G2E140-PE47-07

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G2E140-PE47-07**
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	inH2O	0.2	0.6
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	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	2.5 kg
Fan size	140 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
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

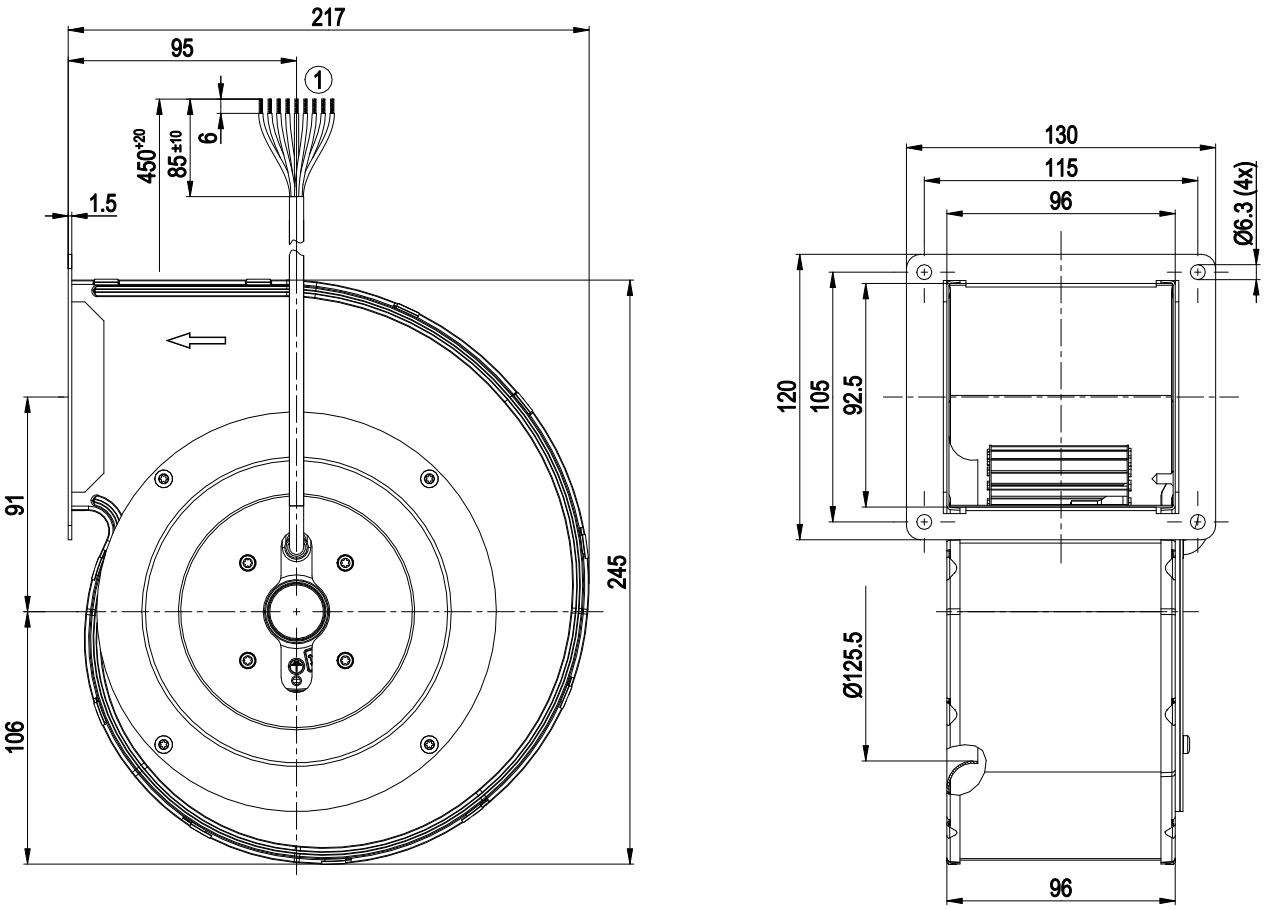
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Product drawing



1	Cable AWG20, 9x crimped splices

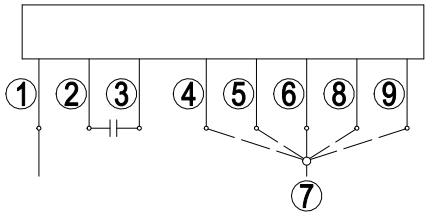
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Connection diagram



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

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

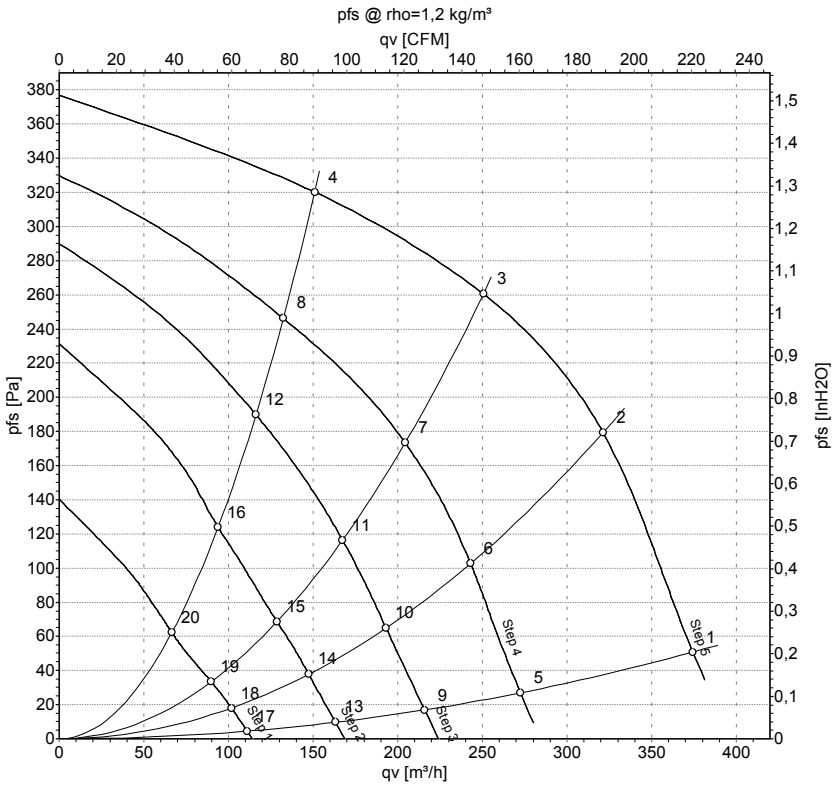
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AC centrifugal fan

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Curves: Air performance 50 Hz



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	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	5	230	50	1600	100	0.44	375	50	220	0.20
2	5	230	50	1890	94	0.41	320	180	190	0.72
3	5	230	50	2160	86	0.38	250	260	150	1.04
4	5	230	50	2430	75	0.34	150	320	90	1.28
5	4	230	50	1175	75	0.34	275	27	160	0.11
6	4	230	50	1455	71	0.32	245	104	145	0.42
7	4	230	50	1760	66	0.30	205	173	120	0.69
8	4	230	50	2145	58	0.26	130	247	80	0.99
9	3	230	50	930	62	0.28	215	17	125	0.07
10	3	230	50	1160	60	0.28	195	65	115	0.26
11	3	230	50	1450	57	0.27	165	117	100	0.47
12	3	230	50	1890	51	0.24	115	190	70	0.76
13	2	230	50	710	52	0.25	165	10	95	0.04
14	2	230	50	890	51	0.24	145	38	85	0.15
15	2	230	50	1120	50	0.24	130	69	75	0.28
16	2	230	50	1540	46	0.22	95	124	55	0.50
17	1	230	50	495	44	0.21	110	5	65	0.02
18	1	230	50	640	43	0.21	100	19	60	0.08
19	1	230	50	800	43	0.21	90	34	55	0.14
20	1	230	50	1100	41	0.20	65	62	40	0.25

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

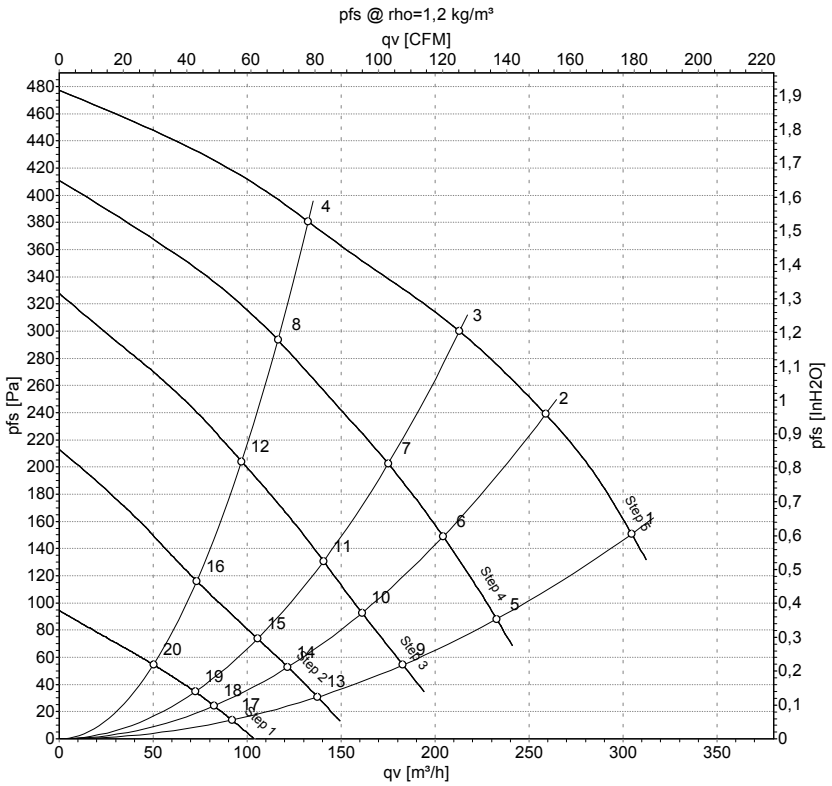
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Curves: Air performance 60 Hz



Measurement: LU-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	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	5	230	60	1750	110	0.47	305	150	180	0.60
2	5	230	60	2065	105	0.46	260	240	150	0.96
3	5	230	60	2320	101	0.44	215	300	125	1.20
4	5	230	60	2665	94	0.41	135	380	80	1.53
5	4	230	60	1360	77	0.36	235	88	135	0.35
6	4	230	60	1645	75	0.35	205	149	120	0.60
7	4	230	60	1920	72	0.35	175	204	105	0.82
8	4	230	60	2360	66	0.32	115	294	70	1.18
9	3	230	60	1075	63	0.31	185	54	110	0.22
10	3	230	60	1305	61	0.30	160	92	95	0.37
11	3	230	60	1545	60	0.30	140	131	85	0.53
12	3	230	60	1965	57	0.29	95	204	55	0.82
13	2	230	60	825	52	0.26	135	31	80	0.12
14	2	230	60	995	51	0.26	120	53	70	0.21
15	2	230	60	1170	50	0.26	105	74	60	0.30
16	2	230	60	1495	49	0.25	75	116	45	0.47
17	1	230	60	565	43	0.22	90	14	55	0.06
18	1	230	60	690	42	0.22	80	25	50	0.10
19	1	230	60	810	42	0.22	70	35	40	0.14
20	1	230	60	1045	41	0.22	50	55	30	0.22

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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