D4E225-FH05-16

AC centrifugal fan

forward-curved, dual-intake

with housing and mounting bracket

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D4E225-FH05-16**	
Motor	**M4E094-LA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		cs
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1415
Power consumption	W	500
Current draw	A	2.4
Capacitor	µF	14
Capacitor voltage	VDB	450
Min. back pressure	Pa	300
Min. back pressure	inH2O	1.2
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	65
Starting current	A	8.0

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	%	41.1	41.1
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	0.57
09 Air flow q_v	m^3/h	2290
09 Pressure increase p_f	Pa	353
10 Speed (rpm) n	min^{-1}	1395
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-163196

ebmpapst

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Technical description

Weight	18.5 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	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F1-1
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
Electrical hookup	Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	P0/S0
Conformity with standards	EN 60034-1 (2010); CE

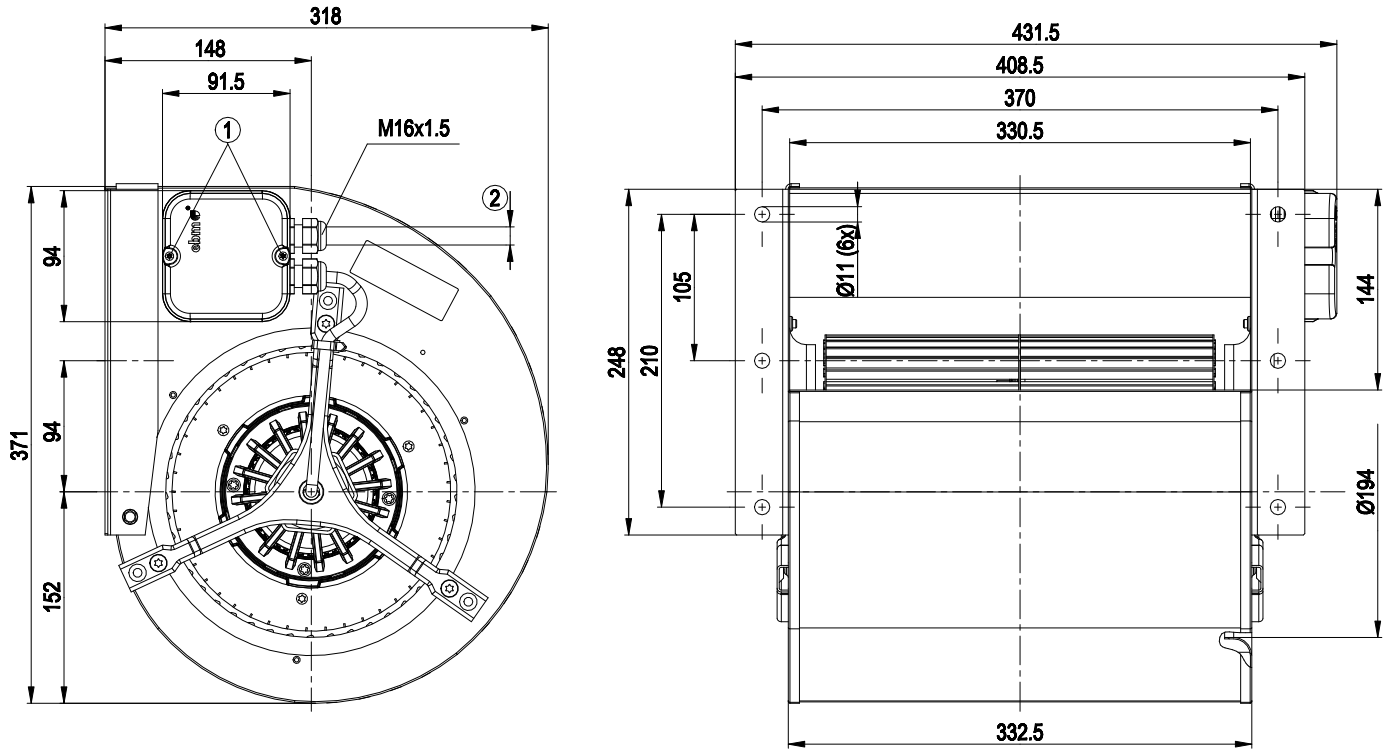
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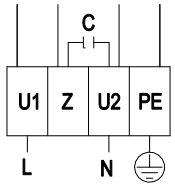
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Product drawing



1	Tightening torque 0.8 ± 0.15 Nm
2	Cable diameter min. 4 mm, max. 10 mm, tightening torque 2.5 ± 0.4 Nm

Connection diagram



L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				

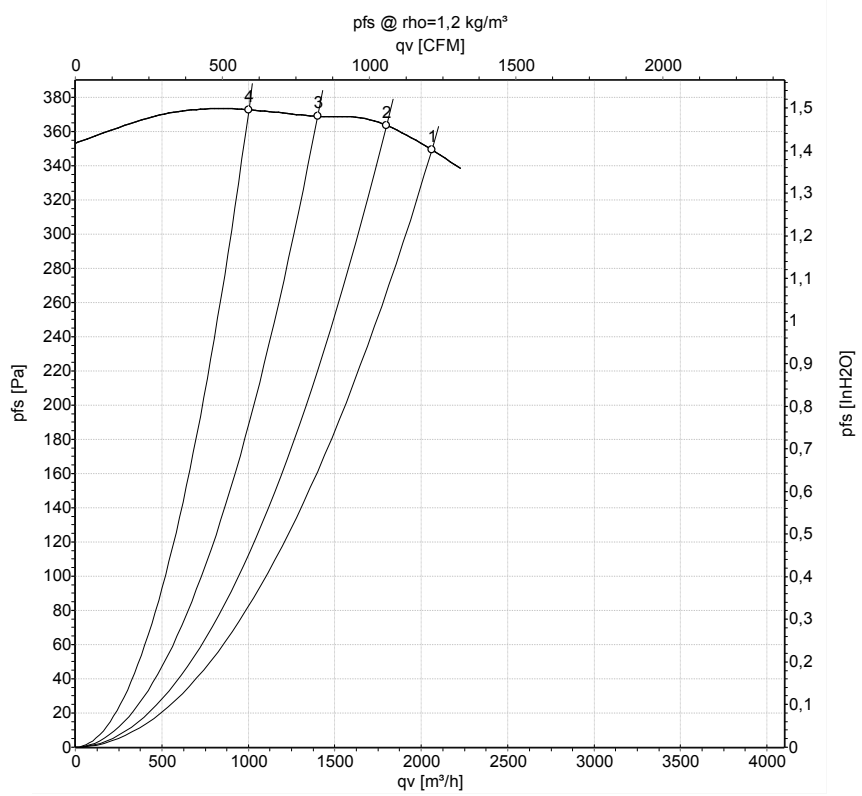
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Curves: Air performance 50 Hz



Measurement: LU-163196-1

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	1415	500	2.40	2060	350	1215	1.41
2	230	50	1420	490	2.34	1800	365	1060	1.47
3	230	50	1435	448	2.13	1400	368	825	1.48
4	230	50	1445	406	1.98	1005	370	590	1.49

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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