G4E250-EA09-03

AC centrifugal fan

forward-curved, single-intake

with housing (large flange)



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Nominal data

Type	**G4E250-EA09-03**
Motor	**M4E094-HA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	1150	1400
Power consumption	W	760	730
Current draw	A	3.8	3.3
Capacitor	µF	10	10
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	0	220
Min. back pressure	inH2O	0	0.88
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	45	55
Starting current	A	6	5.1

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	14.2 kg
Fan size	250 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal
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	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010)
Approval	EAC

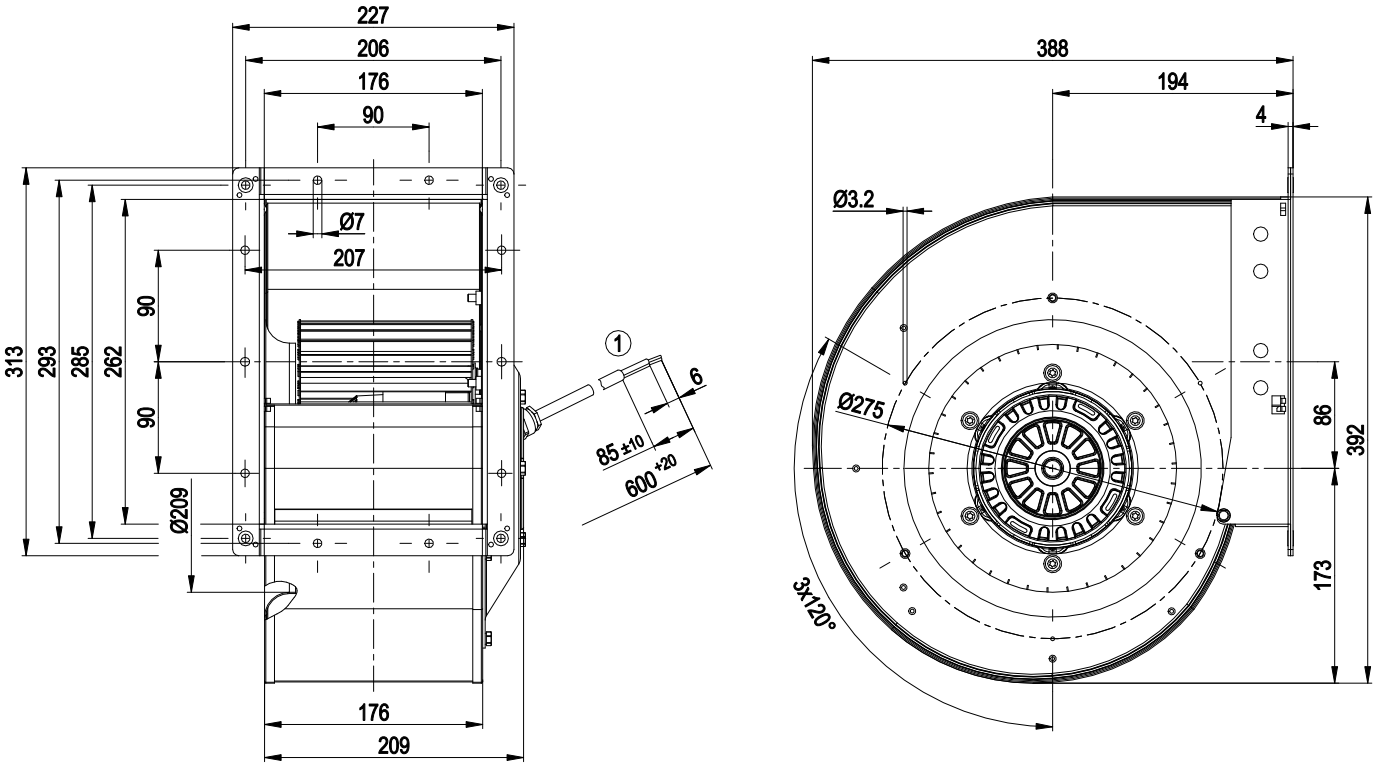
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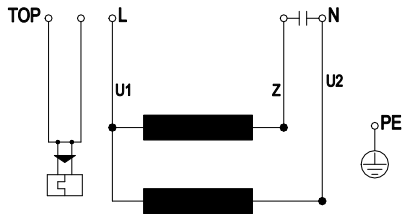
with housing (large flange)

Product drawing



1	Cable silicone 6G 0.5 mm², 6x crimped splices

Connection diagram



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

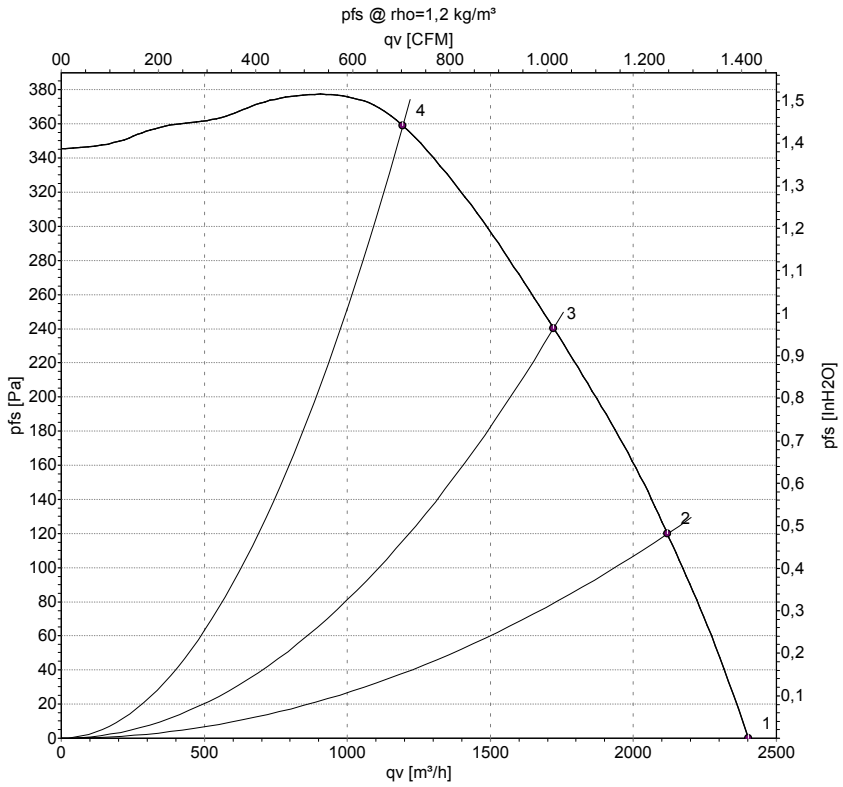
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Curves: Air performance 50 Hz



Measurement: LU-56042-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1150	760	3.80	2400	0	1415	0.00
2	230	50	1290	600	2.91	2120	120	1245	0.48
3	230	50	1365	471	2.34	1720	240	1015	0.96
4	230	50	1420	344	1.86	1195	360	705	1.45

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

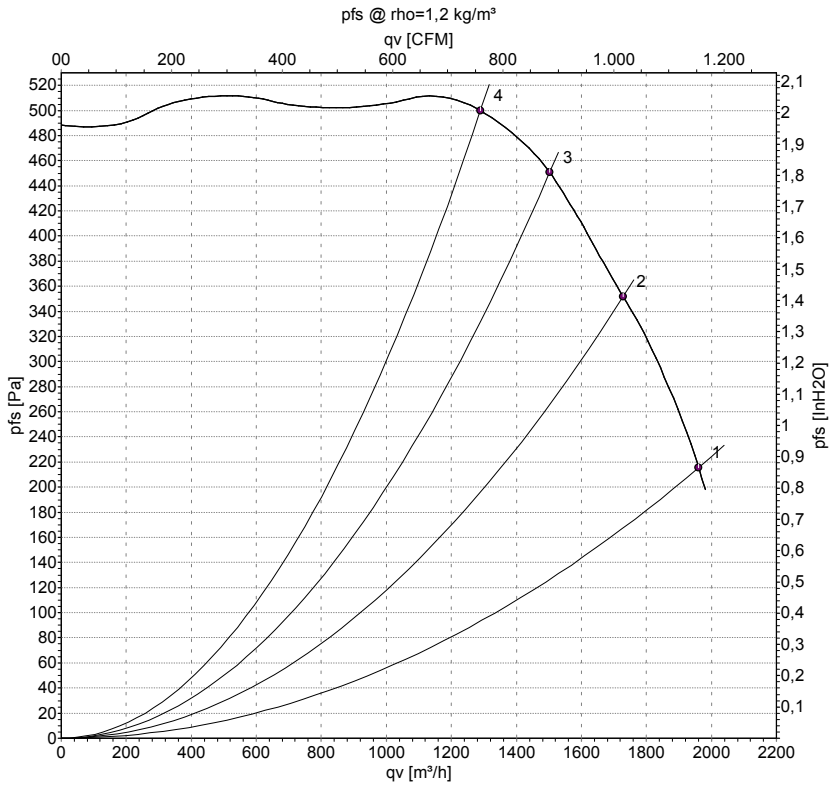
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Curves: Air performance 60 Hz



Measurement: LU-56043-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	1400	730	3.30	1960	220	1155	0.88
2	230	60	1540	621	2.75	1730	350	1015	1.41
3	230	60	1610	543	2.38	1505	450	885	1.81
4	230	60	1650	482	2.10	1290	500	760	2.01

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

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