

D4D225-CC01-02

# AC centrifugal fan

forward-curved, dual-intake  
with housing (large flange)



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## Nominal data

<b>Type</b>	<b>D4D225-CC01-02</b>				
<b>Motor</b>	<b>M4D074-LA</b>				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min <sup>-1</sup>	1040	1170	1040	1170
Power consumption	W	660	650	660	650
Current draw	A	2.08	2.08	1.2	1.2
Min. back pressure	Pa	80	200	80	200
Min. back pressure	inH <sub>2</sub> O	0.32	0.8	0.32	0.8
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	40	40	40	40

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 $\eta_e$	%	46.8	39.5	09 Power consumption $P_e$	kW 0.31
02 Measurement category		B		09 Air flow $q_v$	m <sup>3</sup> /h 1505
03 Efficiency category		Total		09 Pressure increase $p_f$	Pa 350
04 Efficiency grade N		56.3	49	10 Speed (rpm) n	min <sup>-1</sup> 1340
05 Variable speed drive		No		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 =  $1 + p_f / 100\,000\text{ Pa}$

LU-105303



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## Technical description

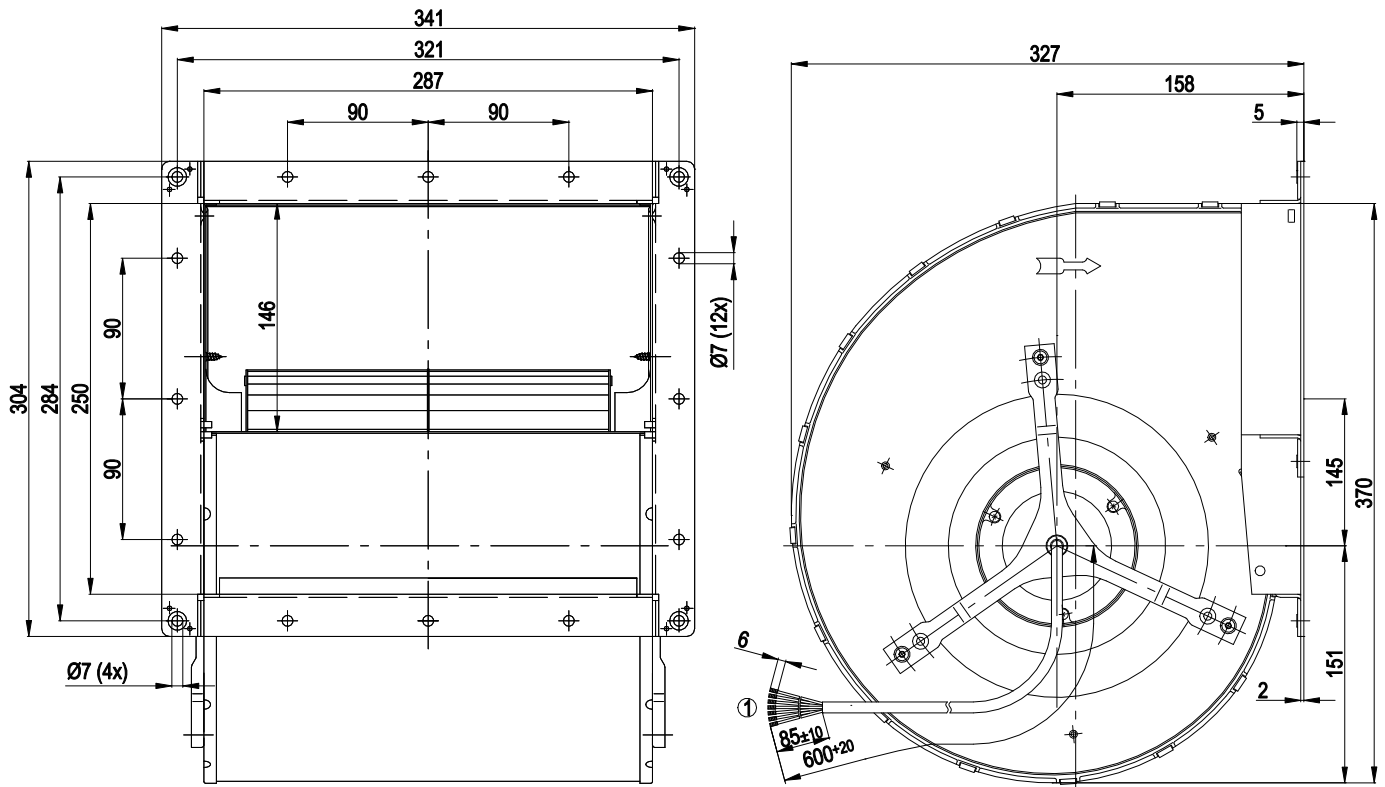
<b>Weight</b>	12.5 kg
<b>Fan size</b>	225 mm
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Sheet steel, galvanized
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP22
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	F2-1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>With cable</b>	Axial
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	CE
<b>Approval</b>	CCC; EAC



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## Product drawing

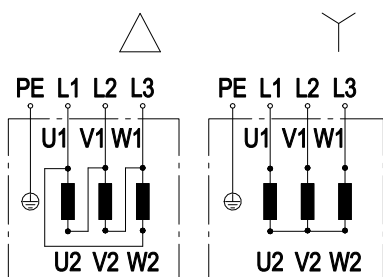


1 Cable AWG20, 7x crimped splices

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## Connection diagram



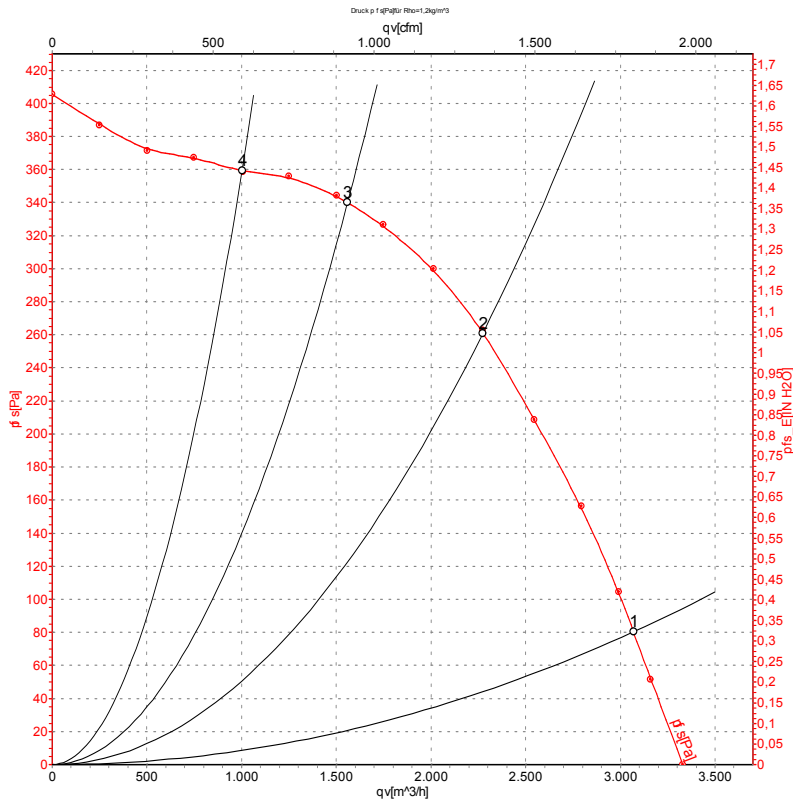
	Three-phase motor	Y	Star connection	Δ	Delta connection
L1	black	L2	black	L3	black
V2	black	U2	black	W2	black
PE	green/yellow				



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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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH2O
1	Y. aus	400	50	1040	660	1.20	3070	80	1805	0.32
2	Y. aus	400	50	1225	473	0.91	2275	260	1340	1.04
3	Y. aus	400	50	1330	323	0.71	1560	340	920	1.36
4	Y. aus	400	50	1385	240	0.63	1000	360	590	1.45

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

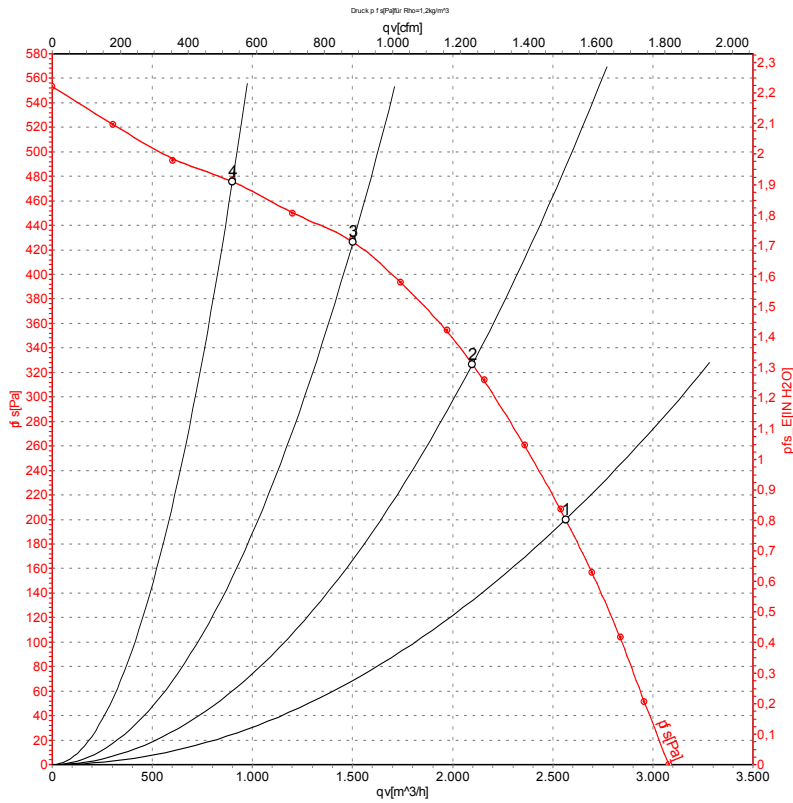


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## Curves: Air performance 60 Hz



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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH2O
1	Y. aus	400	60	1170	650	1.20	2565	200	1510	0.80
2	Y. aus	400	60	1325	554	1.01	2100	325	1235	1.30
3	Y. aus	400	60	1495	415	0.78	1500	425	885	1.71
4	Y. aus	400	60	1590	316	0.64	900	480	530	1.93

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

