D4E250-CA03-05

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**D4E250-CA03-05**		
Motor	**M4E094-LA**		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	60	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	UL
Speed (rpm)	min^{-1}	1400	1400
Power consumption	W	1110	1130
Current draw	A	10.6	10.4
Capacitor	µF	40	40
Capacitor voltage	VDB	250	250
Capacitor standard			UL
Min. back pressure	Pa	350	350
Min. back pressure	inH2O	1.41	1.41
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	50	50

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

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Technical description

Weight	17.3 kg
Fan size	250 mm
Rotor surface	Cast in aluminum
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Sendzimir galvanized sheet steel
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	CE
Approval	UL 1004-1; CSA C22.2 No. 100

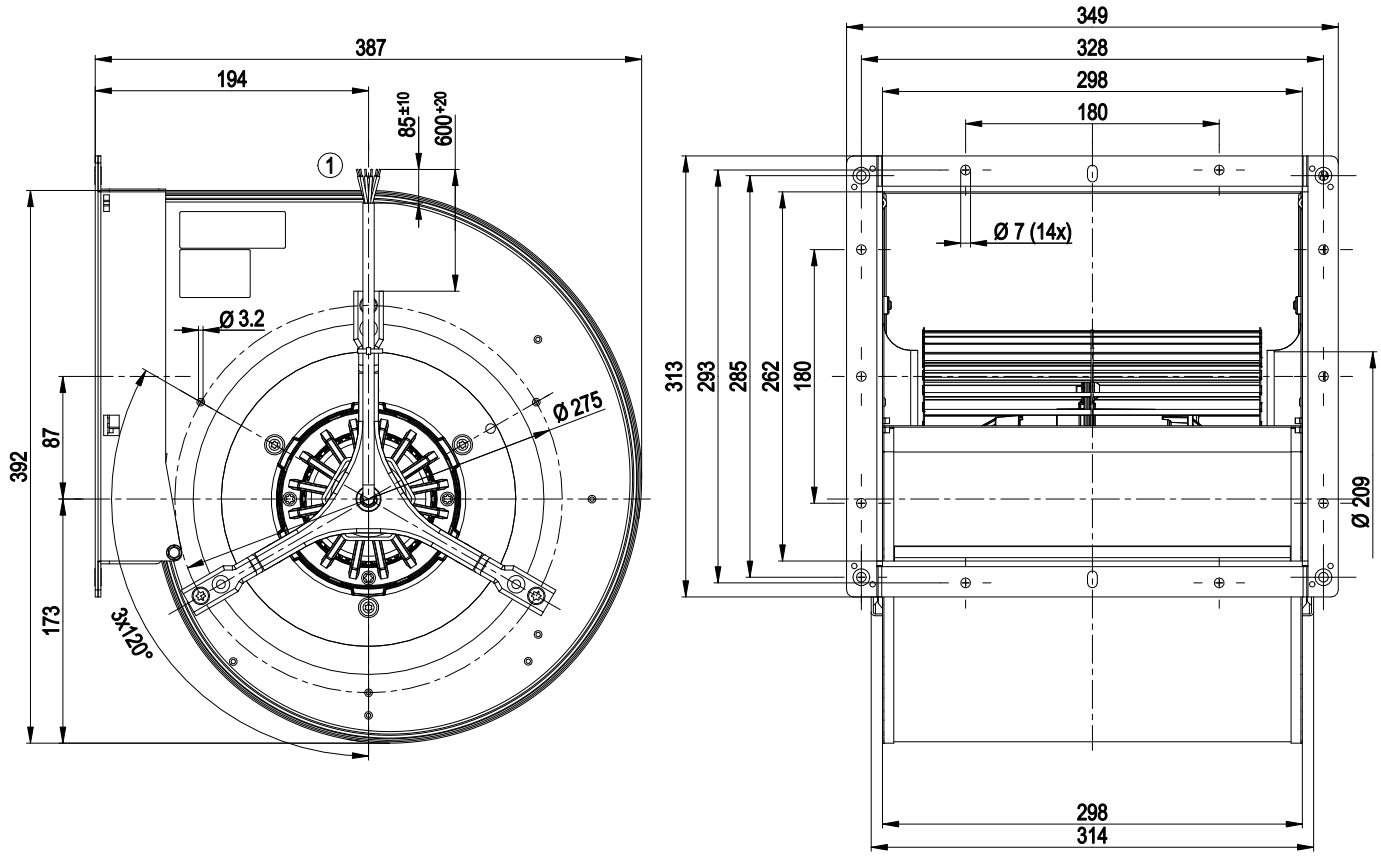
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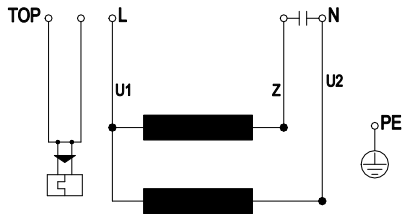
with housing (large flange)

Product drawing



1	Cable PFA AWG18, 6x crimped splices

Connection diagram



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

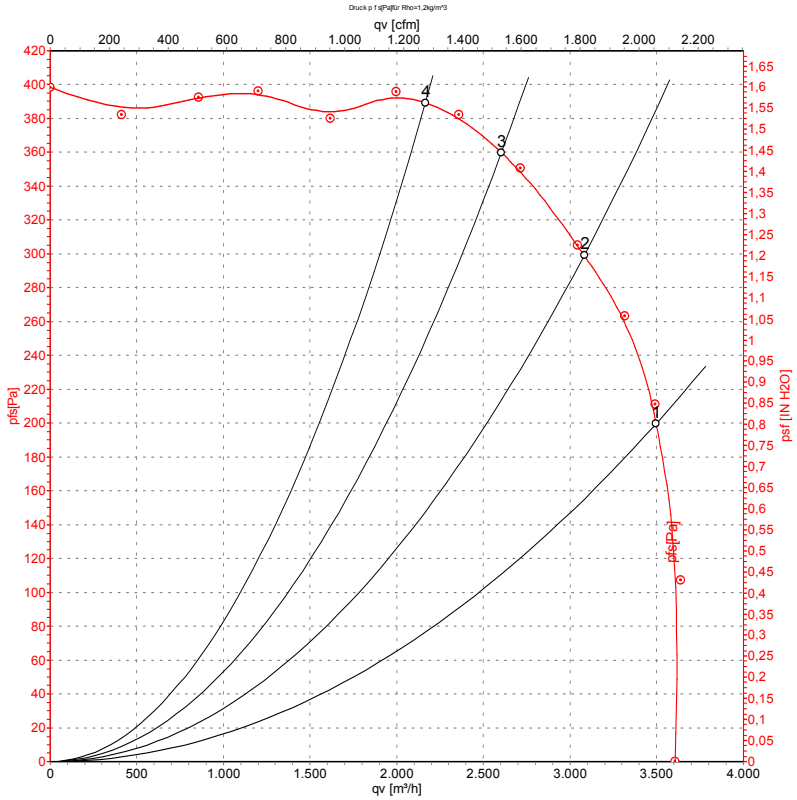
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Curves: Air performance 50 Hz



Measurement: LU-56657-1

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	115	50	1200	1130	11.50	3495	200	2060	0.80
2	115	50	1300	893	9.11	3080	300	1815	1.20
3	115	50	1370	710	7.51	2605	360	1530	1.45
4	115	50	1400	588	6.58	2165	390	1275	1.57

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

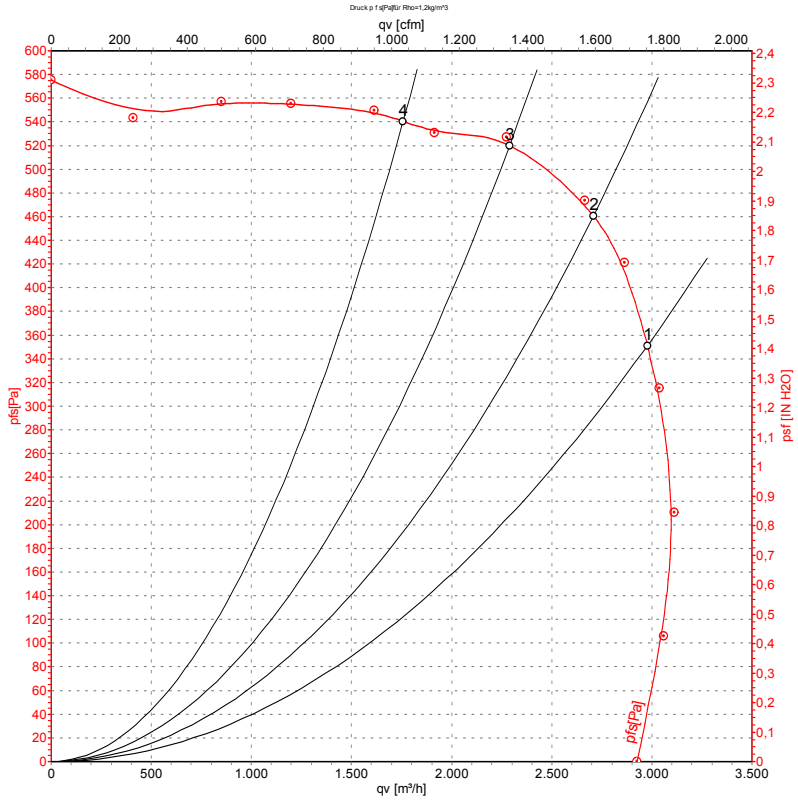
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Curves: Air performance 60 Hz



Measurement: LU-56656-1

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	115	60	1400	1110	10.60	2980	350	1755	1.41
2	115	60	1535	952	8.89	2710	460	1595	1.85
3	115	60	1625	771	7.03	2290	520	1345	2.09
4	115	60	1680	624	5.70	1760	540	1035	2.17

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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