

AC centrifugal fan

forward curved, dual inlet
with housing (flange)

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Nominal data

Type	D2E146-HS97-03		
Motor	M2E068-DF		
Phase		1~	1~
Nominal voltage	[V]	230	230
Frequency	[Hz]	50	60
Type of data definition		rfa	ml
Valid for approval / standard		CE	CE
Speed	[min ⁻¹]	1350	1750
Power input	[W]	195	215
Current draw	[A]	0.86	0.94
Motor capacitor	[µF]	5	5
Capacitor voltage	[VDB]	400	400
Capacitor standard		P2 (CE)	P2 (CE)
Min. back pressure	[Pa]	0	150
Max. ambient temperature	[°C]	45	40

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

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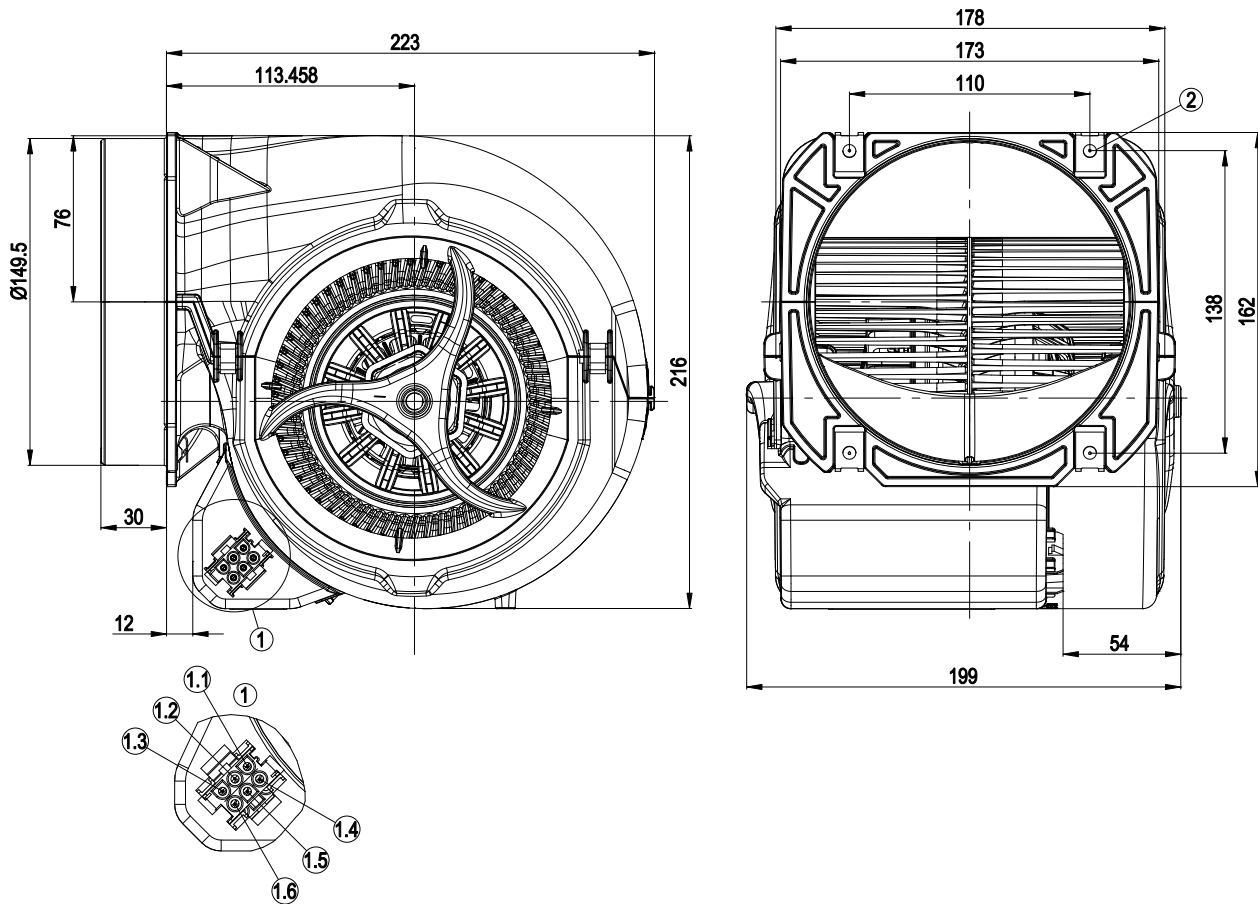
Technical features

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	3.5 kg
Housing material	PP plastic, black
Material of terminal box	PP plastic, black
Material of impeller	PP plastic, white
Motor suspension	Motor anti-vibration mounted 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	CCC; VDE

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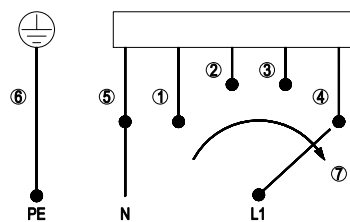
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Product drawing



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 = stage 1
1.2	L = step 2
1.3	L = stage 3
1.4	L = stage 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)

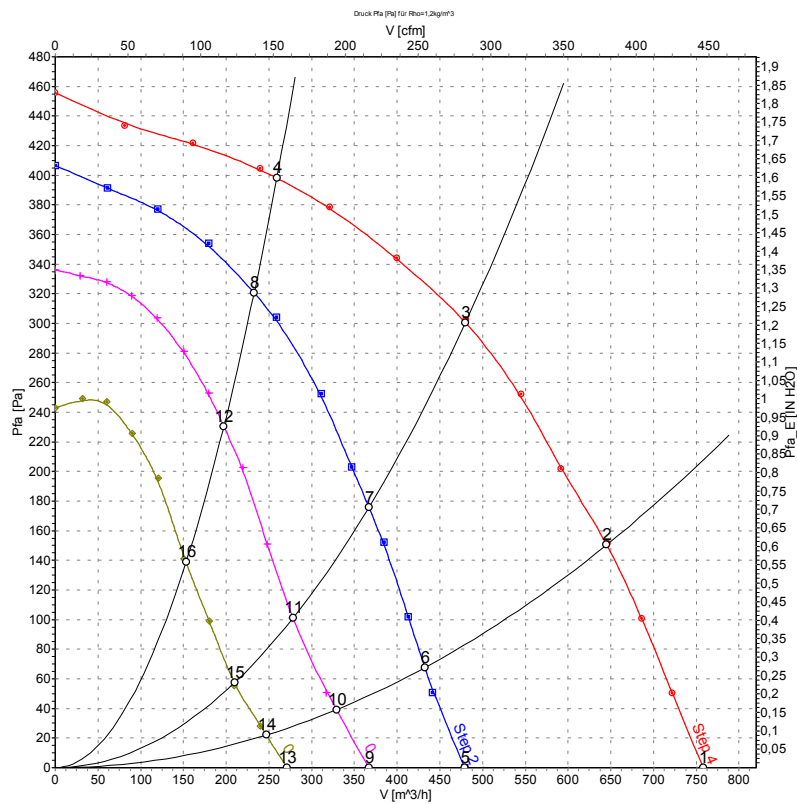
Connection screen



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

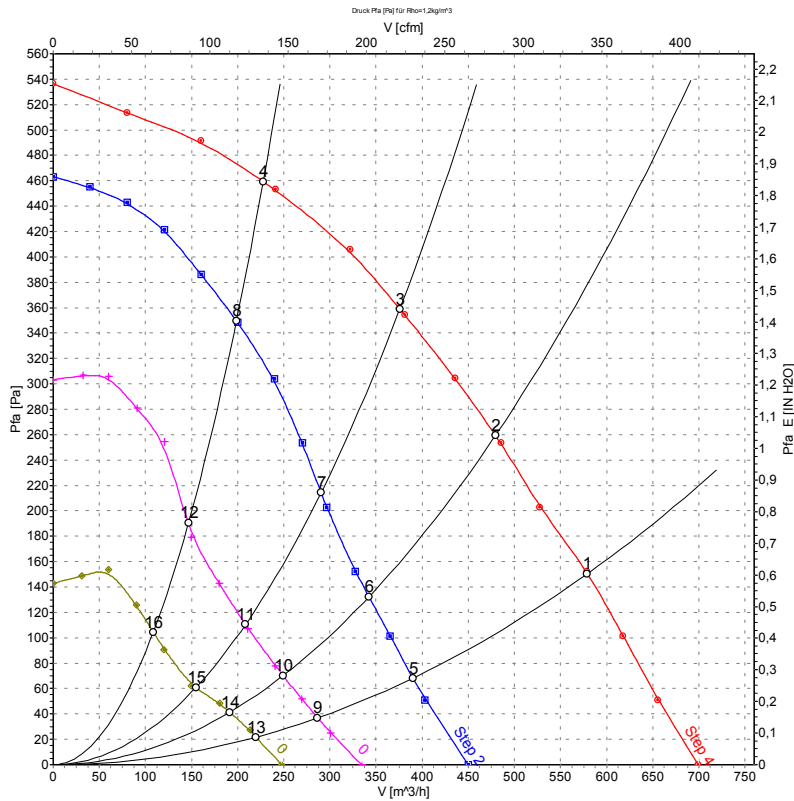
Charts: Air flow 50 Hz



Measured values

	Stage	U	f	n	P ₁	I	$\hat{V}$	p _{fa}
		[V]	[Hz]	[min ⁻¹]	[W]	[A]	[m³/h]	[Pa]
1	4	230	50	1350	195	0.86	760	0
2	4	230	50	1795	185	0.81	645	150
3	4	230	50	2200	169	0.75	480	300
4	4	230	50	2520	146	0.65	260	400
5	3	230	50	875	128	0.61	480	0
6	3	230	50	1215	125	0.60	430	67
7	3	230	50	1680	116	0.58	365	176
8	3	230	50	2255	94	0.52	235	321
9	2	230	50	660	109	0.53	365	0
10	2	230	50	915	106	0.52	330	38
11	2	230	50	1280	102	0.51	280	100
12	2	230	50	1920	88	0.48	195	230
13	1	230	50	510	95	0.47	270	0
14	1	230	50	715	94	0.47	245	22
15	1	230	50	960	92	0.46	210	55
16	1	230	50	1515	85	0.44	155	138

Charts: Air flow 60 Hz



Measurement: LU-72088
 Measurement: LU-72090
 Measurement: LU-72092
 Measurement: LU-72095

Measured values

	Stage	U	f	n	P ₁	I	$\hat{V}$	P _{fa}
		[V]	[Hz]	[min ⁻¹]	[W]	[A]	[m³/h]	[Pa]
1	4	230	60	1750	215	0.94	580	150
2	4	230	60	2060	212	0.93	480	260
3	4	230	60	2380	208	0.91	375	360
4	4	230	60	2710	201	0.89	230	460
5	3	230	60	1175	131	0.67	390	68
6	3	230	60	1485	129	0.67	340	132
7	3	230	60	1855	125	0.66	290	214
8	3	230	60	2365	114	0.65	200	350
9	2	230	60	890	106	0.57	285	37
10	2	230	60	1100	105	0.57	250	70
11	2	230	60	1365	104	0.57	210	110
12	2	230	60	1835	99	0.56	145	187
13	1	230	60	665	92	0.50	220	22
14	1	230	60	820	91	0.50	190	41
15	1	230	60	1010	90	0.50	155	60
16	1	230	60	1325	88	0.50	110	104