D2E146-HS15-85

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

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

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1910
Power consumption	W	162
Current draw	A	0.72
Capacitor	µF	5
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	200
Min. back pressure	inH2O	0.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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	3.1 kg
Fan size	146 mm
Rotor surface	Partly cast in aluminum
Terminal box material	PP plastic
Impeller material	PP plastic
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	With plug; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE
Approval	CCC

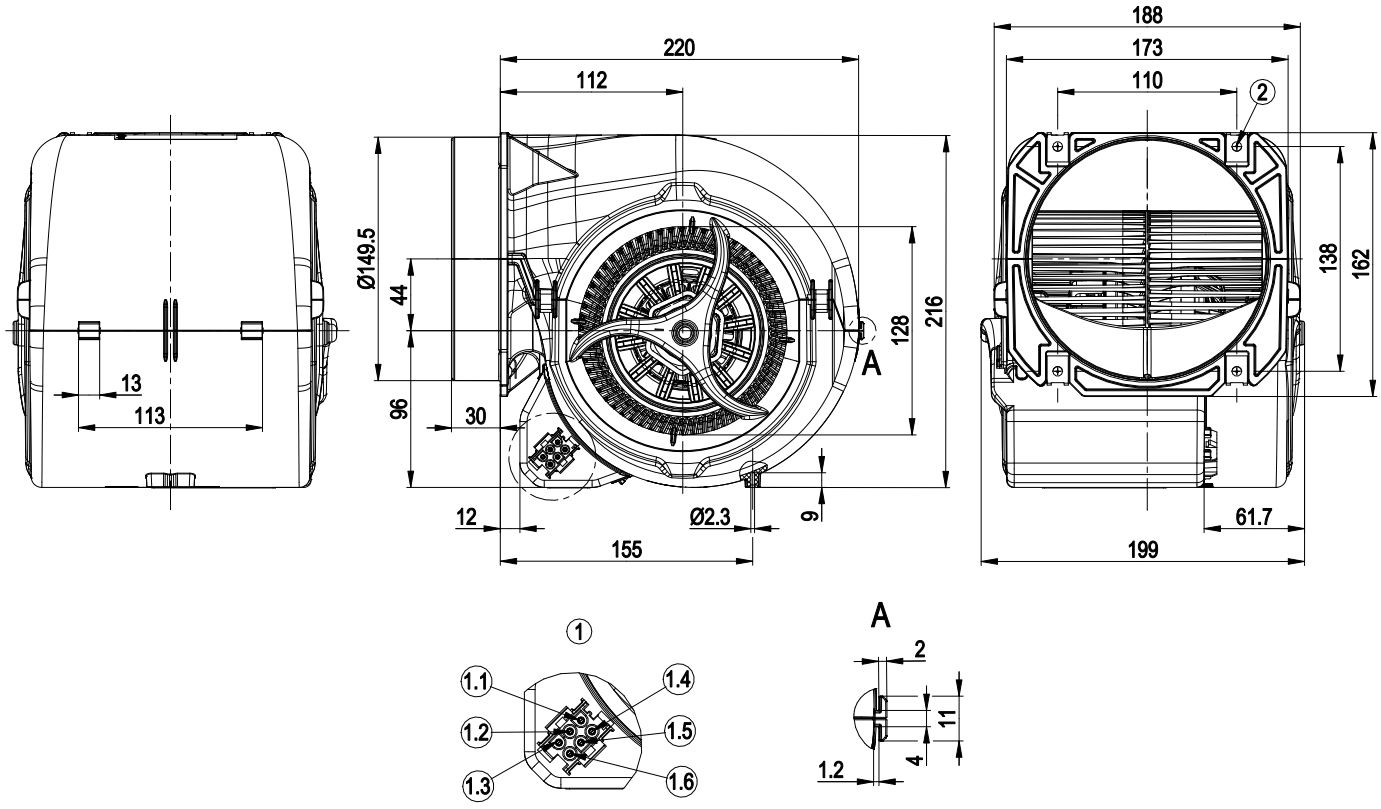
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Product drawing



1	Coded plug system AMP Universal Mate-N-Lok; connector housing: 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 (screw length at least 14.5 mm plus thickness of mounting material)

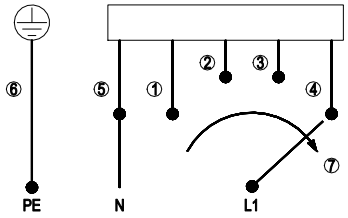
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Connection diagram



The switch must interrupt the circuit when switching.

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

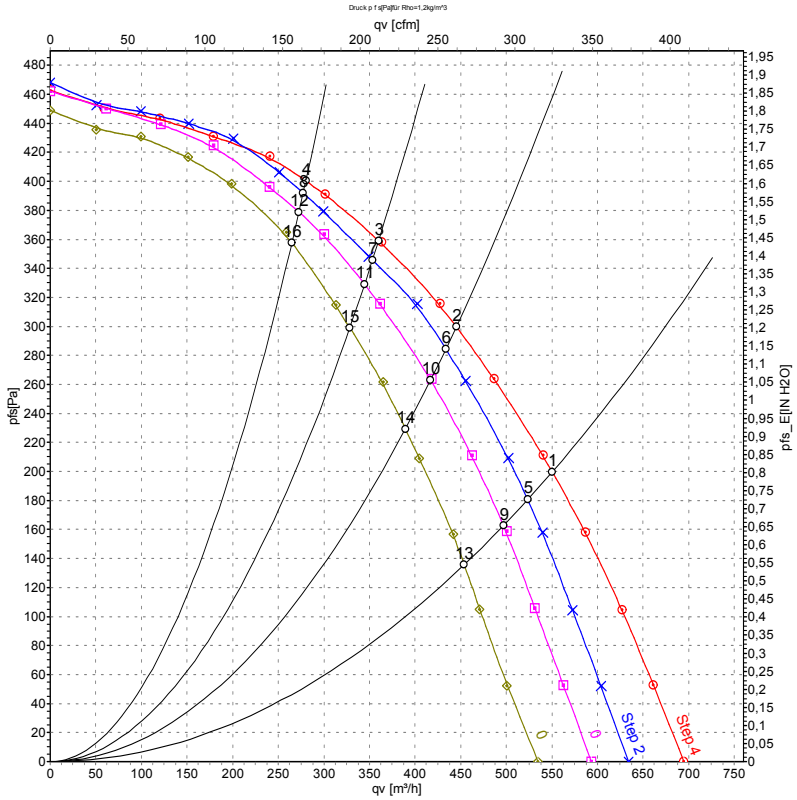
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Curves: Air performance 50 Hz



Measurement: LU-115525-1
Measurement: LU-115529-1
Measurement: LU-115530-1
Measurement: LU-115532-1

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	4	230	50	1910	162	0.72	550	200	325	0.80
2	4	230	50	2155	159	0.71	445	300	260	1.20
3	4	230	50	2315	150	0.68	360	360	210	1.45
4	4	230	50	2430	144	0.66	280	400	165	1.61
5	3	230	50	1800	147	0.69	525	181	310	0.73
6	3	230	50	2100	138	0.66	435	284	255	1.14
7	3	230	50	2300	129	0.63	355	346	210	1.39
8	3	230	50	2445	120	0.61	275	392	165	1.57
9	2	230	50	1685	135	0.65	495	164	295	0.66
10	2	230	50	2020	127	0.63	415	264	245	1.06
11	2	230	50	2240	118	0.61	345	329	200	1.32
12	2	230	50	2410	109	0.59	275	379	160	1.52
13	1	230	50	1550	125	0.61	455	136	265	0.55
14	1	230	50	1910	116	0.59	390	229	230	0.92
15	1	230	50	2140	107	0.57	330	299	195	1.20
16	1	230	50	2320	99	0.55	265	359	155	1.44

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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