

G2D160-AF02-23

AC centrifugal fan

forward-curved, single-intake
with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	G2D160-AF02-23				
Motor	M2D068-EC				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	2300	2550	2300	2550
Power consumption	W	305	335	305	335
Current draw	A	0.83	0.9	0.48	0.52
Min. back pressure	Pa	0	300	0	300
Min. back pressure	in. wg	0	1.2	0	1.2
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	50	40	50	40
Starting current	A	1.75	1.65	1.0	0.95

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

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	34	32.5	09 Power consumption P_e	kW	0.15
02 Measurement category		A		09 Air flow q_v	m ³ /h	390
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	501
04 Efficiency grade N		45.5	44	10 Speed (rpm) n	min ⁻¹	2685
05 Variable speed drive		No		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 = $1 + p_{fs} / 100\,000\text{ Pa}$

LU-39223



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Technical description

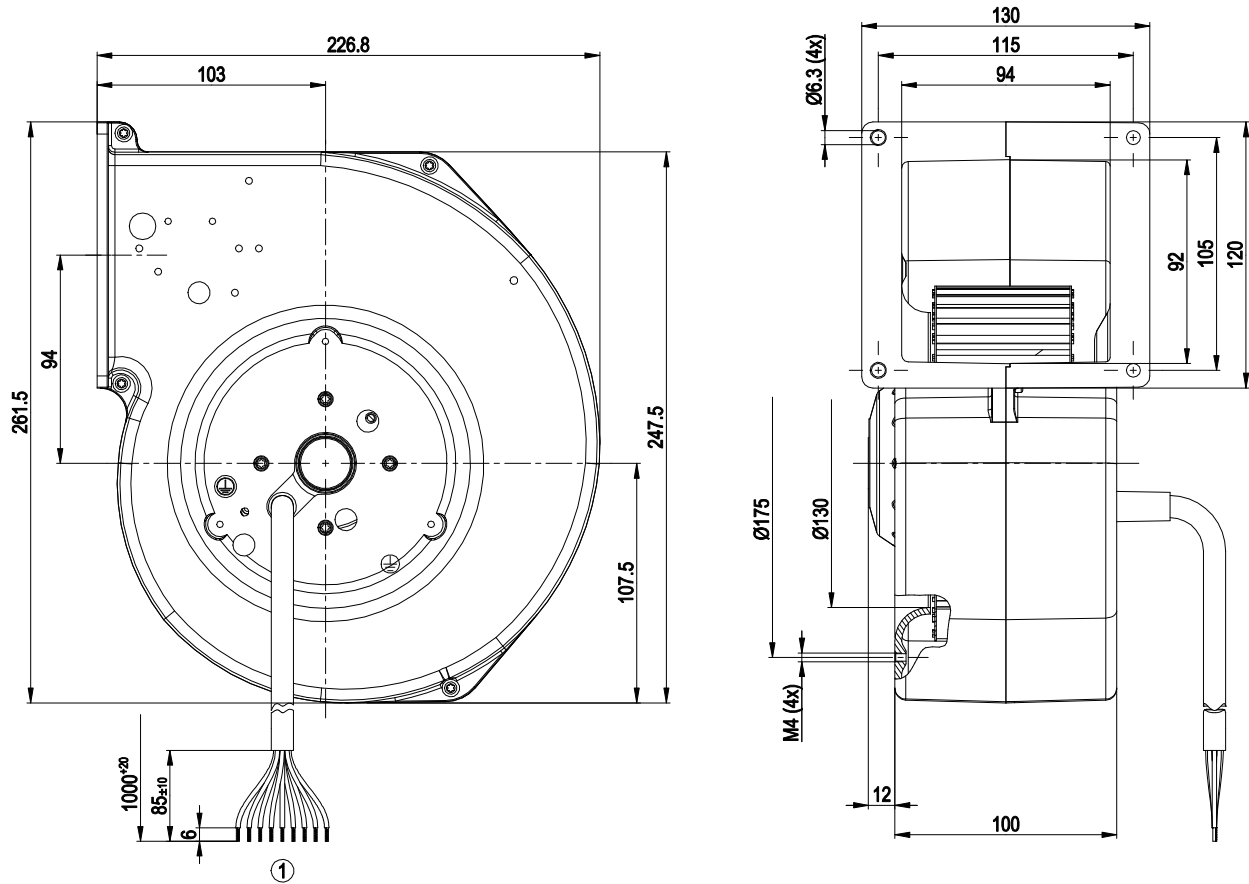
Weight	4.1 kg
Size	160 mm
Motor size	68
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+; F1-1
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
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



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Product drawing



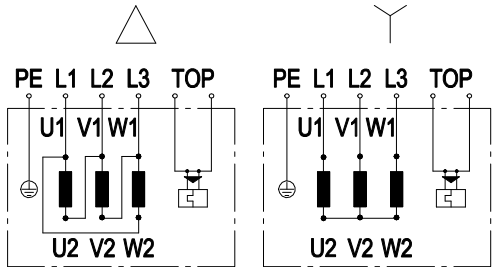
1 Cable silicone 9G 0.5 mm², 9x crimped splices



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Connection diagram



Note: Change of rotation direction by reversing two phases

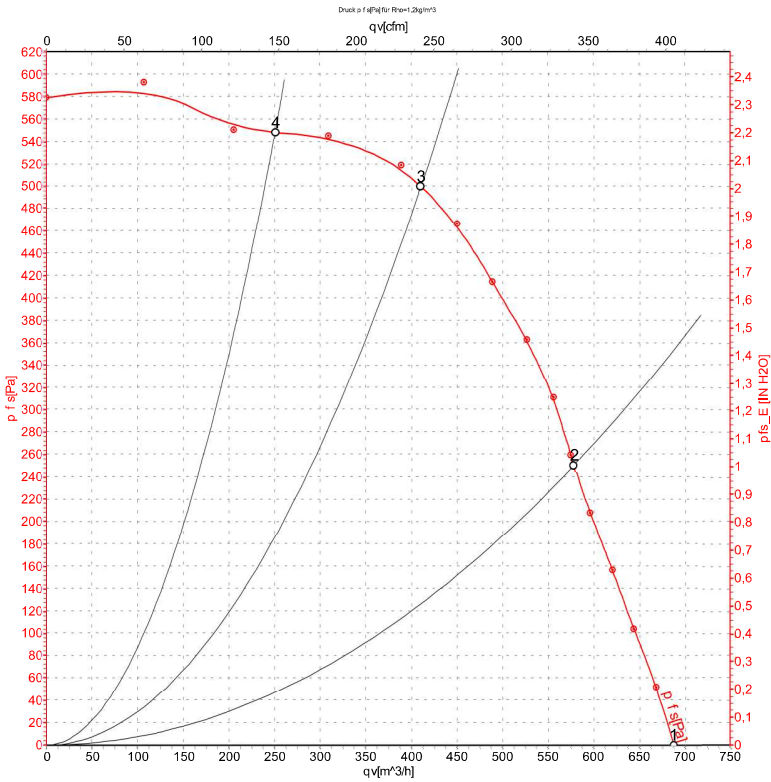
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				



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Curves: Air performance 50 Hz



Measurement: LU-39223-1

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	m³/h	Pa	cfm	in. wg
1	400	50	2300	305	0.48	690	0	405	0.00
2	400	50	2470	242	0.39	580	250	340	1.00
3	400	50	2665	168	0.29	410	500	240	2.01
4	400	50	2790	114	0.23	250	548	145	2.20

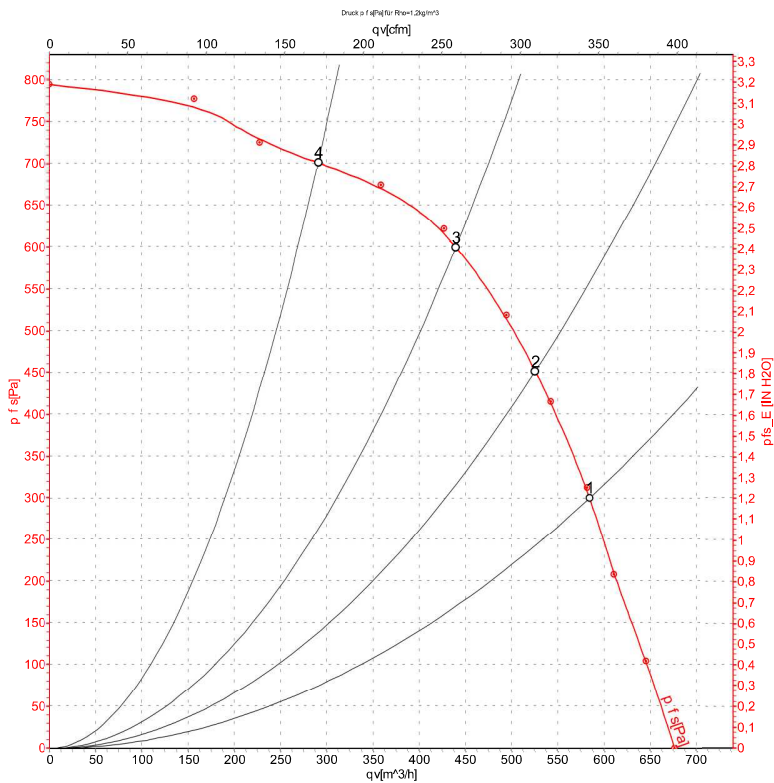
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



Measurement: LU-39224-1

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	m³/h	Pa	cfm	in. wg
1	400	60	2550	335	0.52	585	300	345	1.20
2	400	60	2720	296	0.46	525	450	310	1.81
3	400	60	2905	247	0.39	440	600	260	2.41
4	400	60	3145	176	0.29	290	700	170	2.81

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

