G2D180-CF02-09

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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ErP2015 EXCEEDS THE NORM

Nominal data

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

Phase		3~	3~
Nominal voltage	VAC	230	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2450	2450
Power consumption	W	445	445
Current draw	A	1.33	0.77
Min. back pressure	Pa	300	300
Min. back pressure	inH2O	1.2	1.2
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 = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	37.6	33.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		47.8	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.24
09 Air flow q_v	m^3/h	440
09 Pressure increase p_{fs}	Pa	751
10 Speed (rpm) n	min^{-1}	2755
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-29582

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Technical description

Weight	6.1 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller 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	EAC

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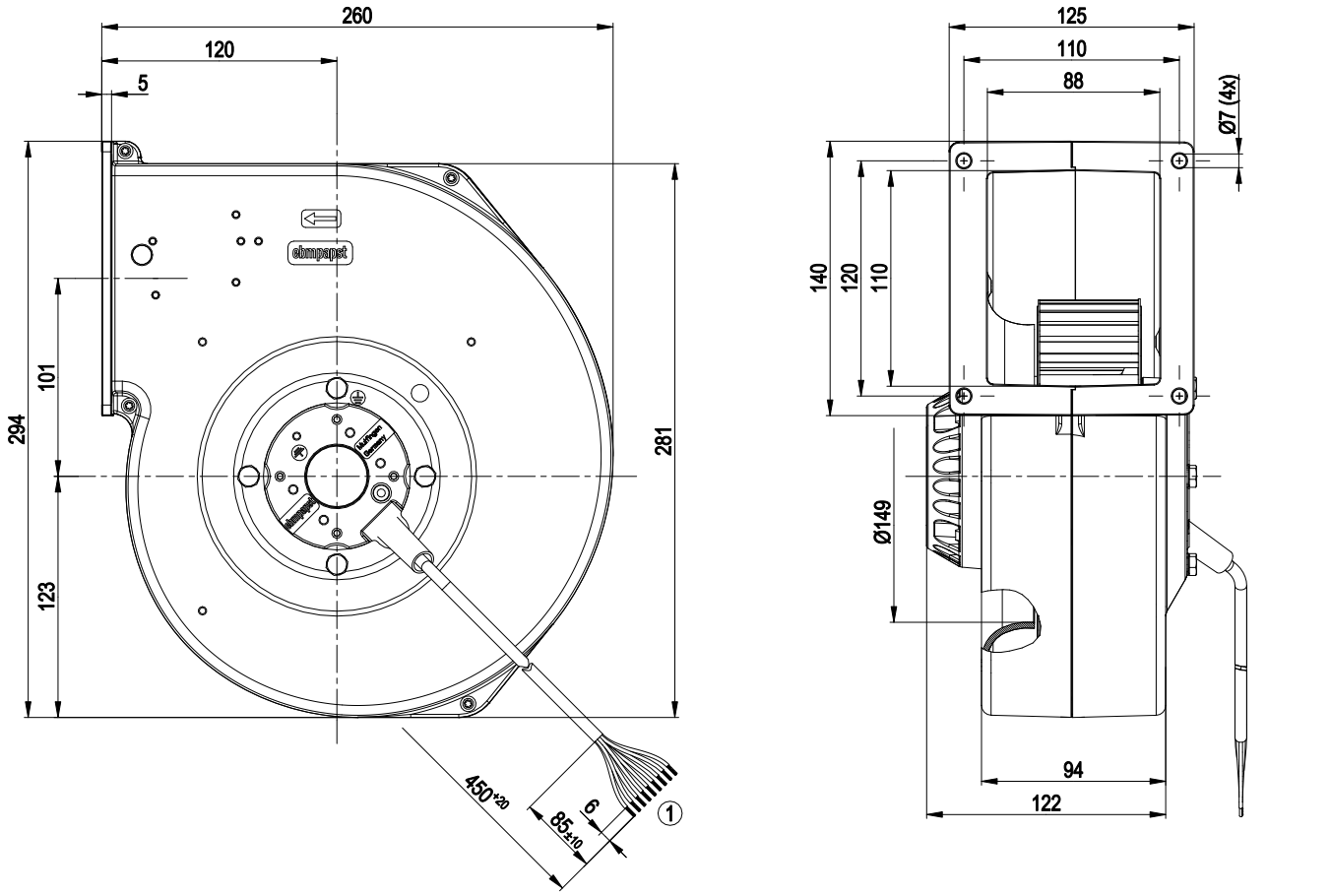
Product drawing



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

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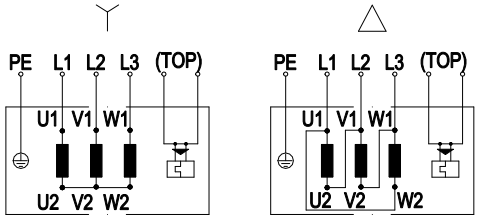
Connection diagram



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

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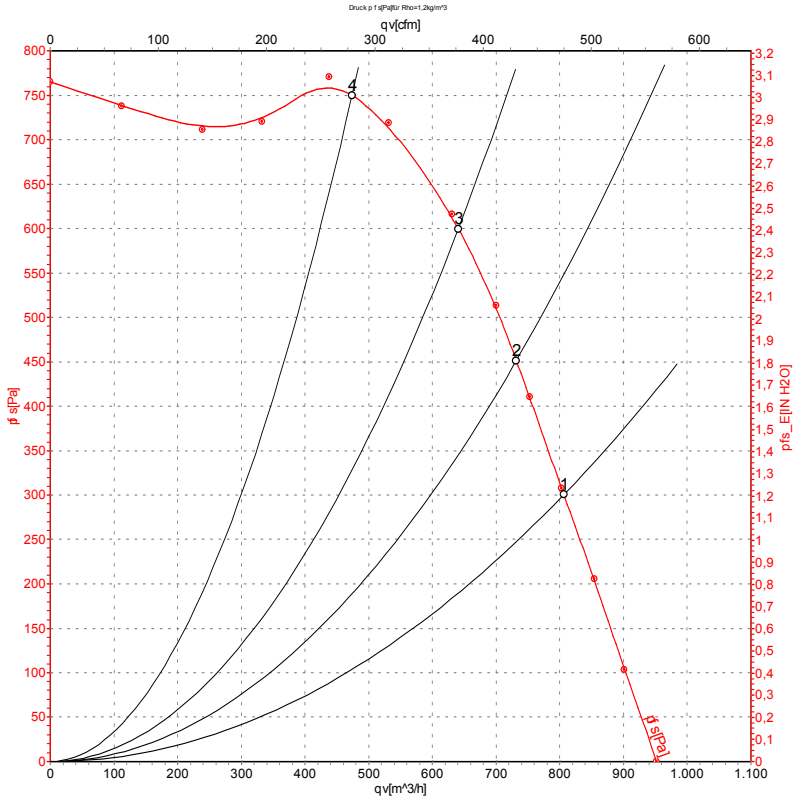
Curves: Air performance 50 Hz Y



Measurement: LU-29582-1

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	400	50	2450	445	0.77	805	300	475	1.20
2	Y	400	50	2540	398	0.68	730	450	430	1.81
3	Y	400	50	2620	344	0.60	640	600	375	2.41
4	Y	400	50	2735	259	0.49	475	750	280	3.01

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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