D4E225-DH01-11

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D4E225-DH01-11**
Motor	**M4E094-LA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1230	1370
Power consumption	W	1060	1120
Current draw	A	5.38	5.4
Capacitor	µF	10	10
Capacitor voltage	VDB	450	500
Min. back pressure	Pa	100	250
Min. back pressure	inH2O	0.4	1
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	45

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	%	40.9	40.9
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		49	49
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.52
09 Air flow q_v	m^3/h	2020
09 Pressure increase p_f	Pa	371
10 Speed (rpm) n	min^{-1}	1415
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_f / 100 000 Pa

LU-41783

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Technical description

Weight	17.4 kg
Fan size	225 mm
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	IP20; (motor)
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, open rotor
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	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); CE

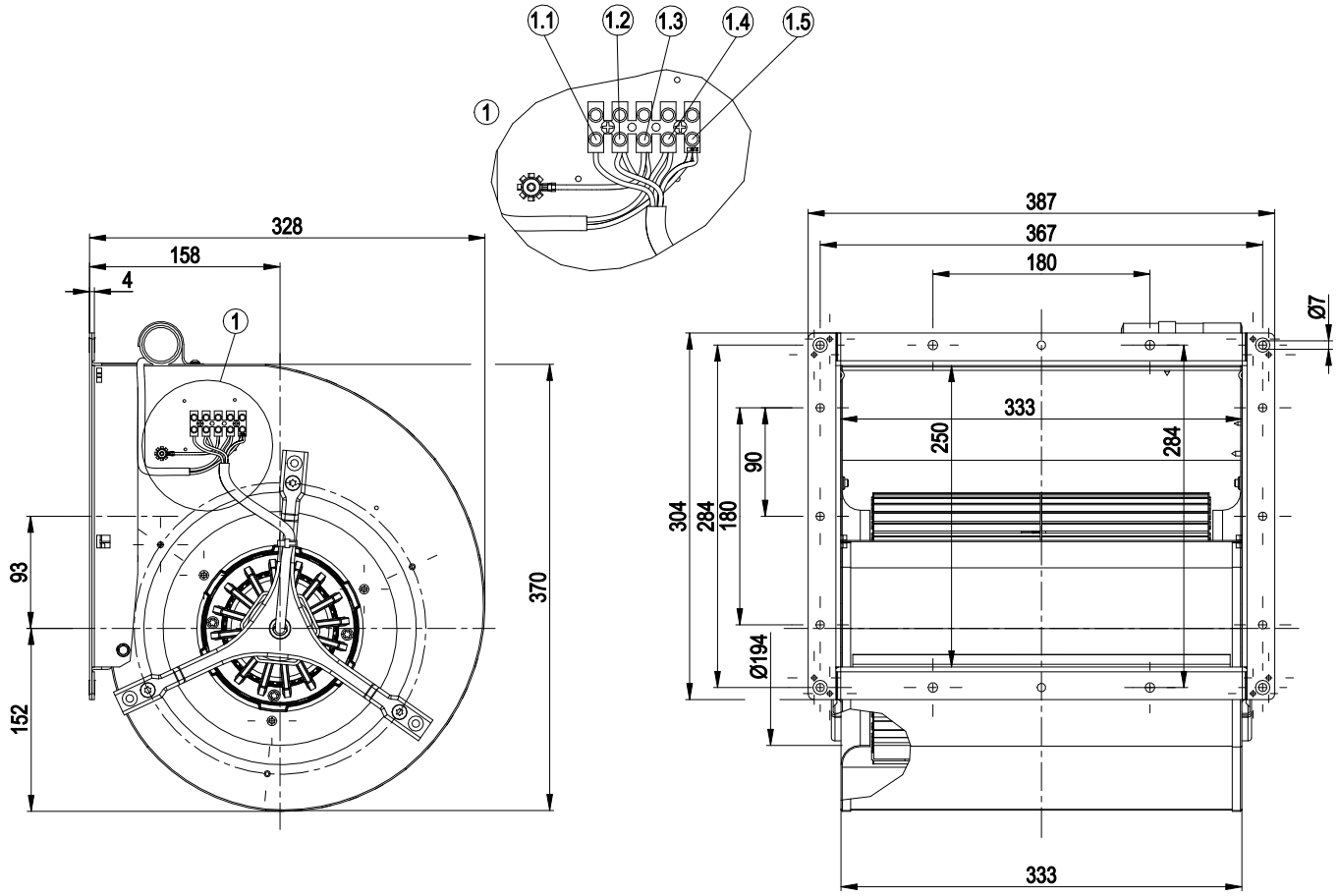
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Product drawing



1	Cable AWG20 with terminal strip (Weco 323-V-HDS/05-VO EN6)
1.1	gray (TOP)
1.2	gray (TOP) + blue
1.3	PE (green/yellow)
1.4	brown + capacitor
1.5	N (black + capacitor)

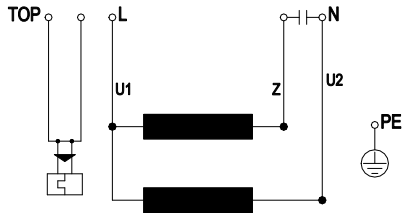
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Connection diagram



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

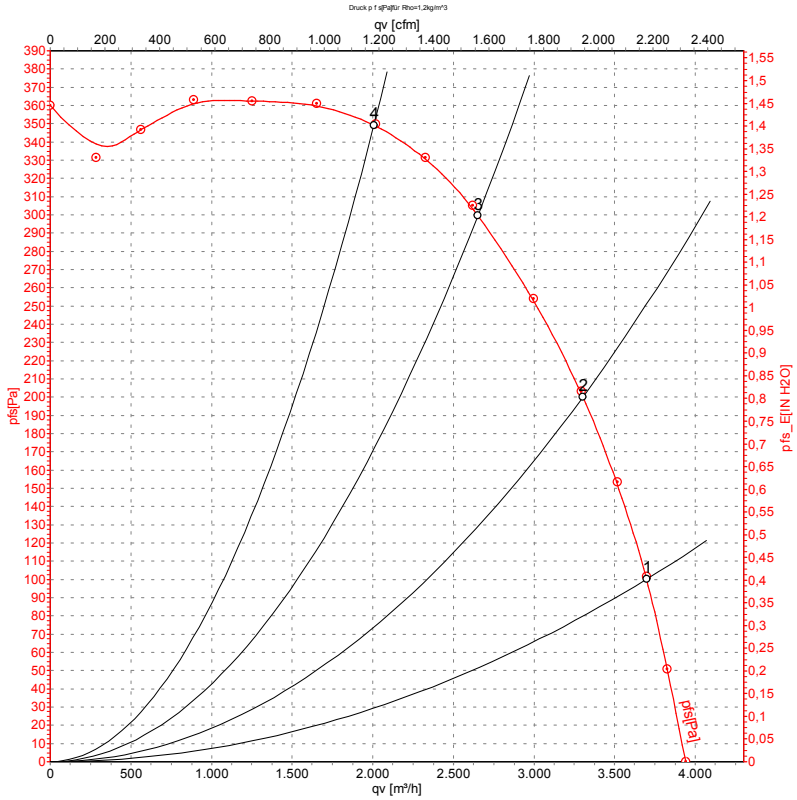
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AC centrifugal fan

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Curves: Air performance 50 Hz



Measurement: LU-41783-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1230	1060	5.38	3700	100	2175	0.40
2	230	50	1310	858	4.39	3300	200	1945	0.80
3	230	50	1375	661	3.55	2650	300	1560	1.20
4	230	50	1415	519	3.02	2005	350	1180	1.41

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

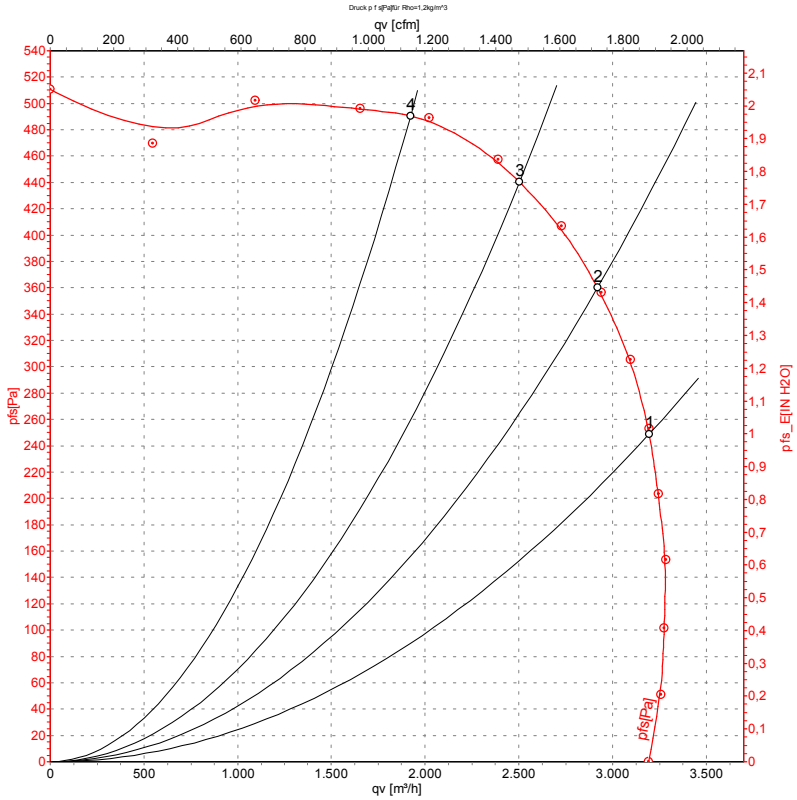
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Curves: Air performance 60 Hz



Measurement: LU-41784-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	1370	1120	5.40	3195	250	1880	1.00
2	230	60	1505	958	4.51	2920	360	1720	1.45
3	230	60	1595	805	3.70	2505	440	1475	1.77
4	230	60	1670	640	2.90	1920	490	1130	1.97

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

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