

G2E140-AE77-97

# AC centrifugal fan

forward-curved  
with housing (flange)



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## Nominal data

Type	G2E140-AE77-97			
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
Speed (rpm)	min <sup>-1</sup>	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	inH <sub>2</sub> O	0	0.2	0.2
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	40	35	35
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

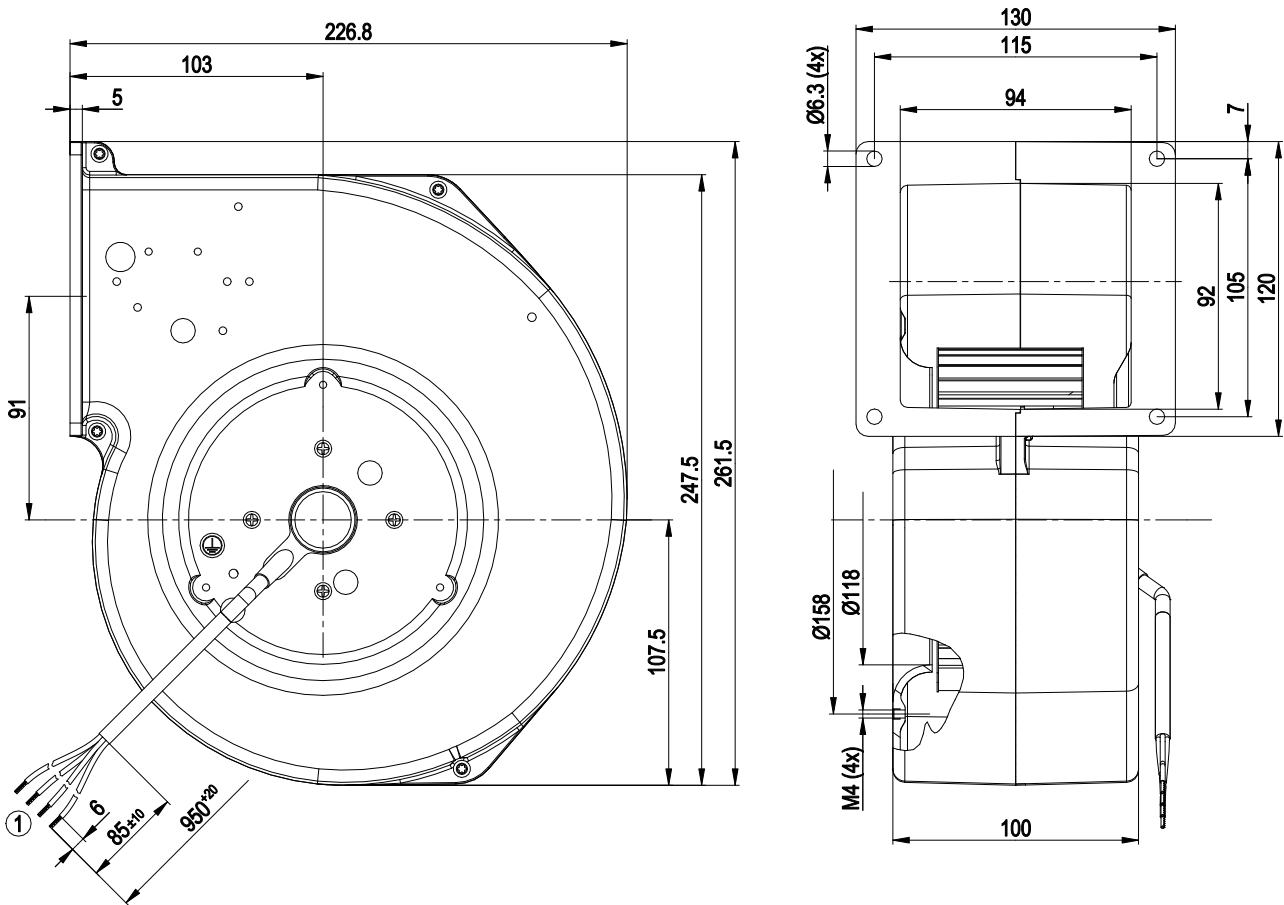
<b>Weight</b>	2.5 kg
<b>Fan size</b>	140 mm
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Die-cast aluminum
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H0+
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	CSA C22.2 No. 77; CCC; UL 2111



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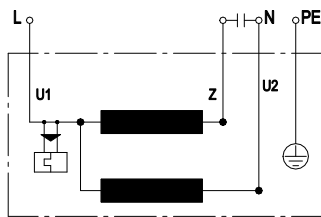
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## Product drawing



1 Cable PVC AWG20, 4x crimped splices

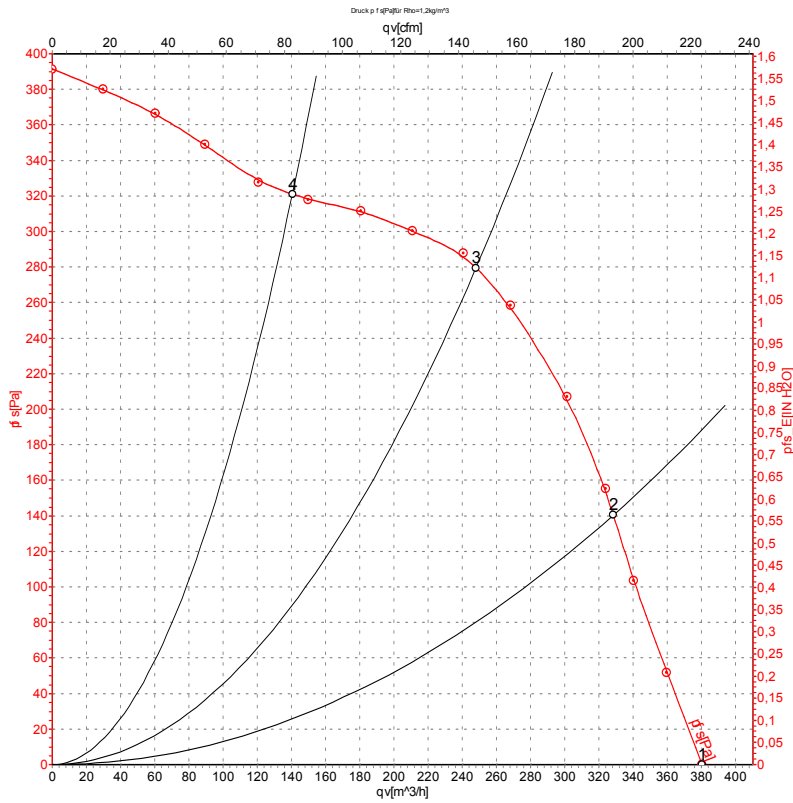
## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



## Curves: Air performance 50 Hz



Measurement: LU-79019-1

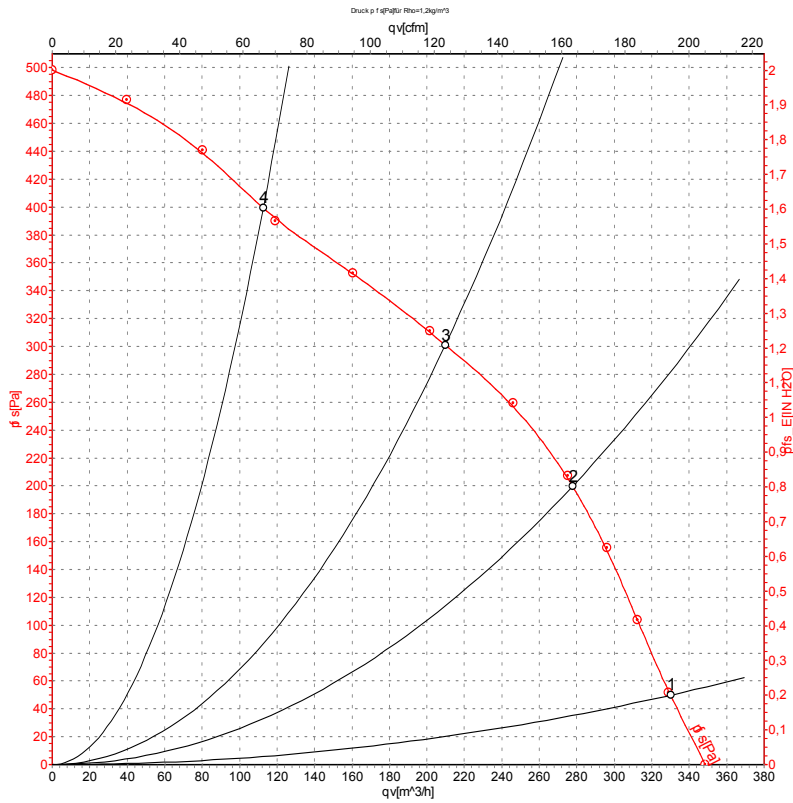
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	230	50	1400	105	0.46	380	0	225	0.00
2	230	50	1760	94	0.41	330	140	195	0.56
3	230	50	2120	85	0.37	250	280	145	1.12
4	230	50	2445	74	0.33	140	320	80	1.28

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

## Curves: Air performance 60 Hz



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 <sup>-1</sup>	W	A	m³/h	Pa	cfm	inH2O
1	230	60	1500	115	0.51	330	50	195	0.20
2	230	60	1840	106	0.46	280	200	165	0.80
3	230	60	2300	101	0.44	210	300	125	1.20
4	230	60	2740	91	0.40	115	400	65	1.61

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

