

D4E146-LV19-14

# AC centrifugal fan

forward curved, dual inlet  
with housing (flange)



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## Nominal data

Type	D4E146-LV19-14		
Motor	M4E068-CF		
Phase		1~	1~
Nominal voltage	[V]	230	230
Frequency	[Hz]	50	60
Type of data definition		rfa	rfa
Valid for approval / standard		CE	CE
Speed	[min <sup>-1</sup> ]	780	710
Power input	[W]	65	68
Current draw	[A]	0,29	0.3
Motor capacitor	[μF]	2	2
Capacitor voltage	[VDB]	400	400
Capacitor standard		P2 (CE)	P2 (CE)
Min. back pressure	[Pa]	0	0
Max. ambient temperature	[°C]	50	40
Air flow	[m <sup>3</sup> /h]	565	510
Back pressure	[Pa]	0	0
Sound pressure level	[dB(A)]	46	42

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

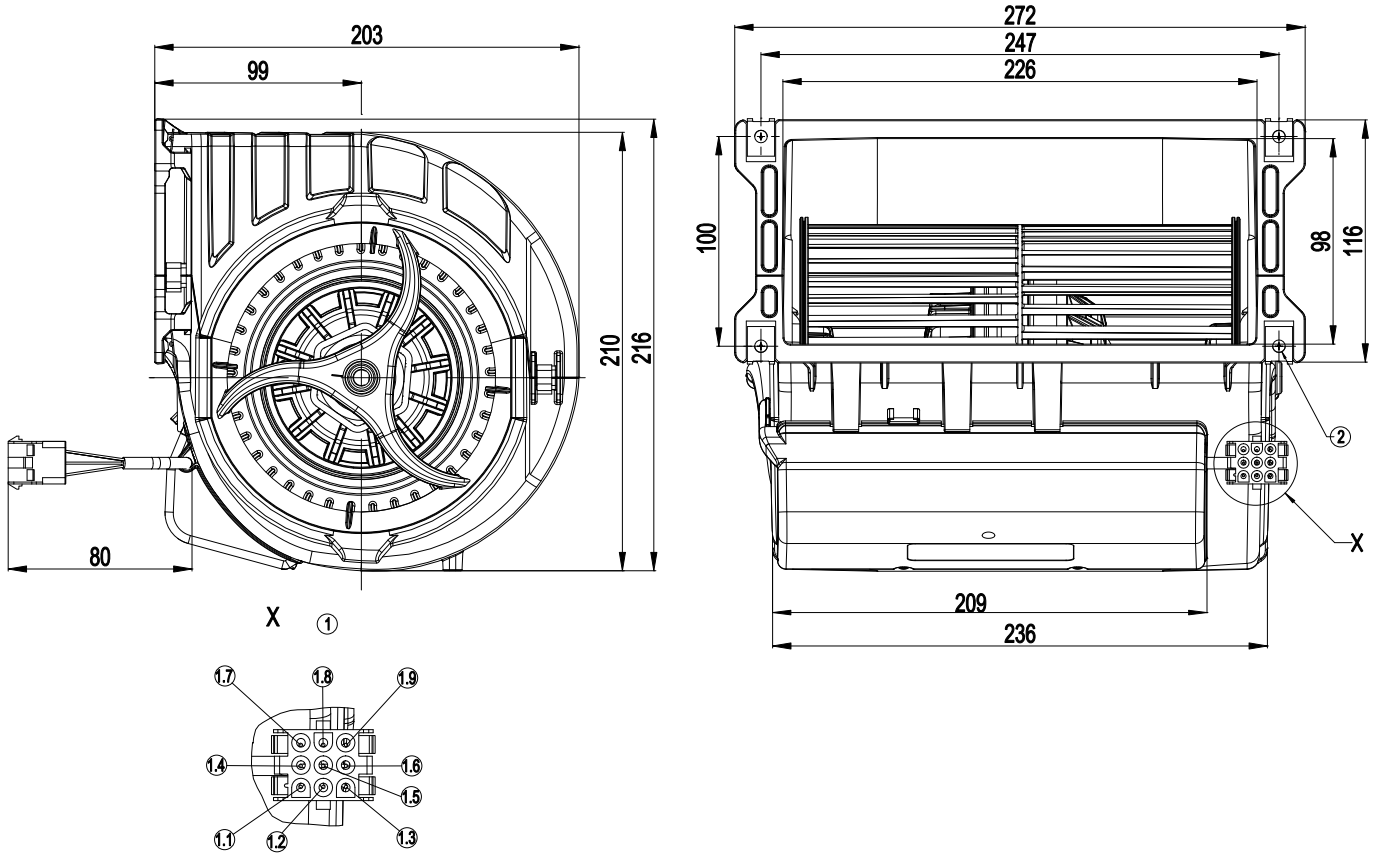
Leakage current	< 0,75 mA
Size	146 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Speed steps	5
Mounting position	Any
Insulation class	"F"
Cable exit	Axial
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	2.5 kg
Housing material	Plastic, Polyfort PP-T20
Material of terminal box	PP plastic, black
Material of impeller	Plastic PA6, fibreglass-reinforced
Motor suspension	Motor anti-vibration mounted on both sides
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	CE; EN 60335-1
Surface of rotor	Uncoated
Type of protection	IP 44 - depending on position
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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## Product drawing

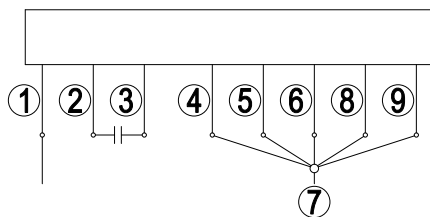


2	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)
1	Connector housing AMP Universal Mate-N-Lok
1.1	Step 1 (min.)
1.2	Step 2
1.3	Step 3
1.4	Step 4
1.5	Step 5 (max.)
1.6	-
1.7	-
1.8	N
1.9	Protective earth

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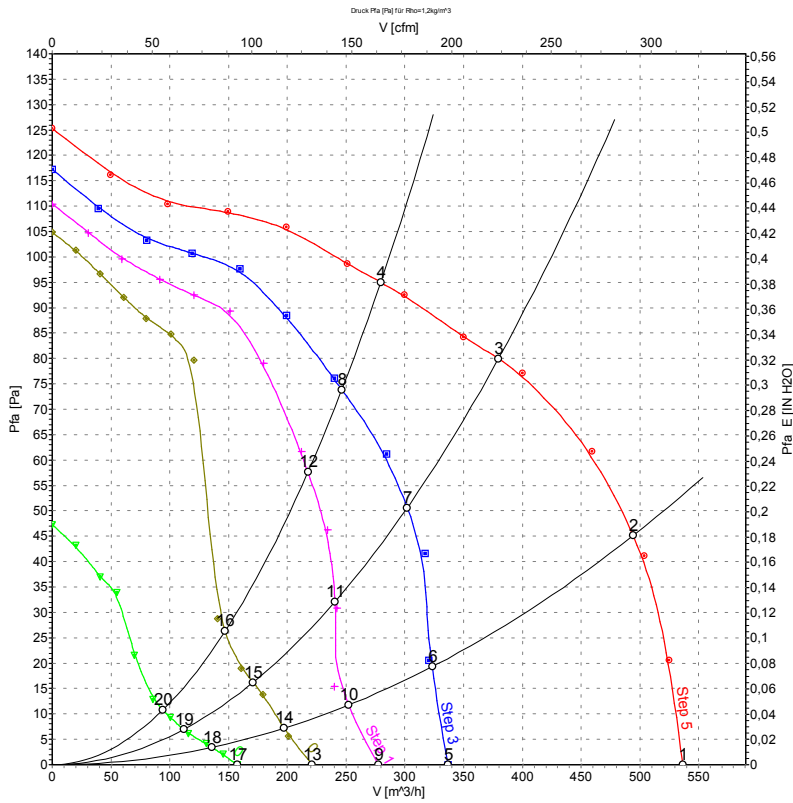
## Connection screen



Note: Fast speed (step V); slow speed (step I)

1	= N = blue	2	brown	3	yellow
4	Step I white	5	Step II red	6	Step III grey
7	L1	8	Step IV orange	9	Step V black

## Charts: Air flow 50 Hz

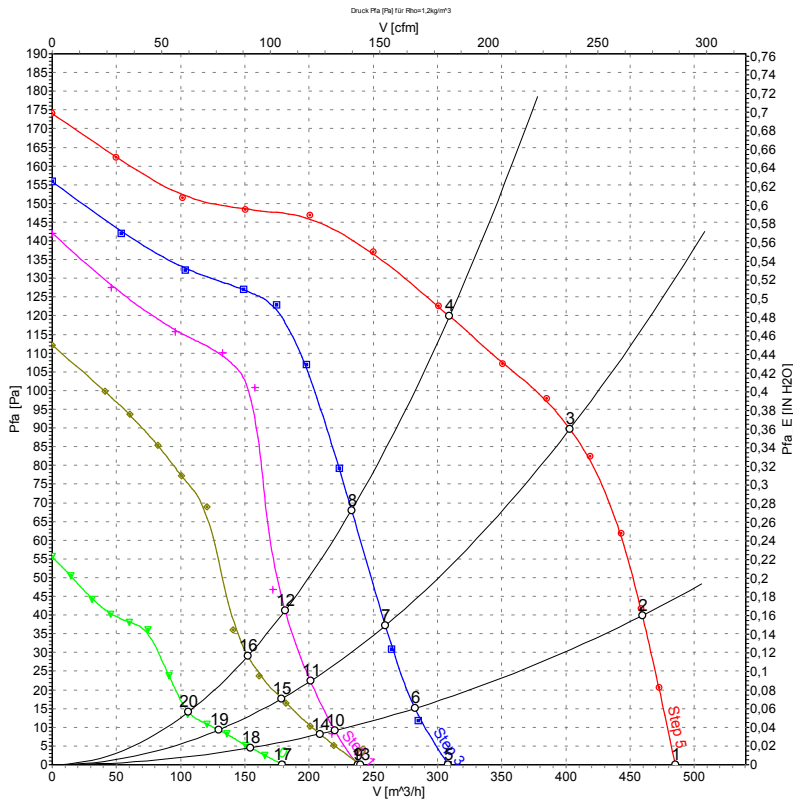


Measurement: LU-68469  
 Measurement: LU-68471  
 Measurement: LU-68472  
 Measurement: LU-68473  
 Measurement: LU-68474

## 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	5	230	50	780	65	0.29	535	0
2	5	230	50	1075	58	0.26	495	46
3	5	230	50	1270	48	0.21	380	80
4	5	230	50	1335	44	0.20	280	95
5	4	230	50	495	54	0.24	335	0
6	4	230	50	685	52	0.23	325	17
7	4	230	50	1015	45	0.21	300	51
8	4	230	50	1190	40	0.19	245	74
9	3	230	50	390	50	0.22	275	0
10	3	230	50	555	48	0.22	250	10
11	3	230	50	630	48	0.22	240	15
12	3	230	50	1045	41	0.19	220	58
13	2	230	50	345	20	0.16	220	0
14	2	230	50	445	20	0.16	195	7
15	2	230	50	580	20	0.16	170	16
16	2	230	50	715	20	0.16	145	26
17	1	230	50	245	13	0.13	155	0
18	1	230	50	315	13	0.13	135	3
19	1	230	50	395	13	0.13	110	7
20	1	230	50	465	13	0.13	95	11

## Charts: Air flow 60 Hz



Measurement: LU-68484  
 Measurement: LU-68487  
 Measurement: LU-68490  
 Measurement: LU-68493  
 Measurement: LU-68495

## 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	5	230	60	710	68	0.30	485	0
2	5	230	60	1010	66	0.29	460	40
3	5	230	60	1345	60	0.27	405	90
4	5	230	60	1505	54	0.25	310	120
5	4	230	60	465	52	0.24	310	0
6	4	230	60	625	51	0.24	280	14
7	4	230	60	870	50	0.24	260	37
8	4	230	60	1130	46	0.23	235	68
9	3	230	60	380	47	0.22	240	0
10	3	230	60	475	47	0.22	220	7
11	3	230	60	650	46	0.22	200	22
12	3	230	60	845	45	0.22	180	39
13	2	230	60	360	23	0.18	240	0
14	2	230	60	480	23	0.18	210	8
15	2	230	60	615	23	0.18	180	18
16	2	230	60	750	23	0.17	150	29
17	1	230	60	280	15	0.14	180	0
18	1	230	60	360	15	0.14	155	4
19	1	230	60	450	15	0.14	130	9
20	1	230	60	530	15	0.14	105	13