G2E140-NL01-44

AC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Nominal data

Type	**G2E140-NL01-44**
Motor	**M2E068-CF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL 1004-3
Speed (rpm)	min^{-1}	2050	2050	2050
Power consumption	W	140	165	172
Current draw	A	0.62	0.75	0.78
Capacitor	µF	3.15	3.15	3.15
Capacitor voltage	VDB	400	400	400
Capacitor standard		S2 (CE)	S2 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. back pressure	inH2O	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	50	50
Starting current	A	0.8	0.83	0.83

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	2.27 kg
Fan size	140 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, hot-dip galvanized
Housing material	PA6 plastic, glass-fiber reinforced
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
Speed levels	2
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No. 77; CCC

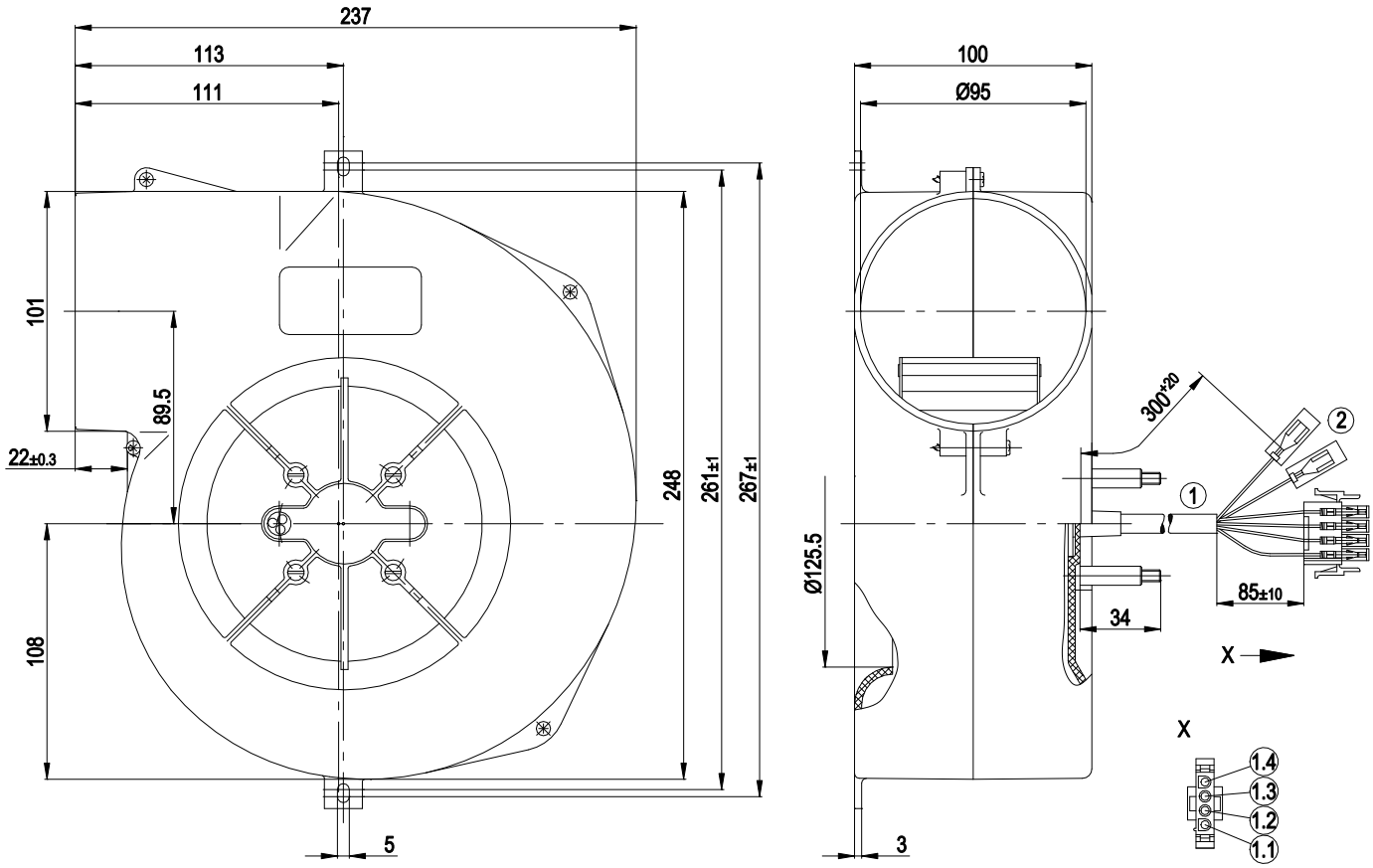
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Product drawing



1	Cable halogen-silicone-free 6G 0.5 mm², connector housing AMP 350 779-4 and 2x flat push-on receptacles 6.3x0.8 crimped
1.1	N (blue)
1.2	Step 2 - fast (black)
1.3	Step 1 - slow (white)
1.4	PE (green/yellow)
2	Capacitor (yellow and brown)

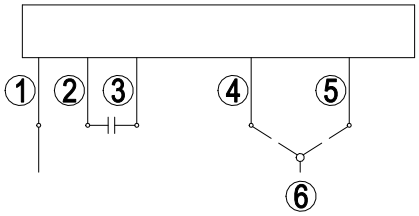
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Connection diagram



Note: High speed (step II); low speed (step I)

1	= N = blue	2	brown	3	yellow
4	Step I white	5	Step II black	6	L1

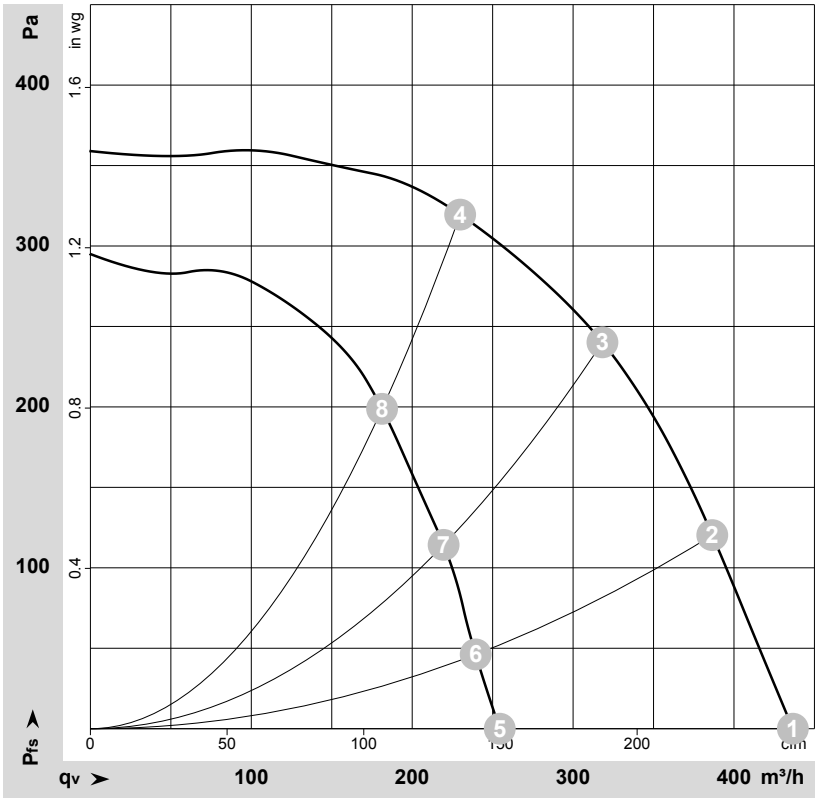
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-61533-1
Measurement: LU-61535-1

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	inH2O
1	230	50	2050	140	0.62	435	0	255	0.00
2	230	50	2235	127	0.55	385	120	230	0.48
3	230	50	2395	114	0.50	320	240	185	0.96
4	230	50	2560	100	0.44	230	320	135	1.28
5	230	50	1235	101	0.45	255	0	150	0.00
6	230	50	1385	96	0.43	240	44	140	0.18
7	230	50	1665	90	0.41	220	115	130	0.46
8	230	50	2045	79	0.36	180	200	105	0.80

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

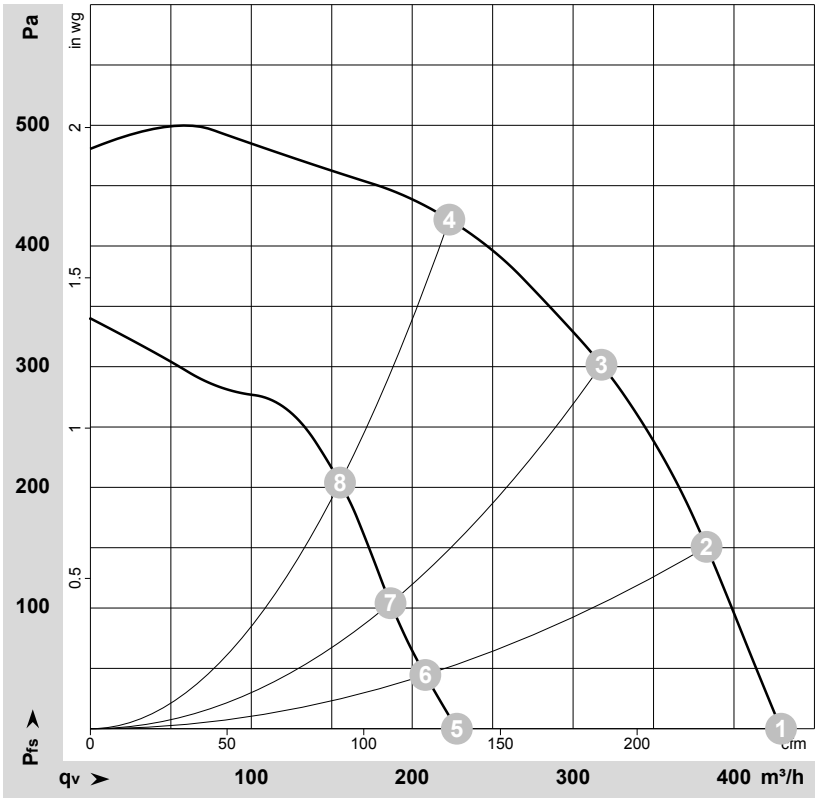
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-61534-1
Measurement: LU-61536-1

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	inH2O
1	230	60	2050	165	0.75	430	0	250	0.00
2	230	60	2310	157	0.68	385	150	225	0.60
3	230	60	2610	145	0.63	320	300	185	1.20
4	230	60	2915	127	0.56	225	420	130	1.69
5	230	60	1110	101	0.47	230	0	135	0.00
6	230	60	1270	99	0.46	210	43	120	0.17
7	230	60	1535	96	0.45	185	103	110	0.41
8	230	60	2075	88	0.43	155	206	90	0.83

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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