D4E250-BA01-05

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)



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Nominal data

Type	**D4E250-BA01-05**
Motor	**M4E094-LA**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1460
Power consumption	W	1230
Current draw	A	5.54
Capacitor	µF	14
Capacitor voltage	VDB	500
Min. back pressure	Pa	300
Min. back pressure	inH2O	1.2
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	45
Starting current	A	12.5

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

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

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

LU-66744

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Technical description

Weight	16.1 kg
Fan size	250 mm
Rotor surface	Cast in aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F0
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
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1 (2010); CE
Approval	CSA C22.2 No. 100; UL 1004-1

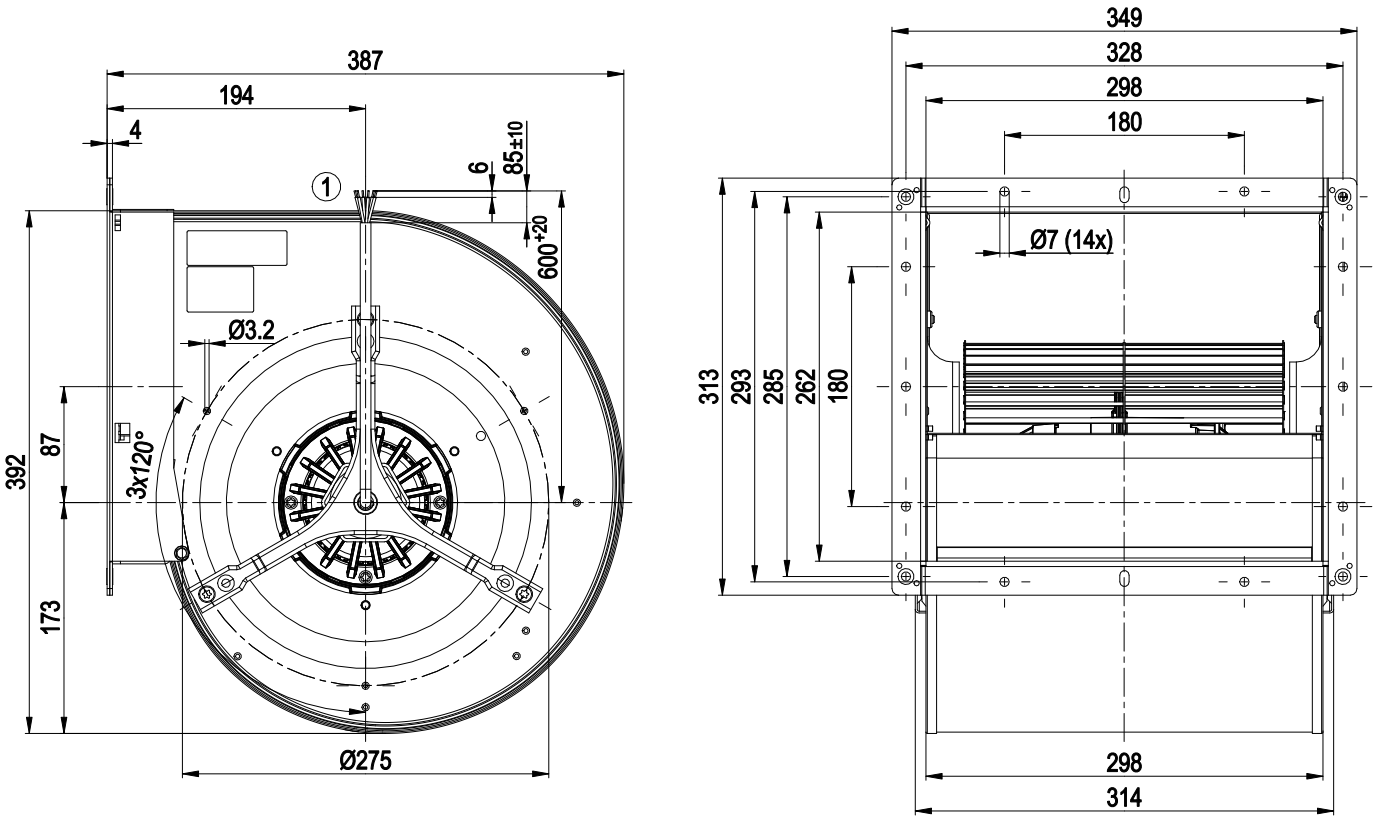
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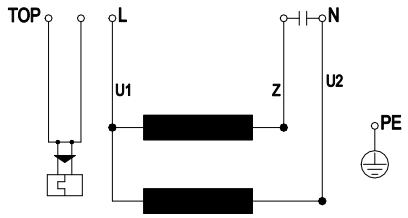
with housing (large flange)

Product drawing



1	Cable PFA AWG18, 6x crimped splices

Connection diagram



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

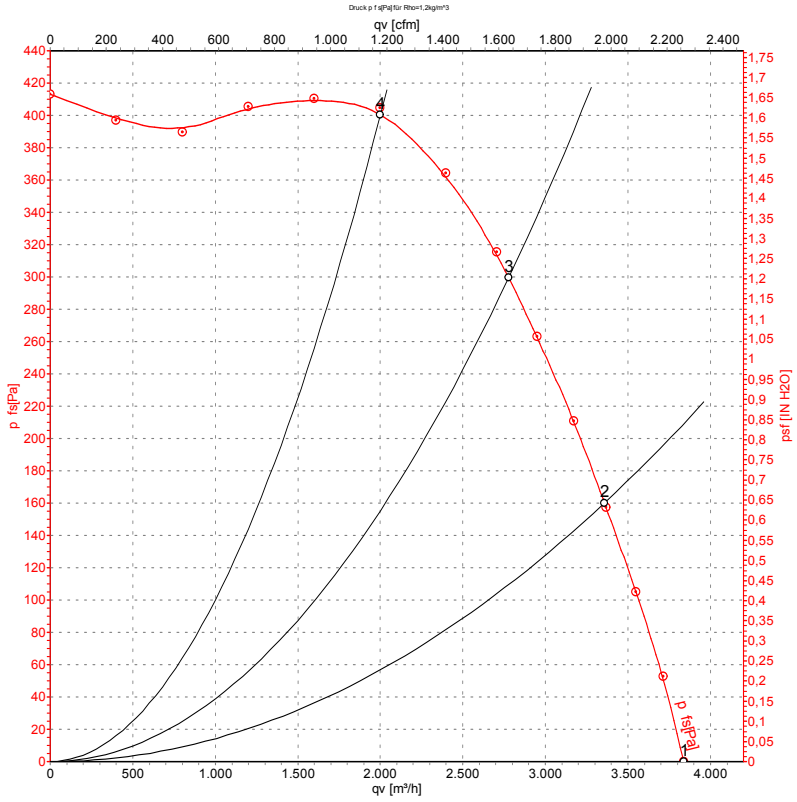
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AC centrifugal fan

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Curves: Air performance 50 Hz



Measurement: LU-66744-1

Air performance measured according to ISO 5801 installation category A. 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	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 = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

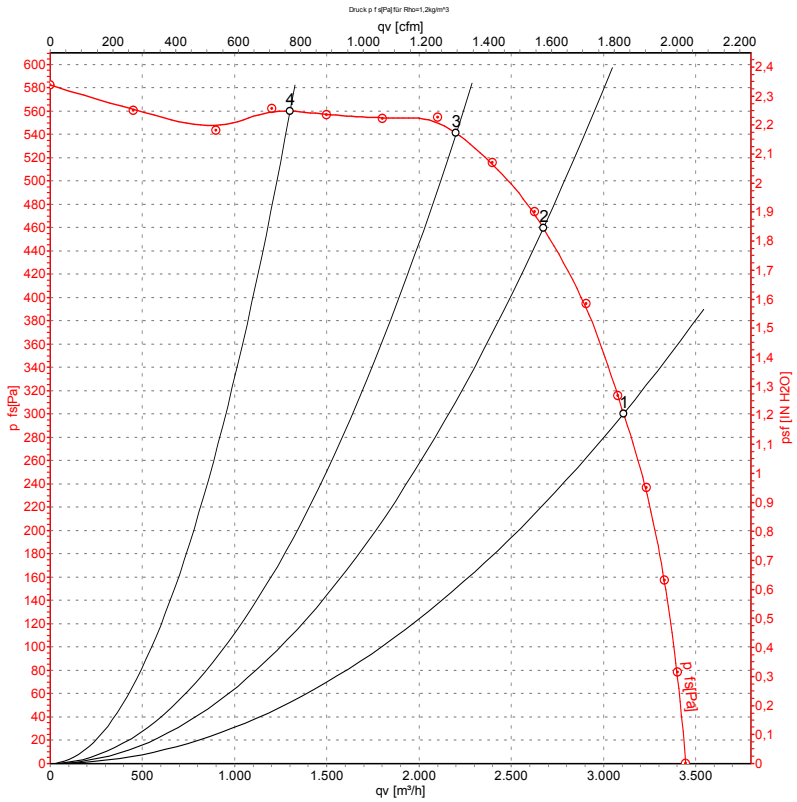
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Curves: Air performance 60 Hz



Measurement: LU-66745-1

Air performance measured according to ISO 5801 installation category A. 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	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 = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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