

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)


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Nominal data

Type	D4E225-BC01-23			
Motor	M4E074-LA			
Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	UL	CE
Speed (rpm)	min ⁻¹	1250	1300	1300
Power consumption	W	520	670	630
Current draw	A	2.28	2.8	2.75
Capacitor	µF	16	16	16
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	UL	S2 (CE)
Min. back pressure	Pa	200	250	250
Min. back pressure	inH ₂ O	0.8	1	1
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	40	30	30

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}	%	34.9	34.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	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	0.37
09 Air flow q_v	m ³ /h	1520
09 Pressure increase p_{fs}	Pa	300
10 Speed (rpm) n	min ⁻¹	1365
11 Specific ratio*		1.00

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

LU-17127



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Technical description

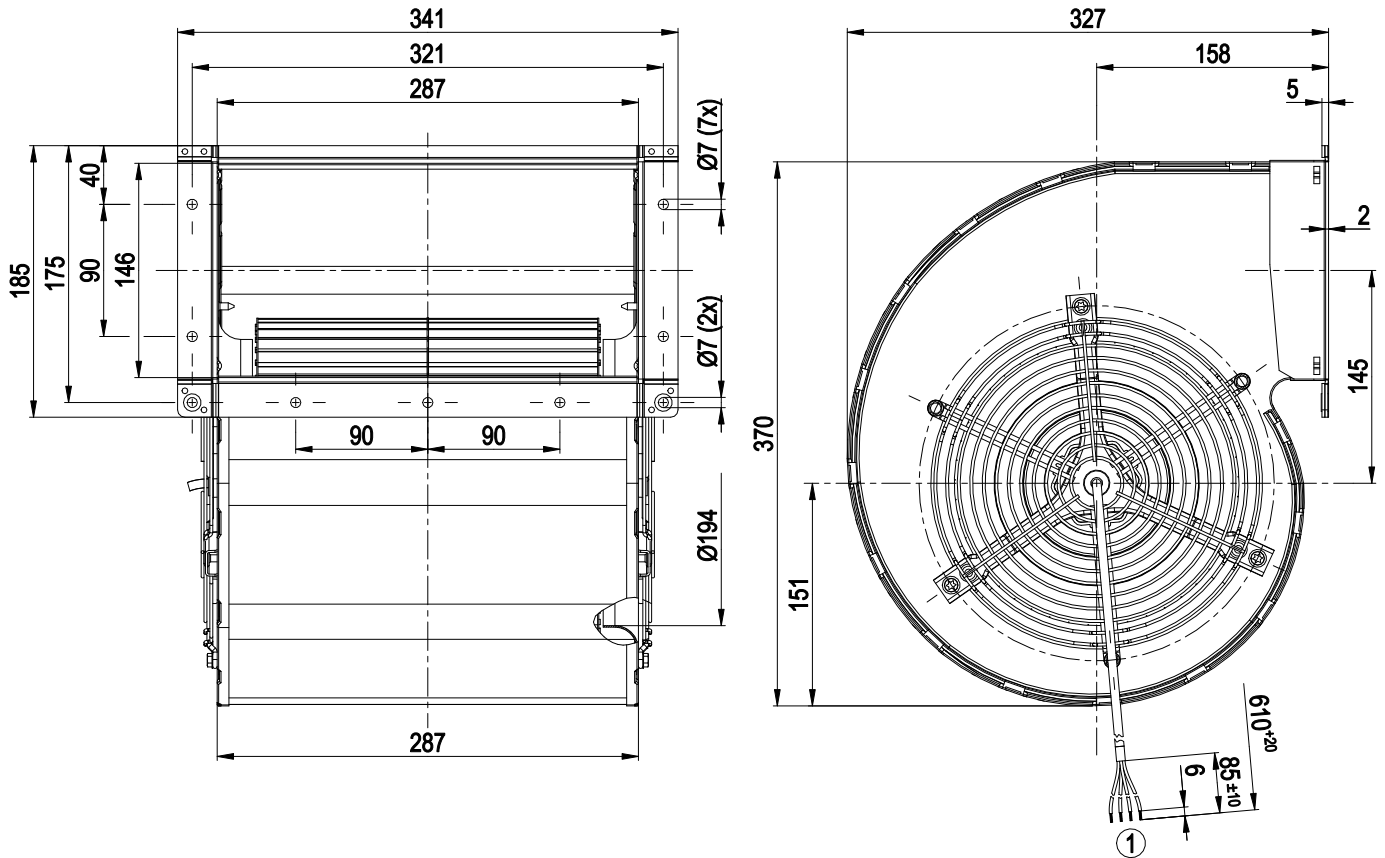
Weight	12.6 kg
Fan size	225 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Support structure material	Sheet steel, galvanized
Guard grille material	Steel, phosphated and coated with black plastic
Motor suspension	Motor mounted on brackets for one-sided vibration damping
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP22
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F2-1
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
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1



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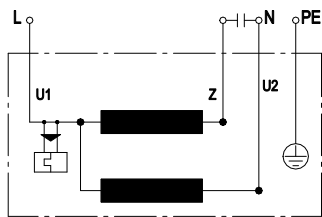
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Product drawing



1	Cable PVC 4G AWG20, 4x crimped splices
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Connection diagram



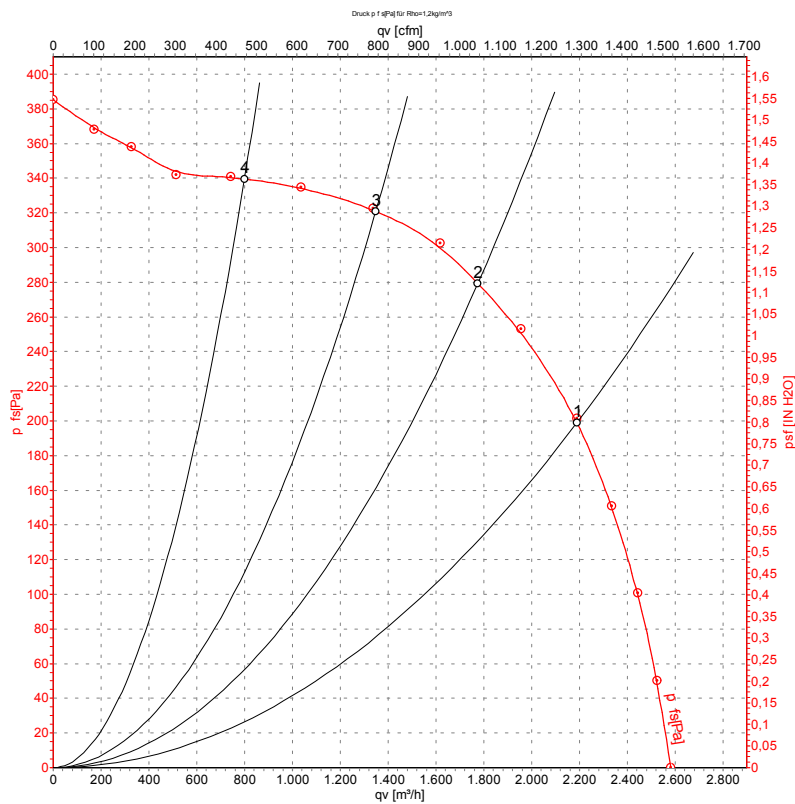
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-35318-1

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	1250	520	2.28	2190	200	1290	0.80
2	230	50	1315	437	1.94	1775	280	1045	1.12
3	230	50	1375	358	1.63	1350	320	795	1.28
4	230	50	1415	292	1.37	800	340	470	1.36

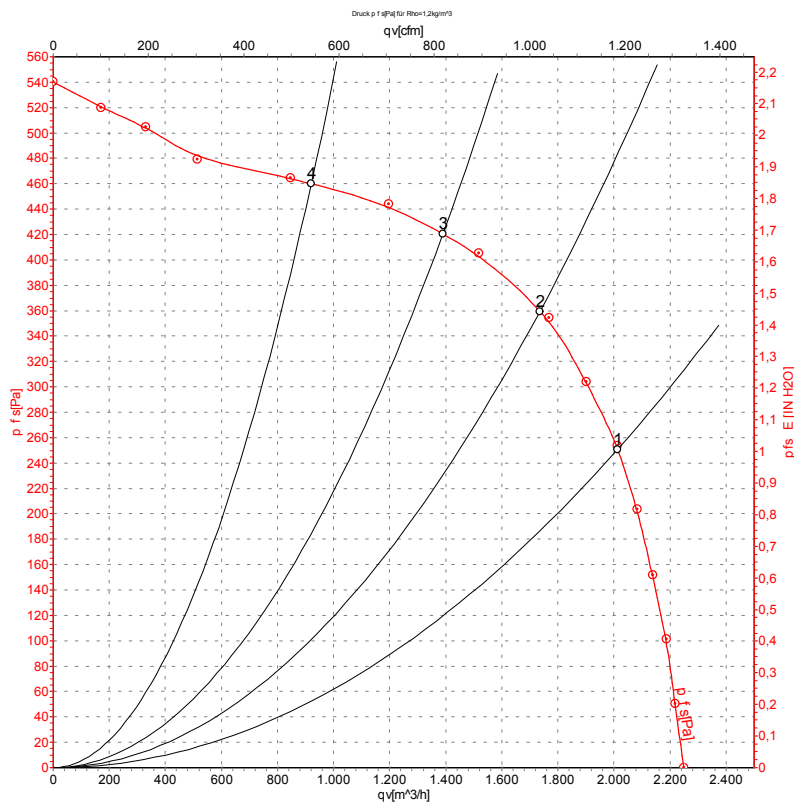
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



Measurement: LU-35319-1

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	inH ₂ O
1	230	60	1300	630	2.75	2015	250	1185	1.00
2	230	60	1460	556	2.44	1735	360	1020	1.45
3	230	60	1565	479	2.14	1390	420	820	1.69
4	230	60	1640	402	1.87	920	460	540	1.85

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

