D2D160-BE02-16

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D2D160-BE02-16**
Motor	**M2D074-LA**

Phase		3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400	480
Connection		Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	50	60	60
Type of data definition		ml	ml	ml	ml	ml
Valid for approval / standard		-	-	-	-	-
Speed (rpm)	min^{-1}	2700	3000	2700	3000	3200
Power input	W	700	1055	700	1055	1085
Current draw	A	2.2	3.0	1.28	1.7	1.5
Min. back pressure	Pa	400	500	400	500	530
Min. ambient temperature	°C	-25	-25	-25	-25	-25
Max. ambient temperature	°C	75	75	75	75	75
Starting current	A	9.25	9.6	5.34	5.54	5.7

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	11.2 kg
Size	160 mm
Motor size	74
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Material of guard grille	Steel, galvanised and plastic-coated in white aluminium (RAL 9006)
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP00
Insulation class	"F"
Humidity (F) / environmental protection class (H)	H0+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CSA C22.2 no. 100; CCC; UL 1004-1; EAC

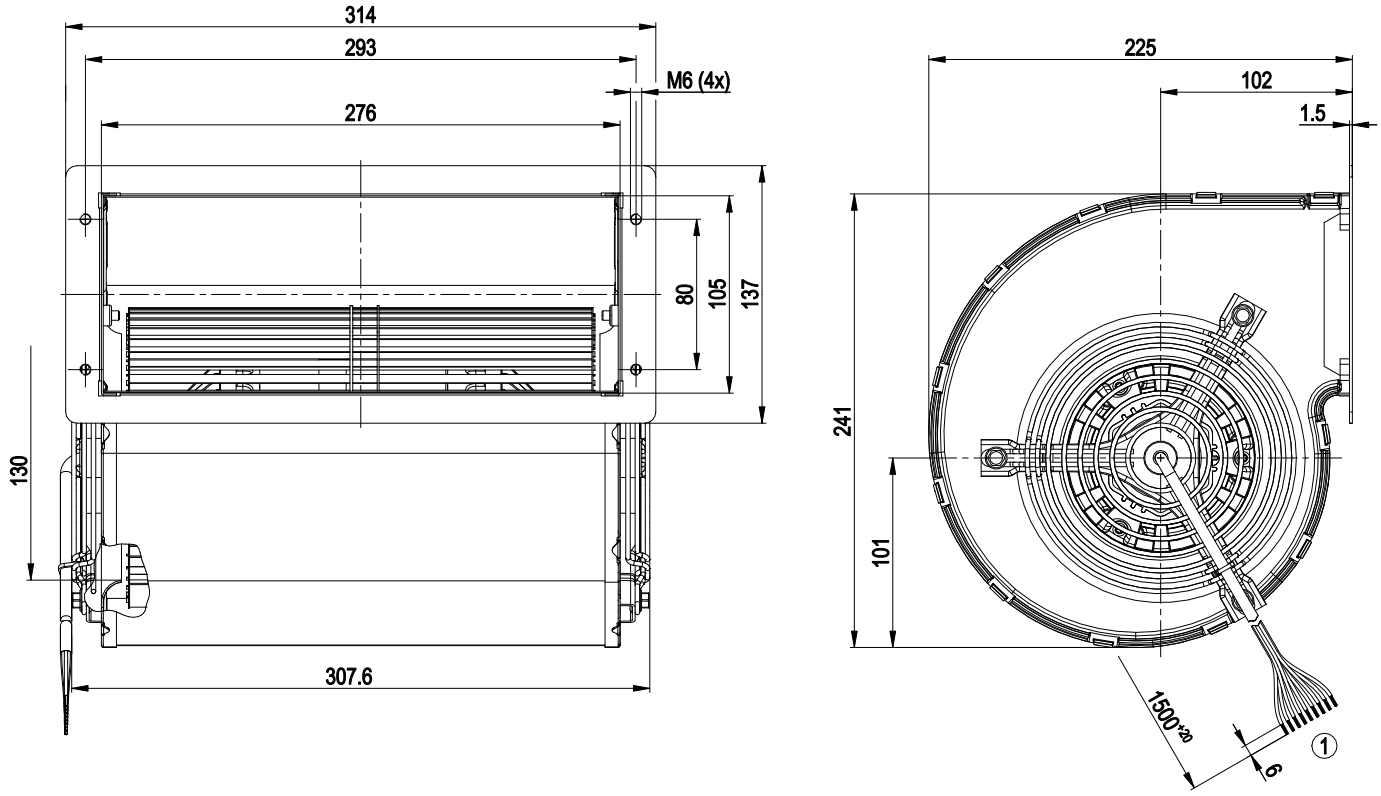
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Product drawing



1	Connection line PFA AWG20 (green/yellow AWG18), 9x lead tips crimped

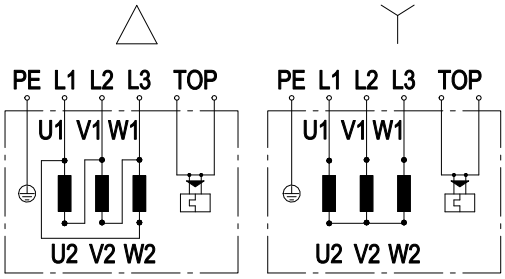
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Connection screen



Note: Change in direction of rotation by reversing two phases

Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2xgrey
PE	green/yellow				

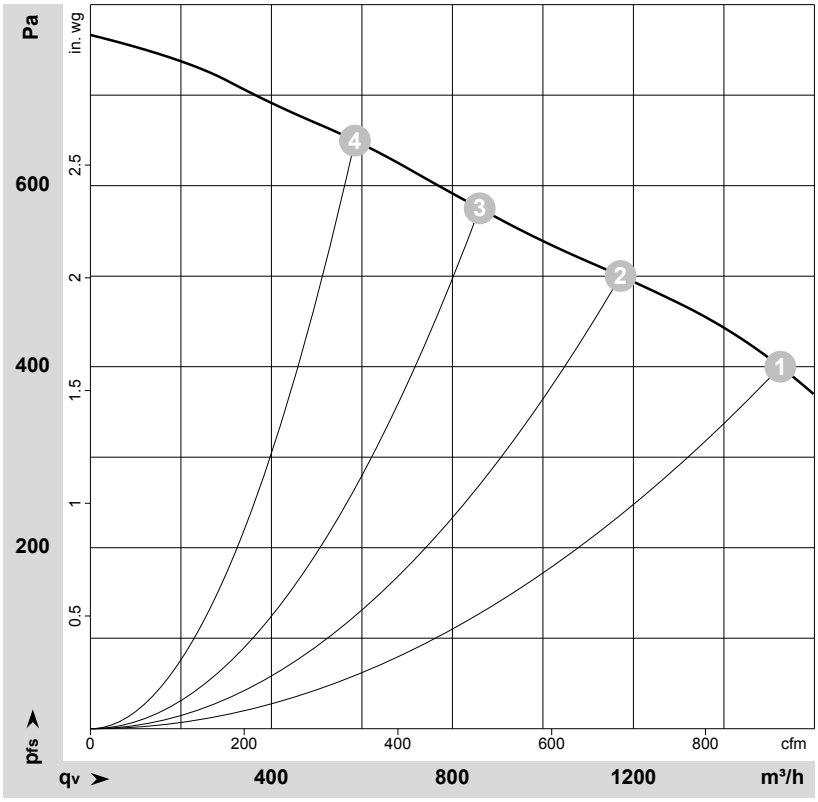
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112482-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	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	2700	700	1.28	68	80	1525	400	900	1.61
2	Y	400	50	2795	523	1.04	68	80	1170	500	690	2.01
3	Y	400	50	2835	428	0.93	69	81	860	575	505	2.31
4	Y	400	50	2870	355	0.85	70	82	585	650	345	2.61

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
q_V = Air flow · p_{fs} = Pressure increase

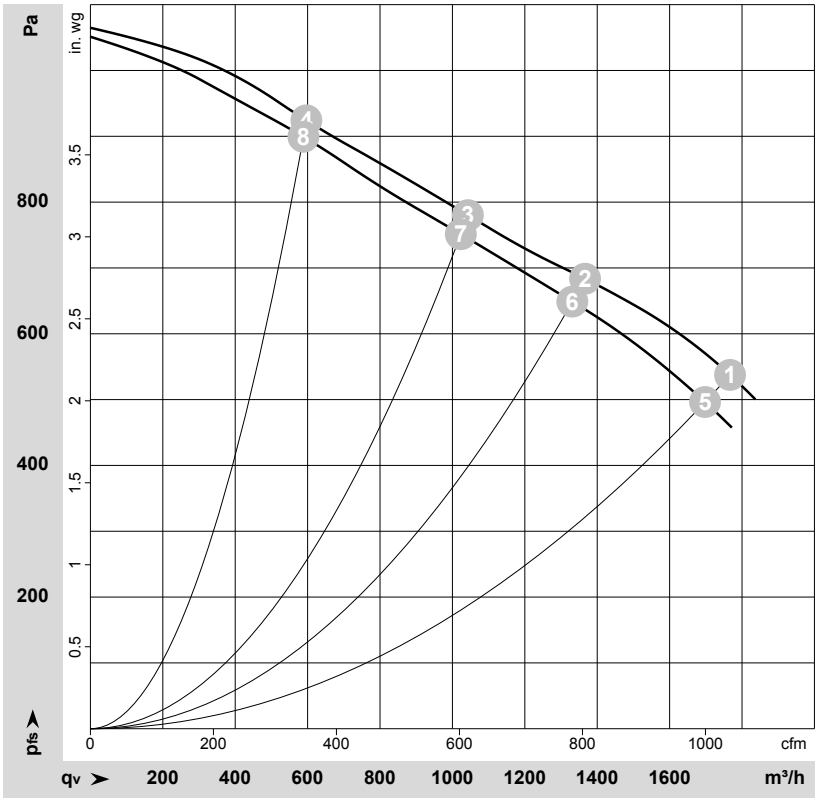
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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-191710-1
Measurement: LU-112483-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	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	480	60	3200	1085	1.50	1765	530	1040	2.13
2	Y	480	60	3300	860	1.19	1365	685	805	2.75
3	Y	480	60	3350	744	1.05	1045	780	615	3.13
4	Y	480	60	3405	598	0.90	595	925	350	3.71
5	Y	400	60	3000	1055	1.70	1700	500	1000	2.01
6	Y	400	60	3160	809	1.33	1330	650	785	2.61
7	Y	400	60	3240	686	1.15	1025	750	600	3.01
8	Y	400	60	3315	559	0.96	590	900	345	3.61

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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