D4E240-BA01-07

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

D4E240-BA01-07 ebmpapst Datasheet
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Nominal data

Type	**D4E240-BA01-07**
Motor	**M4E094-IF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1340
Power consumption	W	750
Current draw	A	3.48
Capacitor	µF	16
Capacitor voltage	VDB	450
Capacitor standard		S0 (CE)
Min. back pressure	Pa	180
Min. back pressure	in. wg	0.72
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	45
Starting current	A	9.1

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}	%	35.8	35.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		43.9	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.52
09 Air flow q_v	m^3/h	1810
09 Pressure increase p_{fs}	Pa	358
10 Speed (rpm) n	min^{-1}	1410
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-153817

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Technical description

Weight	14.9 kg
Size	240 mm
Motor size	94
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	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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; (sealed)
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	EAC

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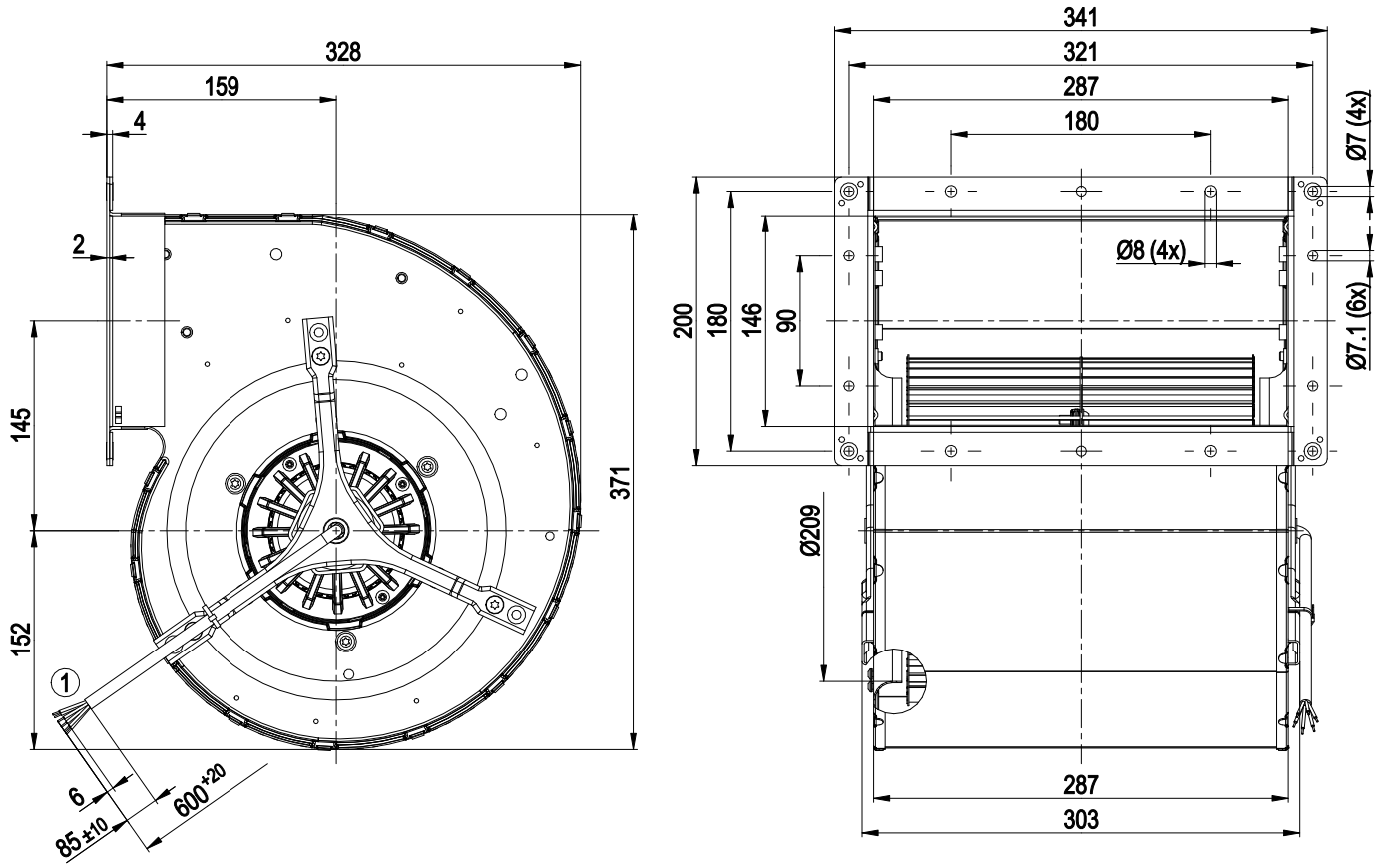
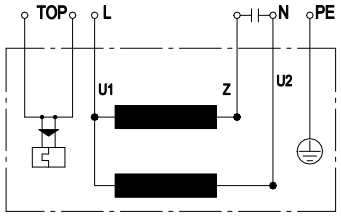
Product drawing



1	Cable ETFE AWG18		6x splice

Connection diagram



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

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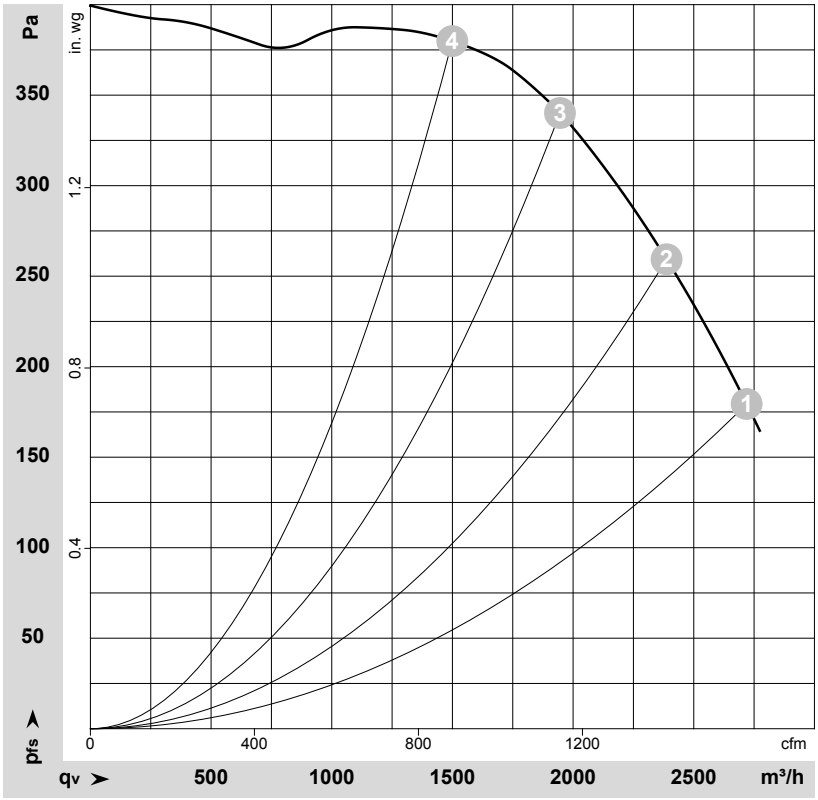
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-153817-1

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

	Wired	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	1~	230	50	1340	750	3.48	2720	180	1600	0.72
2	1~	230	50	1365	663	3.11	2385	260	1405	1.04
3	1~	230	50	1400	555	2.66	1945	340	1145	1.36
4	1~	230	50	1420	475	2.36	1500	380	880	1.53

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