

# AC centrifugal fan

forward curved, dual inlet  
with housing (flange)

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## Nominal data

<b>Type</b>	<b>D2E146-HT67-02</b>		
<b>Motor</b>	<b>M2E068-EC</b>		
Phase		1~	1~
Nominal voltage	[V]	230	230
Frequency	[Hz]	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	[min <sup>-1</sup> ]	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		P2 (CE)	P2 (CE)
Min. back pressure	[Pa]	0	200
Max. ambient temperature	[°C]	55	50

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations

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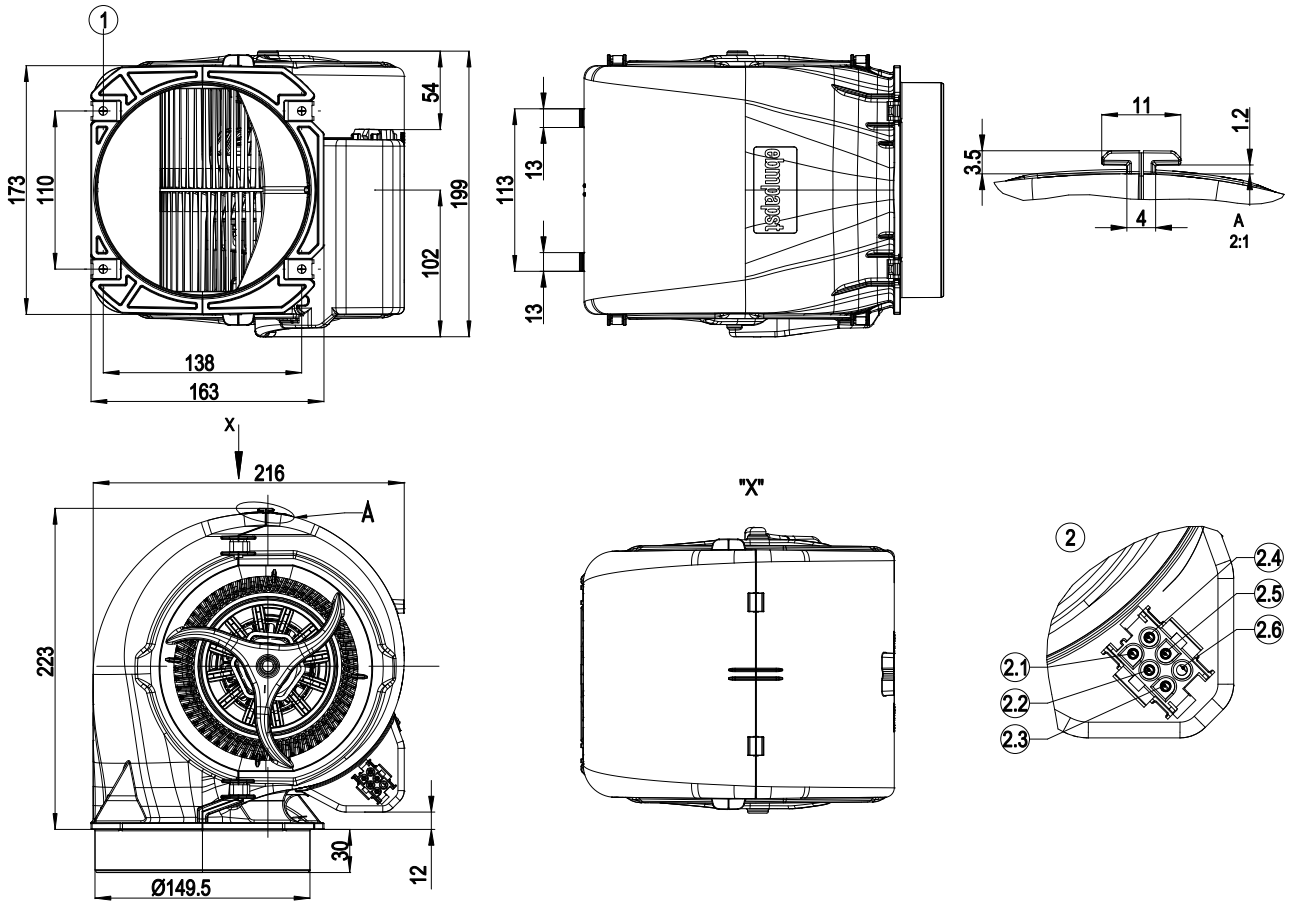
## Technical features

Leakage current	< 0.75 mA
Size	146 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Speed steps	4
Mounting position	Any
Electrical leads	Via terminal box, integrated capacitor connected via terminal box; With plug
Insulation class	"F"
Cable exit	Variable
Condensate discharge holes	None, open rotor
Bearing motor	Ball bearing
Mass	3.41 kg
Housing material	PP plastic, black
Material of terminal box	PP plastic, black
Material of impeller	Sheet steel, hot-dip galvanised
Motor suspension	Motor mounted with anti-vibration on both sides
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	CE; EN 60335-2-31
Surface of rotor	Partially cast in aluminium
Type of protection	IP 20
Protection class	I
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	VDE

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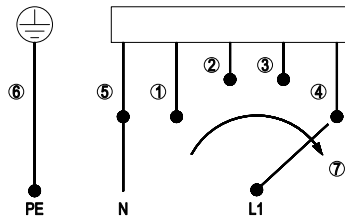
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## Product drawing



1	4x sheet metal nut for thread EN ISO 1478-ST 4.8 (min. screw length 14.5 mm plus thickness of mounting material)
2	AMP Universal Mate-N-Lok coded plug system; connector shell: AMP 926 682-3; 6x plug pin: AMP 926 886-1
2.1	L = step 1
2.2	L = step 2
2.3	L = step 3
2.4	L = step 4
2.5	N
2.6	Protective earth

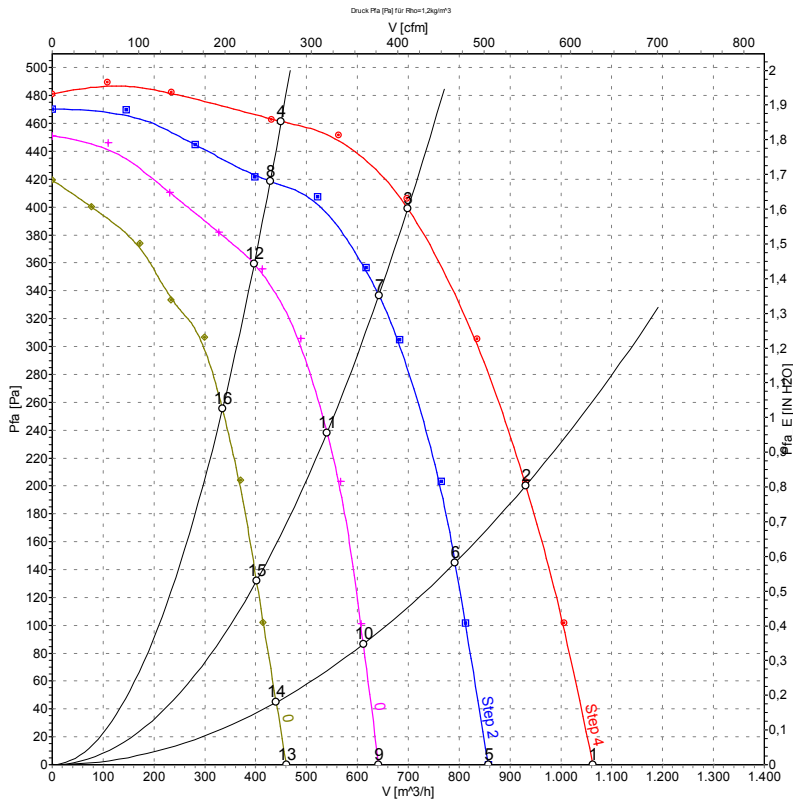
## Connection screen



When changing speeds, switch must break the circuit

1	Step 1 (min.), white
2	Step 2, red
3	Step 3, grey
4	Step 4 (max.), black
5	N, blue
6	Protective earth, green/yellow
7	Speed increase

## Charts: Air flow 50 Hz

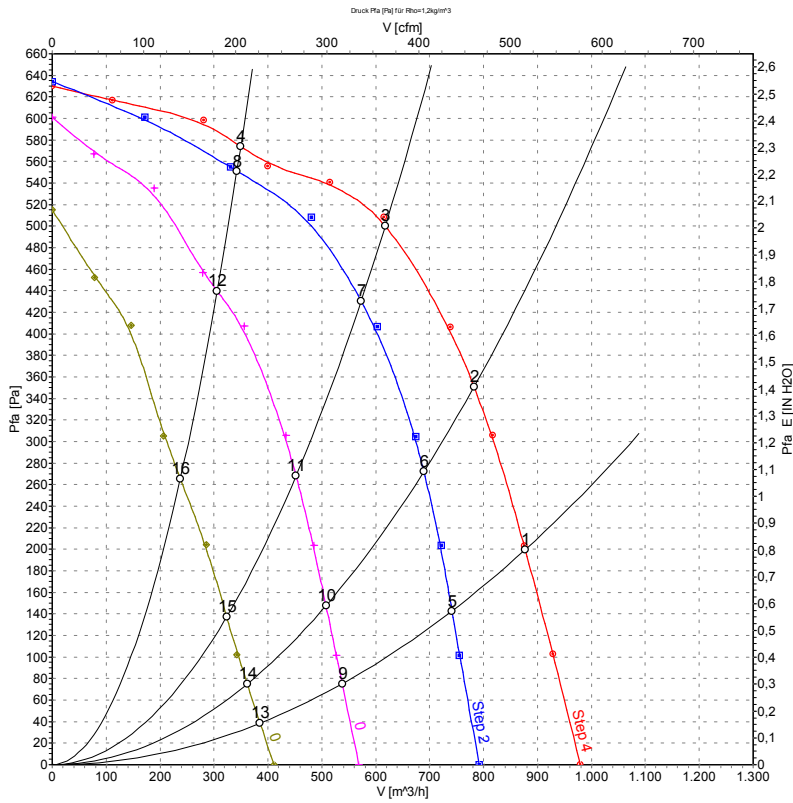


Measurement: LU-45713  
Measurement: LU-45715  
Measurement: LU-45717  
Measurement: LU-45719

## Measured values

	Stage	U	f	n	P <sub>1</sub>	I	$\hat{V}$	P <sub>fa</sub>
		[V]	[Hz]	[min <sup>-1</sup> ]	[W]	[A]	[m <sup>3</sup> /h]	[Pa]
1	4	230	50	1850	355	1.55	1060	0
2	4	230	50	2150	318	1.38	930	200
3	4	230	50	2435	268	1.16	700	400
4	4	230	50	2610	227	0.99	450	460
5	3	230	50	1550	286	1.27	855	0
6	3	230	50	1850	261	1.18	790	145
7	3	230	50	2235	222	1.03	640	337
8	3	230	50	2515	179	0.87	430	418
9	2	230	50	1195	233	1.06	640	0
10	2	230	50	1455	222	1.02	610	88
11	2	230	50	1890	196	0.94	540	239
12	2	230	50	2315	158	0.81	395	360
13	1	230	50	875	195	0.89	460	0
14	1	230	50	1055	191	0.88	440	45
15	1	230	50	1420	179	0.84	400	132
16	1	230	50	1965	151	0.76	335	255

## Charts: Air flow 60 Hz



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

## Measured values

	Stage	U	f	n	P <sub>1</sub>	I	$\hat{V}$	P <sub>fa</sub>
		[V]	[Hz]	[min <sup>-1</sup> ]	[W]	[A]	[m³/h]	[Pa]
1	4	230	60	2100	400	1.75	875	200
2	4	230	60	2360	384	1.67	780	350
3	4	230	60	2685	360	1.58	620	500
4	4	230	60	2935	335	1.48	350	575
5	3	230	60	1780	296	1.37	740	143
6	3	230	60	2085	284	1.34	690	273
7	3	230	60	2495	260	1.29	575	432
8	3	230	60	2870	226	1.22	345	552
9	2	230	60	1325	228	1.10	540	75
10	2	230	60	1560	222	1.09	510	148
11	2	230	60	1990	210	1.07	450	268
12	2	230	60	2575	181	1.02	305	439
13	1	230	60	950	187	0.92	385	38
14	1	230	60	1105	185	0.91	360	74
15	1	230	60	1400	180	0.90	325	137
16	1	230	60	1985	165	0.88	240	265