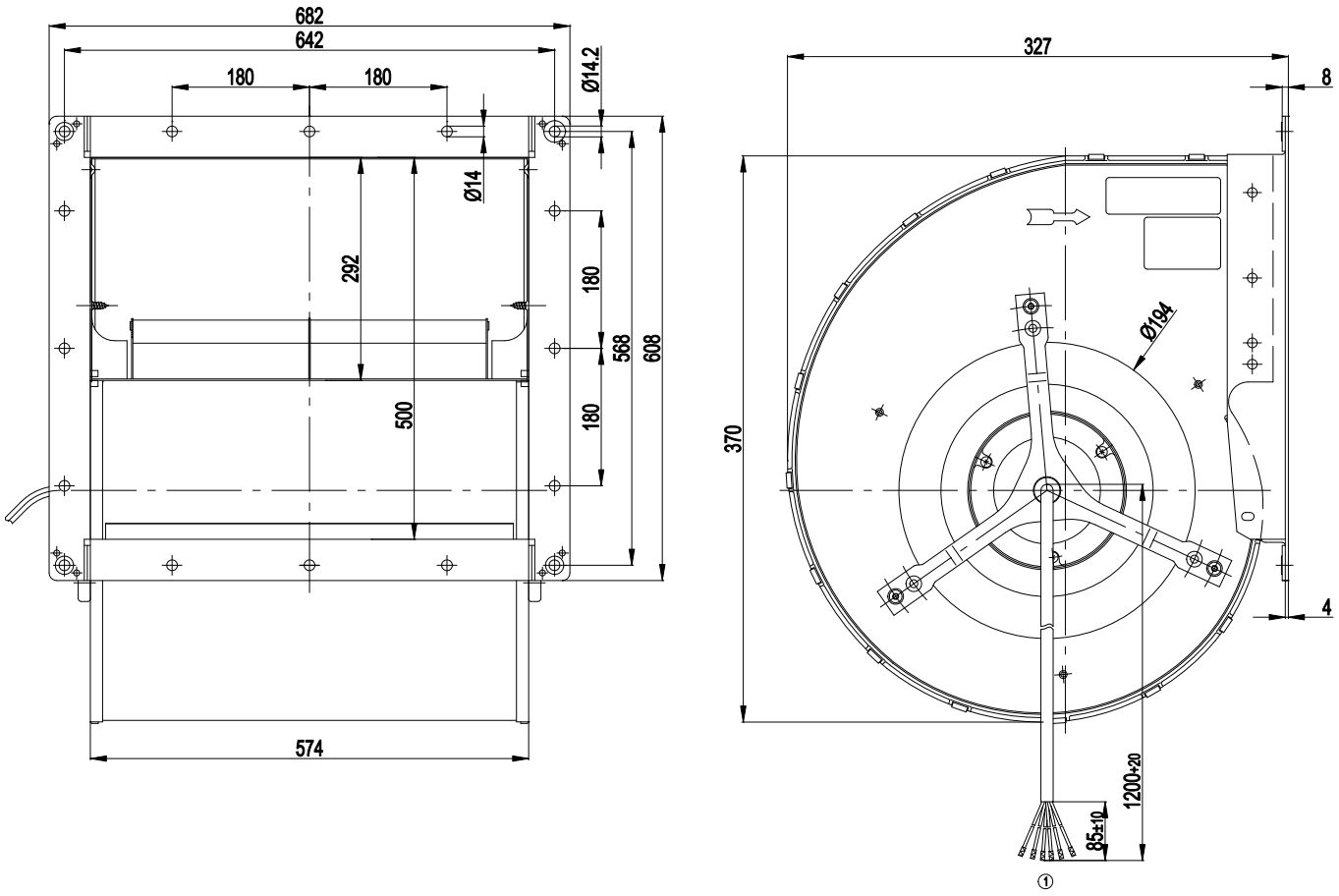
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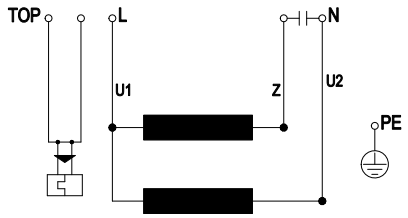
with housing (large flange)

Product drawing



1	Connection line, ETFE, AWG20, 6x brass lead tips crimped

Connection screen



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

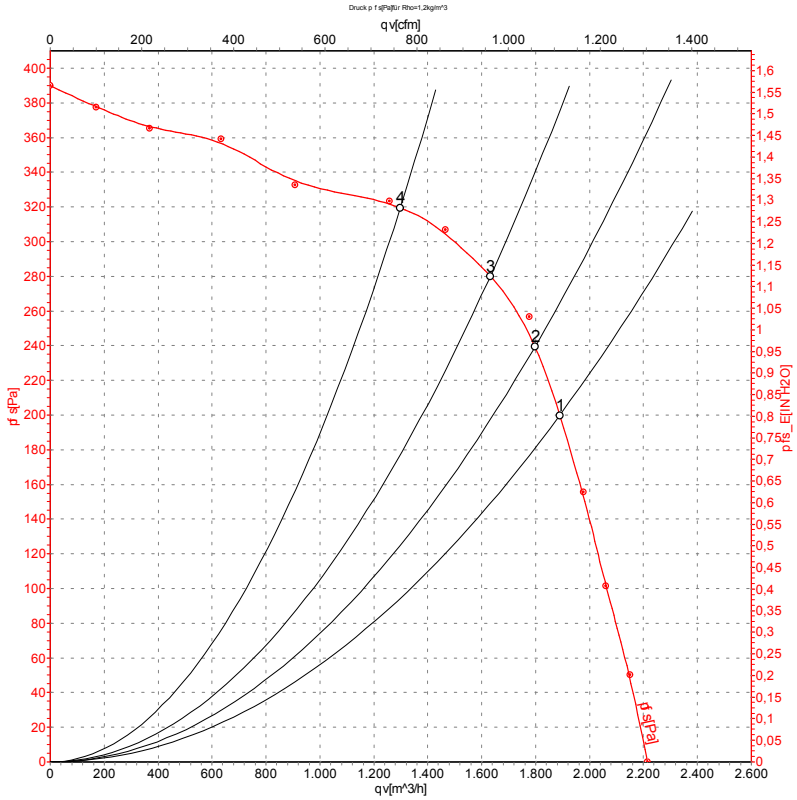
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Charts: Air flow 50 Hz



Measurement: LU-4884

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	50	1080	458	2.02	1890	200
2	230	50	1155	425	1.86	1795	246
3	230	50	1215	389	1.70	1630	280
4	230	50	1300	326	1.42	1300	320

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

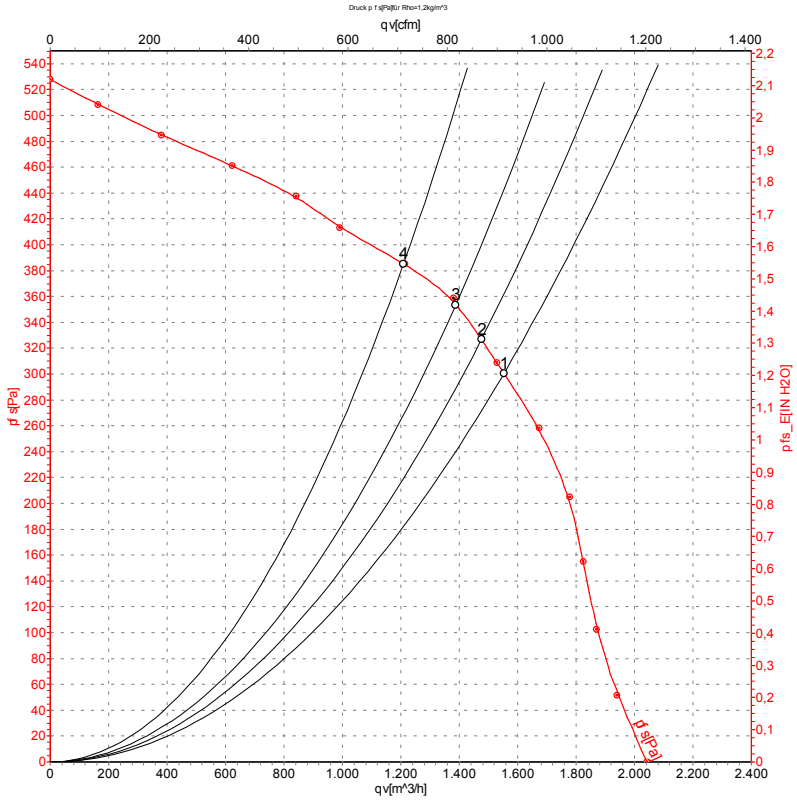
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Charts: Air flow 60 Hz



Measurement: LU-4885

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	1265	471	2.05	1555	300
2	230	60	1315	456	1.98	1475	327
3	230	60	1370	439	1.90	1390	357
4	230	60	1440	412	1.78	1210	386

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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