D4E225-CC01-57

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

D4E225-CC01-57 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**D4E225-CC01-57**		
Motor	**M4E074-LA**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1210	1300
Power consumption	W	540	625
Current draw	A	2.4	2.75
Capacitor	µF	16	16
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	250	300
Min. back pressure	in. wg	1	1.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	30	30

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_e	%	40.3	40.2
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		49.1	49
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.41
09 Air flow q_v	m^3/h	1710
09 Pressure increase p_f	Pa	351
10 Speed (rpm) n	min^{-1}	1335
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_f / 100 000 Pa

LU-200211

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Technical description

Weight	12.67 kg
Size	225 mm
Motor size	74
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Guard grille material	Steel, coated with white-aluminum plastic (RAL 9006)
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP22
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 100; CCC; EAC; UL 1004-1

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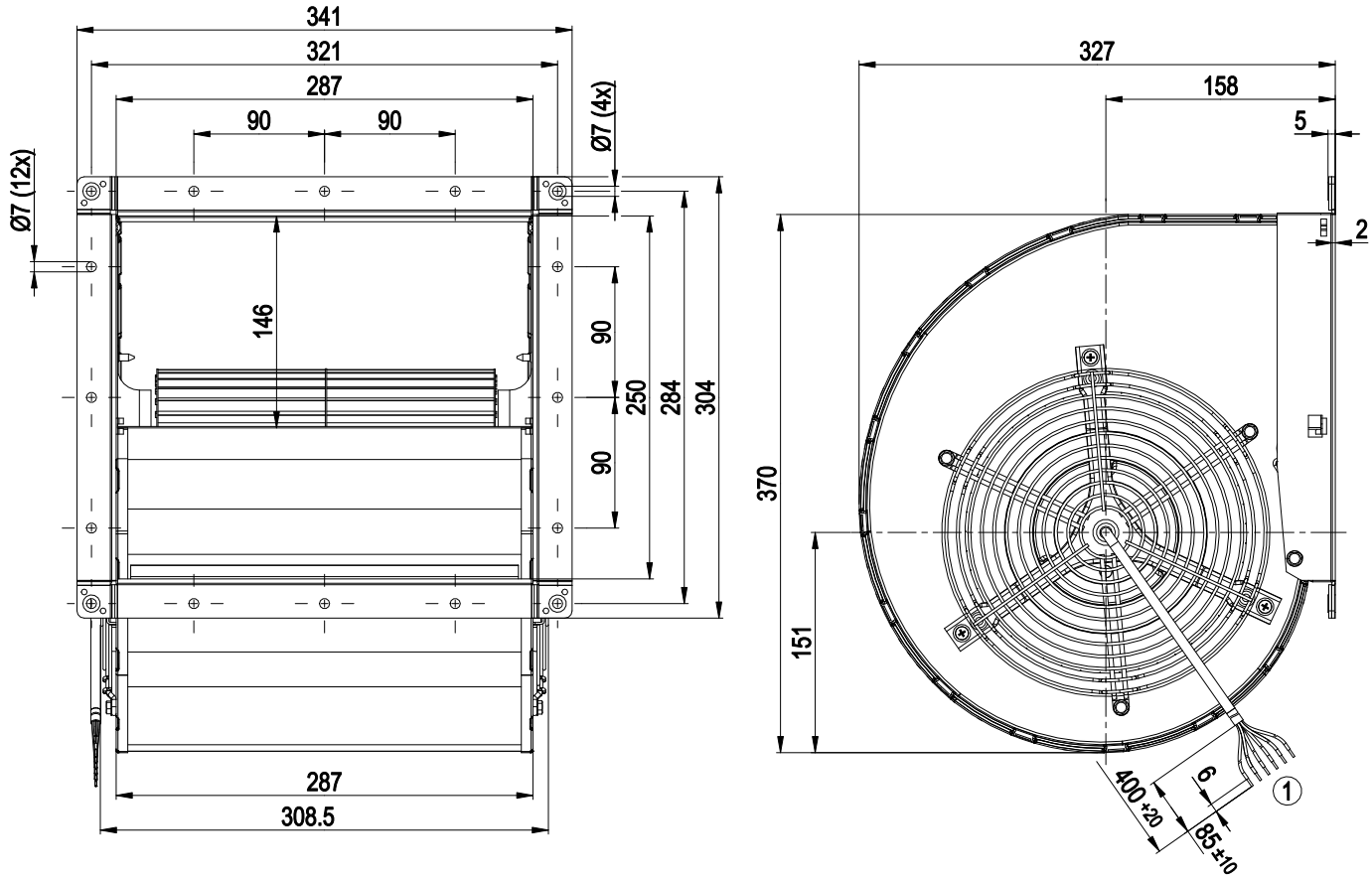
Product drawing



1	Cable PFA AWG20 (green/yellow AWG18)
	6x splice

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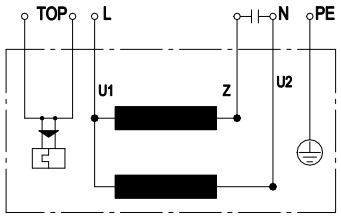
Connection diagram



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

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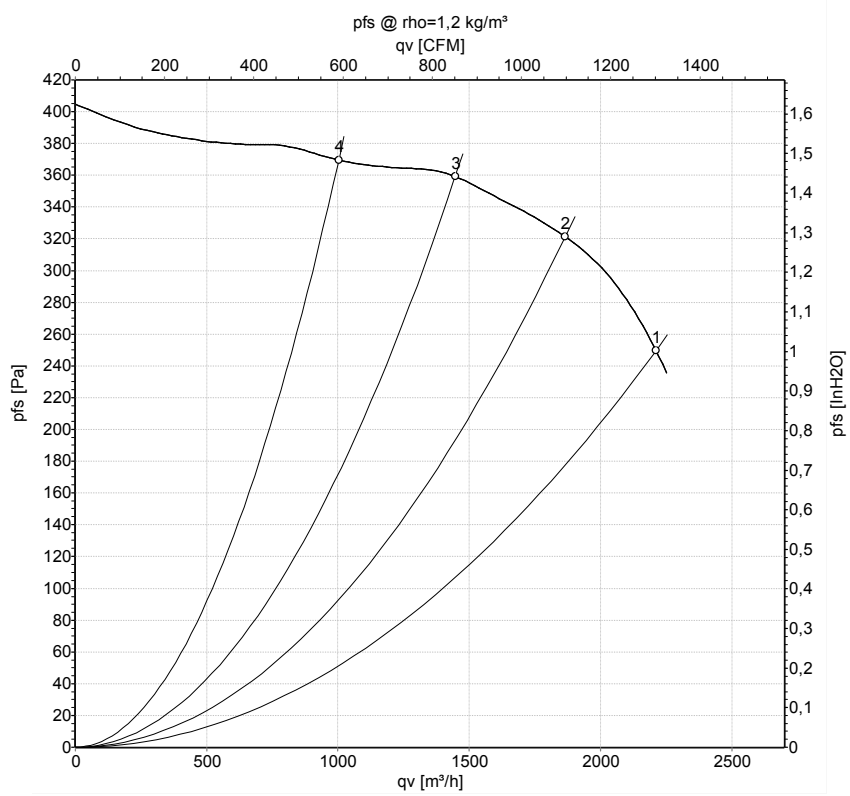
Curves: Air performance 50 Hz



Measurement: LU-135956-1

Air performance measured according to ISO 5801 installation category B. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	1210	540	2.40	2210	250	1300	1.00
2	230	50	1300	459	2.04	1865	320	1100	1.28
3	230	50	1365	378	1.71	1445	360	850	1.45
4	230	50	1405	320	1.48	1005	370	590	1.49

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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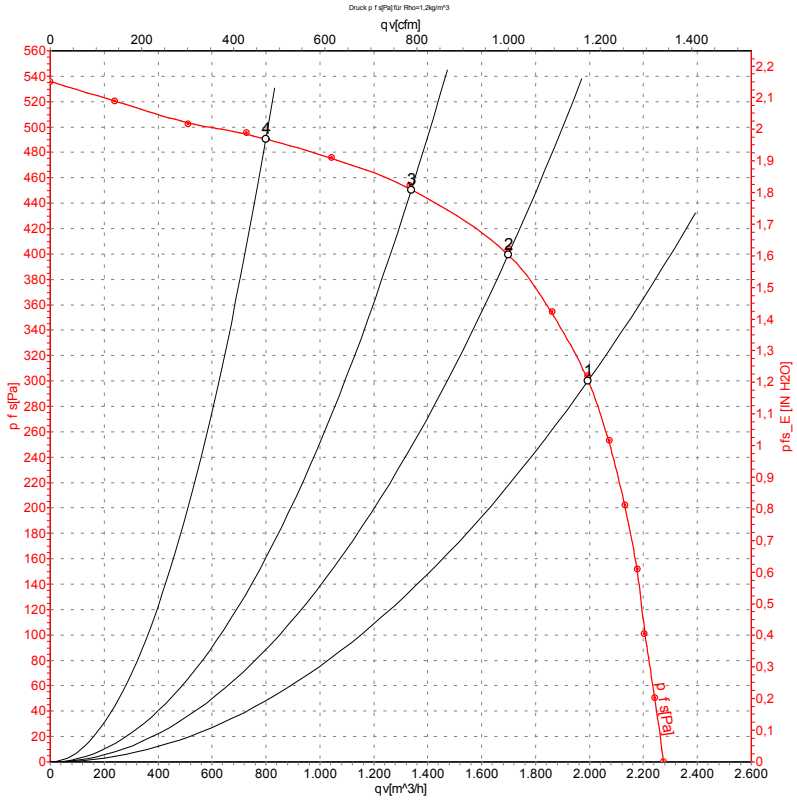
Curves: Air performance 60 Hz



Measurement: LU-35316-1

Air performance measured according to ISO 5801 installation category B. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	60	1300	625	2.75	1995	300	1175	1.20
2	230	60	1465	553	2.43	1700	400	1000	1.61
3	230	60	1565	474	2.13	1340	450	790	1.81
4	230	60	1645	390	1.83	800	490	470	1.97

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase