D4E250-CA01-01

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)



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Nominal data

Type	**D4E250-CA01-01**		
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 (rpm)	min^{-1}	1200	1400
Power input	W	1250	1285
Current draw	A	6	5.9
Motor capacitor	µF	14	14
Capacitor voltage	VDB	500	500
Min. back pressure	Pa	100	350
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	40

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_e	%	43.5	41.6
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		50.9	49
05 Variable speed drive		No	

09 Power input P_e	kW	0.68
09 Air flow q_v	m^3/h	2440
09 Pressure increase p_f	Pa	444
10 Speed (rpm) n	min^{-1}	1395
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_f / 100 000 Pa

LU-120630

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Technical features

Mass	16.3 kg
Size	250 mm
Surface of rotor	Cast in aluminium
Material of impeller	Sendzimir galvanized sheet steel
Housing material	Sendzimir galvanized sheet steel
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
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	CE
Approval	CCC; EAC

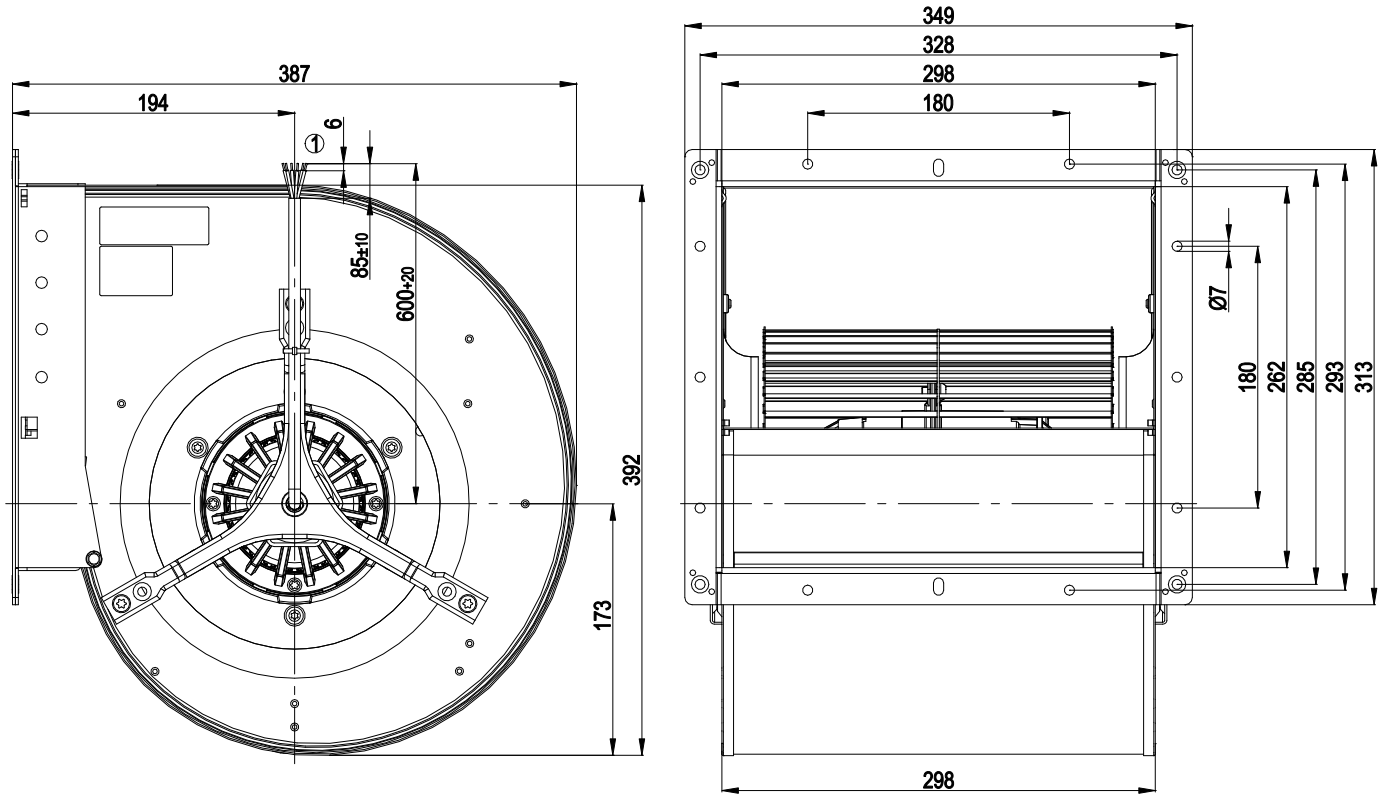
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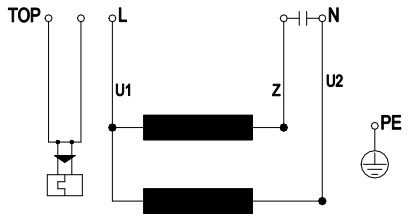
with housing (large flange)

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		

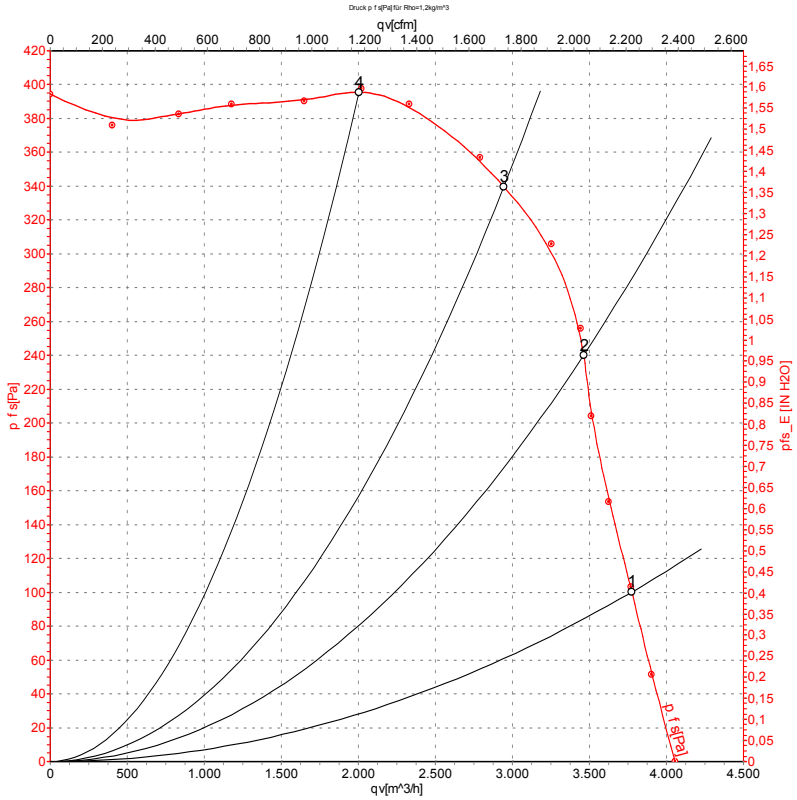
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Charts: Air flow 50 Hz



Measurement: LU-41792-1

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	1200	1250	6.00	3770	100	2220	0.40
2	230	50	1280	1073	5.18	3460	240	2040	0.96
3	230	50	1350	843	4.18	2945	340	1735	1.36
4	230	50	1420	598	3.26	2005	400	1180	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

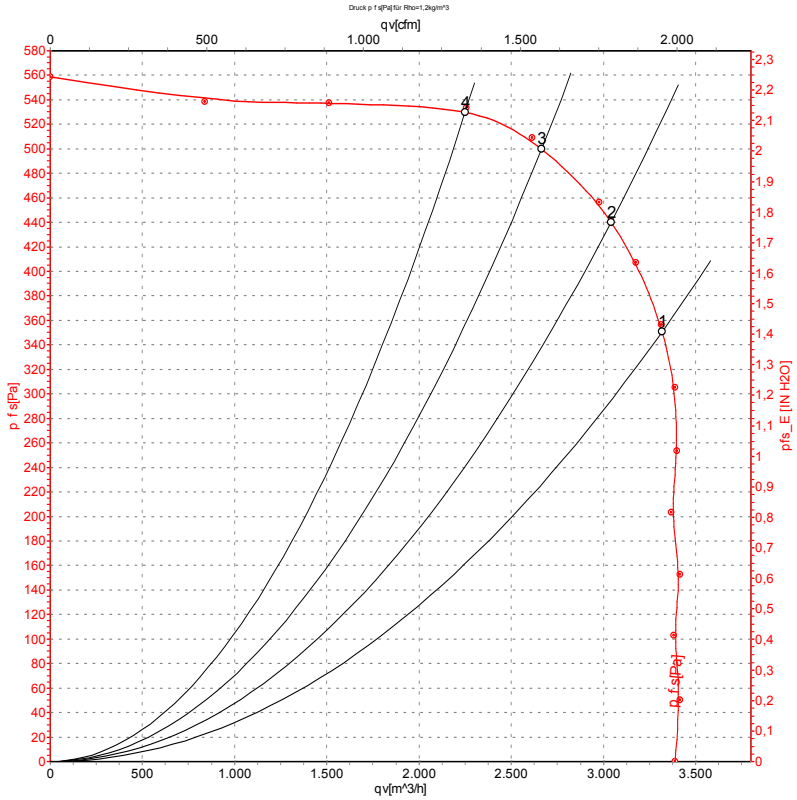
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Charts: Air flow 60 Hz



Measurement: LU-41793-1

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	1400	1285	5.90	3310	350	1950	1.41
2	230	60	1515	1137	5.07	3040	440	1790	1.77
3	230	60	1590	1002	4.40	2665	500	1570	2.01
4	230	60	1650	870	3.78	2250	530	1325	2.13

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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