D2D133-DB08-27

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**D2D133-DB08-27**
Motor	**M2D068-DF**

Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		cs	cs
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2100	2050
Power consumption	W	190	255
Current draw	A	0.30	0.36
Min. back pressure	Pa	180	250
Min. back pressure	in. wg	0.72	1
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	60

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	4.0 kg
Size	133 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized and painted black
Housing material	Sheet steel, galvanized
Guard grille material	Steel, coated with white-aluminum plastic (RAL 9006)
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+; F5
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; motor not provided with overheating protection at the factory; CE
Approval	UL 1004-1; CSA C22.2 No. 100

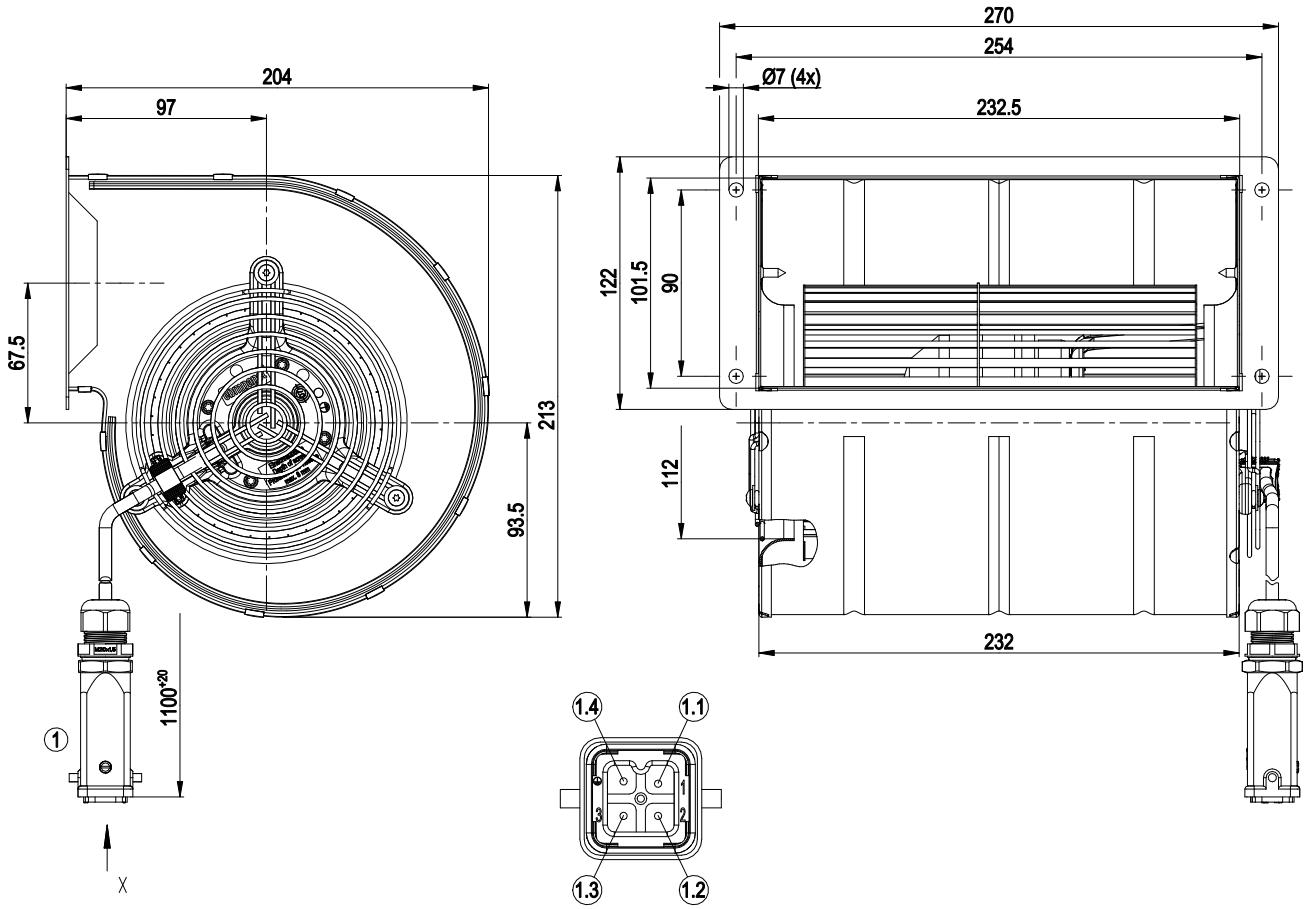
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Product drawing



1	Cable PFA AWG20 (green/yellow AWG18), 1x connector housing Harting 19200030420, 1x 4-pole pin insert Harting 09200032611
1.1	Motor connection U (black)
1.2	Motor connection V (blue)
1.3	Motor connection W (brown)
1.4	PE (green/yellow)

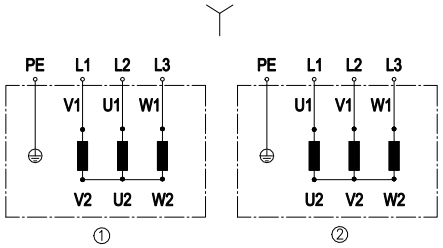
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Connection diagram



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

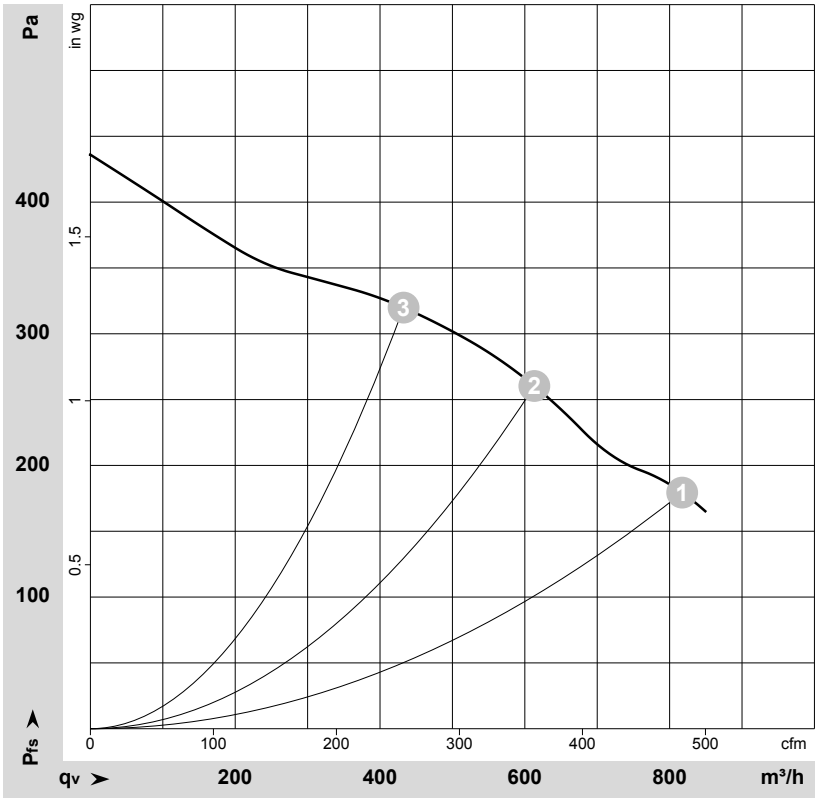
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-69481-1

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	2100	190	0.30	815	180	480	0.72
2	400	50	2325	151	0.25	615	260	360	1.04
3	400	50	2530	119	0.21	435	320	255	1.28

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

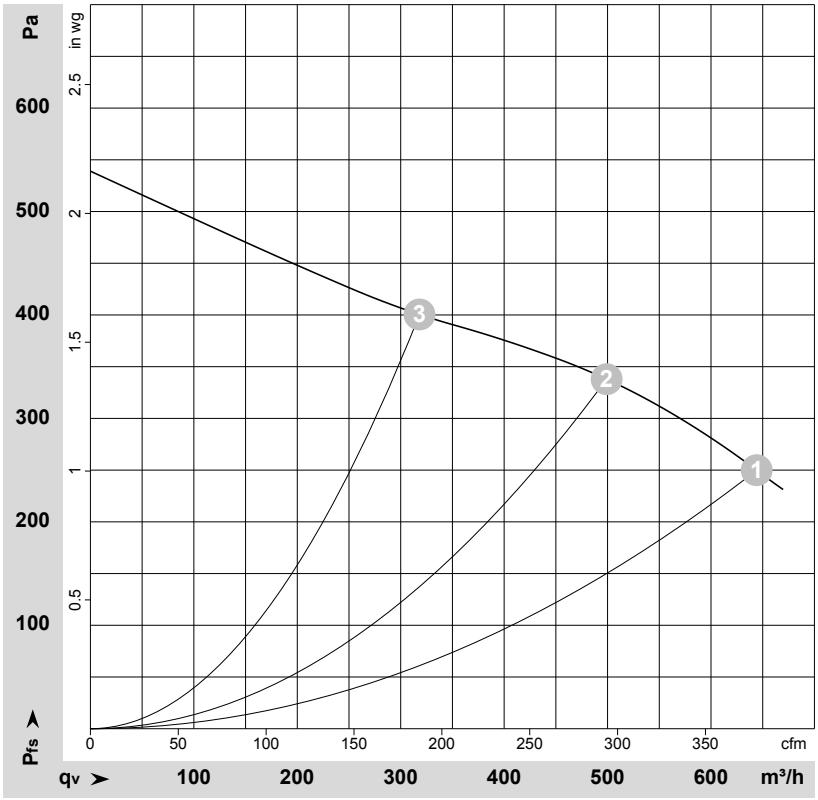
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-69482-1

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	60	2330	204	0.32	645	250	380	1.00
2	400	60	2605	173	0.27	500	340	295	1.36
3	400	60	2795	146	0.23	320	400	185	1.61

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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