G2E140-AE77-D3

AC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Type	**G2E140-AE77-D3**
Motor	**M2E068-BF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	ml	ml
Valid for approval/standard		CE	CE	UL 1004-3
Speed (rpm)	min^{-1}	1400	1500	1500
Power consumption	W	105	115	120
Current draw	A	0.46	0.51	0.51
Capacitor	µF	2	2	2
Capacitor voltage	VDB	450	450	450
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. back pressure	Pa	0	50	50
Min. back pressure	in. wg	0	0.2	0.2
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	55	55
Starting current	A	0.47	0.48	0.5

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

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Technical description

Weight	2.6 kg
Size	140 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum
Guard grille material	Hot-dip galvanized and spot-welded net
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	H0+
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
Electrical hookup	Connector with cable
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; CCC; UL 1004-3

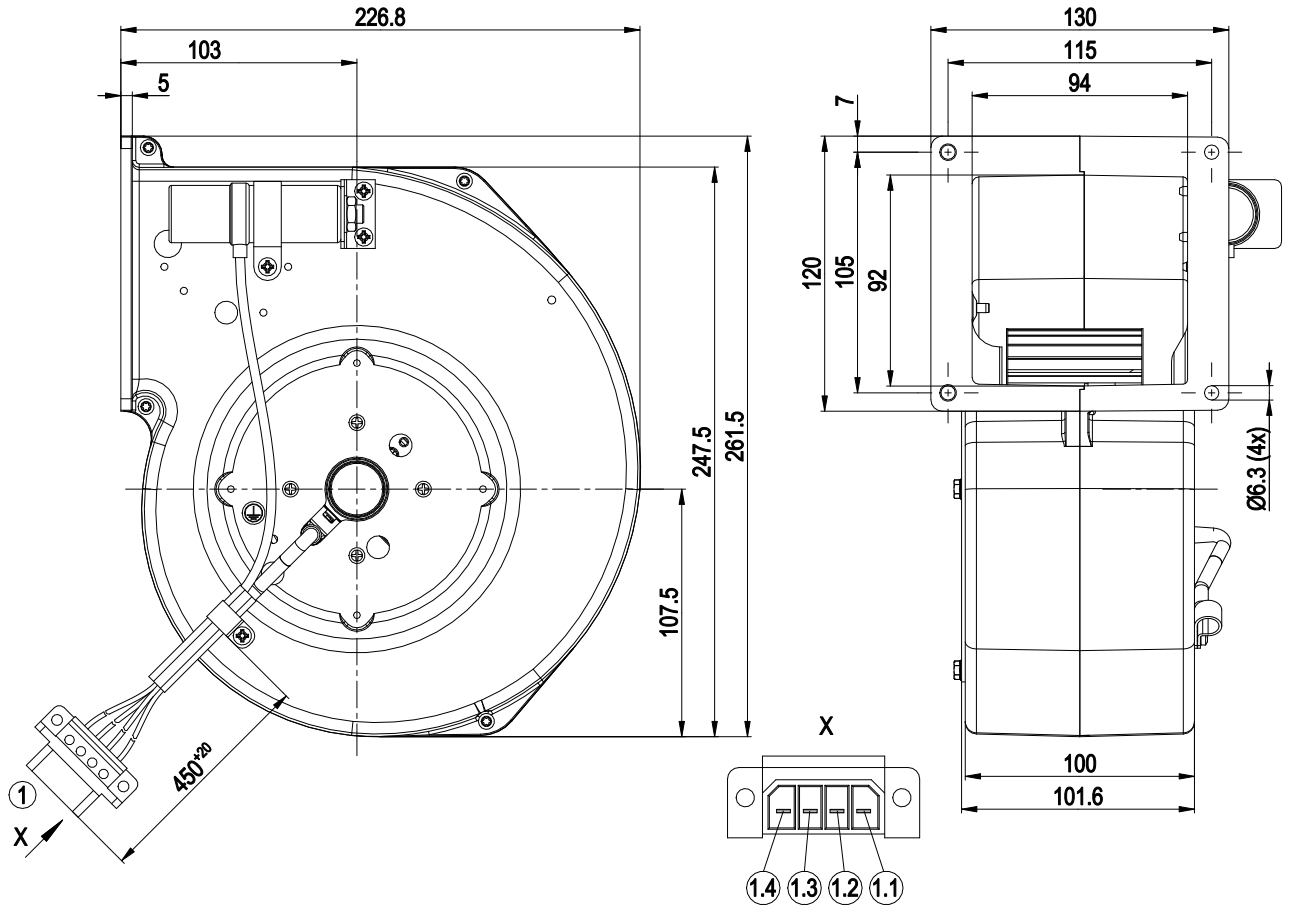
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Product drawing



1	Cable PFA AWG20
	4-pole header Weidmüller 1612010000
	4x splice
1.1	L (blue)
1.2	N (black + capacitor)
1.3	Z (brown + capacitor)
1.4	PE (green/yellow)

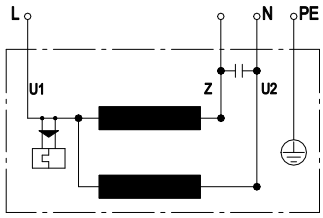
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Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

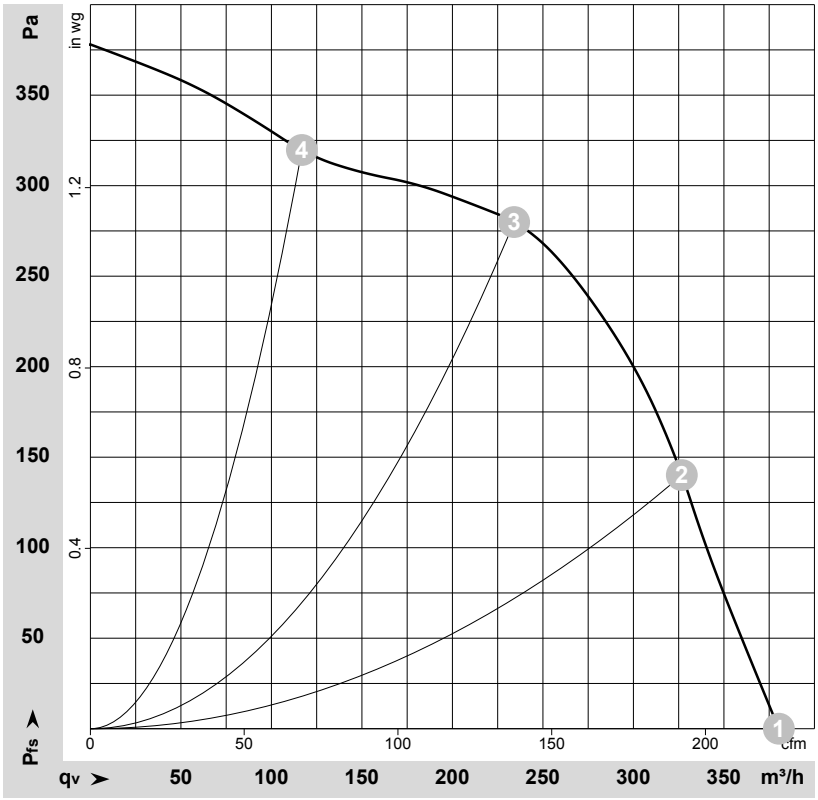
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-79019-1

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	230	50	1400	105	0.46	380	0	225	0.00
2	230	50	1770	94	0.41	325	140	190	0.56
3	230	50	2175	84	0.37	235	280	140	1.12
4	230	50	2495	73	0.33	115	320	70	1.28

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

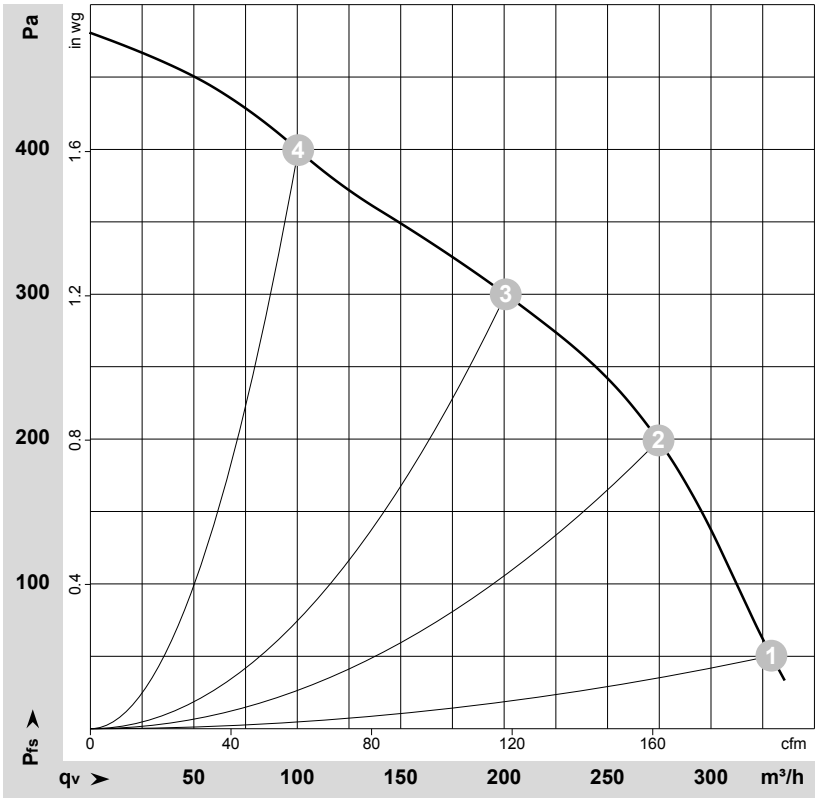
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-79020-1

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	230	60	1500	115	0.51	330	50	195	0.20
2	230	60	1865	106	0.46	275	200	160	0.80
3	230	60	2355	100	0.43	200	300	120	1.20
4	230	60	2775	90	0.39	100	400	60	1.61

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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