D4E225-FH01-07

AC centrifugal fan

forward curved, dual inlet

with housing (without flange)

D4E225-FH01-07 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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

Nominal data

Type	**D4E225-FH01-07**		
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 (rpm)	min^{-1}	1380	1620
Power input	W	650	780
Current draw	A	3.5	3.6
Motor capacitor	µF	10	10
Capacitor voltage	VDB	450	500
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	250	400
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	45
Starting current	A	9.7	8.7

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

		Actual	Request 2015
01 Overall efficiency η_{es}	%	35.6	35.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

09 Power input P_e	kW	0.47
09 Air flow q_v	m^3/h	1805
09 Pressure increase p_{fs}	Pa	327
10 Speed (rpm) n	min^{-1}	1430
11 Specific ratio*		1.00

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

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-141645

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Technical features

Mass	15.18 kg
Size	225 mm
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
Humidity (F)/environmental protection class (H)	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	On the side, in bearing shield
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, basic insulation
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Product conforming to standard	EN 60034-1 (2010); CE

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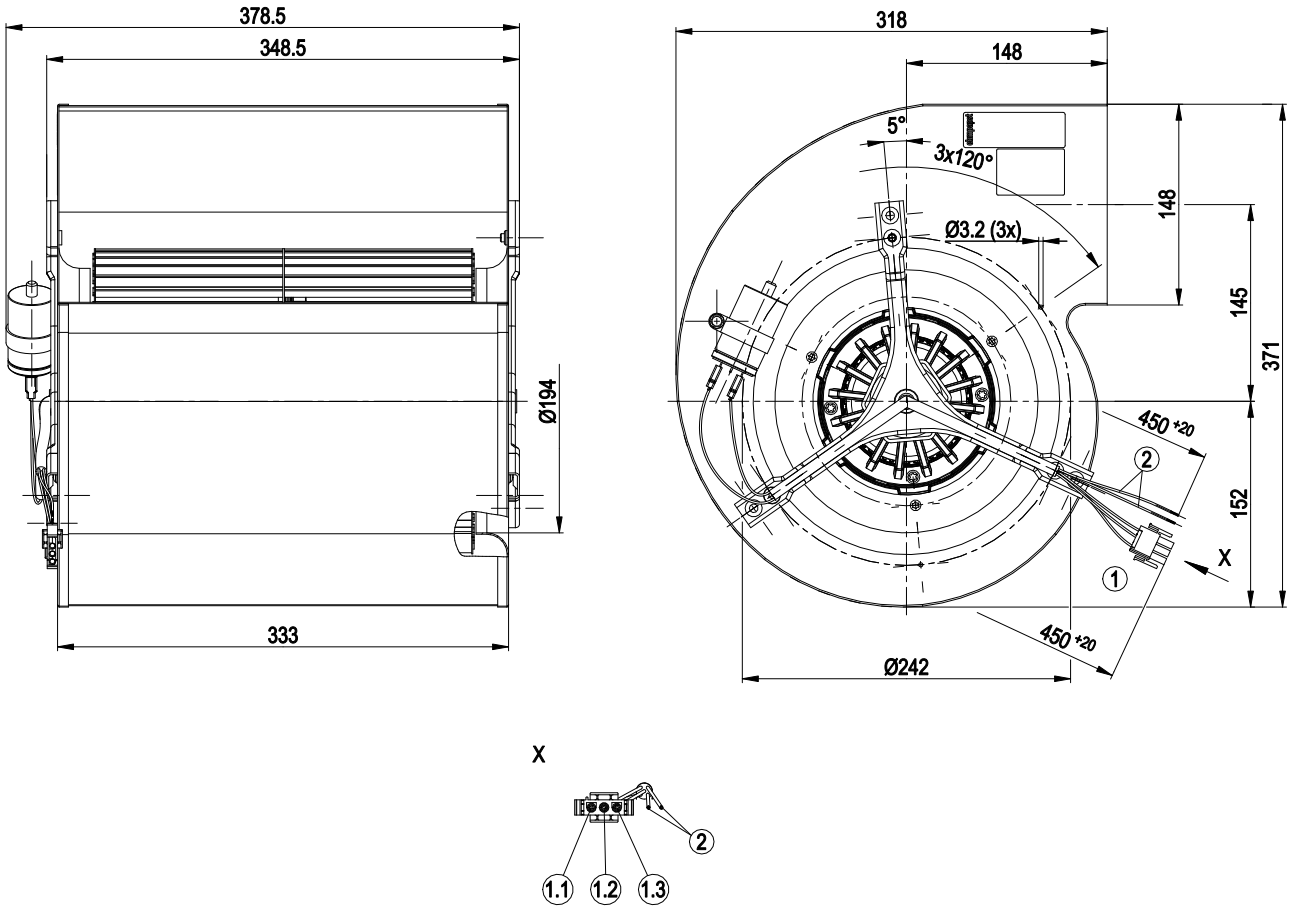
Product drawing



1	Connection line PFA AWG18, connector housing AMP Universal Mate-N-Lok 3-way, 3x plug pin 926885, 2x lead tips 3295 crimped
1.1	PE (green/yellow)
1.2	L (blue)
1.3	N (black)
2	TOP (grey)

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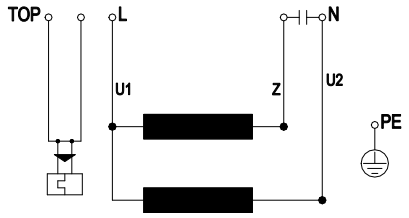
Connection screen



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

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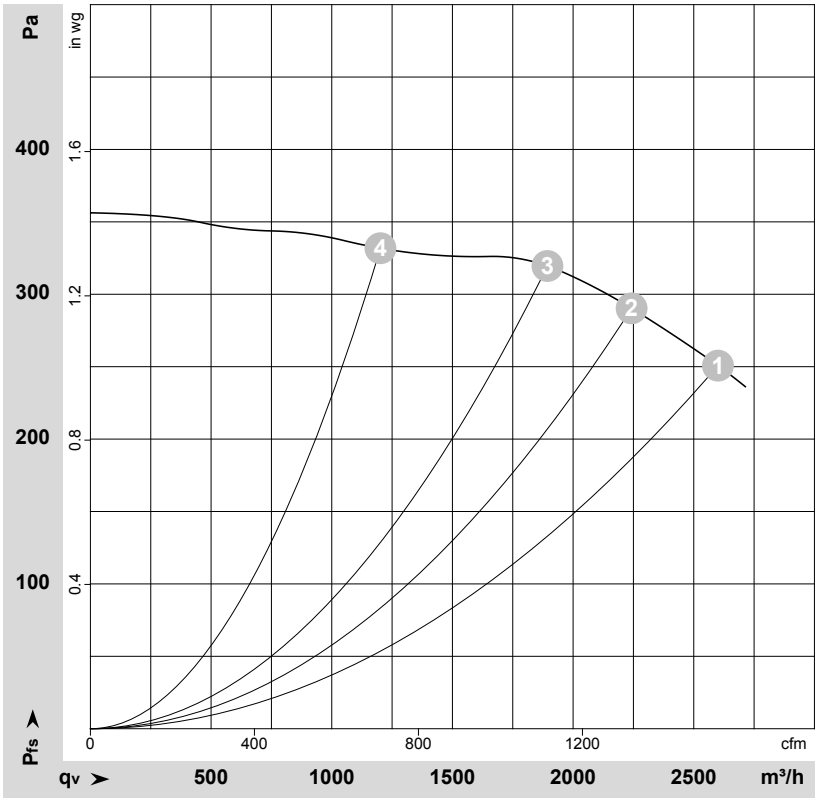
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-141645-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1380	650	3.50	2600	250	1530	1.00
2	230	50	1410	563	3.20	2245	290	1320	1.16
3	230	50	1425	495	2.96	1895	320	1115	1.28
4	230	50	1450	399	2.69	1200	330	705	1.32

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

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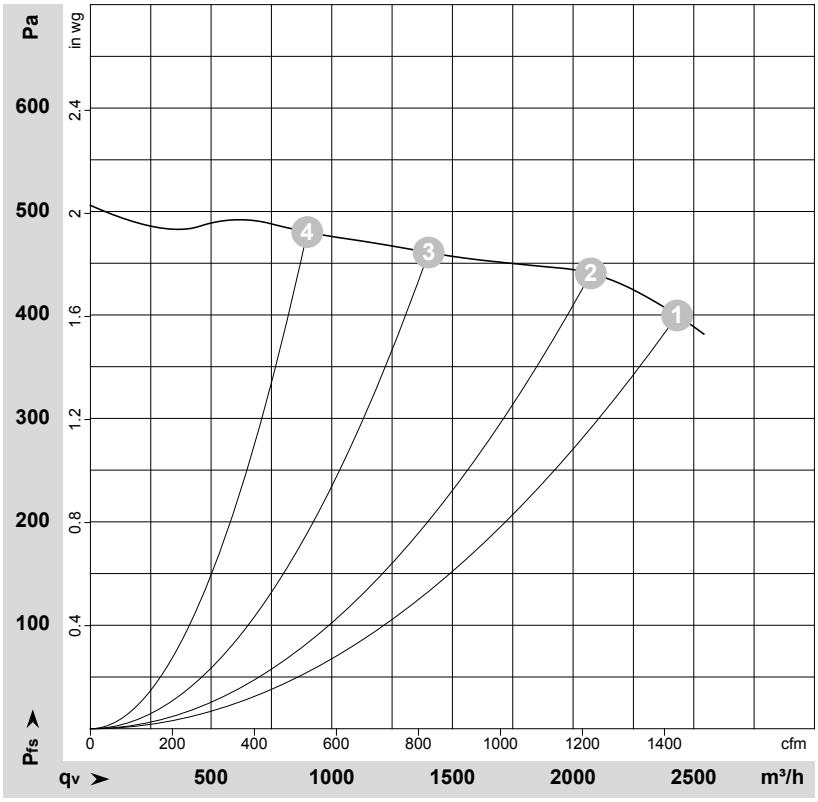
Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-141647-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	60	1620	780	3.60	2430	400	1430	1.61
2	230	60	1660	684	3.12	2075	440	1220	1.77
3	230	60	1705	547	2.49	1400	460	825	1.85
4	230	60	1730	461	2.11	900	480	530	1.93

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