D2E146-HT65-49

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D2E146-HT65-49 ebmpapst Datasheet
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Nominal data

Type	**D2E146-HT65-49**	
Motor	**M2E068-EC**	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	2000
Power input	W	430
Current draw	A	3.75
Motor capacitor	µF	25
Capacitor voltage	VDB	240
Capacitor standard		P2 (CE)
Min. back pressure	Pa	100
Max. ambient temperature	°C	40

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	3.7 kg
Size	146 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic, black
Material of impeller	Sheet steel, hot-galvanised
Housing material	PP plastic, black
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
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	UL 507; CSA C22.2 Nr.113

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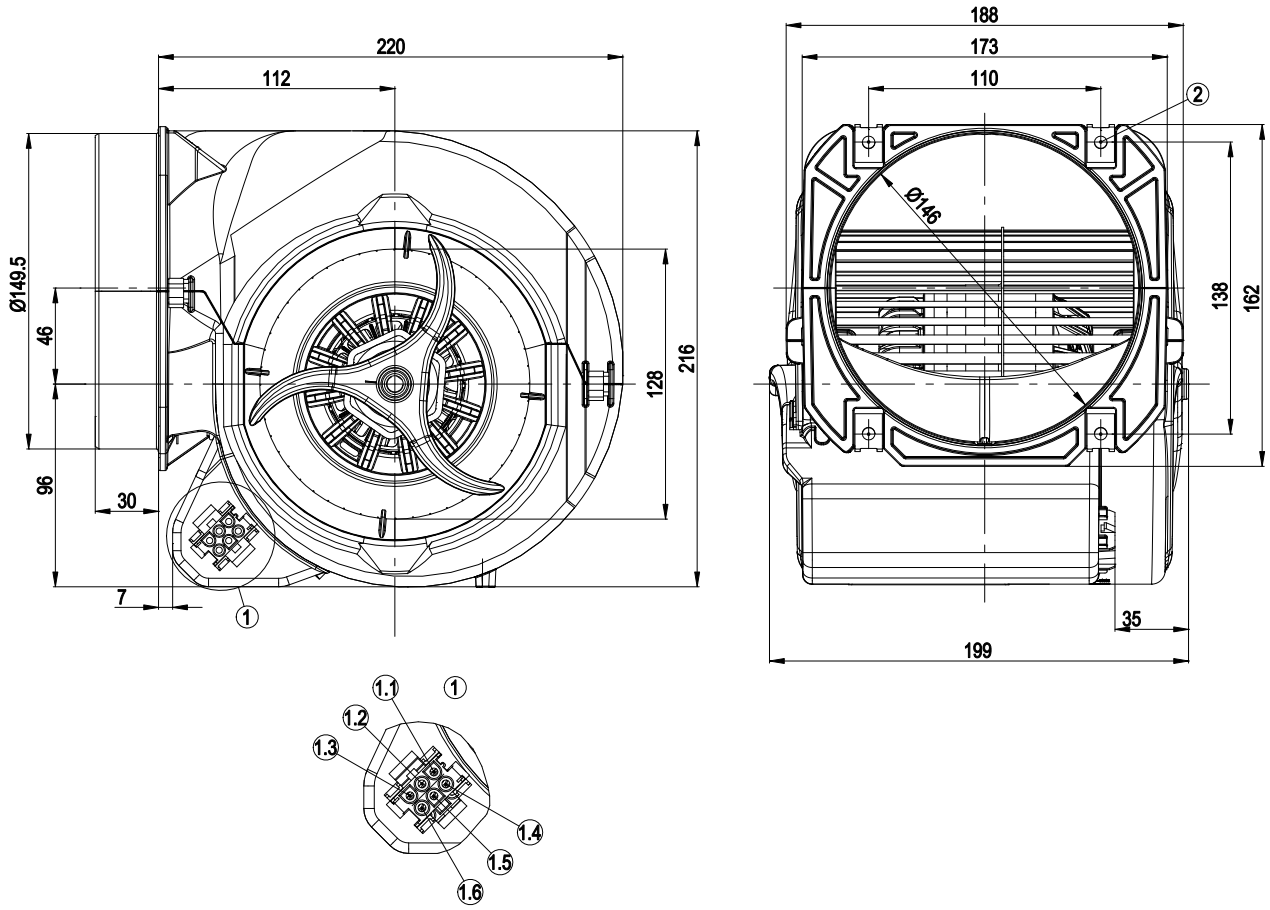
Product drawing



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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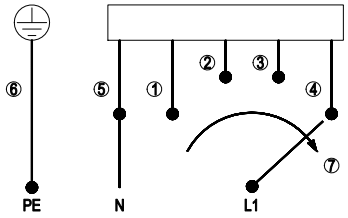
Connection screen



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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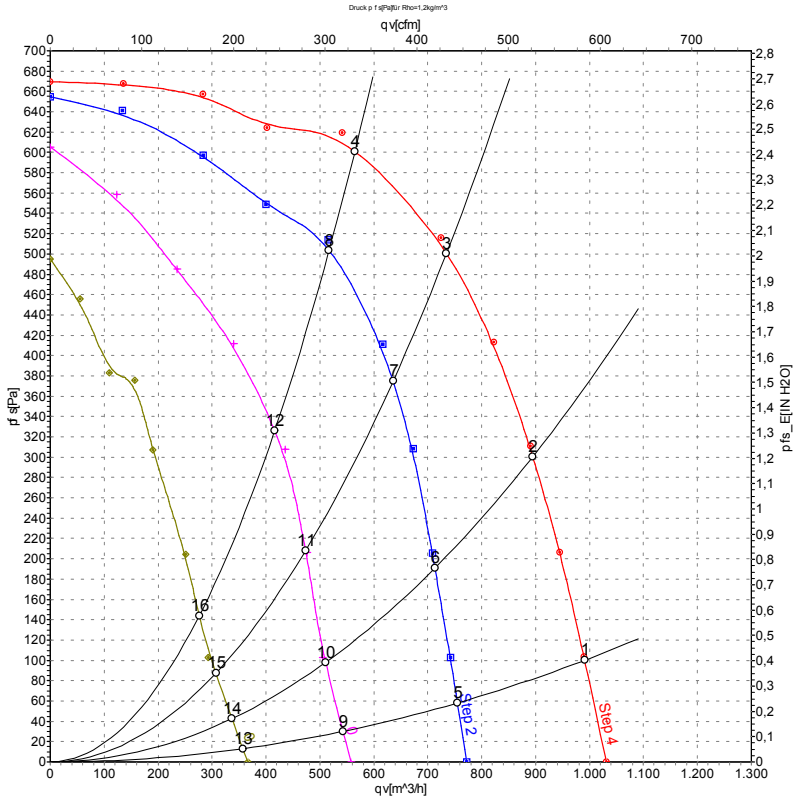
Charts: Air flow 60 Hz



Measurement: LU-45289
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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	115	60	2000	430	3.75	990	100
2	4	115	60	2340	419	3.63	895	300
3	4	115	60	2685	382	3.31	735	500
4	4	115	60	2925	345	2.99	565	600
5	3	115	60	1560	325	2.87	755	59
6	3	115	60	1890	313	2.79	715	191
7	3	115	60	2325	288	2.63	635	376
8	3	115	60	2710	256	2.42	515	512
9	2	115	60	1135	252	2.27	540	29
10	2	115	60	1350	244	2.22	510	91
11	2	115	60	1755	234	2.16	475	211
12	2	115	60	2175	217	2.06	415	329
13	1	115	60	750	194	1.78	355	13
14	1	115	60	900	192	1.77	335	42
15	1	115	60	1115	188	1.74	305	82
16	1	115	60	1415	183	1.71	275	143

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