

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

G4E225-DK15-10 ebmpapst Datasheet

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Nominal data

Type	G4E225-DK15-10		
Motor	M4E094-FA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1170	1170
Power consumption	W	360	385
Current draw	A	1.7	1.9
Capacitor	μF	4	4
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	100
Min. back pressure	inH ₂ O	0	0.4
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	55
Starting current	A	2.5	2.3

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_{es}	%	33.5	32.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44.7	44
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	0.17
09 Air flow q_v	m ³ /h	755
09 Pressure increase p_{fs}	Pa	280
10 Speed (rpm) n	min ⁻¹	1405
11 Specific ratio*		1.00

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

LU-180523



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Technical description

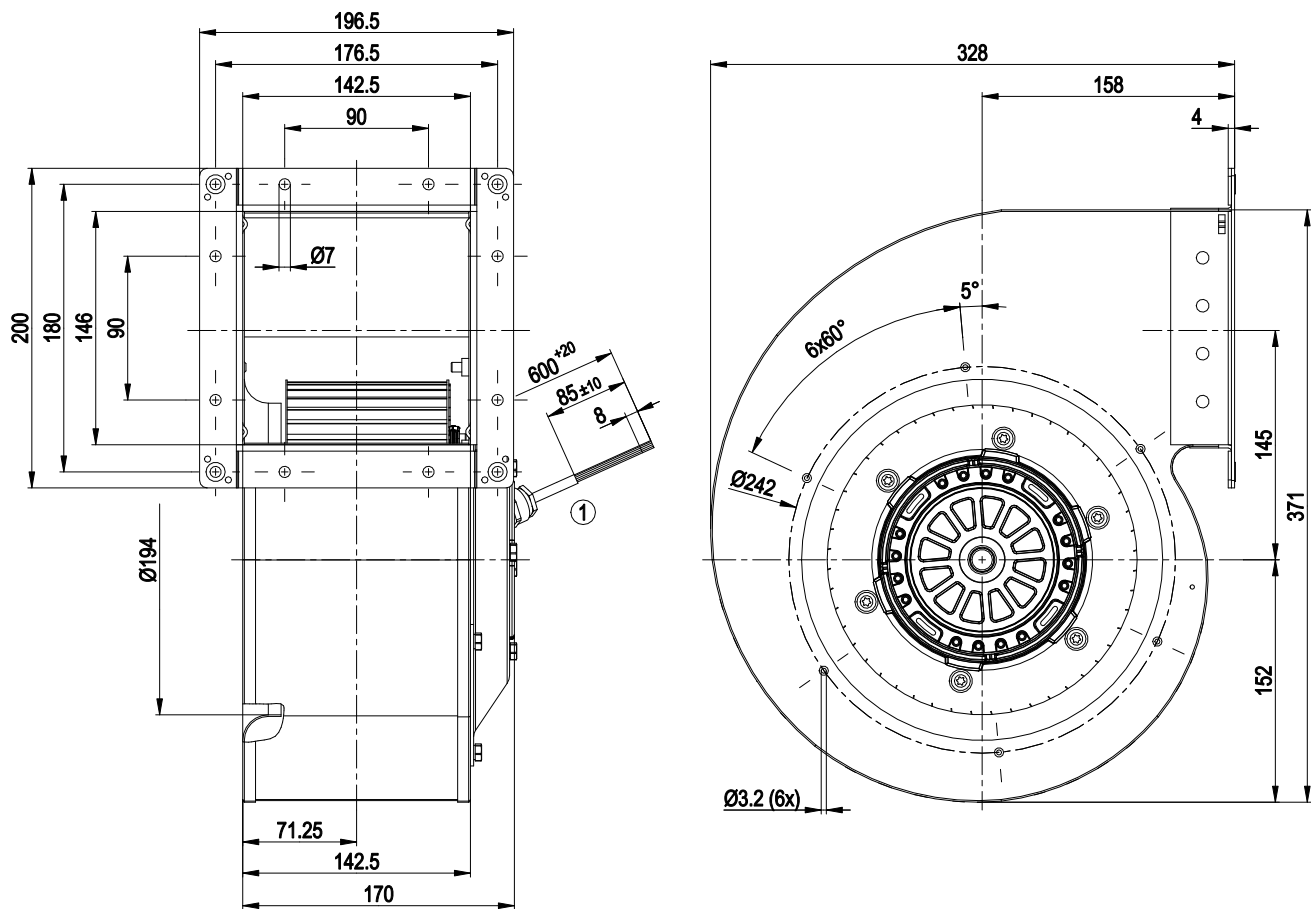
Weight	10.3 kg
Fan size	225 mm
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
Ambient temperature note	Occasional start-up between -40°C and -25°C is permissible. For continuous operation at temperatures below -25°C (e.g. refrigeration applications) we recommend our 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
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)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1 (2010); CE



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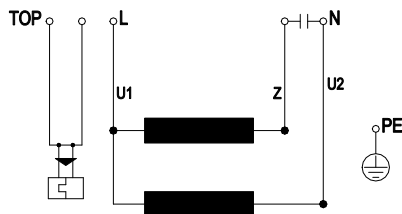
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Product drawing



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

Connection diagram



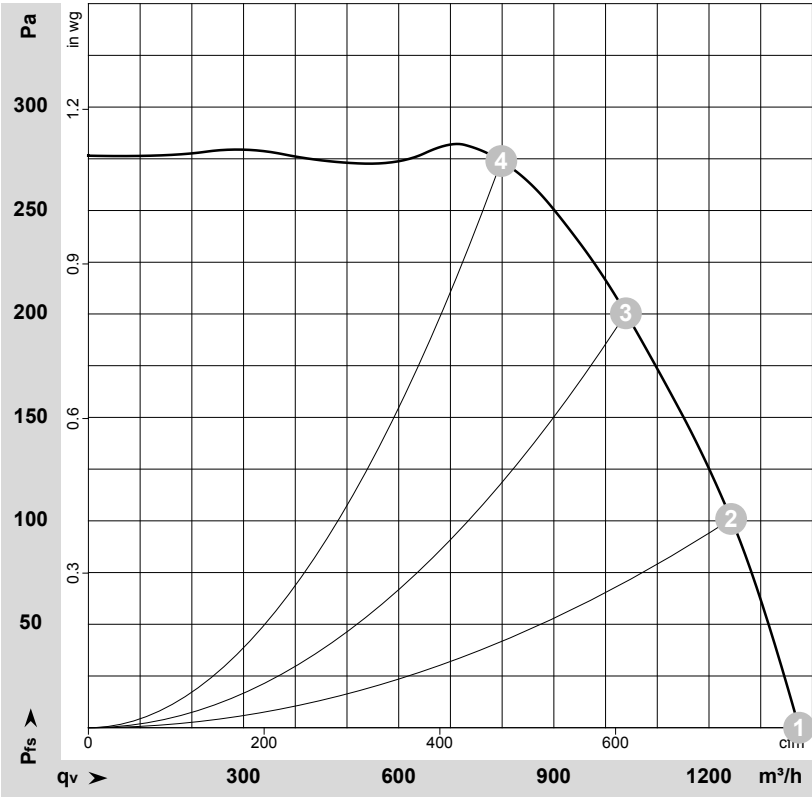
TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-180523-1

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 _{ts}	q _v	p _{ts}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	230	50	1170	360	1.70	1375	0	810	0.00
2	230	50	1275	292	1.38	1245	100	730	0.40
3	230	50	1345	236	1.11	1040	200	610	0.80
4	230	50	1395	184	0.87	800	275	470	1.10

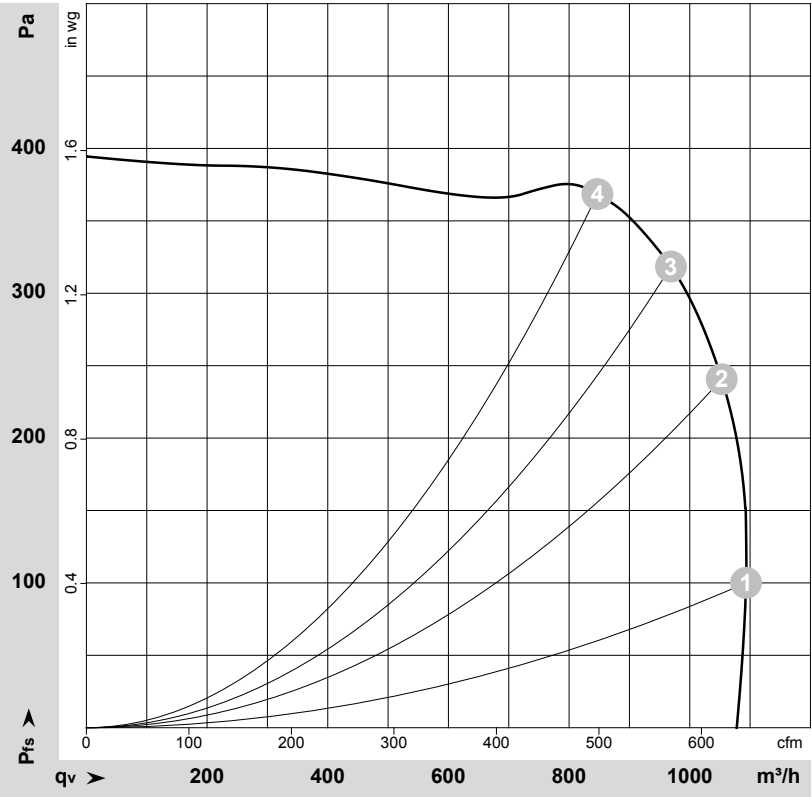
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{ts} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-180527-1

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	inH ₂ O
1	230	60	1170	385	1.90	1095	100	645	0.40
2	230	60	1425	334	1.54	1055	240	620	0.96
3	230	60	1530	301	1.34	970	320	570	1.28
4	230	60	1605	262	1.15	845	370	500	1.49

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

