G2D180-CF02-09

AC centrifugal fan

forward curved, single inlet

with housing (flange)

G2D180-CF02-09 ebmpapst Datasheet
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Nominal data

Type	**G2D180-CF02-09**
Motor	**M2D074-GA**

Phase		3~	3~
Nominal voltage	VAC	230	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	2450	2450
Power input	W	445	445
Current draw	A	1.33	0.77
Min. back pressure	Pa	300	300
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	60
Starting current	A	3.8	2.2

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.01

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		37.6	26.8	33.8
Efficiency grade N		47.8	37	44
Power input P_e	kW	0.24		
Air flow q_v	m^3/h	440		
Pressure increase p_{fs}	Pa	751		
Speed n	min^{-1}	2755		

Data established at point of optimum efficiency

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Technical features

Mass	6.1 kg
Size	180 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F2-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

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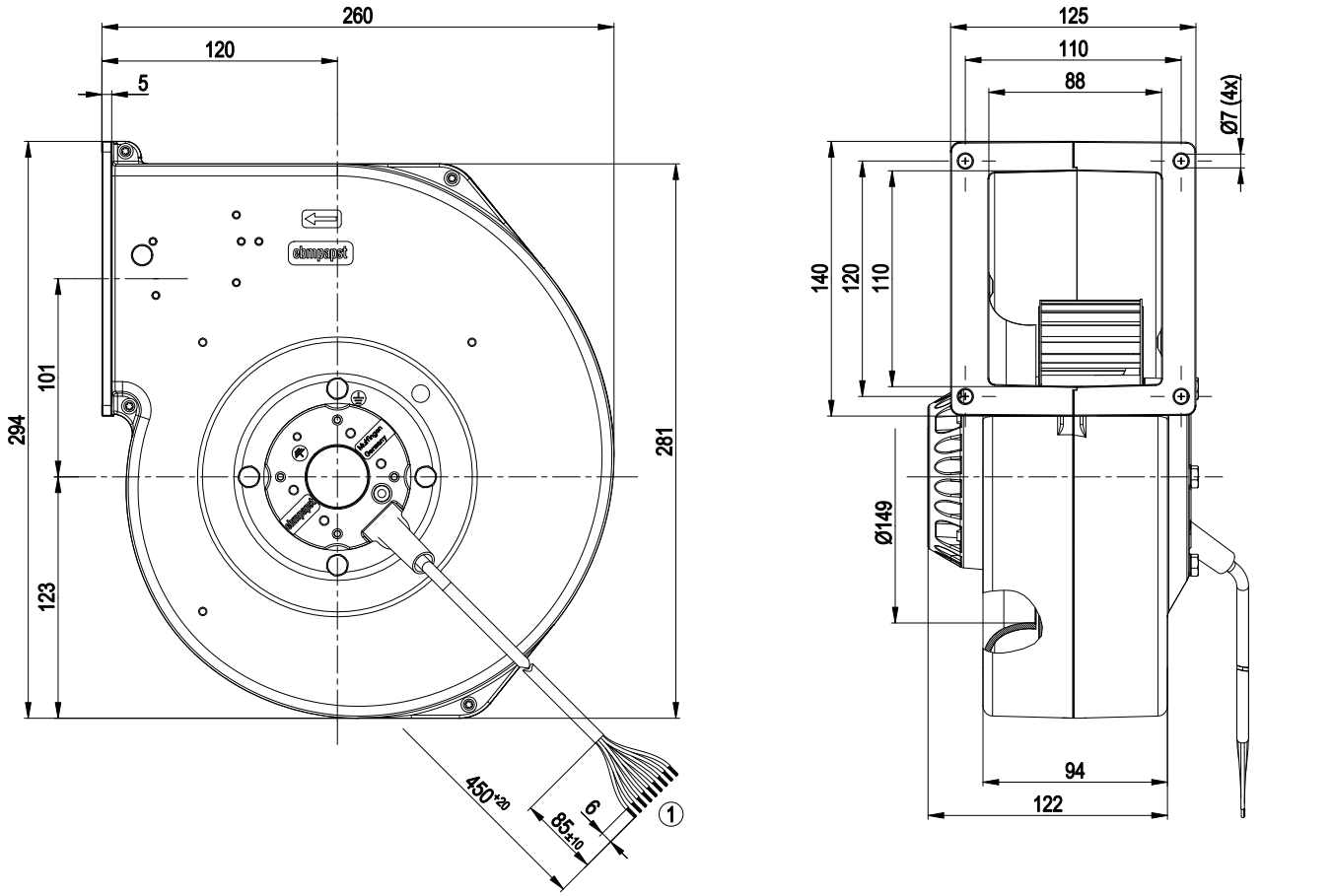
Product drawing



1	Connection line silicone 9G 0.5 mm², 9x brass lead tips crimped

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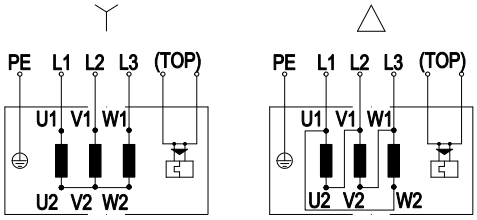
Connection screen



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

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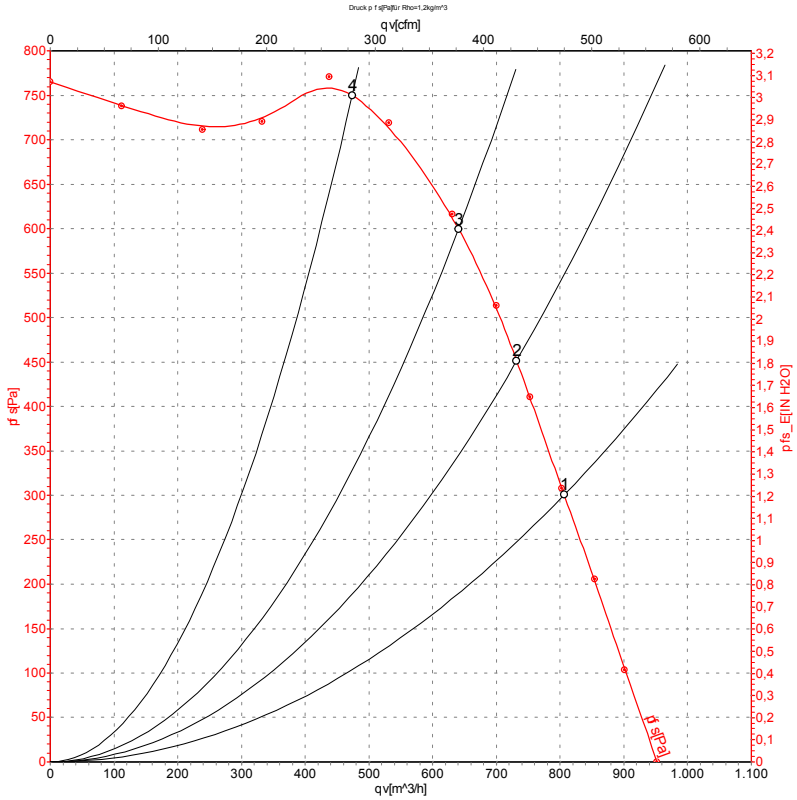
Charts: Air flow 50 Hz Y



Measurement: LU-29582

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Y	400	50	2450	445	0.77	805	300
2	Y	400	50	2540	398	0.68	730	450
3	Y	400	50	2620	344	0.60	640	600
4	Y	400	50	2735	259	0.49	475	750

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase