D2E097-BE01-02

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D2E097-BE01-02**		
Motor	**M2E042-CA**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1250	1200
Power consumption	W	48	54
Current draw	A	0.22	0.26
Capacitor	µF	2	2
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	inH2O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	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	1.2 kg
Fan size	97 mm
Rotor surface	Partly cast in aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP22; installation- and position-dependent
Insulation class	"B"
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)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; EAC

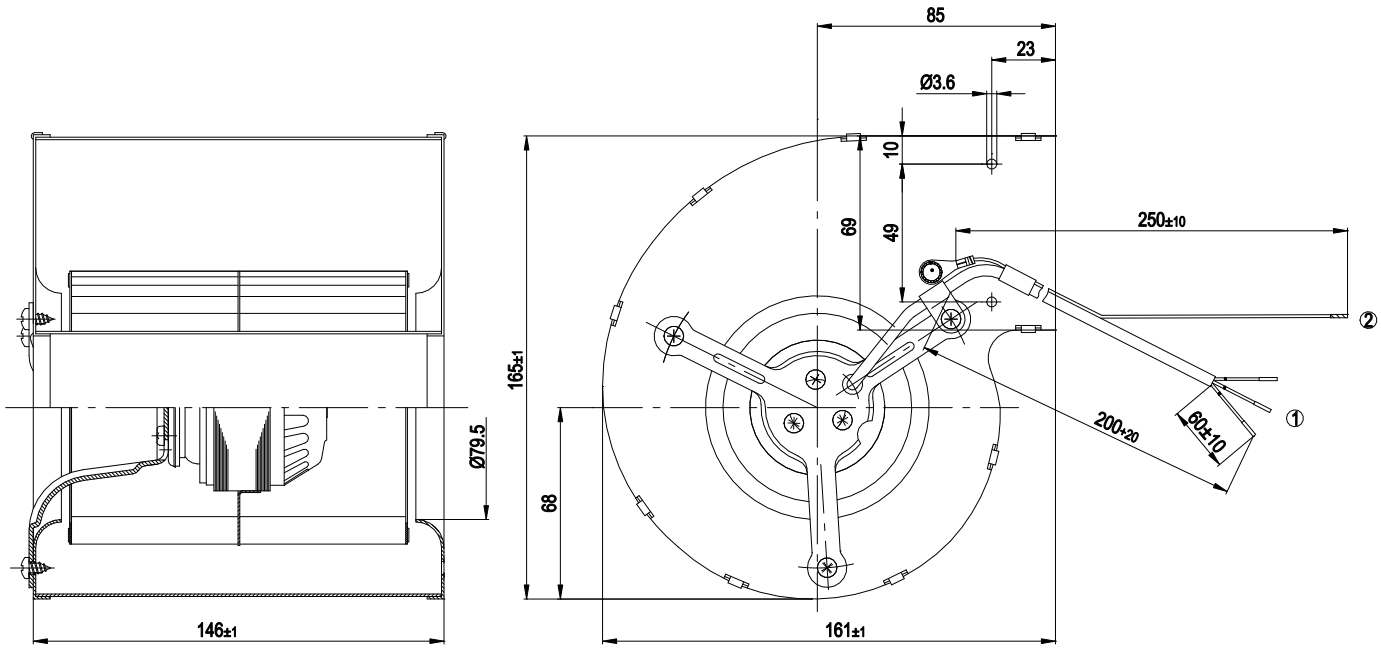
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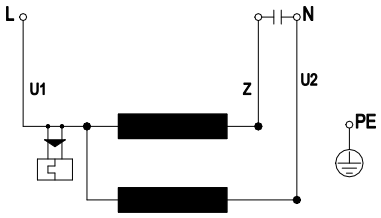
with housing (without flange)

Product drawing



1	Cable PVC 0.25 mm², 3x crimped splices
2	Cable AWG20, 1x crimped splice

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

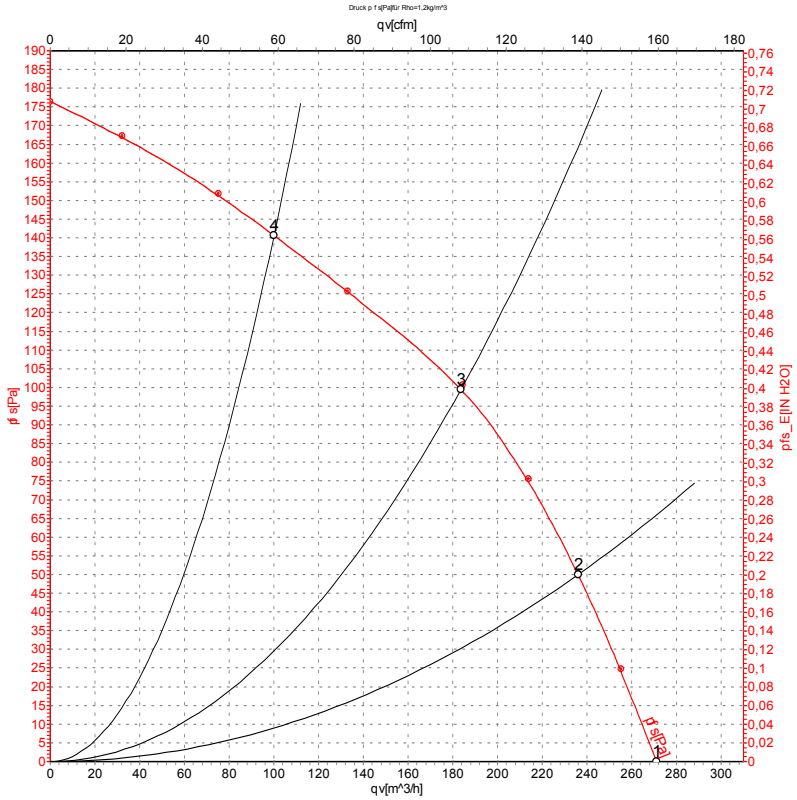
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Curves: Air performance 50 Hz



Measurement: LU-4665-1

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	1250	48	0.22	270	0	160	0.00
2	230	50	1535	48	0.22	235	50	140	0.20
3	230	50	1895	45	0.20	185	100	110	0.40
4	230	50	2245	43	0.19	100	140	60	0.56

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

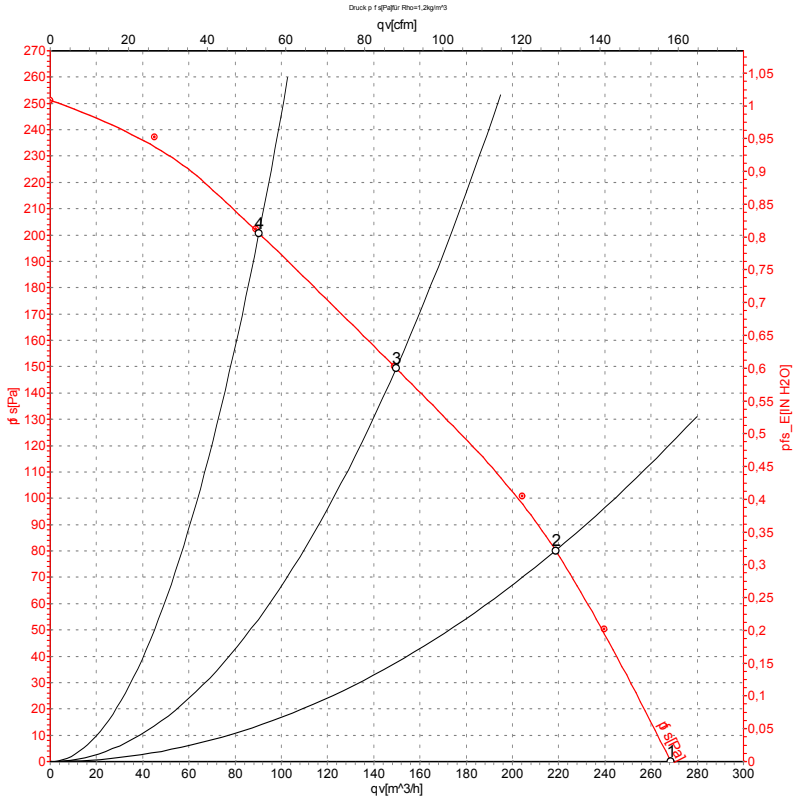
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Curves: Air performance 60 Hz



Measurement: LU-24480-1

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	1200	54	0.26	270	0	160	0.00
2	230	60	1770	52	0.25	220	80	130	0.32
3	230	60	2315	48	0.23	150	150	90	0.60
4	230	60	2675	45	0.22	90	201	55	0.81

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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