D2E146-HT67-02

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D2E146-HT67-02**
Motor	**M2E068-EC**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		-	-
Speed (rpm)	min^{-1}	1850	2100
Power input	W	355	400
Current draw	A	1.55	1.75
Motor capacitor	µF	8	8
Capacitor voltage	VDB	450	450
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	200
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	50
Starting current	A	1.8	1.9

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	3.4 kg
Size	146 mm
Surface of rotor	Partially cast in aluminium
Material of terminal box	PP plastic, black
Material of impeller	Sheet steel, hot-dip galvanised
Housing material	PP plastic, black
Motor suspension	Motor mounted with anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
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, open rotor
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	With plug; Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Product conforming to standard	EN 60335-2-31
Approval	CCC; VDE; EAC

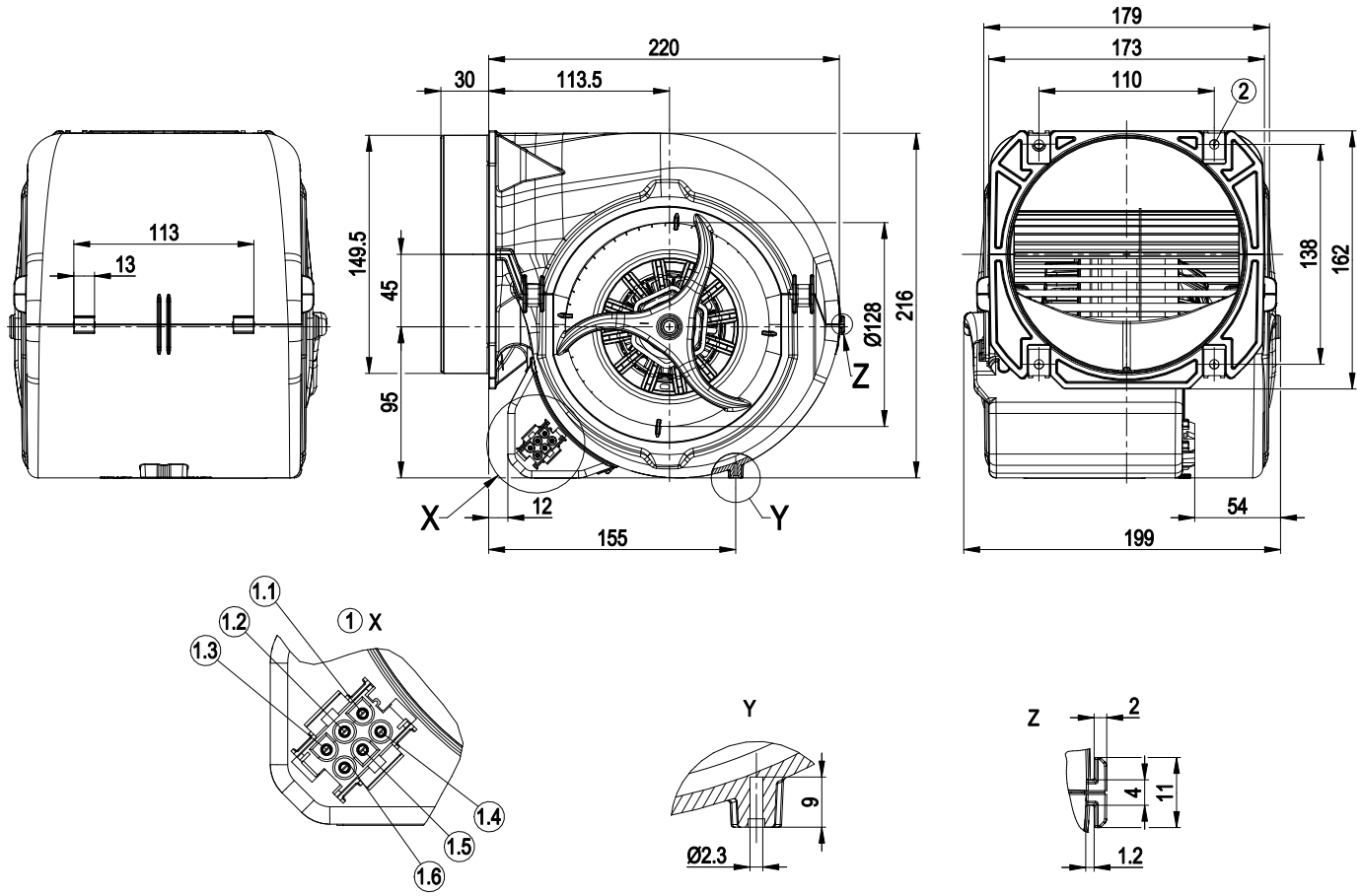
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Product drawing



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 = Level 1
1.2	L = Level 2
1.3	L = Level 3
1.4	L = Level 4
1.5	N
1.6	Protective earth
2	4x sheet metal nut for thread EN ISO 1478-ST 4.8 (min. screw length 14.5 mm plus thickness of mounting material)

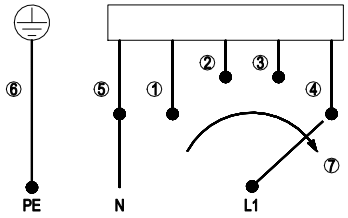
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Connection screen



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				

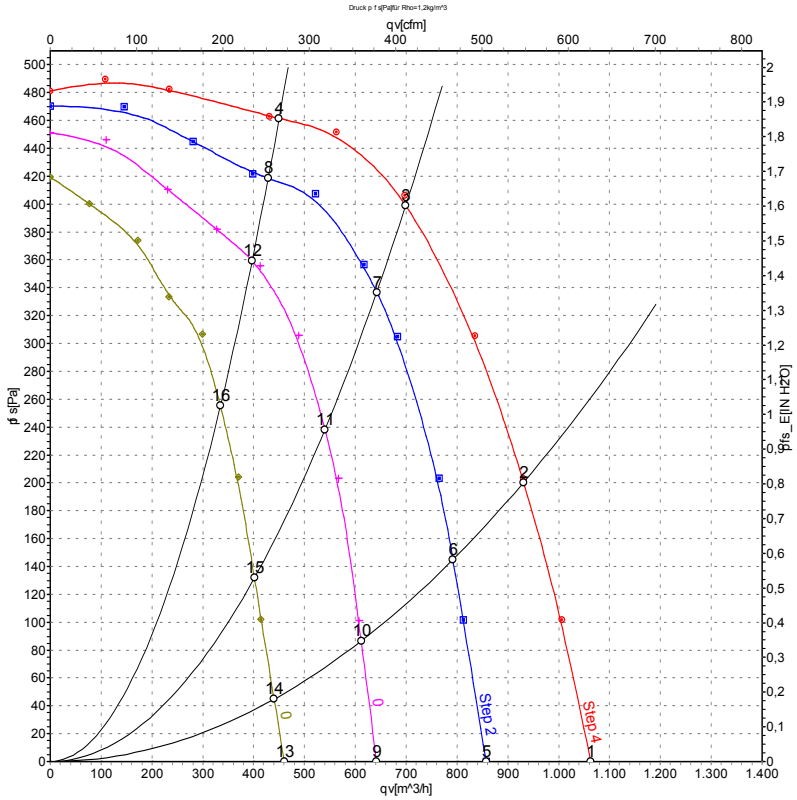
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Charts: Air flow 50 Hz



Measurement: LU-45713-1
Measurement: LU-45715-1
Measurement: LU-45717-1
Measurement: LU-45719-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	4	230	50	1850	355	1.55	1060	0	625	0.00
2	4	230	50	2150	318	1.38	930	200	550	0.80
3	4	230	50	2435	268	1.16	700	400	410	1.61
4	4	230	50	2610	227	0.99	450	460	265	1.85
5	3	230	50	1550	286	1.27	855	0	505	0.00
6	3	230	50	1850	261	1.18	790	145	465	0.58
7	3	230	50	2235	222	1.03	640	337	380	1.35
8	3	230	50	2515	179	0.87	430	418	250	1.68
9	2	230	50	1195	233	1.06	640	0	380	0.00
10	2	230	50	1455	222	1.02	610	88	360	0.35
11	2	230	50	1890	196	0.94	540	239	320	0.96
12	2	230	50	2315	158	0.81	395	360	235	1.45
13	1	230	50	875	195	0.89	460	0	270	0.00
14	1	230	50	1055	191	0.88	440	45	260	0.18
15	1	230	50	1420	179	0.84	400	132	235	0.53
16	1	230	50	1965	151	0.76	335	255	195	1.02

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

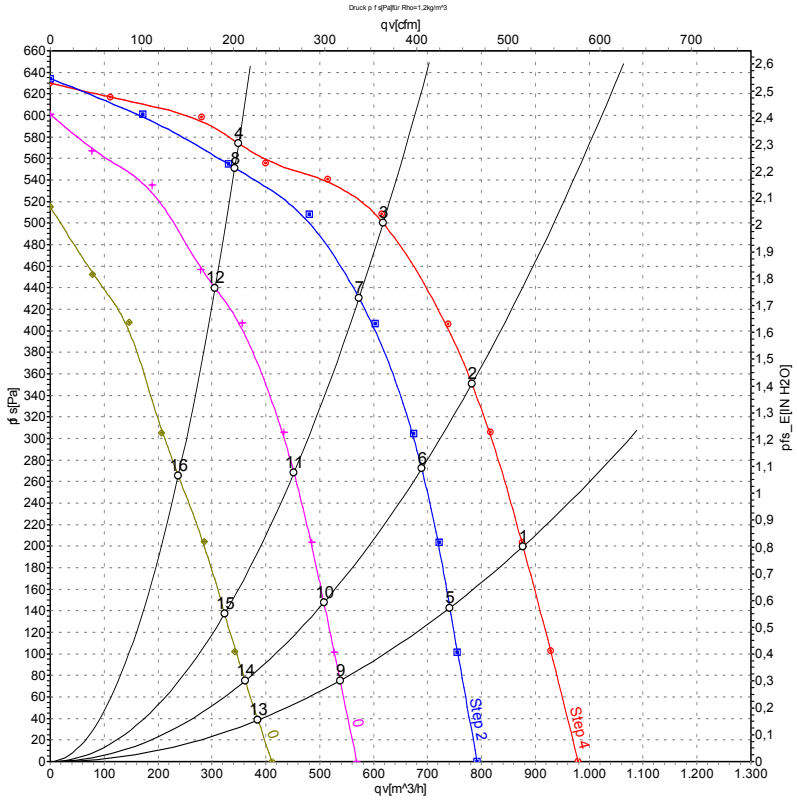
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Charts: Air flow 60 Hz



Measurement: LU-45714-1
Measurement: LU-45716-1
Measurement: LU-45718-1
Measurement: LU-45720-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	4	230	60	2100	400	1.75	875	200	515	0.80
2	4	230	60	2360	384	1.67	780	350	460	1.41
3	4	230	60	2685	360	1.58	620	500	365	2.01
4	4	230	60	2935	335	1.48	350	575	205	2.31
5	3	230	60	1780	296	1.37	740	143	435	0.57
6	3	230	60	2085	284	1.34	690	273	405	1.10
7	3	230	60	2495	260	1.29	575	432	335	1.73
8	3	230	60	2870	226	1.22	345	552	200	2.22
9	2	230	60	1325	228	1.10	540	75	315	0.30
10	2	230	60	1560	222	1.09	510	148	300	0.59
11	2	230	60	1990	210	1.07	450	268	265	1.08
12	2	230	60	2575	181	1.02	305	439	180	1.76
13	1	230	60	950	187	0.92	385	38	225	0.15
14	1	230	60	1105	185	0.91	360	74	215	0.30
15	1	230	60	1400	180	0.90	325	137	190	0.55
16	1	230	60	1985	165	0.88	240	265	140	1.06

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

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