

AC centrifugal fan

forward-curved, single-intake



G2E140-NS38-45 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	G2E140-NS38-45		
Motor	M2E068-BF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1800	1850
Power consumption	W	105	115
Current draw	A	0.46	0.51
Capacitor	μF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	50
Min. back pressure	inH ₂ O	0	0.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	35
Starting current	A	0.54	0.55

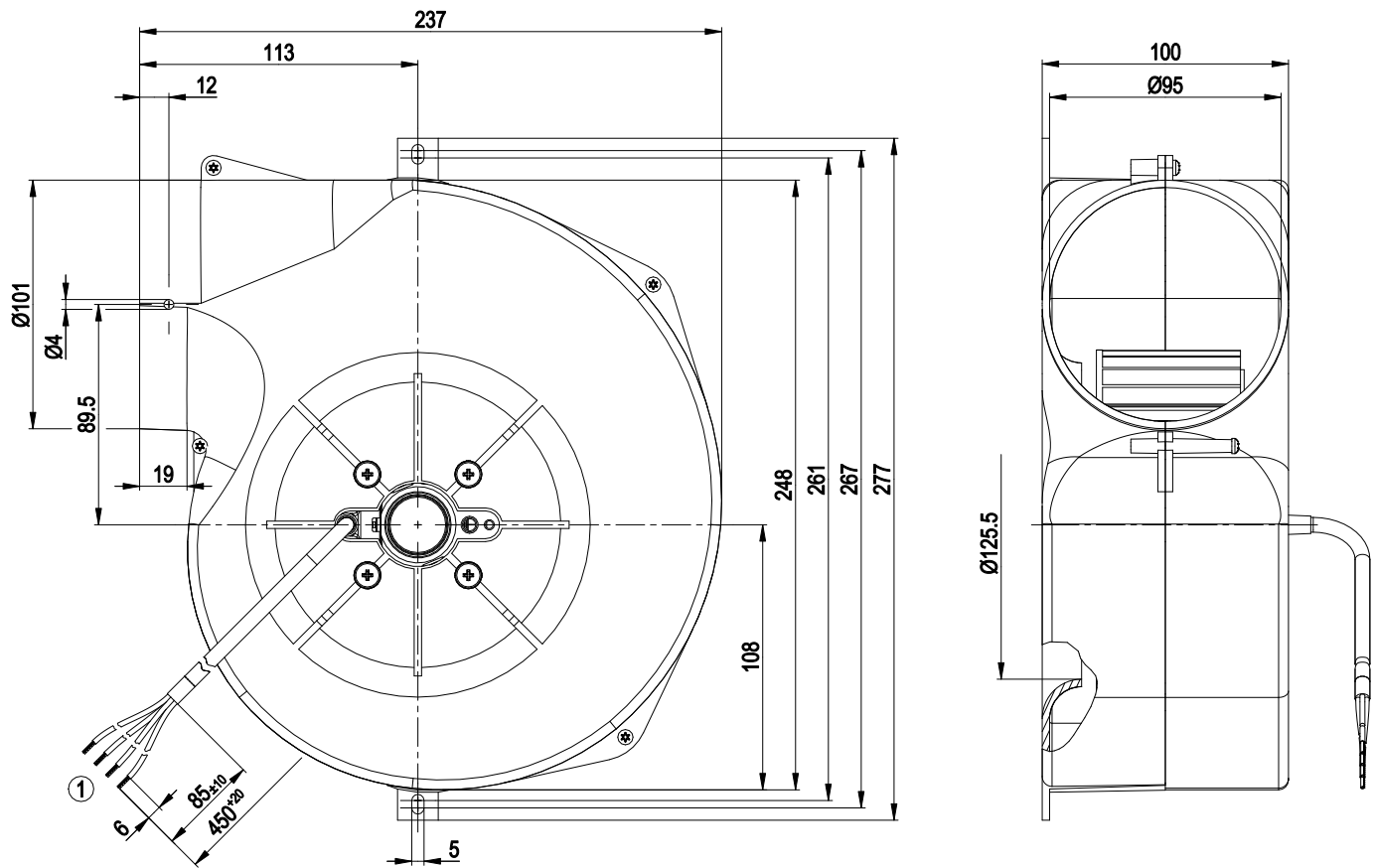
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



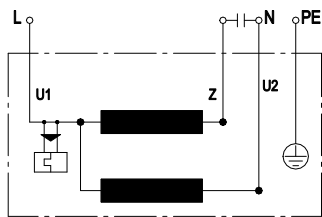
Technical description

Weight	1.8 kg
Fan size	140 mm
Rotor surface	Unpainted
Impeller material	PA plastic
Housing material	PA plastic
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
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
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

Product drawing



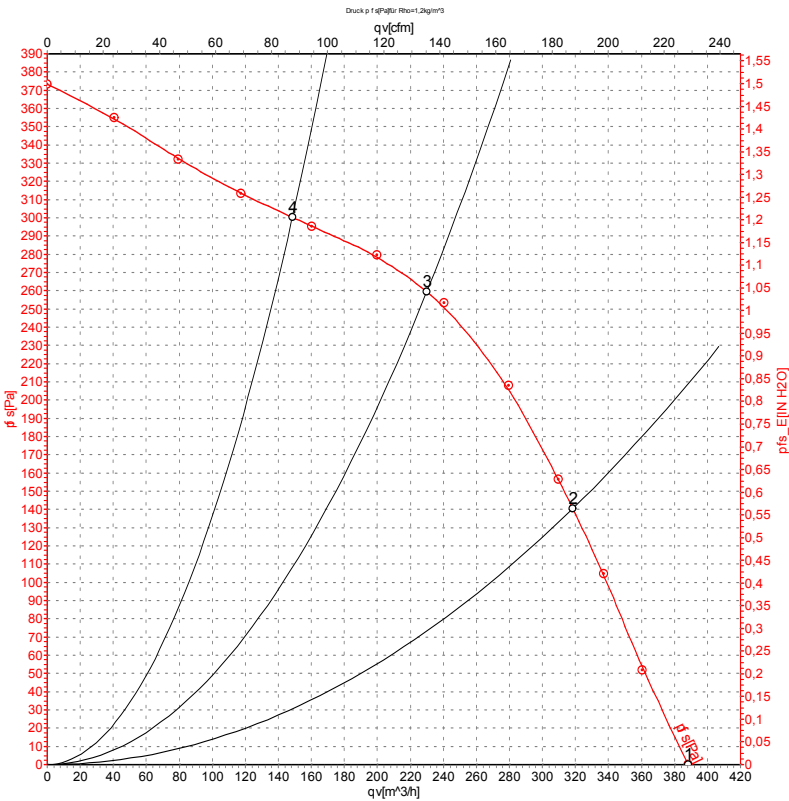
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



Curves: Air performance 50 Hz



Measurement: LU-104991-1

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.

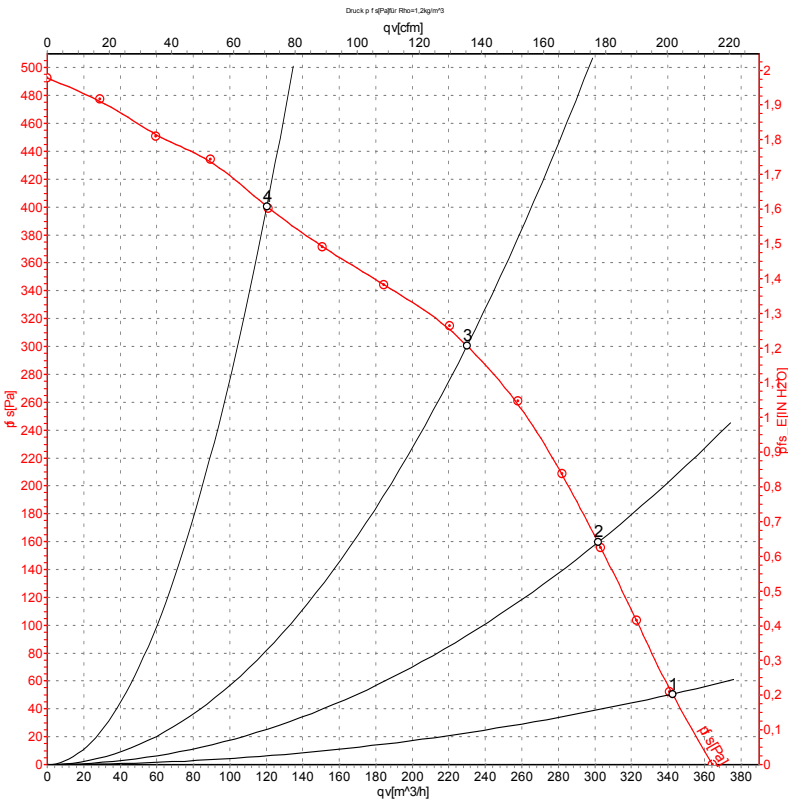
Measured values

	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH2O
1	230	50	1800	105	0.46	390	0	230	0.00
2	230	50	2075	91	0.40	320	140	185	0.56
3	230	50	2350	81	0.36	230	260	135	1.04
4	230	50	2515	75	0.34	150	300	85	1.20

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



Curves: Air performance 60 Hz



Measurement: LU-104994-1

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 _{ts}	q _v	p _{ts}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH ₂ O
1	230	60	1850	115	0.51	345	50	200	0.20
2	230	60	2095	108	0.47	300	160	180	0.64
3	230	60	2485	101	0.44	230	300	135	1.20
4	230	60	2870	90	0.39	120	400	70	1.61

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

