D4E250-BA01-01

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D4E250-BA01-01 ebmpapst Datasheet
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Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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

Nominal data

Type	**D4E250-BA01-01**		
Motor	**M4E094-LA**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	ml
Valid for approval / standard		CE	CE
Speed (rpm)	min^{-1}	1210	1460
Power input	W	1240	1230
Current draw	A	6	5.54
Motor capacitor	µF	14	14
Capacitor voltage	VDB	500	500
Min. back pressure	Pa	0	300
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	45
Starting current	A	15	12.5

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}	%	36.3	36.3
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	0.61
09 Air flow q_v	m^3/h	2000
09 Pressure increase p_{fs}	Pa	385
10 Speed (rpm) n	min^{-1}	1415
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-66744

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Technical features

Mass	17.4 kg
Size	250 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
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	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, 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	S0
Product conforming to standard	EN 60034-1 (2010); CE
Approval	EAC

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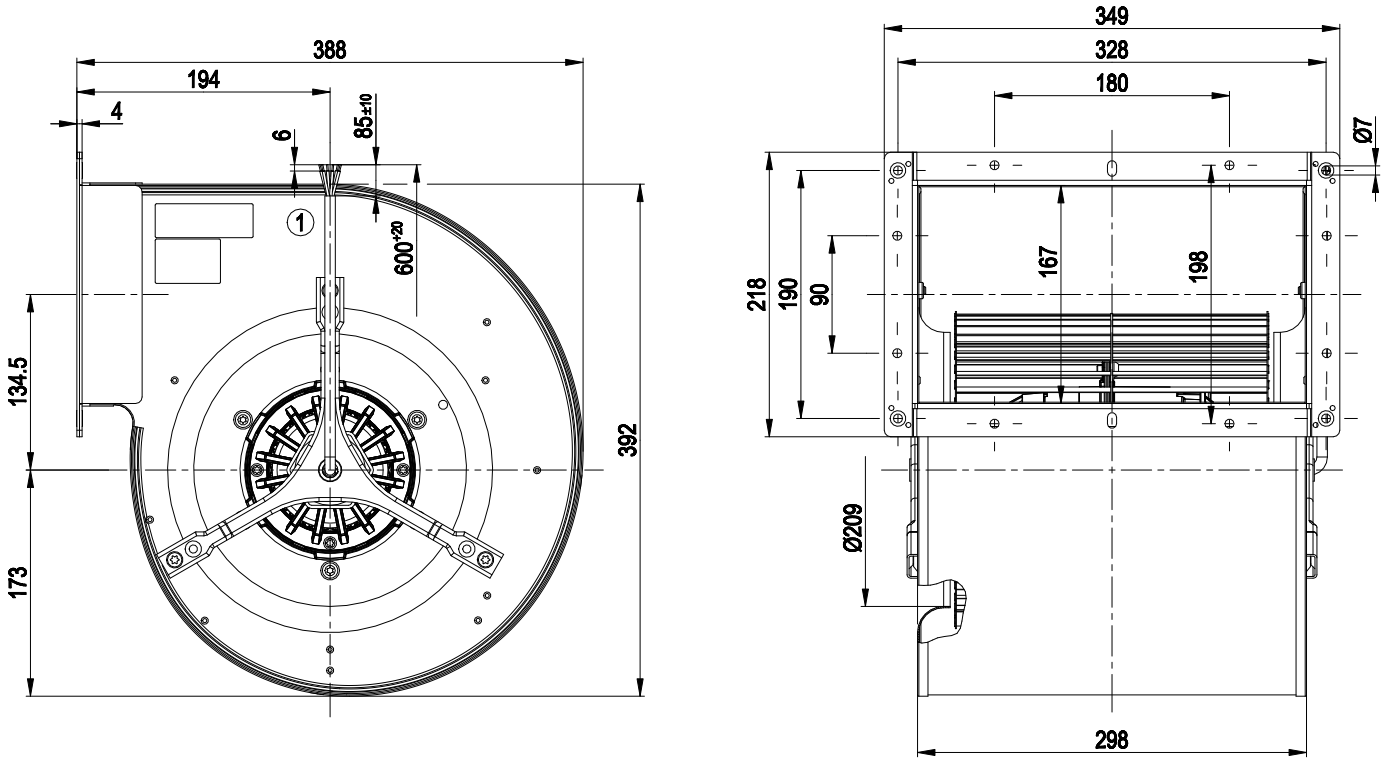
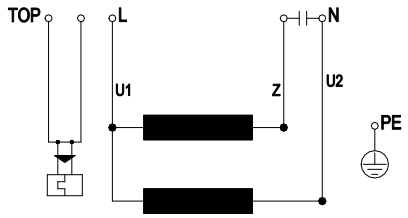
Product drawing



1	Connection line ETFE AWG18, 6 x brass lead tips crimped

Connection screen



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

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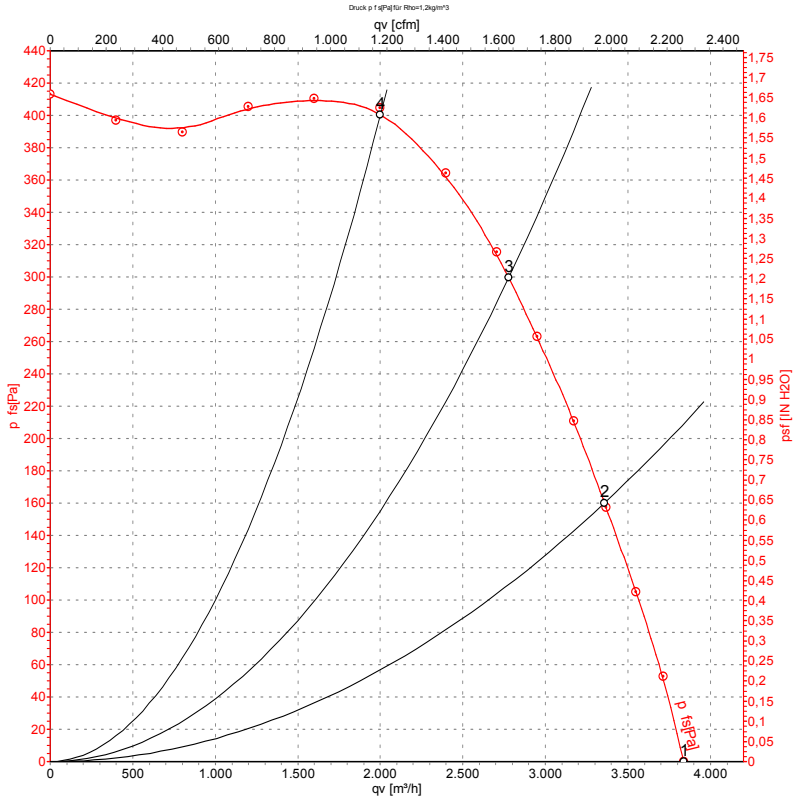
Charts: Air flow 50 Hz



Measurement: LU-66744-1

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	1210	1240	6.00	3840	0	2260	0.00
2	230	50	1310	978	4.76	3360	160	1975	0.64
3	230	50	1365	803	3.96	2780	300	1635	1.20
4	230	50	1415	612	3.18	2000	400	1175	1.61

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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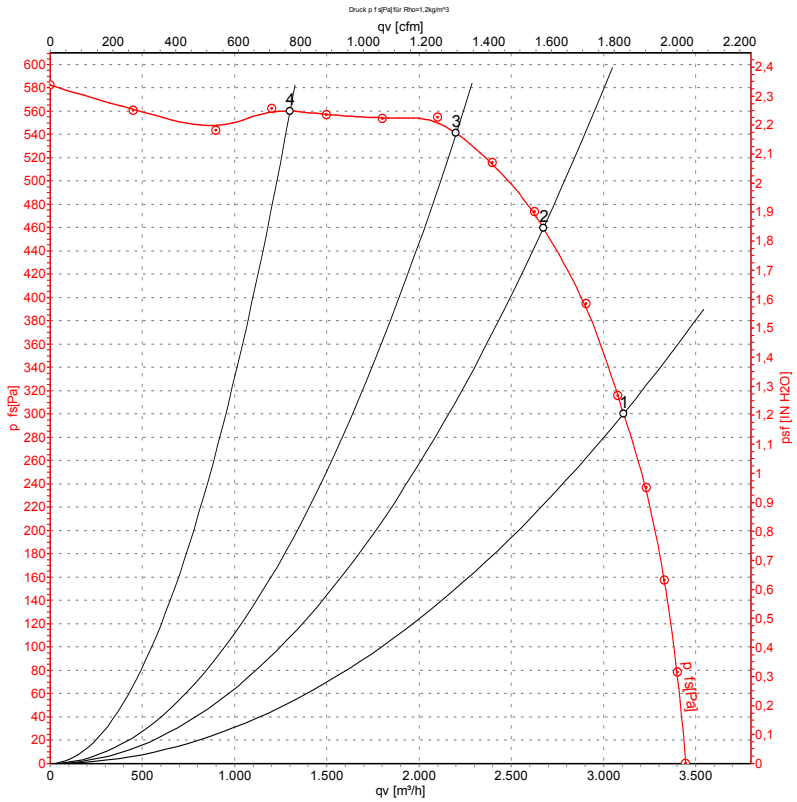
Charts: Air flow 60 Hz



Measurement: LU-66745-1

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	1460	1230	5.54	3110	300	1830	1.20
2	230	60	1565	1040	4.63	2675	460	1575	1.85
3	230	60	1630	902	3.96	2200	540	1295	2.17
4	230	60	1700	747	3.25	1300	560	765	2.25

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