

AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

D4E240-AA01-09 ebmpapst Datasheet
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Nominal data

Type	D4E240-AA01-09	
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	1330
Power consumption	W	950
Current draw	A	4.15
Capacitor	μF	25
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	70
Min. back pressure	inH ₂ O	0.28
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	70

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_e	%	41.7	41.7
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		49	49
05 Variable speed drive		No	

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

09 Power consumption P_e	kW	0.7
09 Air flow q_v	m ³ /h	2405
09 Pressure increase p_f	Pa	428
10 Speed (rpm) n	min ⁻¹	1390
11 Specific ratio*		1.00

* Specific ratio = $1 + p_f / 100\,000\text{ Pa}$

LU-155176



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Technical description

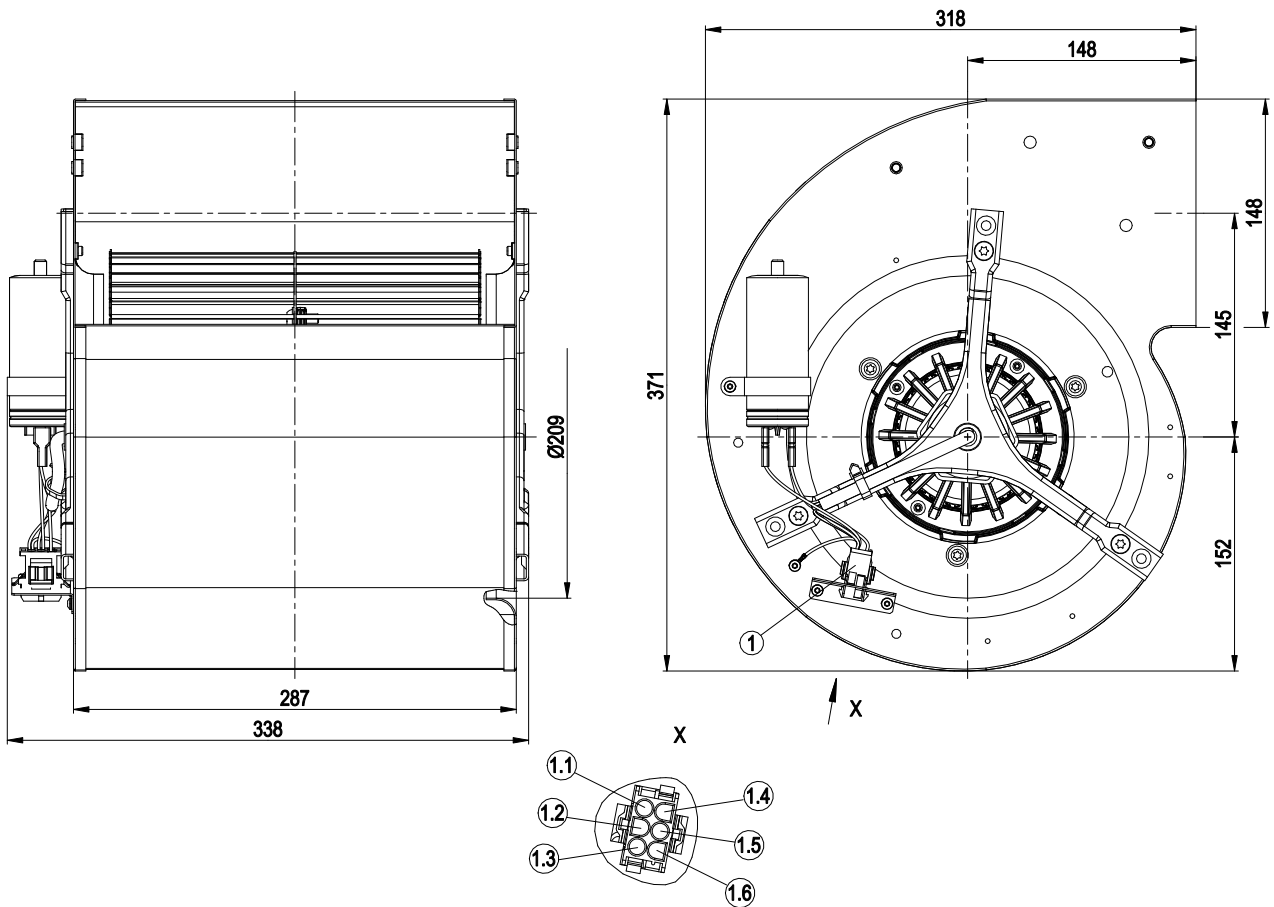
Weight	14.1 kg
Fan size	240 mm
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP00
Insulation class	"F"
Moisture (F) / Environmental (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
Electrical hookup	Via terminal strip, capacitor connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60034-1 (2010); CE



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Product drawing

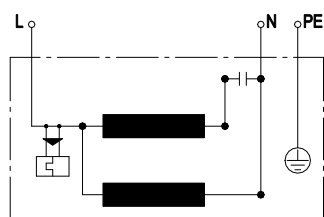


1	Cable FEP AWG18, 6-pole connector housing tyco 770027-1 with 3x crimped plug pin tyco 770007-1
1.1	PE (green/yellow)
1.2	N (black + capacitor)
1.3	not used
1.4	not used
1.5	not used
1.6	L (blue)

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Connection diagram

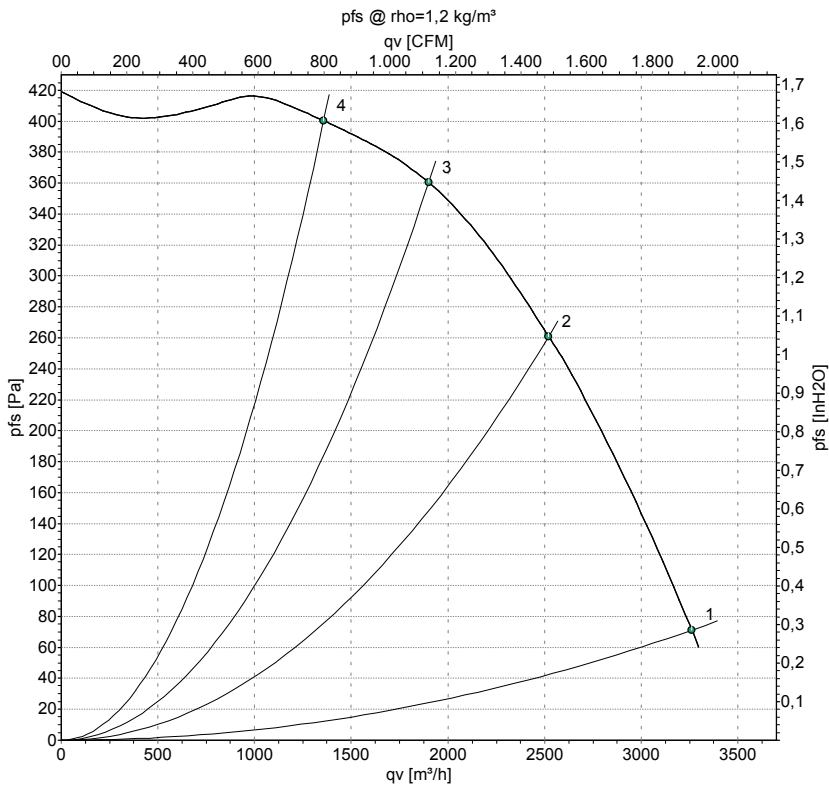


L	blue	N	black	PE	green/yellow
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Curves: Air performance 50 Hz



Measurement: LU-66809-1

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	m³/h	Pa	cfm	inH2O
1	230	50	1330	950	4.15	3265	70	1920	0.28
2	230	50	1375	748	3.33	2520	260	1485	1.04
3	230	50	1410	621	2.82	1900	360	1120	1.45
4	230	50	1430	541	2.50	1355	400	800	1.61

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

