G2D180-AB08-28

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

G2D180-AB08-28 ebmpapst Datasheet
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www.fansco.com

Nominal data

Type	**G2D180-AB08-28**
Motor	**M2D074-EI**

Phase		3~	3~
Nominal voltage	VAC	440	440
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2450	2650
Power consumption	W	450	540
Current draw	A	0.66	0.8
Min. back pressure	Pa	0	250
Min. back pressure	inH2O	0	1
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	80	55

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	5.34 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum
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
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

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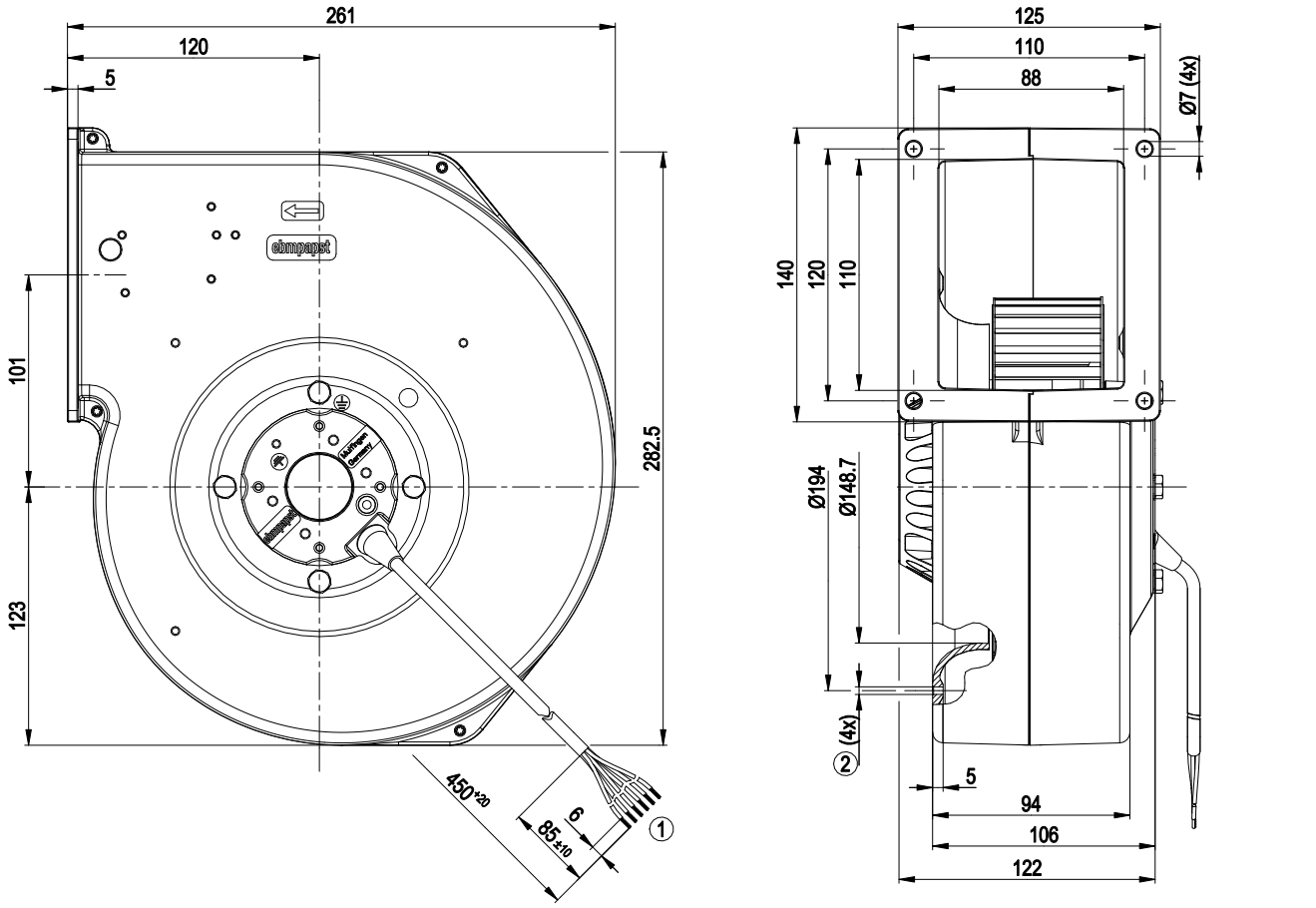
Product drawing



1	Cable halogen-free, BETAtrans® 3 GKW flex, sw 6G 0.5 mm², 6x crimped splices
2	For self-tapping M4 screws

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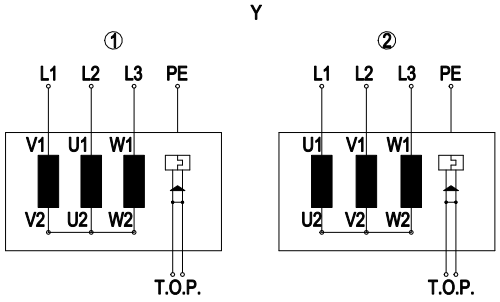
Connection diagram



Y	Star connection, three-phase motor
1	Counterclockwise operation
L1	blue
L2	black
L3	brown
PE	green/yellow
TOP	gray
2	Clockwise operation
L1	black
L2	blue
L3	brown
PE	green/yellow
TOP	gray

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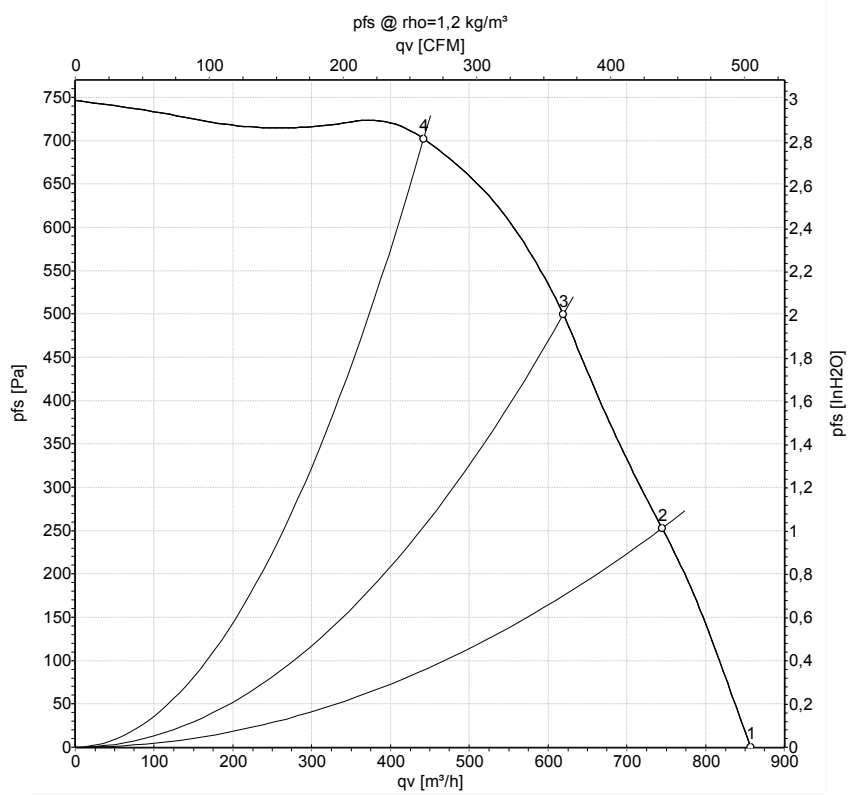
Curves: Air performance 50 Hz



Measurement: LU-125214-1

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	440	50	2450	450	0.66	855	0	505	0.00
2	Y	440	50	2535	380	0.57	745	250	440	1.00
3	Y	440	50	2635	310	0.48	620	500	365	2.01
4	Y	440	50	2760	219	0.37	440	700	260	2.81

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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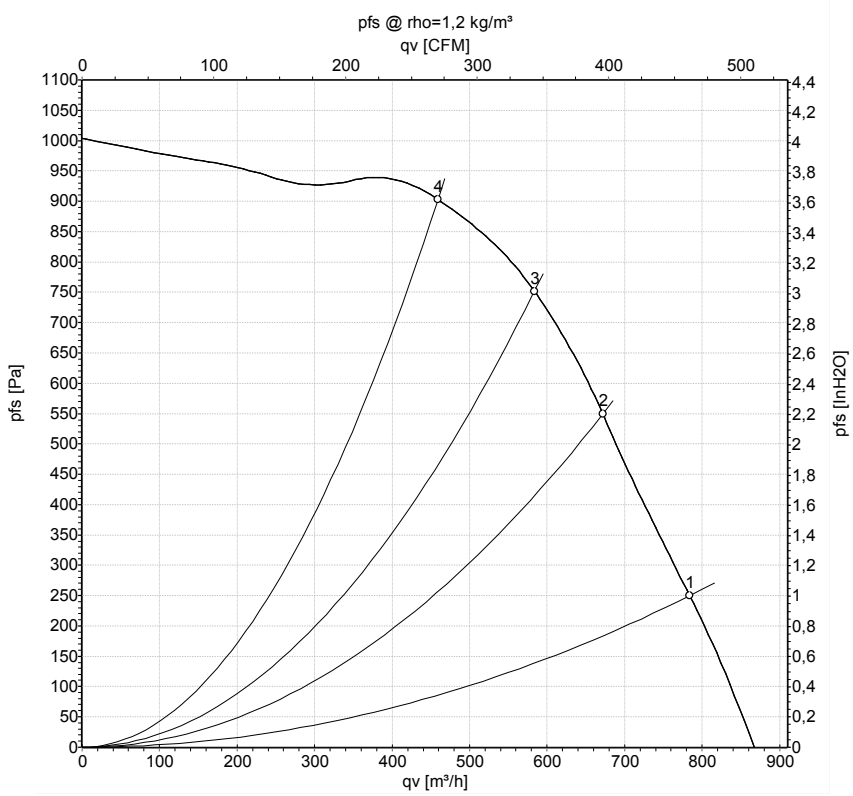
Curves: Air performance 60 Hz



Measurement: LU-125215-1

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	440	60	2650	540	0.80	785	250	460	1.00
2	Y	440	60	2830	461	0.67	670	550	395	2.21
3	Y	440	60	2965	398	0.58	585	750	345	3.01
4	Y	440	60	3110	323	0.48	460	900	270	3.61

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