D2E146-KA45-01

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D2E146-KA45-01**
Motor	**M2E068-CA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1350	1400
Power input	W	120	125
Current draw	A	0.53	0.55
Motor capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Capacitor standard		P2 (CE)	P2 (CE)
Min. back pressure	Pa	50	100
Max. ambient temperature	°C	55	40
Starting current	A	0.56	

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	2.5 kg
Size	146 mm
Surface of rotor	Partially cast in aluminium
Material of impeller	PA plastic
Housing material	PP plastic
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F0
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	Via terminal box, integrated capacitor connected via terminal box; With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	VDE

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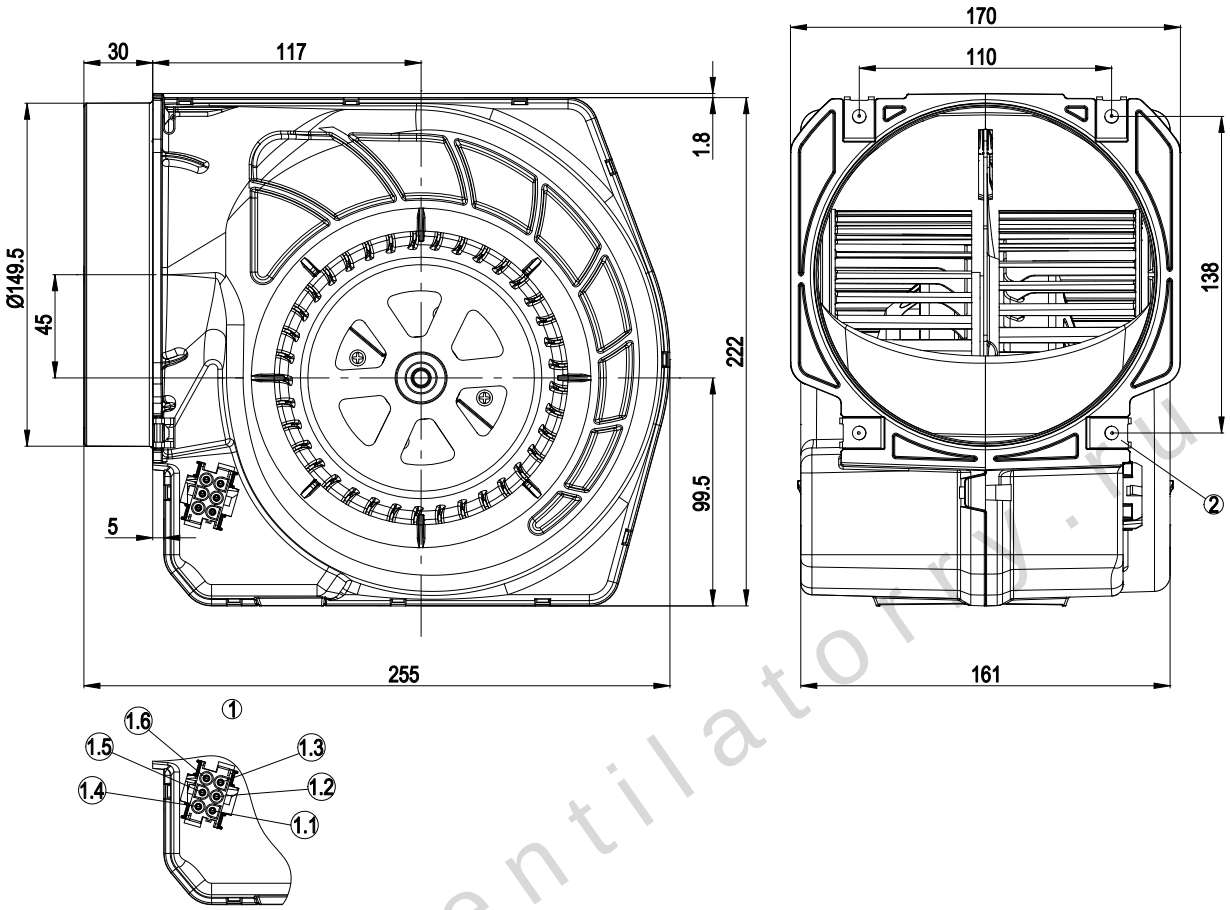
Product drawing



1	AMP Universal Mate-N-Lok coded plug system; connector shell: AMP 926 682-3; 6x plug pin: AMP 926 886-1
1.1	L = step 1
1.2	L = step 2
1.3	L = step 3
1.4	L = step 4
1.5	N
1.6	Protective earth
2	4 x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

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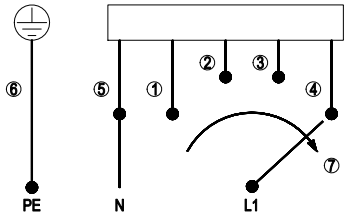
Connection screen



When changing speeds, switch must break the circuit

1	Step 1 (min.)	2	Step 2	3	Step 3
4	Step 4 (max.)	5	N	6	PE protective earth
7	Speed increase				

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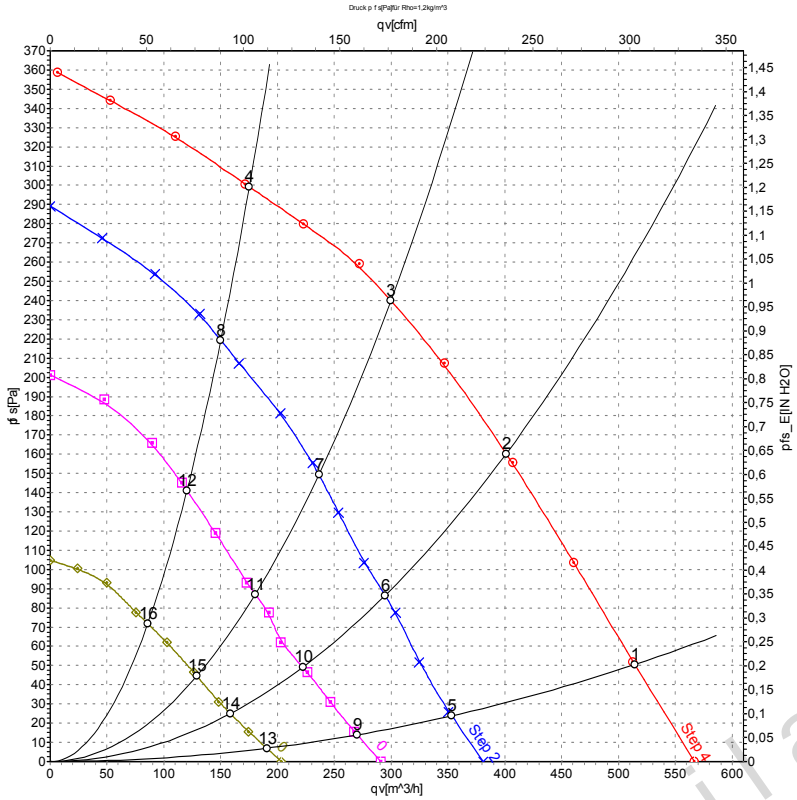
Charts: Air flow 50 Hz



Measurement: LU-65092
Measurement: LU-65094
Measurement: LU-65096
Measurement: LU-65098

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}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	4	230	50	1350	120	0.53	54	66	515	50
2	4	230	50	1715	113	0.49	57	69	400	160
3	4	230	50	2035	107	0.47	59	71	300	240
4	4	230	50	2300	100	0.44	62	74	175	300
5	3	230	50	930	74	0.37	45	57	355	23
6	3	230	50	1260	72	0.36	49	61	295	86
7	3	230	50	1615	68	0.35	53	65	235	150
8	3	230	50	1975	62	0.34	56	68	150	219
9	2	230	50	705	60	0.31	38	50	270	14
10	2	230	50	960	59	0.31	42	54	220	49
11	2	230	50	1235	57	0.31	46	58	180	87
12	2	230	50	1585	54	0.30	50	62	120	141
13	1	230	50	495	49	0.27	29	41	190	7
14	1	230	50	690	49	0.27	33	45	160	25
15	1	230	50	885	48	0.26	37	49	130	44
16	1	230	50	1130	47	0.26	41	53	85	72

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

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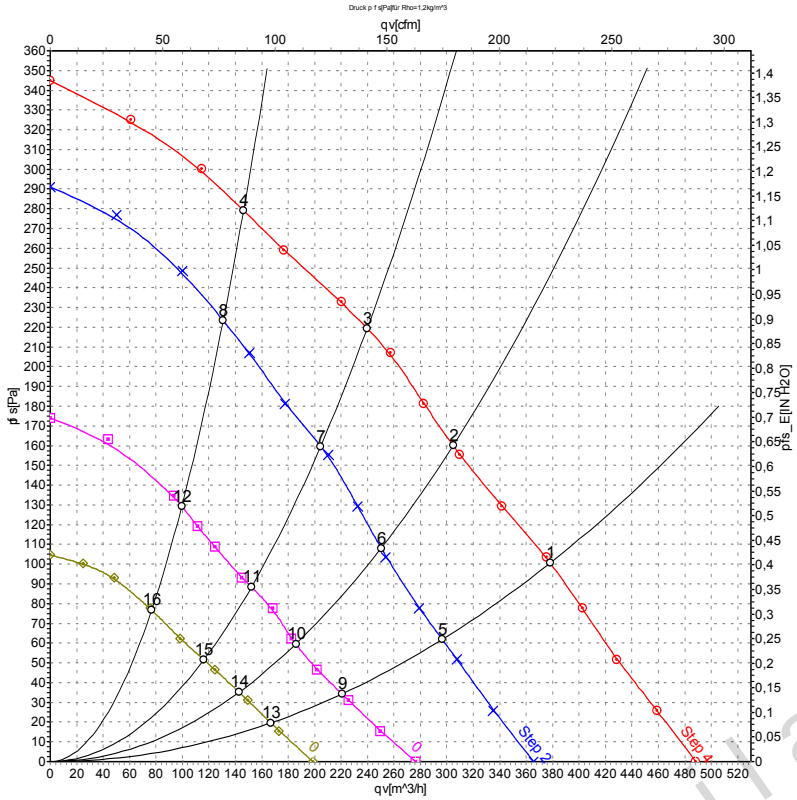
Charts: Air flow 60 Hz



Measurement: LU-65093
Measurement: LU-65095
Measurement: LU-65097
Measurement: LU-65099

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	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	4	230	60	1400	125	0.55	380	100
2	4	230	60	1700	125	0.54	305	160
3	4	230	60	1955	124	0.54	240	220
4	4	230	60	2205	122	0.53	145	280
5	3	230	60	1115	80	0.42	295	62
6	3	230	60	1400	78	0.42	250	108
7	3	230	60	1675	77	0.42	205	160
8	3	230	60	1980	74	0.41	130	223
9	2	230	60	835	61	0.35	220	34
10	2	230	60	1045	60	0.35	185	59
11	2	230	60	1240	60	0.35	150	88
12	2	230	60	1520	58	0.35	100	130
13	1	230	60	620	49	0.27	165	20
14	1	230	60	790	48	0.27	145	35
15	1	230	60	950	47	0.26	115	52
16	1	230	60	1165	46	0.26	75	77

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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