D2E146-HT99-91

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D2E146-HT99-91**
Motor	**M2E068-EC**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	220 .. 240
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		-
Speed (rpm)	min^{-1}	1850
Power consumption	W	355
Current draw	A	1.55
Capacitor	µF	8
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. ambient temperature	°C	-20
Max. ambient temperature	°C	55
Starting current	A	1.8

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	3.44 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	IP20
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, open rotor
Mode	S1
Motor bearing	Calotte bearing
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box, capacitor integrated and connected; With plug
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	VDE

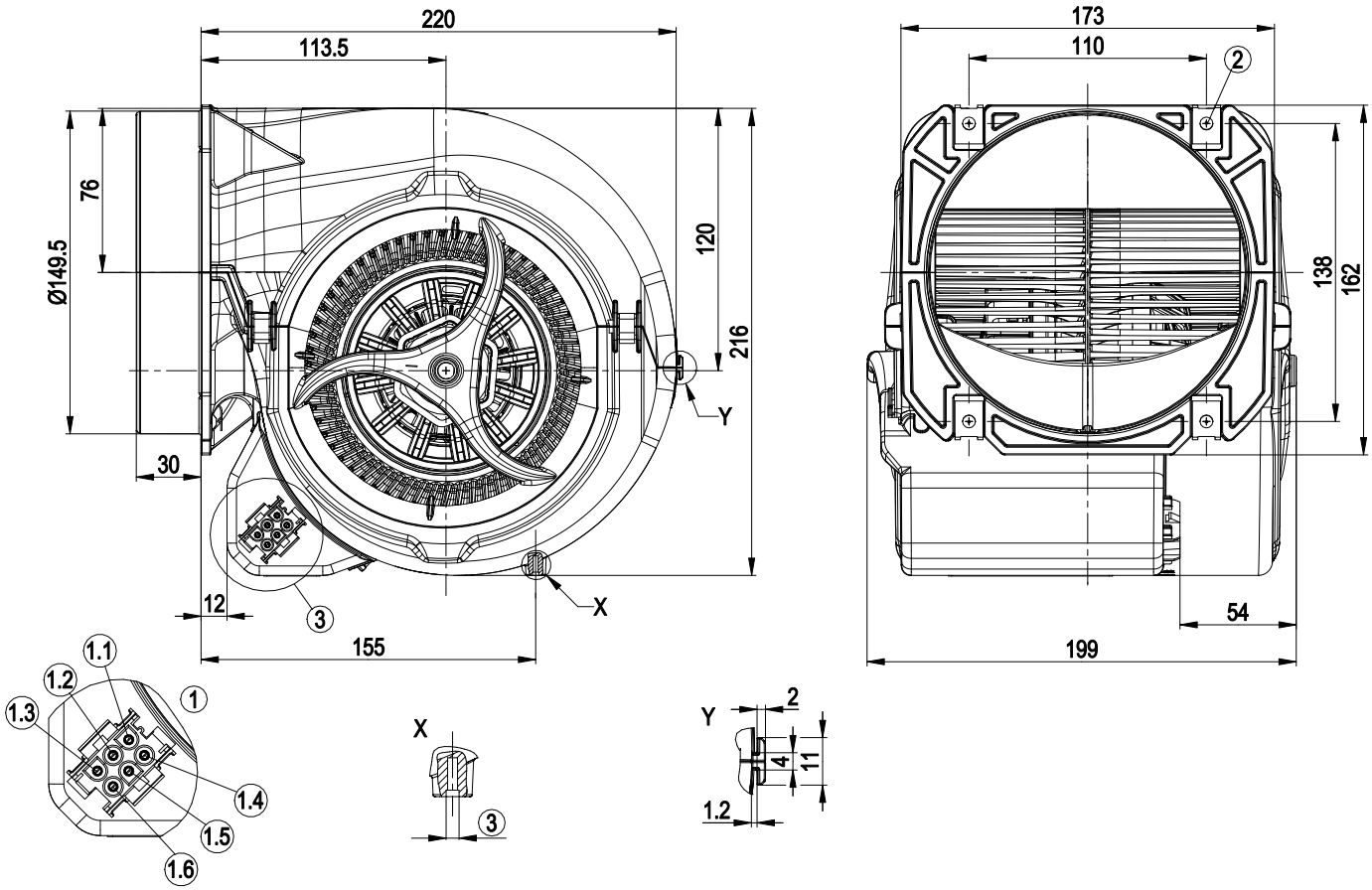
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Product drawing



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	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus material thickness of mounting)
3	For M3 thread, max. clearance for screw 8 mm

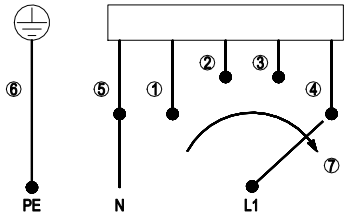
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Connection diagram



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				

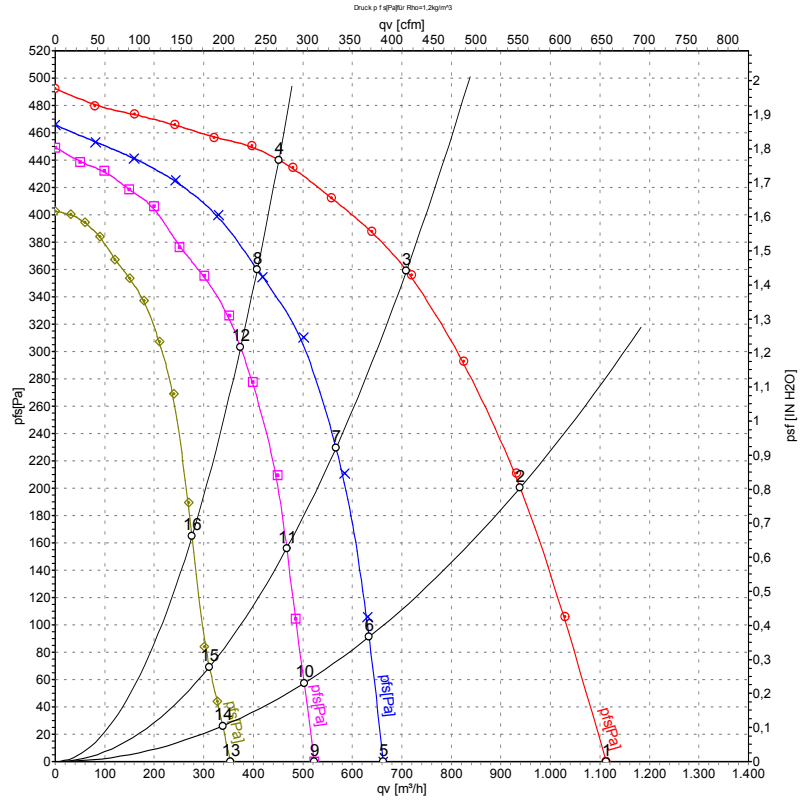
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Curves: Air performance 50 Hz



Measurement: LU-122266-1
Measurement: LU-122270-1
Measurement: LU-122272-1
Measurement: LU-122274-1

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

	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1850	355	1.55	1110	0	655	0.00
2	230	50	2240	313	1.36	940	200	555	0.80
3	230	50	2495	263	1.15	710	360	415	1.45
4	230	50	2660	226	0.99	450	440	265	1.77
5	230	50	1140	245	1.11	665	0	390	0.00
6	230	50	1550	230	1.06	635	97	375	0.39
7	230	50	1995	202	0.96	565	232	335	0.93
8	230	50	2435	155	0.80	410	360	240	1.45
9	230	50	925	218	0.99	525	0	310	0.00
10	230	50	1205	209	0.96	500	57	295	0.23
11	230	50	1655	191	0.90	470	156	275	0.63
12	230	50	2215	154	0.78	375	303	220	1.22
13	230	50	625	179	0.83	355	0	210	0.00
14	230	50	820	177	0.82	340	26	200	0.10
15	230	50	1120	171	0.80	310	69	185	0.28
16	230	50	1680	153	0.74	275	166	160	0.67

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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