G2E140-PE47-23

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G2E140-PE47-23**		
Motor	**M2E068-BF**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1600	1750
Power consumption	W	100	110
Current draw	A	0.44	0.47
Capacitor	µF	2	2
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	50	150
Min. back pressure	in. wg	0.2	0.6
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	45
Starting current	A	0.5	0.53

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	2.5 kg
Size	140 mm
Motor size	68
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, painted black
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
Speed levels	5
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

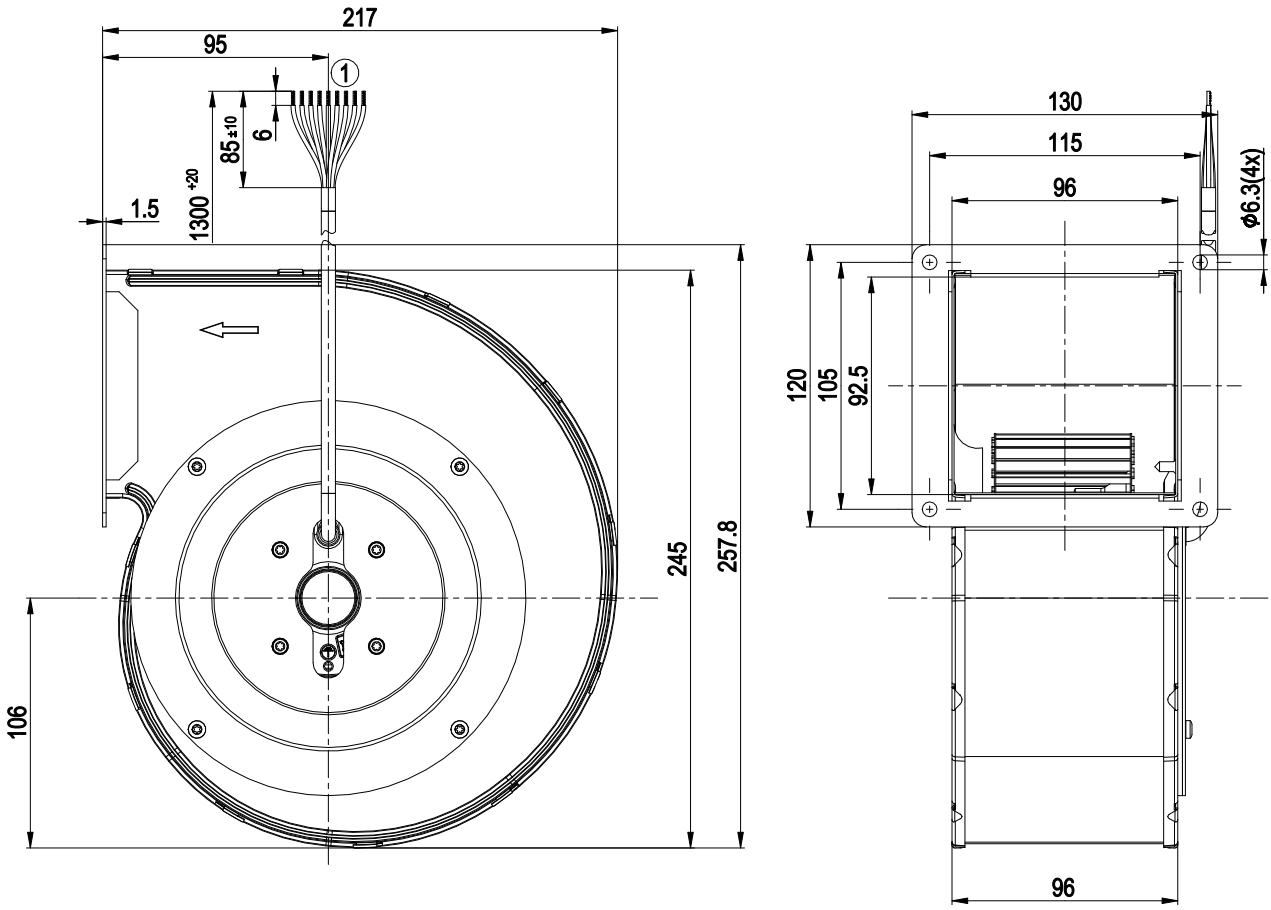
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Product drawing



1	Cable AWG20		9x splice

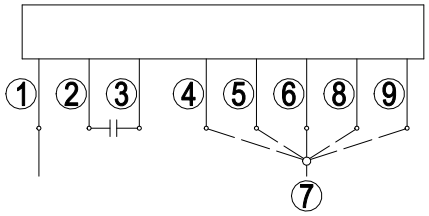
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Connection diagram



Note: High speed (step IV); low speed (step I); the switch must interrupt the circuit on switching.

1	= N = blue
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / gray
7	L1
8	Step IV black 4 / orange
9	Step V black 5 / black

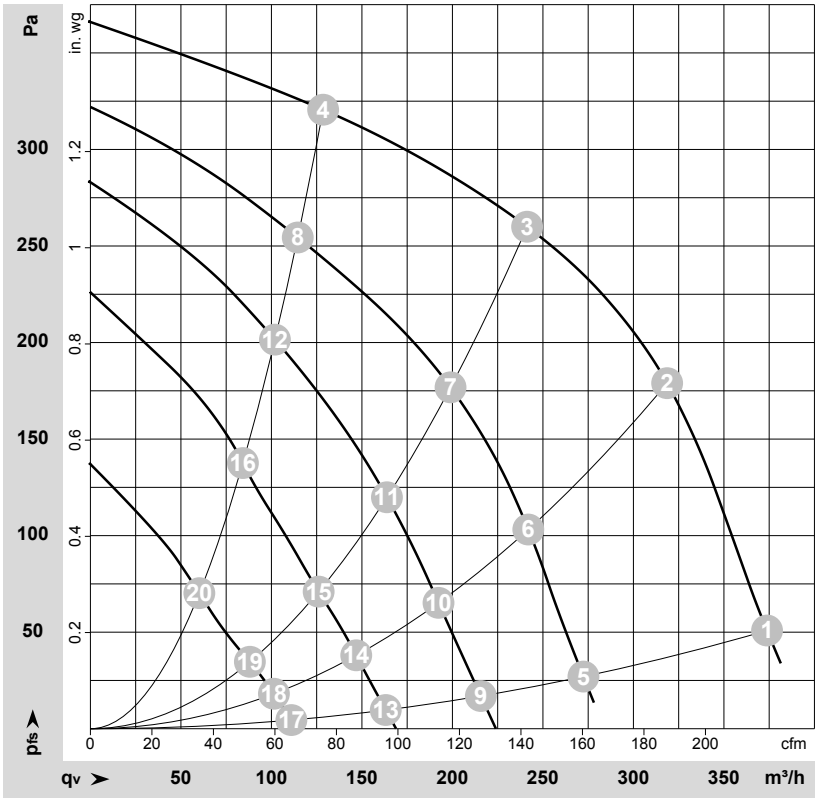
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-44730-1
Measurement: LU-44732-1
Measurement: LU-44734-1
Measurement: LU-44736-1
Measurement: LU-44738-1

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

	Stage	Wired	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	5	1~	230	50	1600	100	0.44	375	50	220	0.20
2	5	1~	230	50	1905	93	0.41	320	180	190	0.72
3	5	1~	230	50	2185	85	0.37	240	260	140	1.04
4	5	1~	230	50	2475	74	0.33	130	320	75	1.28
5	4	1~	230	50	1175	75	0.34	270	27	160	0.11
6	4	1~	230	50	1465	71	0.32	240	104	140	0.42
7	4	1~	230	50	1795	65	0.30	200	177	115	0.71
8	4	1~	230	50	2215	56	0.26	115	255	70	1.02
9	3	1~	230	50	935	62	0.28	215	17	125	0.07
10	3	1~	230	50	1170	60	0.28	190	65	115	0.26
11	3	1~	230	50	1490	57	0.27	165	120	95	0.48
12	3	1~	230	50	1985	50	0.24	100	203	60	0.81
13	2	1~	230	50	715	52	0.25	165	10	95	0.04
14	2	1~	230	50	900	51	0.24	145	38	85	0.15
15	2	1~	230	50	1150	50	0.24	125	71	75	0.29
16	2	1~	230	50	1650	45	0.22	85	138	50	0.55
17	1	1~	230	50	495	44	0.21	110	5	65	0.02
18	1	1~	230	50	645	43	0.21	100	19	60	0.08
19	1	1~	230	50	825	43	0.21	90	35	50	0.14
20	1	1~	230	50	1190	41	0.20	60	70	35	0.28

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

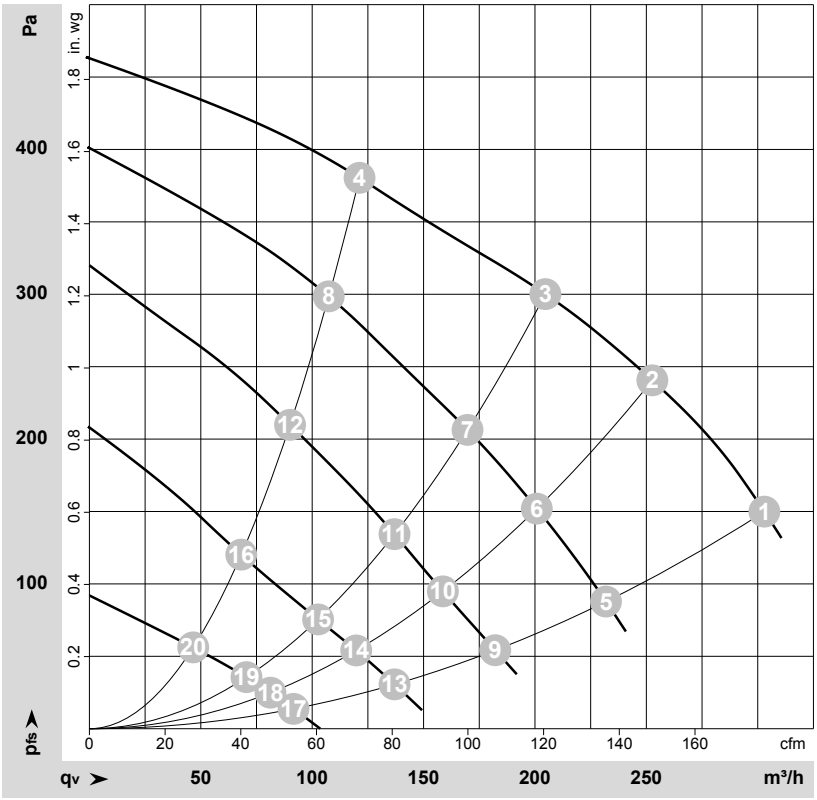
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-44731-1
Measurement: LU-44733-1
Measurement: LU-44735-1
Measurement: LU-44737-1
Measurement: LU-44739-1

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

	Stage	Wired	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	5	1~	230	60	1750	110	0.47	305	150	180	0.60
2	5	1~	230	60	2100	105	0.45	255	240	150	0.96
3	5	1~	230	60	2365	100	0.43	205	300	120	1.20
4	5	1~	230	60	2705	93	0.40	120	380	70	1.53
5	4	1~	230	60	1370	77	0.36	230	88	135	0.35
6	4	1~	230	60	1680	75	0.35	200	153	120	0.61
7	4	1~	230	60	1960	72	0.34	170	207	100	0.83
8	4	1~	230	60	2415	65	0.32	105	300	65	1.20
9	3	1~	230	60	1085	63	0.31	180	54	105	0.22
10	3	1~	230	60	1330	61	0.30	160	95	95	0.38
11	3	1~	230	60	1590	60	0.30	135	135	80	0.54
12	3	1~	230	60	2015	56	0.29	90	210	55	0.84
13	2	1~	230	60	830	52	0.26	135	31	80	0.12
14	2	1~	230	60	1015	51	0.26	120	54	70	0.22
15	2	1~	230	60	1205	50	0.26	105	75	60	0.30
16	2	1~	230	60	1545	49	0.25	70	119	40	0.48
17	1	1~	230	60	570	43	0.22	90	14	55	0.06
18	1	1~	230	60	705	42	0.22	80	26	50	0.10
19	1	1~	230	60	830	42	0.22	70	36	40	0.14
20	1	1~	230	60	1070	41	0.22	45	56	30	0.22

Wired = Wiring · 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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