

AC centrifugal fan

forward-curved, dual-intake

with housing (flange), for rail applications

D2D133-AB34-38 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	D2D133-AB34-38		
Motor	M2D068-DF		
Phase		3~	3~
Nominal voltage	VAC	200	200
Wiring		Δ	Δ
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1580	1700
Power consumption	W	175	185
Current draw	A	0.55	0.57
Min. back pressure	Pa	0	60
Min. back pressure	inH ₂ O	0	0.24
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	50
Starting current	A	0.73	0.75

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	3.7 kg
Fan size	133 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Sheet steel, painted black
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	F2-2
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
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE

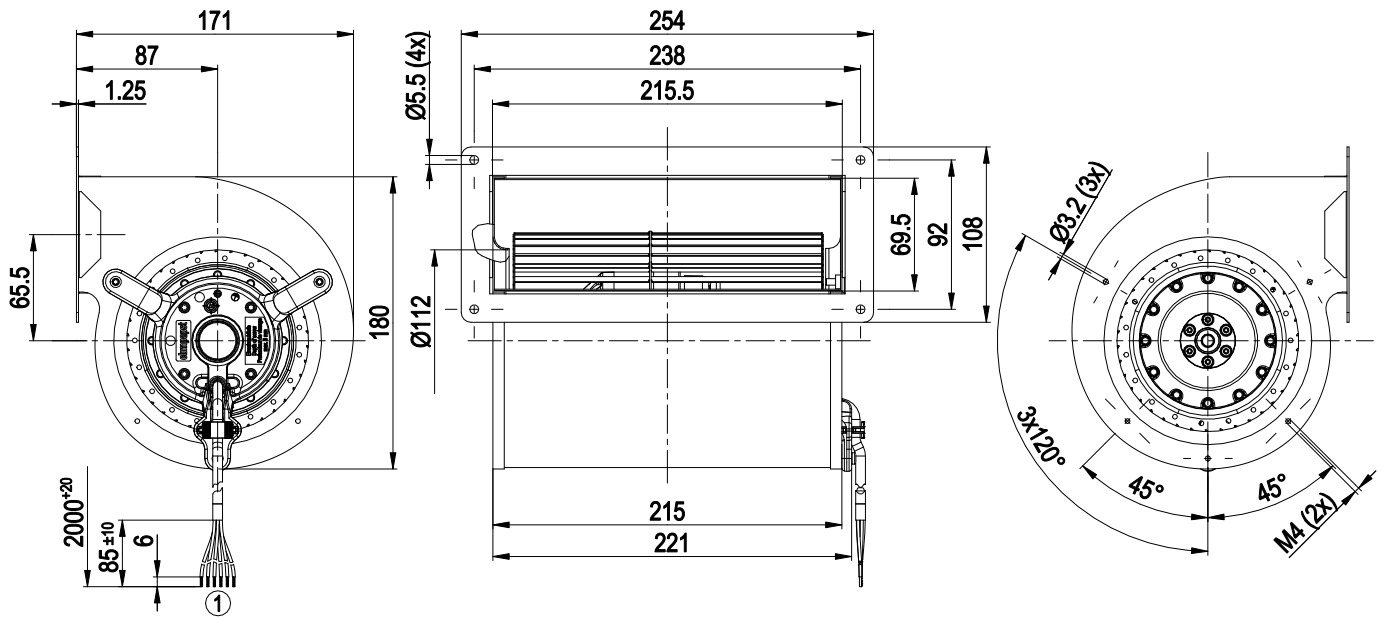


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Product drawing

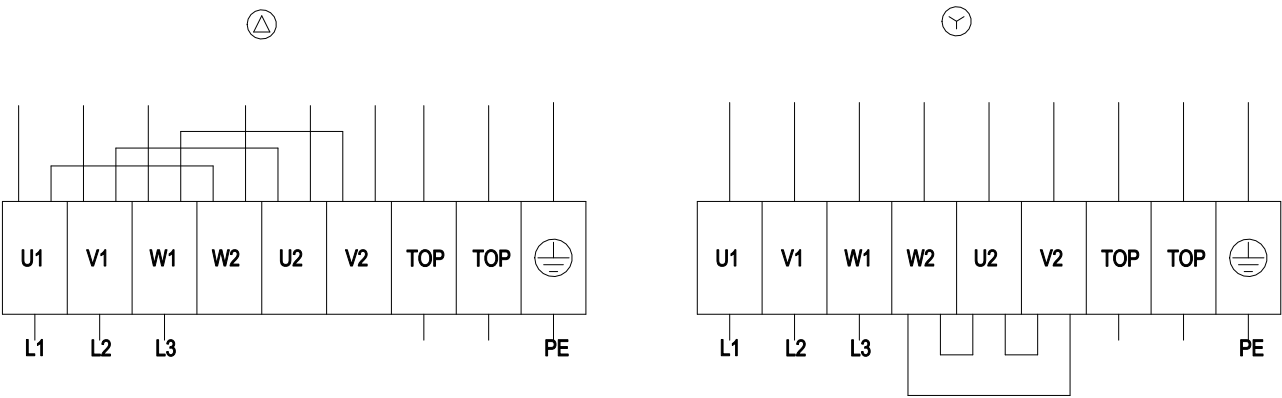


1 Cable halogen-free, BETAtans® 3 GKW flex, sw 6G 0.5 mm², 6x crimped splices

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Connection diagram



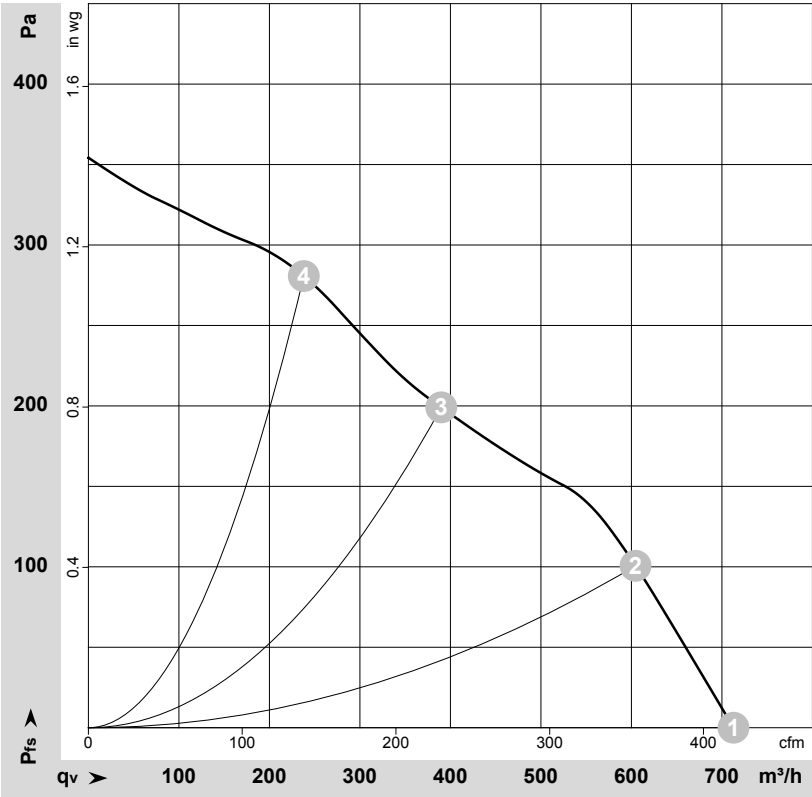
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-137262-1

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	m³/h	Pa	cfm	inH2O
1	Δ	200	50	1580	175	0.55	715	0	420	0.00
2	Δ	200	50	1870	149	0.46	605	100	355	0.40
3	Δ	200	50	2315	104	0.33	390	200	230	0.80
4	Δ	200	50	2570	73	0.25	240	280	140	1.12

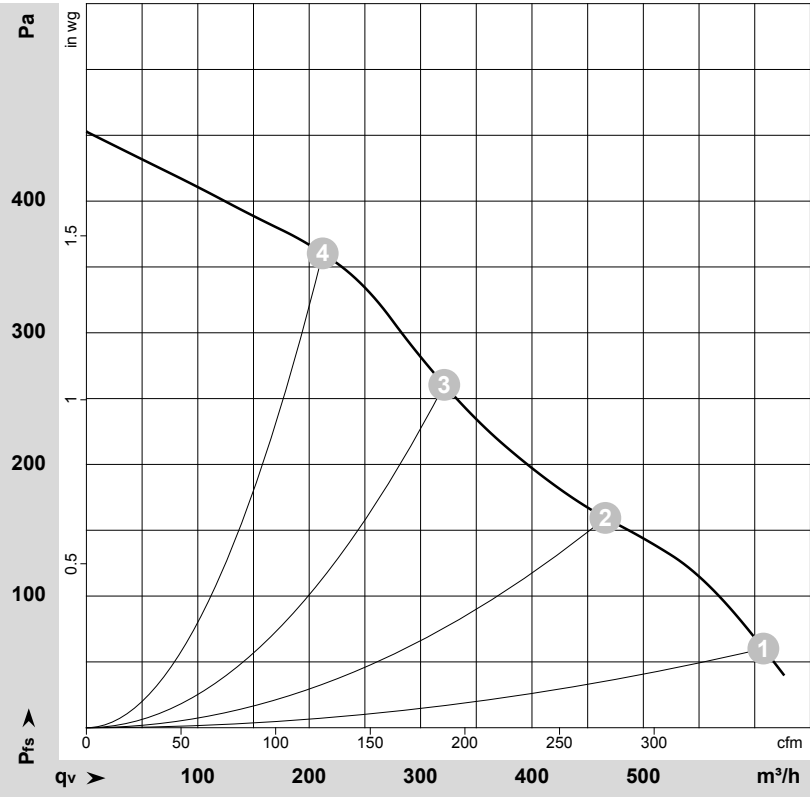
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_s = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-137263-1

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	inH ₂ O
1	Δ	200	60	1700	185	0.57	610	60	360	0.24
2	Δ	200	60	2125	154	0.47	465	160	275	0.64
3	Δ	200	60	2545	121	0.37	320	260	190	1.04
4	Δ	200	60	2885	91	0.29	210	360	125	1.45

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

