G2D180-AE02-01

AC centrifugal fan

forward-curved, single-intake

with housing (without flange)

G2D180-AE02-01 ebmpapst Datasheet FansCo

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Nominal data

Type	**G2D180-AE02-01**	
Motor	**M2D068-GA**	
Phase		3~
Nominal voltage	VAC	380
Wiring		Y
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2350
Power consumption	W	385
Current draw	A	0.63
Min. back pressure	Pa	300
Min. back pressure	in. wg	1.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	25
Starting current	A	1.53

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	36.9	33.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		47.4	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.21
09 Air flow q_v	m^3/h	405
09 Pressure increase p_{fs}	Pa	712
10 Speed (rpm) n	min^{-1}	2680
11 Specific ratio*		1.01

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-145333

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Technical description

Weight	5 kg
Size	180 mm
Motor size	68
Impeller material	Sheet steel, galvanized
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	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	EAC

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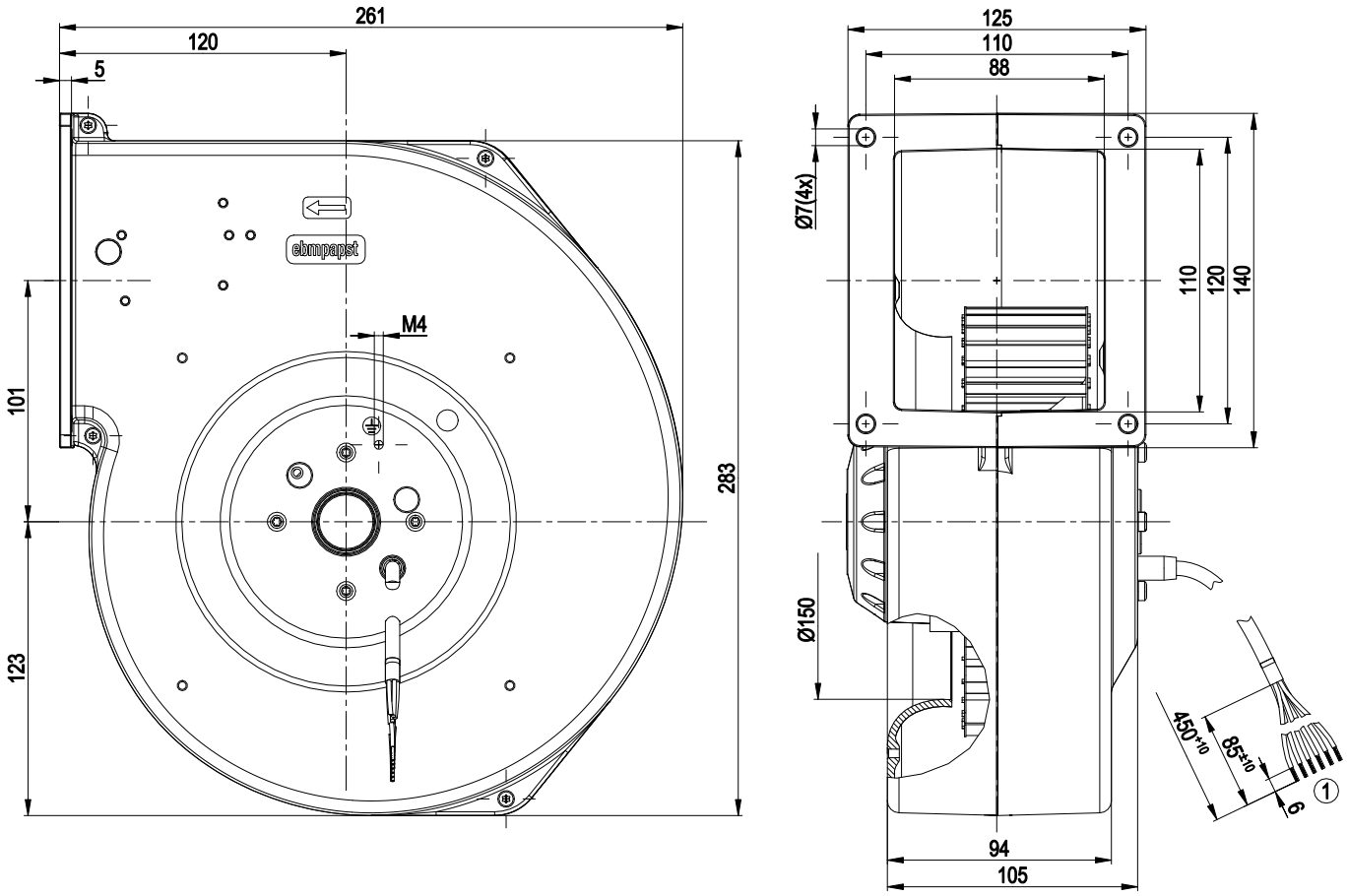
Product drawing



1	Cable PVC 6x 0.5mm², 6x crimped splices

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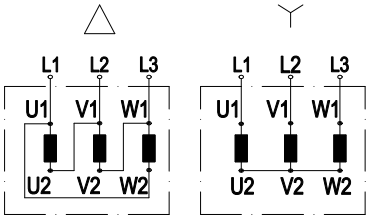
Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow

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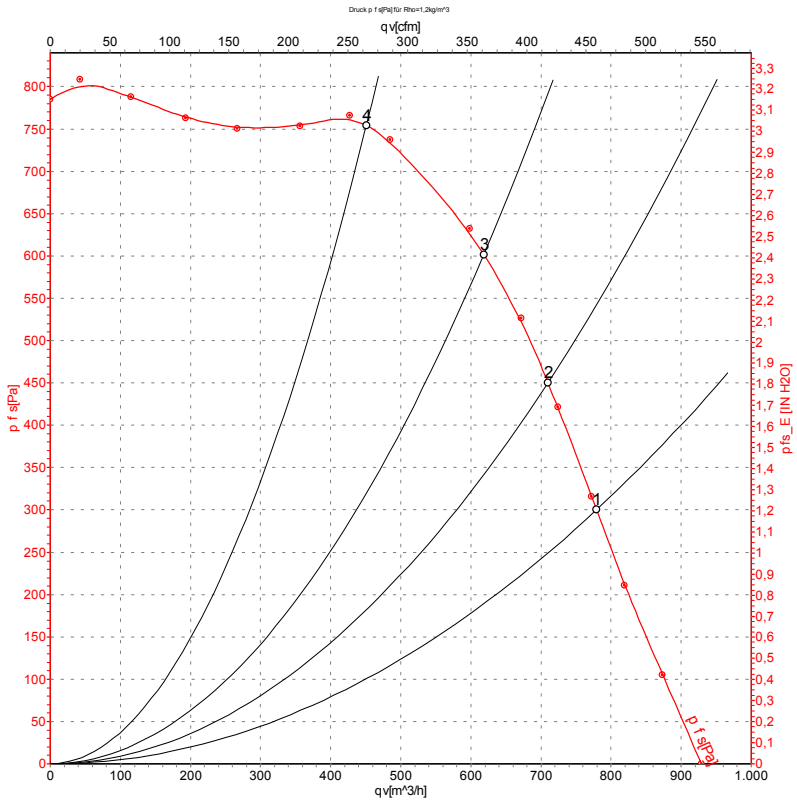
Curves: Air performance 50 Hz



Measurement: LU-56385-1

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	2370	420	0.65	770	300	455	1.20
2	400	50	2445	378	0.59	710	450	420	1.81
3	400	50	2540	323	0.52	620	600	365	2.41
4	400	50	2680	240	0.40	450	750	265	3.01

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