D4D225-FH02-06

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**D4D225-FH02-06**		
Motor	**M4D094-LA**		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1300	1520
Power consumption	W	880	930
Current draw	A	1.71	1.72
Min. back pressure	Pa	50	275
Min. back pressure	in. wg	0.2	1.1
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	55
Starting current	A	5.6	4.9

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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	39.6	35.2
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		48.4	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.4
09 Air flow q_v	m^3/h	1805
09 Pressure increase p_{fs}	Pa	319
10 Speed (rpm) n	min^{-1}	1425
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_{fs} / 100 000 Pa

LU-72882

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Technical description

Weight	16.11 kg
Size	225 mm
Motor size	94
Rotor surface	Partly cast in aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized and painted black
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	H2
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	On stator side
Mode	Continuous operation (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
Approval	EAC

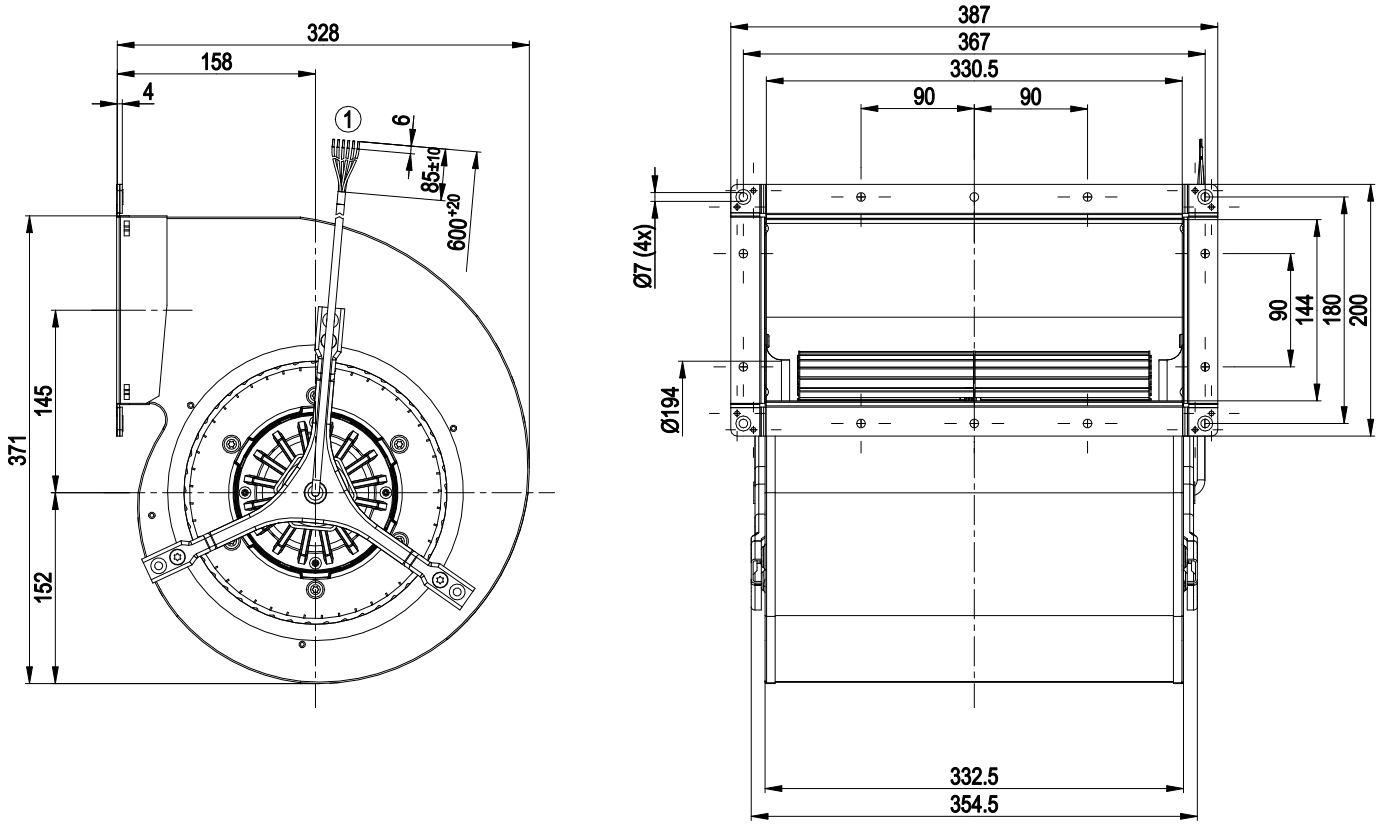
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Product drawing



1	Cable Dipotherm 9x 0.5 mm², sheathed in heat shrink tube, with splices

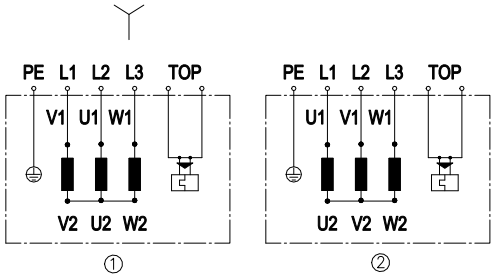
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Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green/yellow
TOP	2x gray

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-72882-1

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

	Wired	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	400	50	1300	880	1.71	71	83	3745	50	2205	0.20
2	Y	400	50	1330	784	1.56	69	81	3420	120	2010	0.48
3	Y	400	50	1375	625	1.35	66	78	2820	220	1660	0.88
4	Y	400	50	1435	371	1.07	61	73	1600	320	940	1.28

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

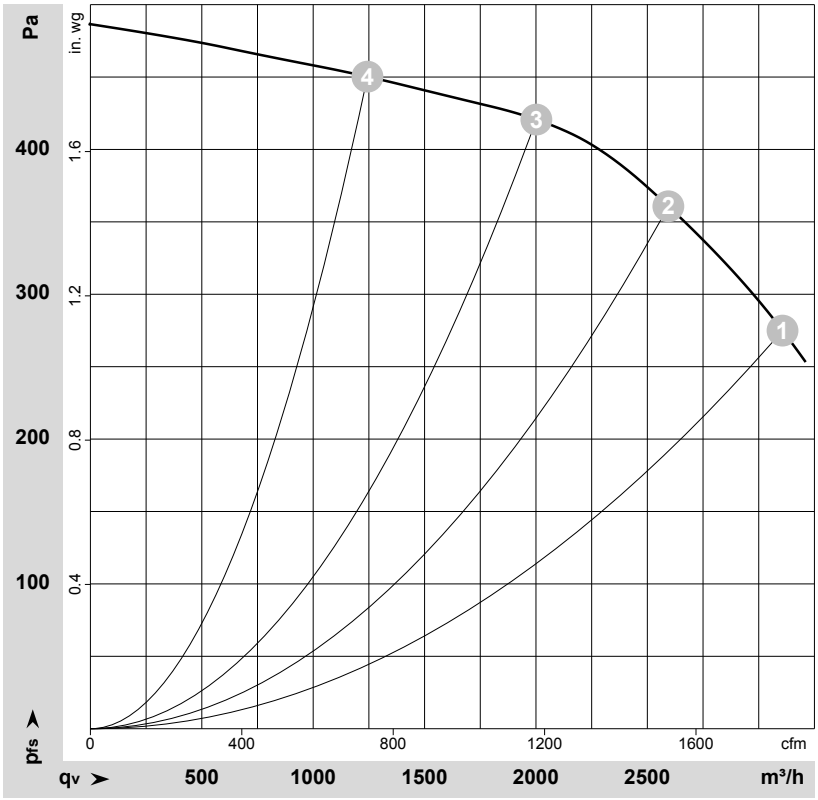
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-72881-1

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

	Wired	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	400	60	1520	930	1.72	70	81	3105	275	1830	1.10
2	Y	400	60	1580	767	1.46	69	80	2595	360	1525	1.45
3	Y	400	60	1645	596	1.20	67	78	2000	420	1180	1.69
4	Y	400	60	1695	443	0.99	66	78	1245	450	730	1.81

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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