G4E146-AA94-12

AC centrifugal fan

forward curved, single inlet

with housing (flange)

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Nominal data

Type	**G4E146-AA94-12**
Motor	**M2E068-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	60
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	930
Power input	W	38
Current draw	A	0.17
Motor capacitor	µF	1
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	2.6 kg
Size	146 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

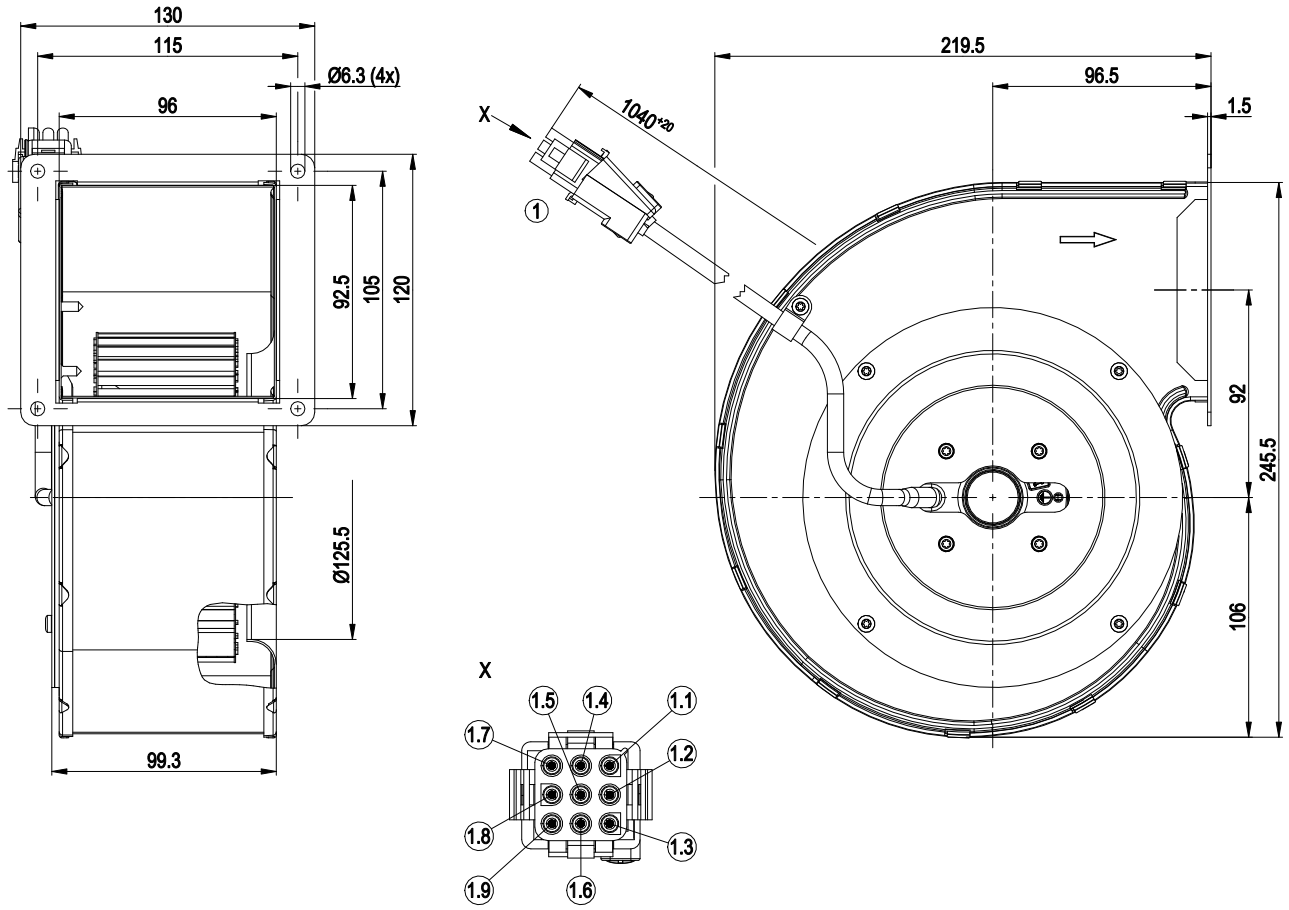
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Product drawing



1	Connection line halogen-silicone-free 8x 0.5 mm², connector housing 9-pole tyco 350720-4, 7x plug pin tyco 926885-1, 1x plug pin tyco 350654-1, 2x strain relief tyco 1-640722-0
1.1	white
1.2	red
1.3	grey
1.4	black
1.5	not used
1.6	yellow
1.7	brown
1.8	blue
1.9	green/yellow

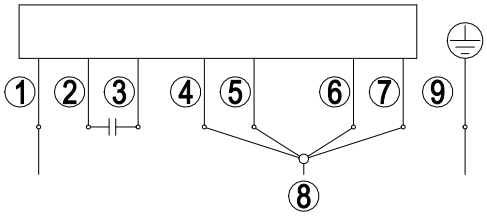
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Connection screen



Note: fast speed (step IV); slow speed (step I); the switch must interrupt the circuit during the changeover.

1	N (blue)
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / grey
7	Step IV black 4 / black
8	L1
9	= PE = green / yellow

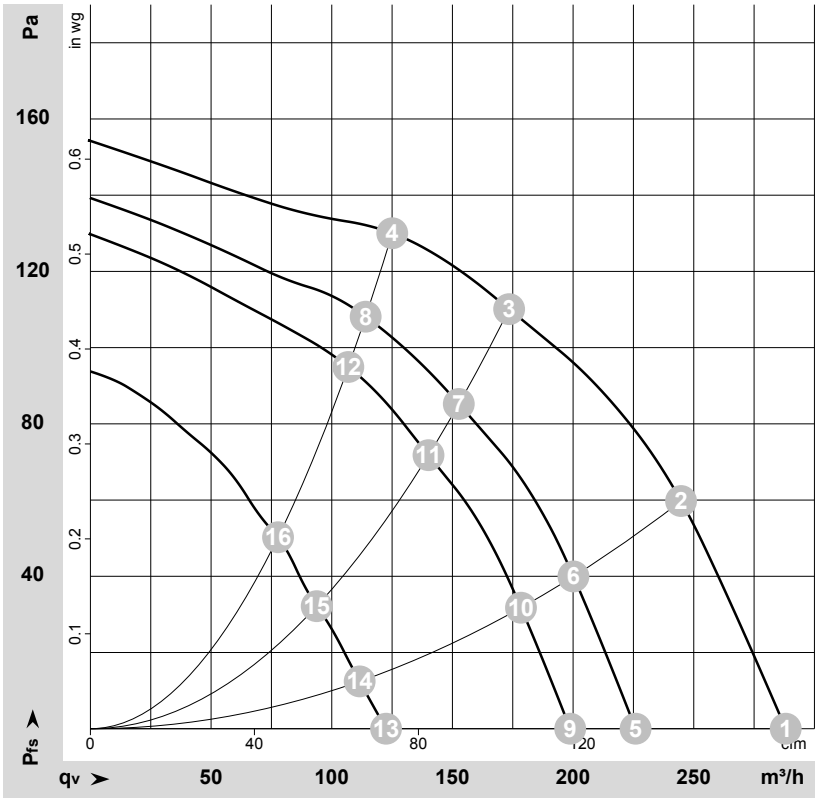
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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-172371-1
Measurement: LU-172378-1
Measurement: LU-172382-1
Measurement: LU-172384-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Stage	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	4	230	60	930	38	0.17	49	57	290	0	170	0.00
2	4	230	60	1160	35	0.15	48	56	245	60	145	0.24
3	4	230	60	1375	31	0.13	48	55	175	110	100	0.44
4	4	230	60	1485	28	0.12	48	56	125	130	75	0.52
5	3	230	60	760	32	0.14			225	0	135	0.00
6	3	230	60	965	30	0.14			200	41	120	0.16
7	3	230	60	1220	27	0.12			155	85	90	0.34
8	3	230	60	1360	25	0.11			115	108	65	0.43
9	2	230	60	675	30	0.13			200	0	115	0.00
10	2	230	60	865	28	0.13			180	32	105	0.13
11	2	230	60	1120	26	0.12			140	72	80	0.29
12	2	230	60	1275	24	0.11			105	95	65	0.38
13	1	230	60	430	24	0.11			120	0	70	0.00
14	1	230	60	555	24	0.11			110	12	65	0.05
15	1	230	60	770	22	0.11			95	32	55	0.13
16	1	230	60	950	21	0.10			80	50	45	0.20

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow p_{fs} = Pressure increase

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