

D2D160-BE02-09

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

D2D160-BE02-09 ebmpapst Datasheet FansCo

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Nominal data

Type	D2D160-BE02-09		
Motor	M2D074-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		-	-
Speed (rpm)	min ⁻¹	2700	3000
Power consumption	W	700	1055
Current draw	A	1.28	1.7
Min. back pressure	Pa	400	500
Min. back pressure	in. wg	1.61	2.01
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	75	55
Starting current	A	5.34	5.54

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



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Technical description

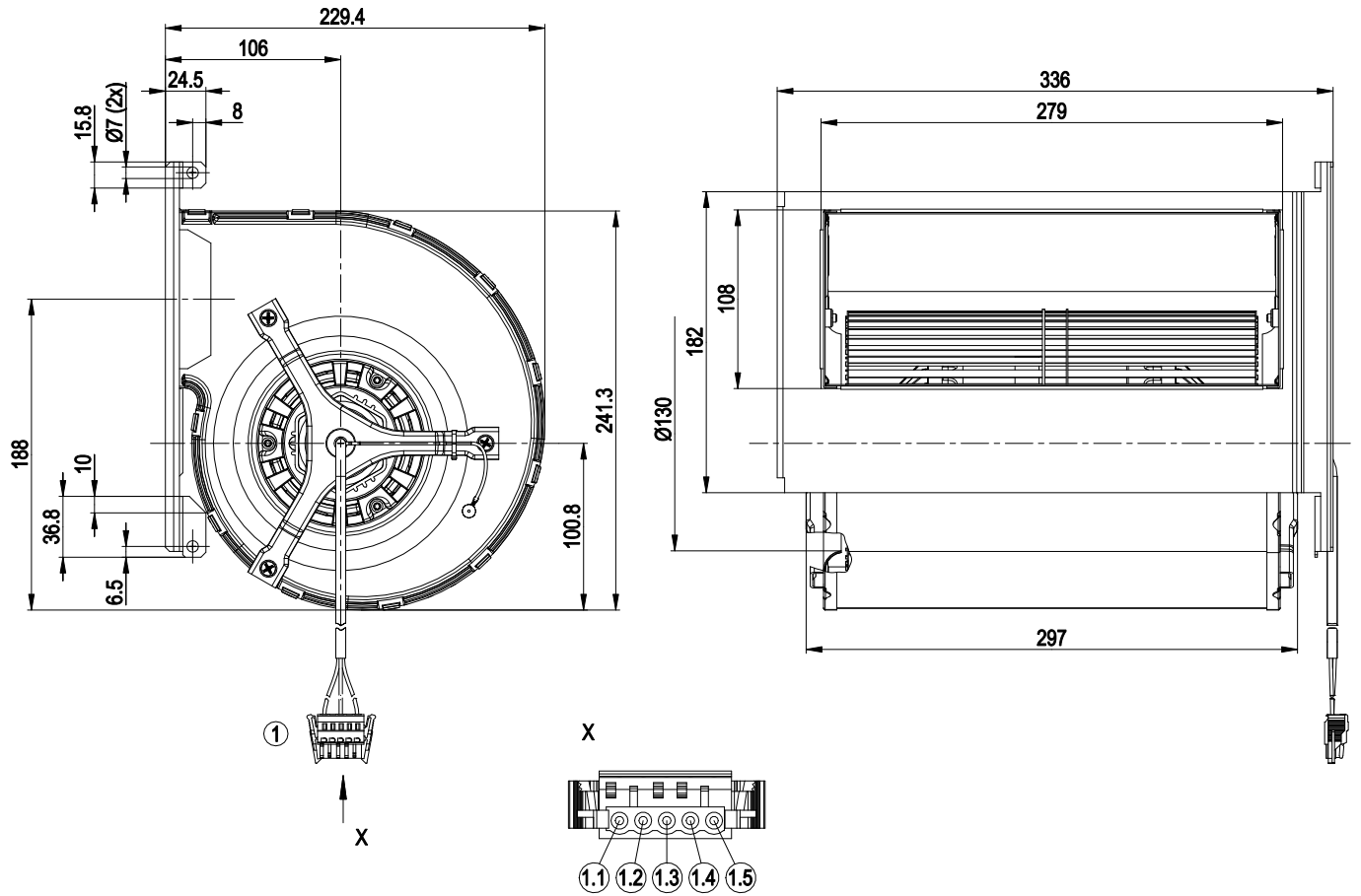
Weight	9.9 kg
Size	160 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP00
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+; F2-1
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, open rotor
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) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1



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Product drawing



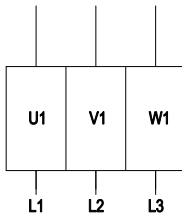
1	Cable PFA AWG20, 1x WAGO connector housing 721-105/037-000 crimped
1.1	L1 (black)
1.2	free
1.3	L2 (blue)
1.4	free
1.5	L3 (brown)



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Connection diagram



Change of rotation direction by reversing 2 phases

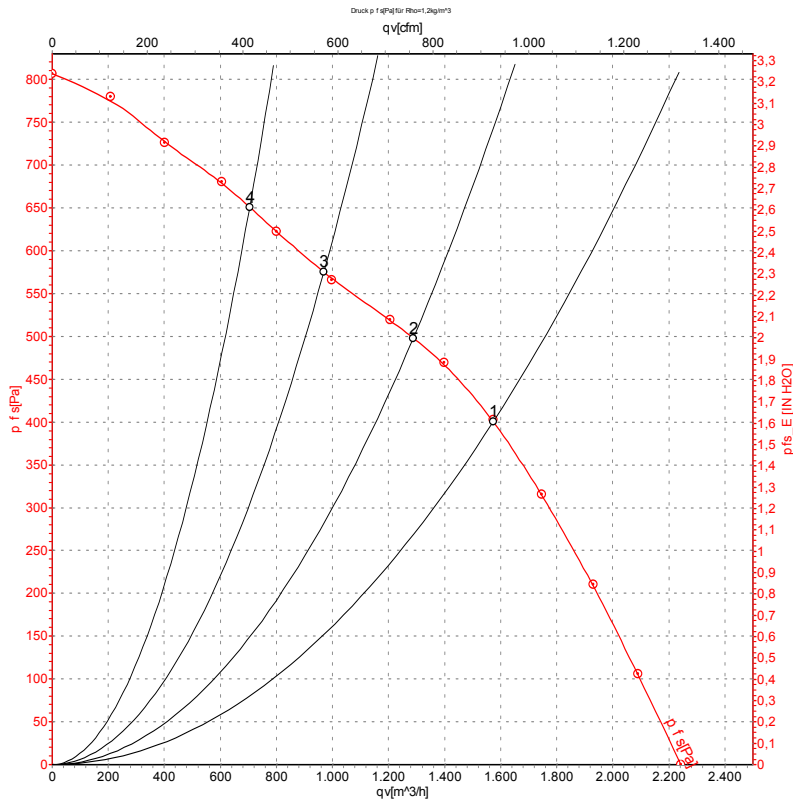
1	Three-phase motor, star connection
U1	= L1 = black
V1	= L2 = blue
W1	= L3 = brown

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Curves: Air performance 50 Hz



Measurement: LU-112482-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	400	50	2700	700	1.28	1575	400	925	1.61
2	400	50	2775	564	1.10	1290	500	760	2.01
3	400	50	2825	454	0.96	970	575	570	2.31
4	400	50	2855	387	0.89	705	650	415	2.61

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

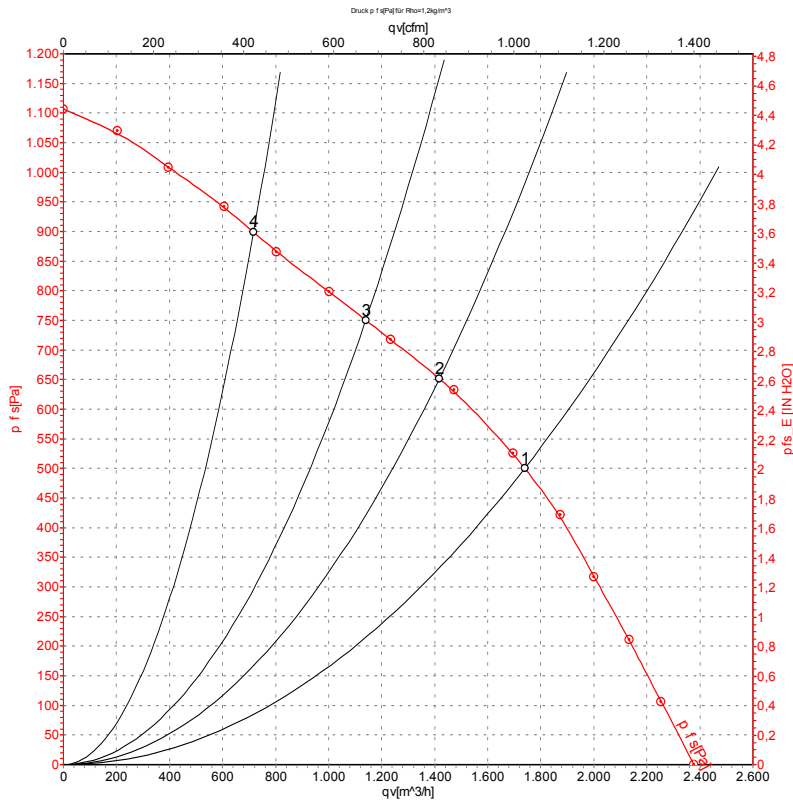


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Curves: Air performance 60 Hz



Measurement: LU-112483-1

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	q _v	P _{is}	q _v	P _{is}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	400	60	3000	1055	1.70	1740	500	1025	2.01
2	400	60	3130	851	1.39	1415	650	835	2.61
3	400	60	3215	728	1.21	1140	750	670	3.01
4	400	60	3300	592	1.01	715	900	420	3.61

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · P_{is} = Pressure increase

