G4D180-BD28-17

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G4D180-BD28-17**
Motor	**M4D068-EC**

Phase		3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400	440
Wiring		Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	50	60	60
Method of obtaining data		fa	fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	CE	CE
Speed (rpm)	min^{-1}	1300	1430	1300	1430	1500
Power consumption	W	185	240	185	240	255
Current draw	A	0.59	0.71	0.34	0.41	0.4
Min. back pressure	Pa	0	50	0	50	55
Min. back pressure	inH2O	0	0.2	0	0.2	0.22
Min. ambient temperature	°C	-25	-25	-25	-25	-25
Max. ambient temperature	°C	85	60	85	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	5.7 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Sheet steel, galvanized
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; 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
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; EAC; UL 1004-1

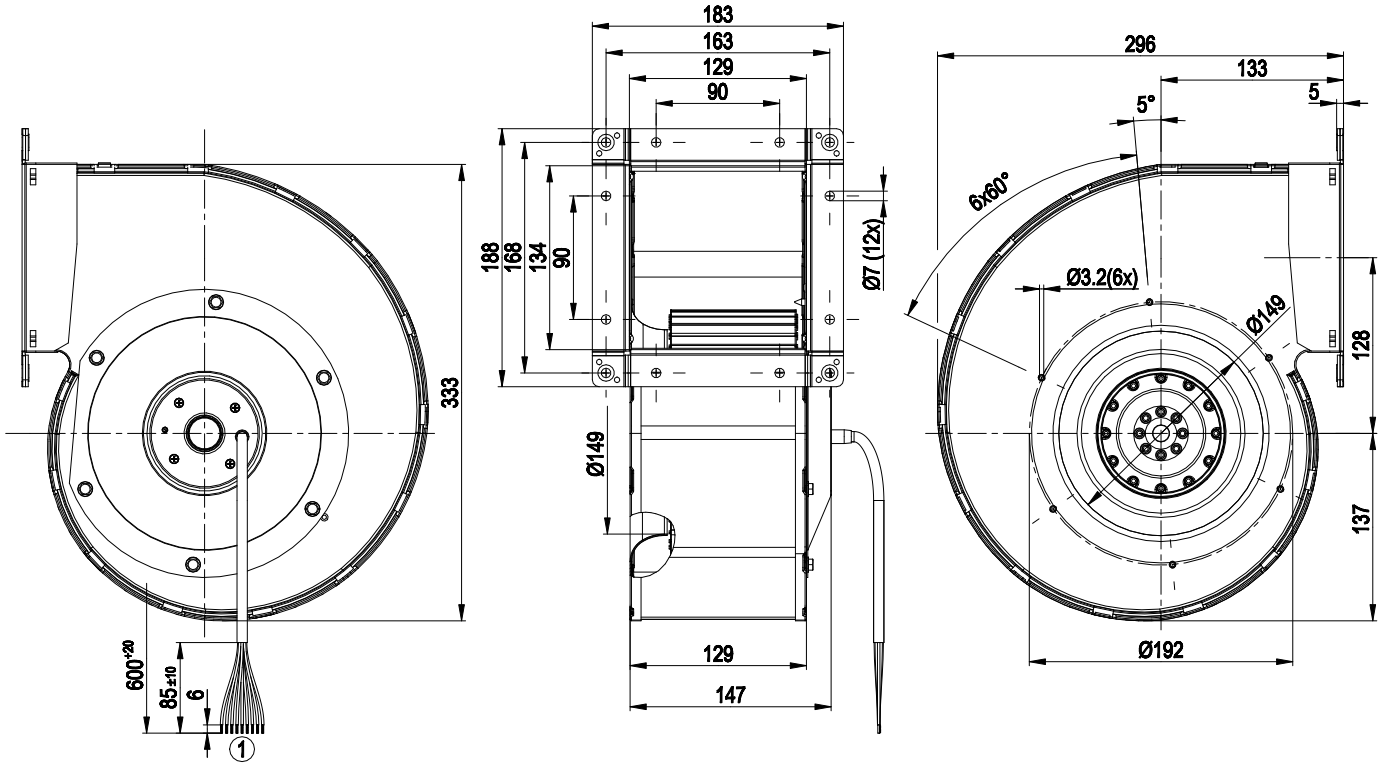
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Product drawing



1	Cable Dipotherm 9G 0.5mm², 9x crimped splices

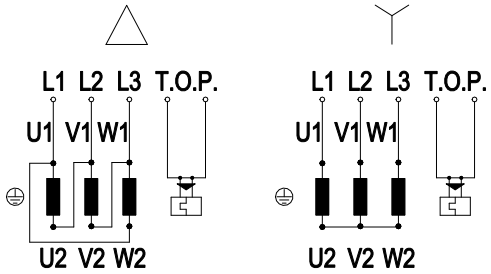
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Connection diagram



Note: Change of rotation direction 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	gray

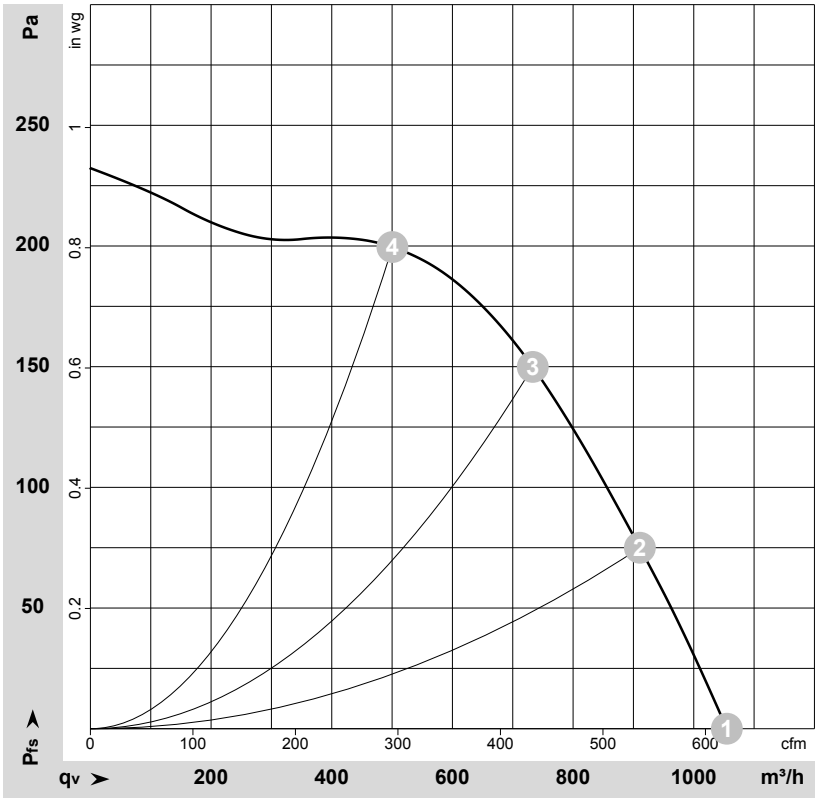
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-178463-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y. AUS	400	50	1300	185	0.34	1055	0	620	0.00
2	Y. AUS	400	50	1350	152	0.28	910	75	535	0.30
3	Y. AUS	400	50	1390	121	0.25	735	150	430	0.60
4	Y. AUS	400	50	1430	88	0.23	500	200	295	0.80

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

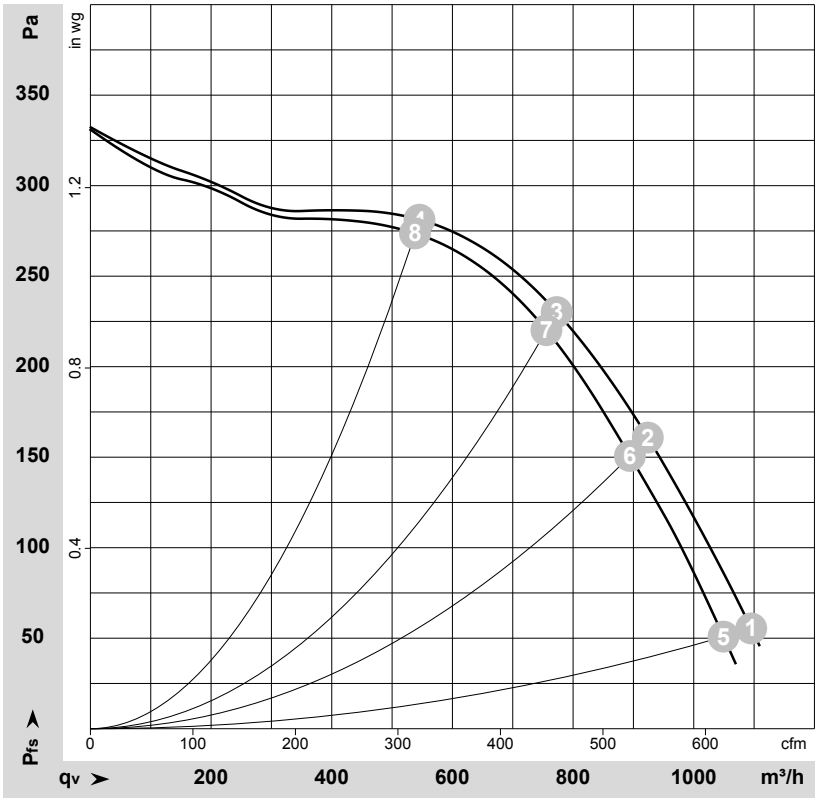
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-178466-1
Measurement: LU-178435-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y. AUS	440	60	1500	255	0.40	1095	55	645	0.22
2	Y. AUS	440	60	1575	203	0.31	925	161	545	0.65
3	Y. AUS	440	60	1625	167	0.27	775	230	455	0.92
4	Y. AUS	440	60	1685	120	0.23	545	281	320	1.13
5	Y. AUS	400	60	1430	240	0.41	1050	50	615	0.20
6	Y. AUS	400	60	1525	195	0.32	895	150	525	0.60
7	Y. AUS	400	60	1585	160	0.27	755	220	445	0.88
8	Y. AUS	400	60	1660	115	0.22	540	275	315	1.10

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

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