D2E097-AB01-08

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D2E097-AB01-08**	
Motor	**M2E042-CA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1300
Power consumption	W	40
Current draw	A	0.19
Capacitor	µF	1.5
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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
Size	97 mm
Motor size	42
Rotor surface	Unpainted
Housing material	Sheet steel, galvanized
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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	Sleeve bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection; CE

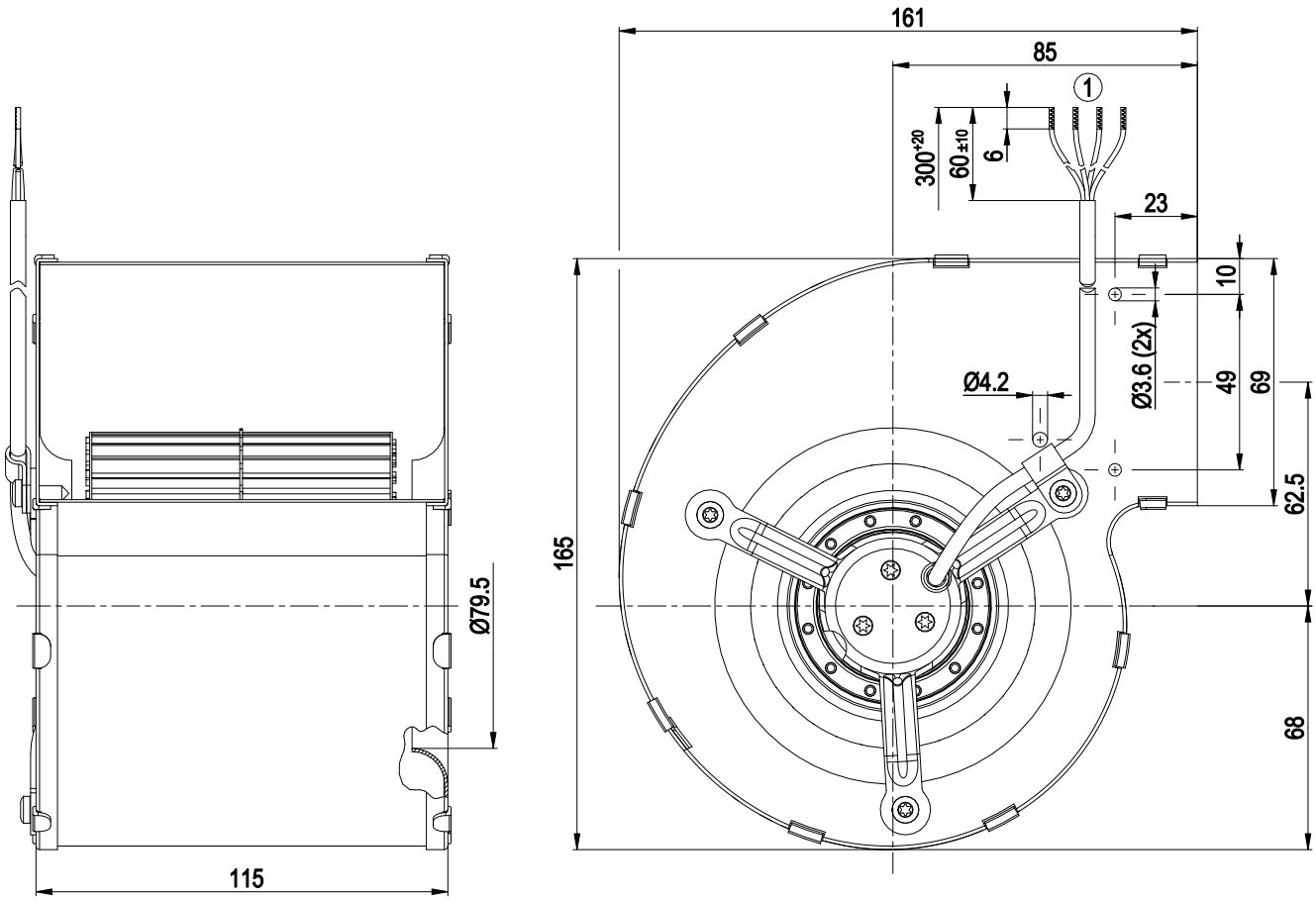
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Product drawing



Cable PVC 4x 0.25 mm², 4x crimped splices

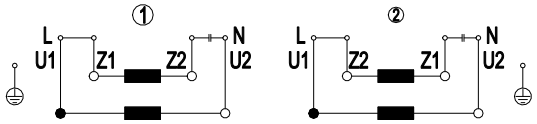
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Connection diagram



Single-phase AC motor with motor run capacitor

1	Clockwise operation
2	Counterclockwise operation
U1	black
U2	gray
Z1	blue
Z2	brown

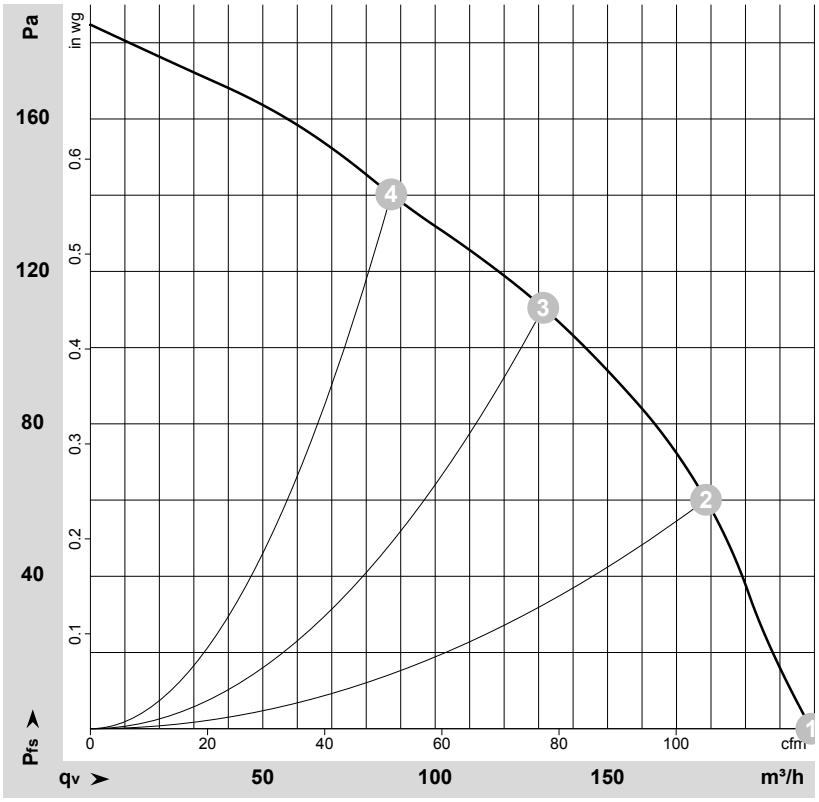
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-123409-1

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	in. wg
1	230	50	1300	40	0.19	210	0	125	0.00
2	230	50	1610	40	0.17	180	60	105	0.24
3	230	50	1995	37	0.16	130	110	75	0.44
4	230	50	2215	36	0.16	85	140	50	0.56

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

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