D4D225-CC01-19

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

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Nominal data

Type	**D4D225-CC01-19**
Motor	**M4D074-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}	1040	1170
Power consumption	W	660	650
Current draw	A	1.2	1.2
Min. back pressure	Pa	80	200
Min. back pressure	in. wg	0.32	0.8
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	40

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_e	%	46.8	39.5
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		56.3	49
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.31
09 Air flow q_v	m^3/h	1505
09 Pressure increase p_f	Pa	350
10 Speed (rpm) n	min^{-1}	1340
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-105303

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Technical description

Weight	12.1 kg
Size	225 mm
Motor size	74
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP22; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal
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) with basic insulation
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

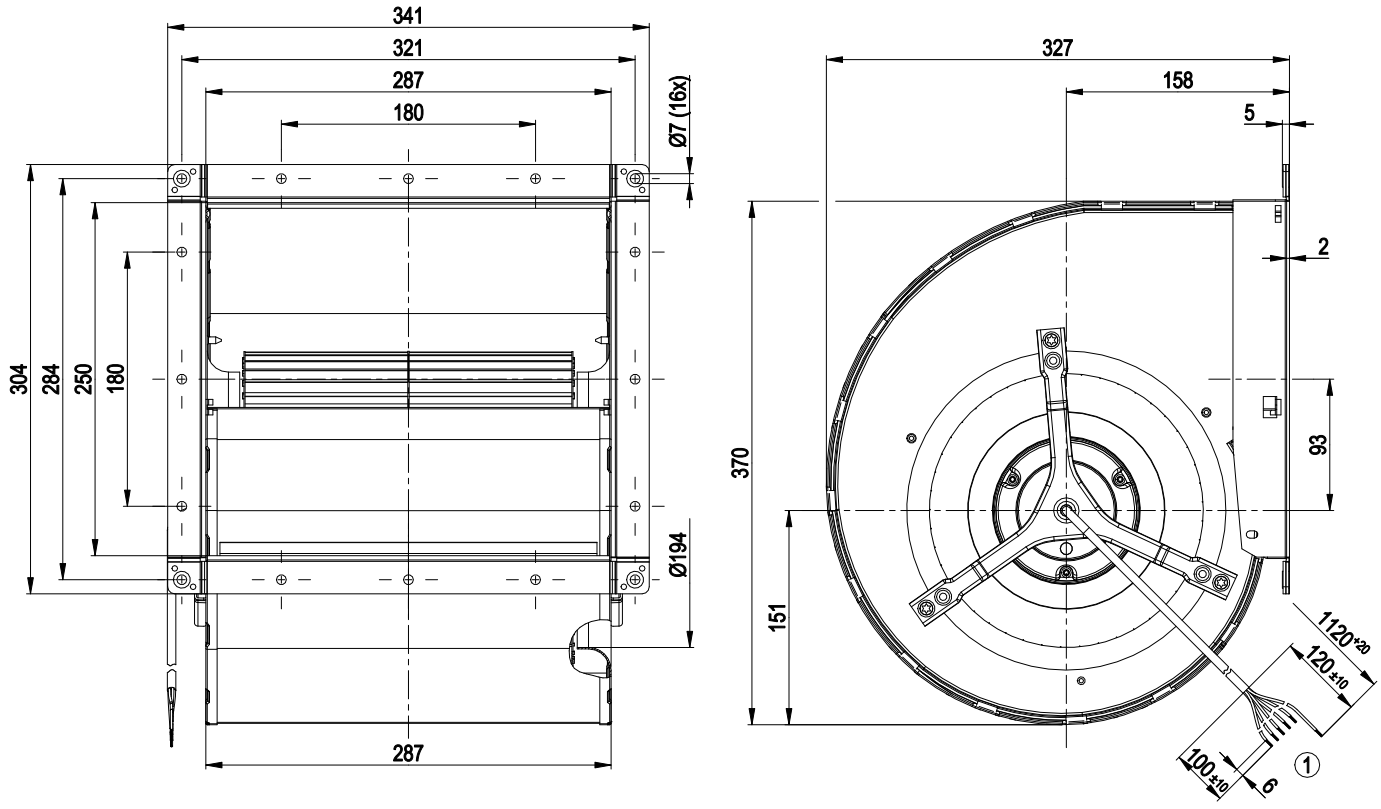
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Product drawing



1	Cable ETFE AWG 20, 6x crimped splices

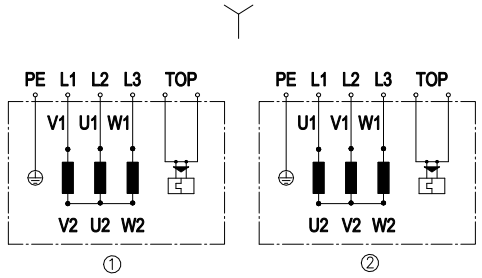
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Connection diagram



Note: Change of rotation direction by reversing two phases

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

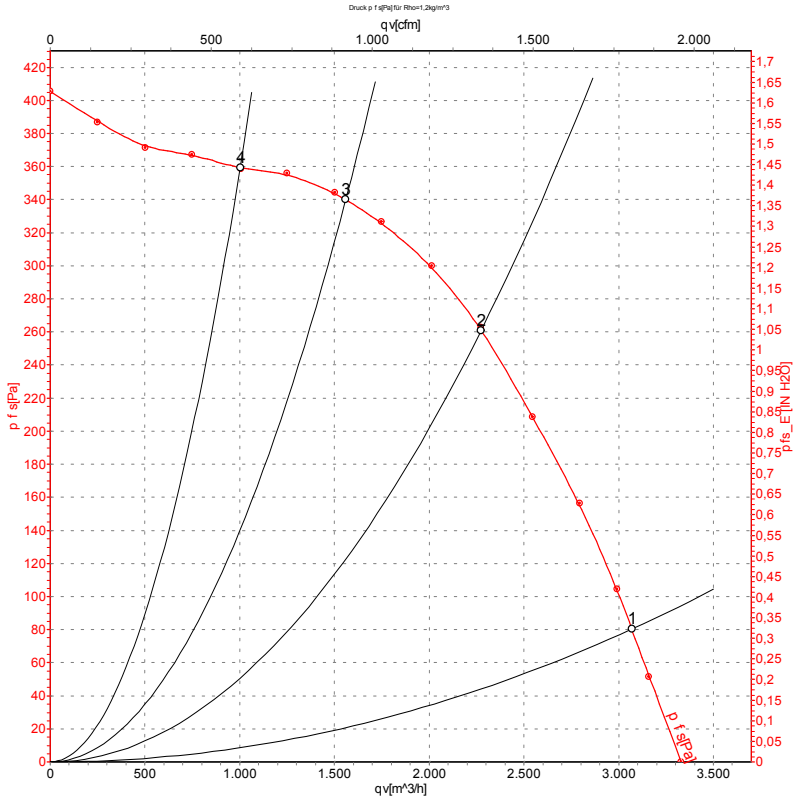
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Curves: Air performance 50 Hz



Measurement: LU-105303-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	Y	400	50	1040	660	1.20	3070	80	1805	0.32
2	Y	400	50	1225	473	0.91	2275	260	1340	1.04
3	Y	400	50	1330	323	0.71	1560	340	920	1.36
4	Y	400	50	1385	240	0.63	1000	360	590	1.45

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

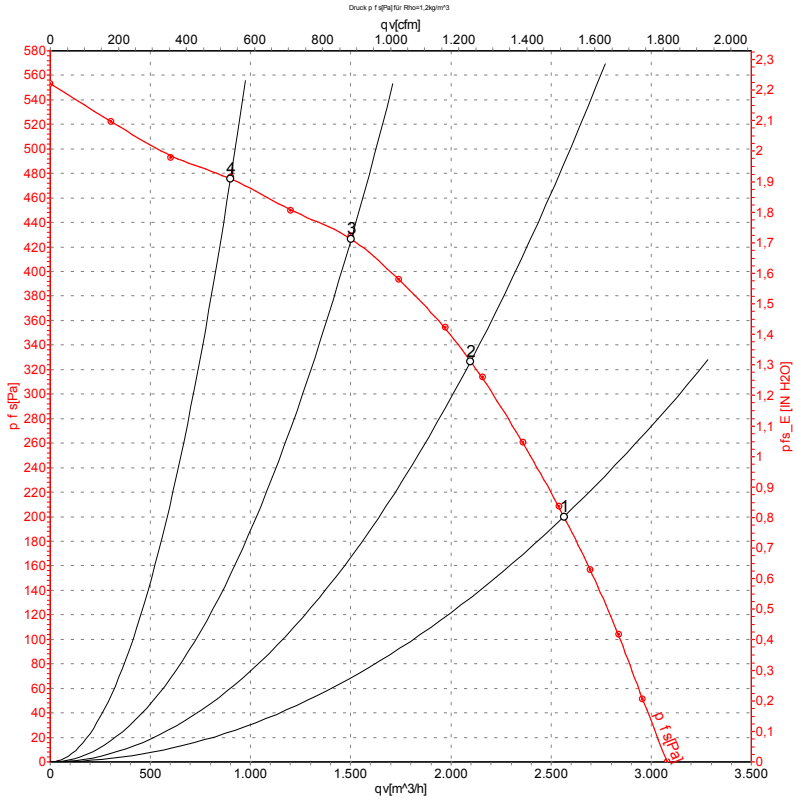
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Curves: Air performance 60 Hz



Measurement: LU-105306-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	Y	400	60	1170	650	1.20	2565	200	1510	0.80
2	Y	400	60	1325	554	1.01	2100	325	1235	1.30
3	Y	400	60	1495	415	0.78	1500	425	885	1.71
4	Y	400	60	1590	316	0.64	900	480	530	1.93

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

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