

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

G2E146-BF03-53 ebmpapst Datasheet

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Nominal data

Type	G2E146-BF03-53		
Motor	M2E068-EC		
Phase		1~	1~
Nominal voltage	VAC	240	240
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2250	2350
Power consumption	W	245	295
Current draw	A	1.04	1.25
Capacitor	μF	5	5
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	100
Min. back pressure	inH ₂ O	0	0.4
Max. ambient temperature	°C	65	50
Starting current	A	1.51	1.45

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



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Technical description

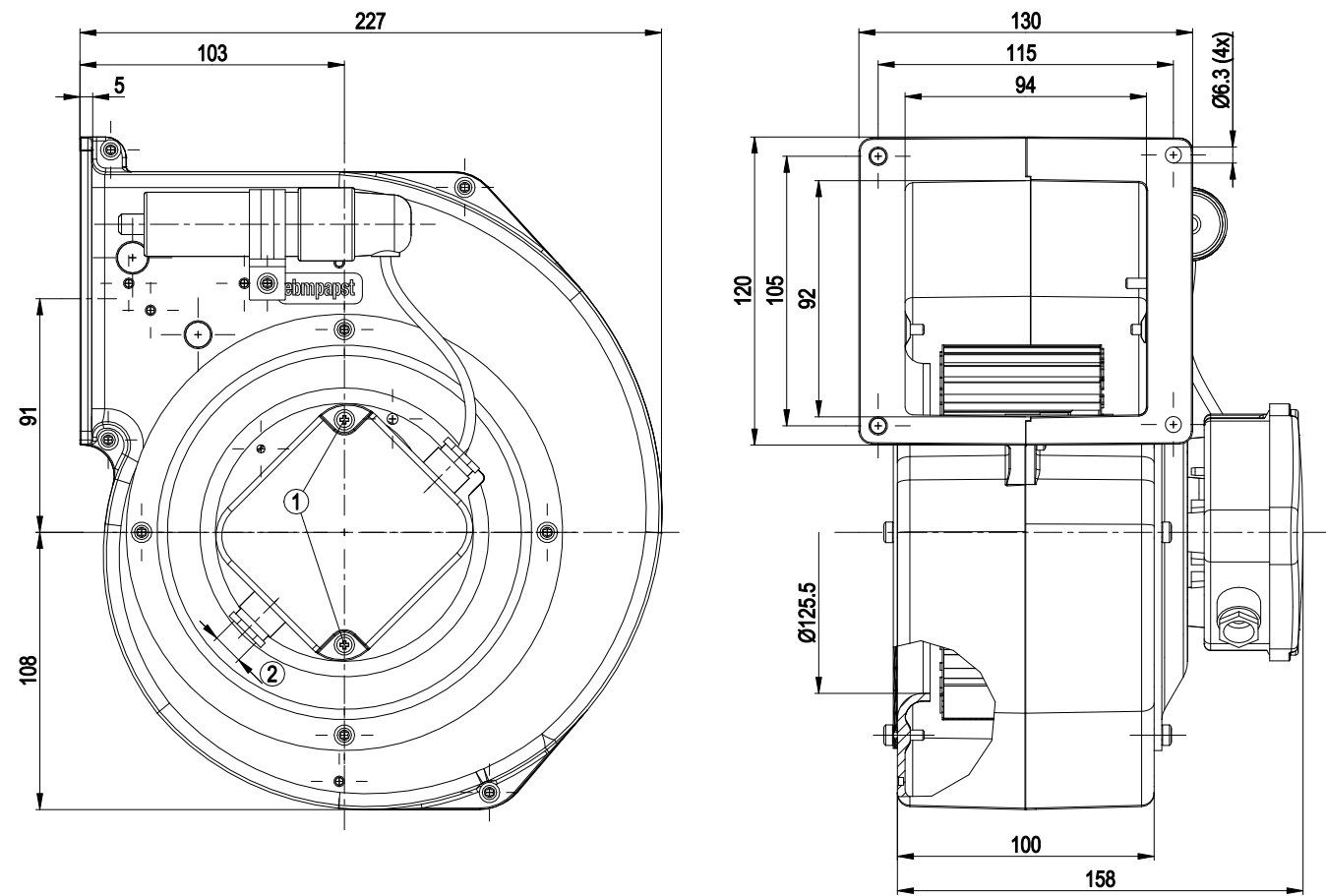
Weight	4.15 kg
Fan size	146 mm
Rotor surface	Unpainted
Terminal box material	Die-cast aluminum
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
Electrical hookup	Via terminal box, capacitor integrated and connected
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



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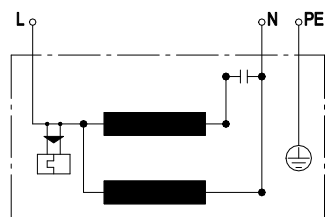
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Product drawing



- | | |
|---|---|
| 1 | Tightening torque 1.3 ± 0.2 Nm |
| 2 | Cable diameter min. 6 mm, max. 7 mm; tightening torque 1.3 ± 0.2 Nm |

Connection diagram



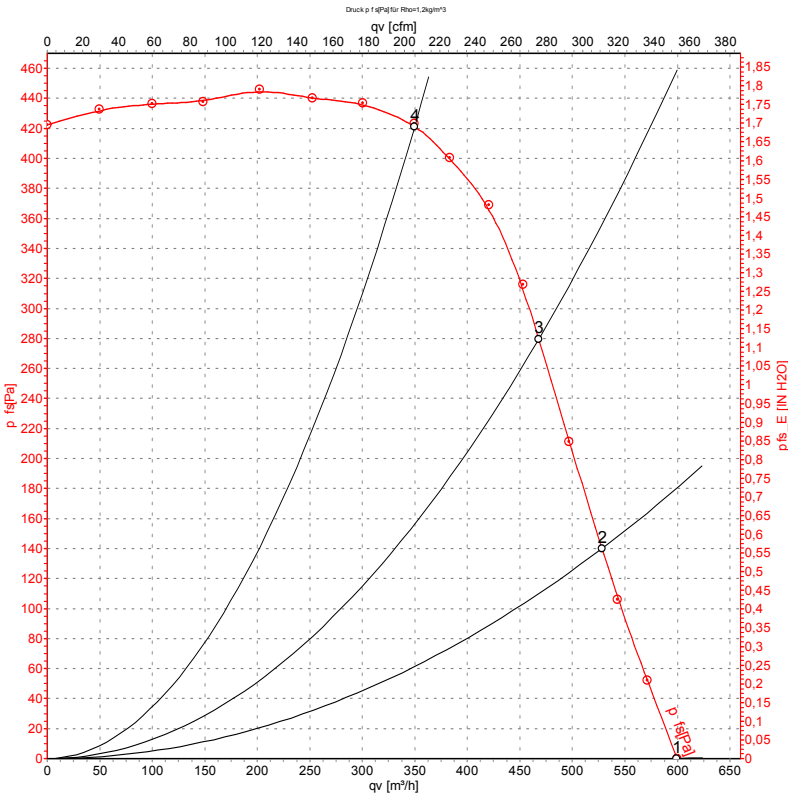
L	blue	N	black	PE	green/yellow
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Curves: Air performance 50 Hz



Measurement: LU-136276-1

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	inH ₂ O
1	240	50	2250	245	1.04	600	0	355	0.00
2	240	50	2420	213	0.89	530	140	310	0.56
3	240	50	2520	193	0.80	470	280	275	1.12
4	240	50	2660	159	0.67	350	420	205	1.69

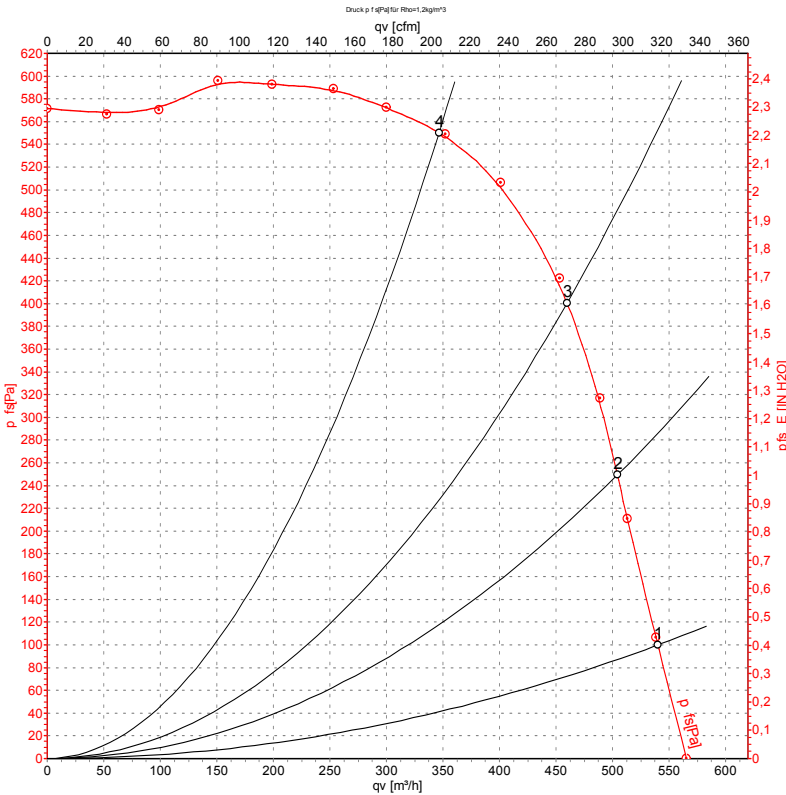
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



Measurement: LU-136279-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	inH ₂ O
1	240	60	2350	295	1.25	540	100	320	0.40
2	240	60	2580	274	1.15	505	250	295	1.00
3	240	60	2755	257	1.08	460	400	270	1.61
4	240	60	3025	220	0.94	345	550	205	2.21

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

