D2E146-HS15-85

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D2E146-HS15-85 ebmpapst Datasheet
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Nominal data

Type	**D2E146-HS15-85**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	1910
Power input	W	162
Current draw	A	0.72
Motor capacitor	µF	5
Capacitor voltage	VDB	400
Min. back pressure	Pa	200
Max. ambient temperature	°C	50

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	3.1 kg
Size	146 mm
Surface of rotor	Partially cast in aluminium
Material of terminal box	PP plastic
Material of impeller	PP plastic
Housing material	PP plastic
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
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	Shaft horizontal or rotor on bottom; rotor on top on request
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	CCC

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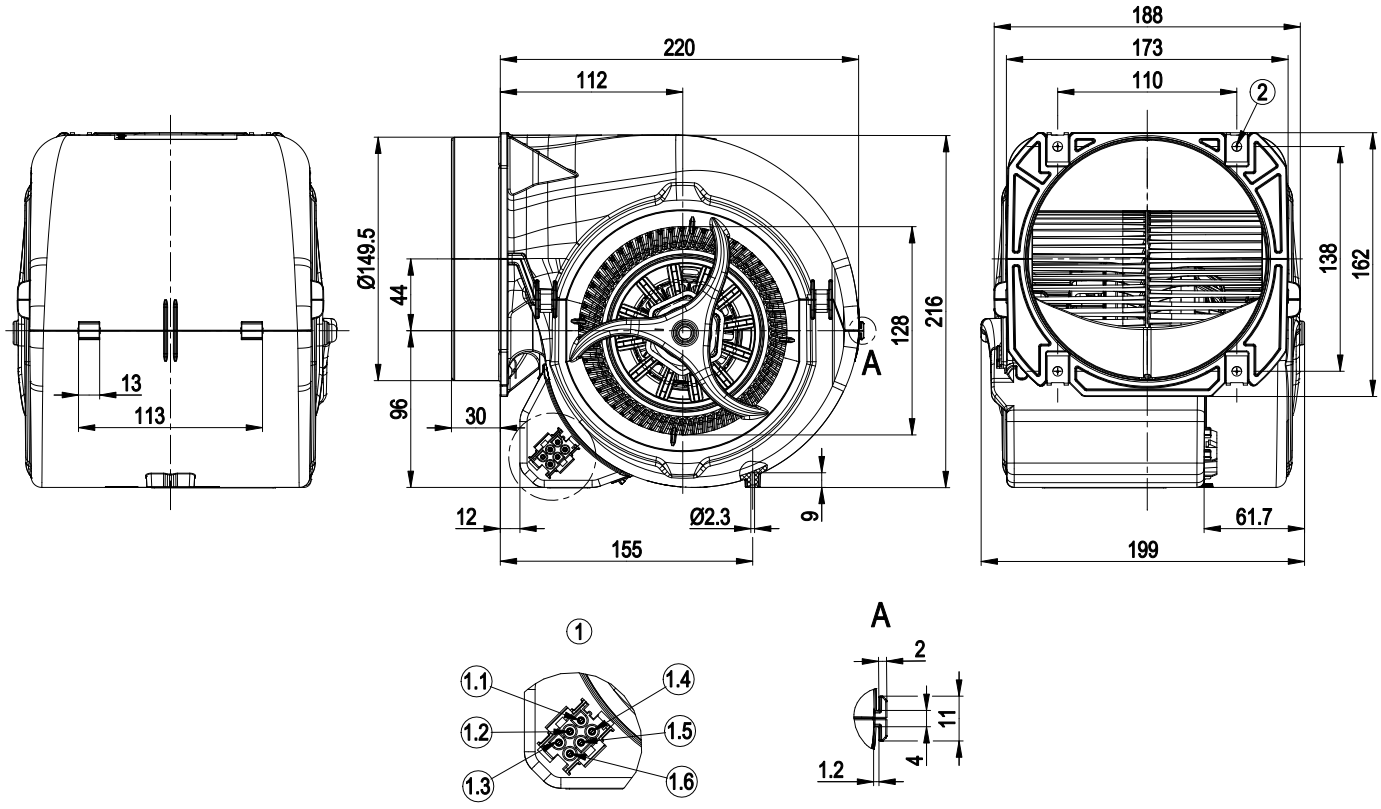
Product drawing



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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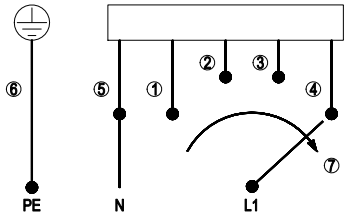
Connection screen



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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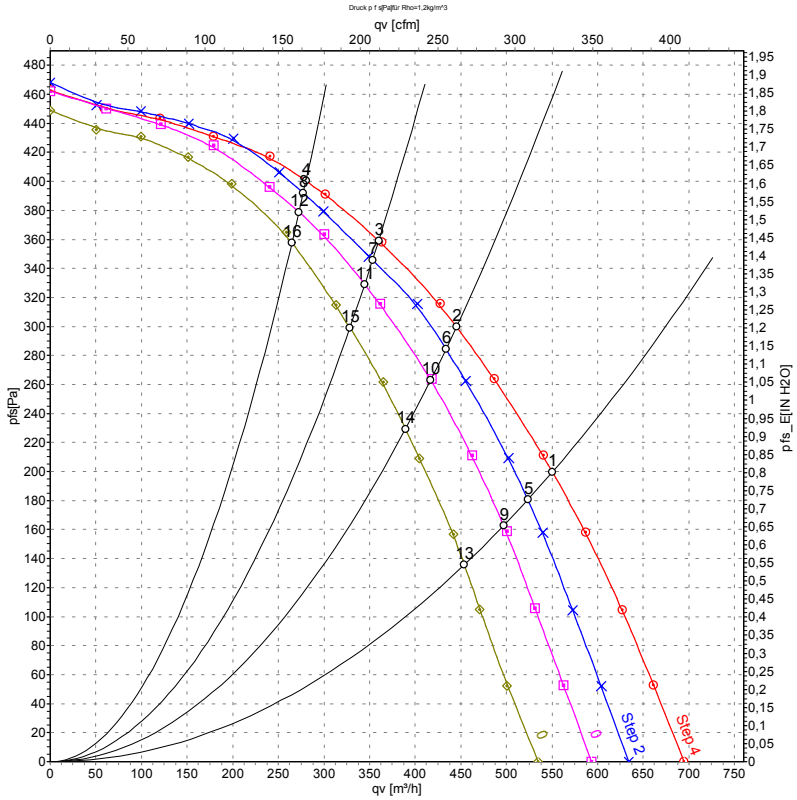
Charts: Air flow 50 Hz



Measurement: LU-115525
Measurement: LU-115529
Measurement: LU-115530
Measurement: LU-115532

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	50	1910	162	0.72	550	200
2	4	230	50	2155	159	0.71	445	300
3	4	230	50	2315	150	0.68	360	360
4	4	230	50	2430	144	0.66	280	400
5	3	230	50	1800	147	0.69	525	181
6	3	230	50	2100	138	0.66	435	284
7	3	230	50	2300	129	0.63	355	346
8	3	230	50	2445	120	0.61	275	392
9	2	230	50	1685	135	0.65	495	164
10	2	230	50	2020	127	0.63	415	264
11	2	230	50	2240	118	0.61	345	329
12	2	230	50	2410	109	0.59	275	379
13	1	230	50	1550	125	0.61	455	136
14	1	230	50	1910	116	0.59	390	229
15	1	230	50	2140	107	0.57	330	299
16	1	230	50	2320	99	0.55	265	359

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