G2D180-BE02-09

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**G2D180-BE02-09**
Motor	**M2D068-GA**

Phase		3~	3~
Nominal voltage	VAC	220	380
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2350	2350
Power consumption	W	415	415
Current draw	A	1.15	0.66
Min. back pressure	Pa	300	300
Min. back pressure	inH2O	1.2	1.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	-	-

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}	%	37.4	33.6
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	0.23
09 Air flow q_v	m^3/h	430
09 Pressure increase p_{fs}	Pa	727
10 Speed (rpm) n	min^{-1}	2695
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-56385

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Technical description

Weight	5.3 kg
Fan size	180 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F1-1
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

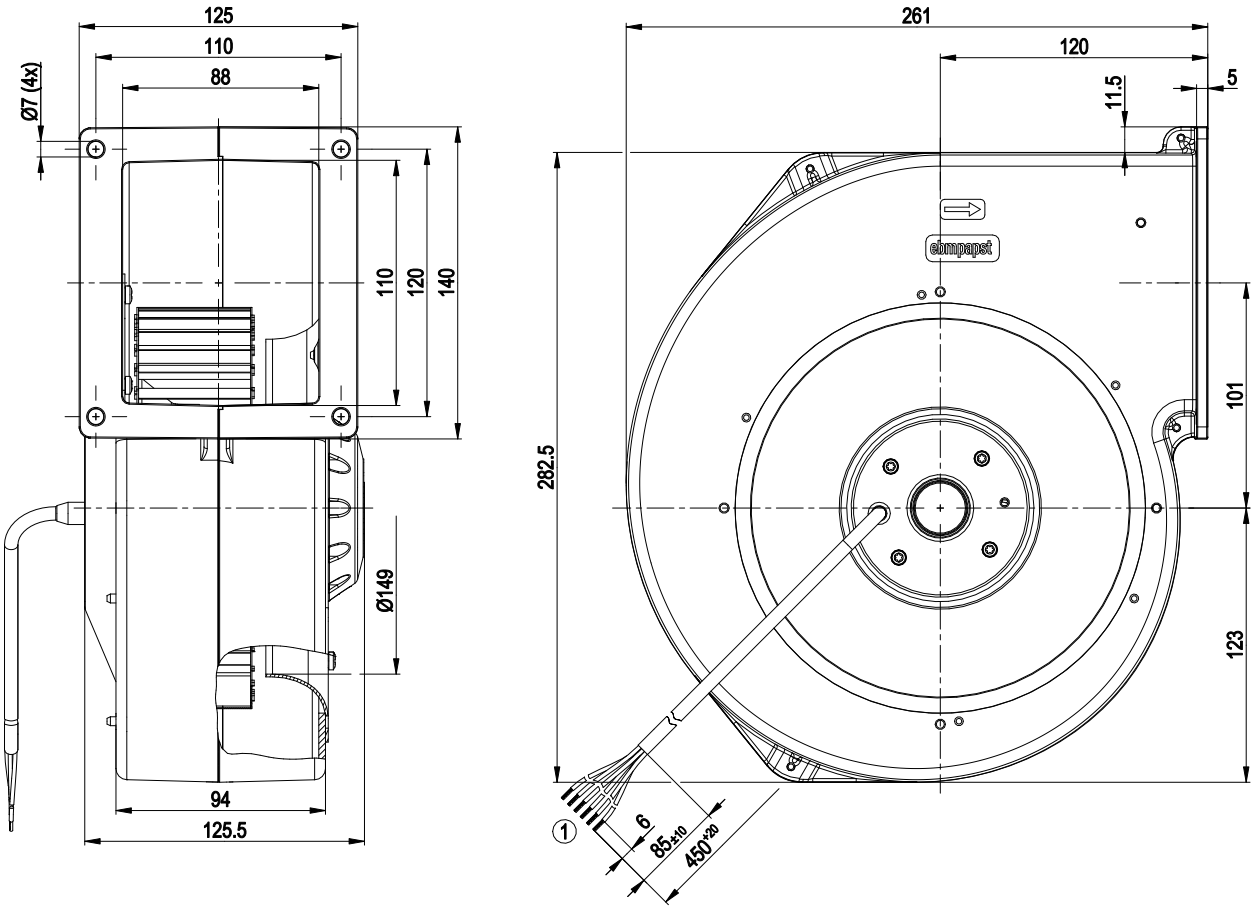
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Product drawing



1	Cable XLPE/XLPO 6G 0.5 mm², 6x crimped splices

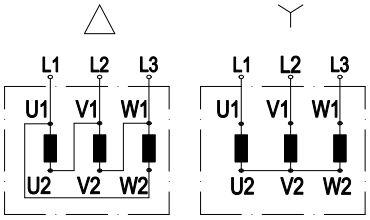
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Connection diagram



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

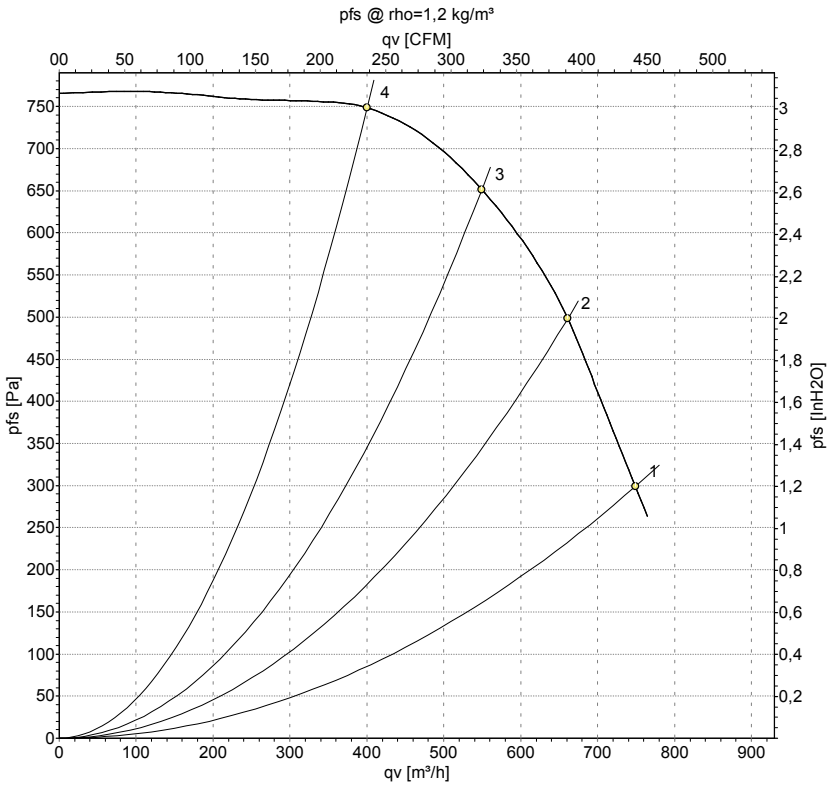
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Curves: Air performance 50 Hz



Measurement: LU-145333-1

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	380	50	2350	415	0.66	750	300	440	1.20
2	Y	380	50	2430	340	0.57	660	500	390	2.01
3	Y	380	50	2555	283	0.49	550	650	325	2.61
4	Y	380	50	2680	216	0.39	400	750	235	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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