D2E146-CD81-19

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**D2E146-CD81-19**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Valid for approval/standard		-
Speed (rpm)	min^{-1}	2300
Power consumption	W	195
Current draw	A	0.86
Capacitor	µF	4
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	350
Min. back pressure	inH2O	1.41
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	-

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	4.2 kg
Fan size	146 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Guard grille material	PA plastic
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
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	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Speed levels	5
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

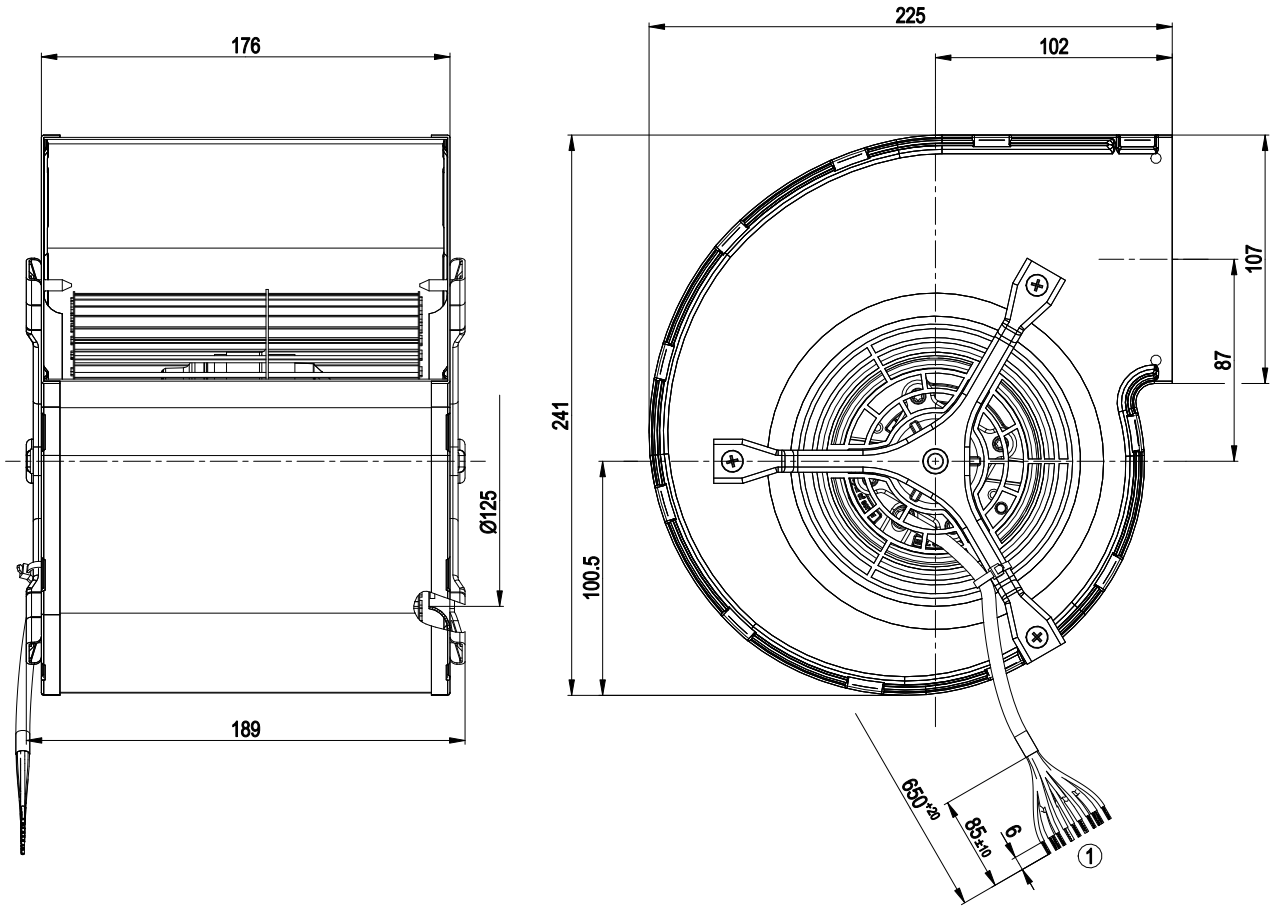
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Product drawing



1	Cable halogen-silicone-free 9G 0.5 mm², 9x crimped splices

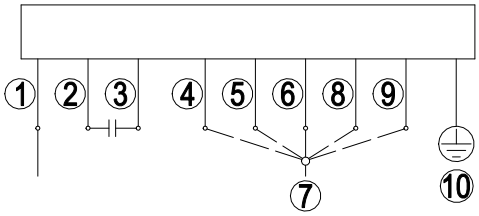
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Connection diagram



Note: High speed (step IV); low speed (step I)

1	= N = blue
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / gray
7	L1
8	Step IV black 4 / orange
9	Step V black 5 / black
10	PE (green/yellow)

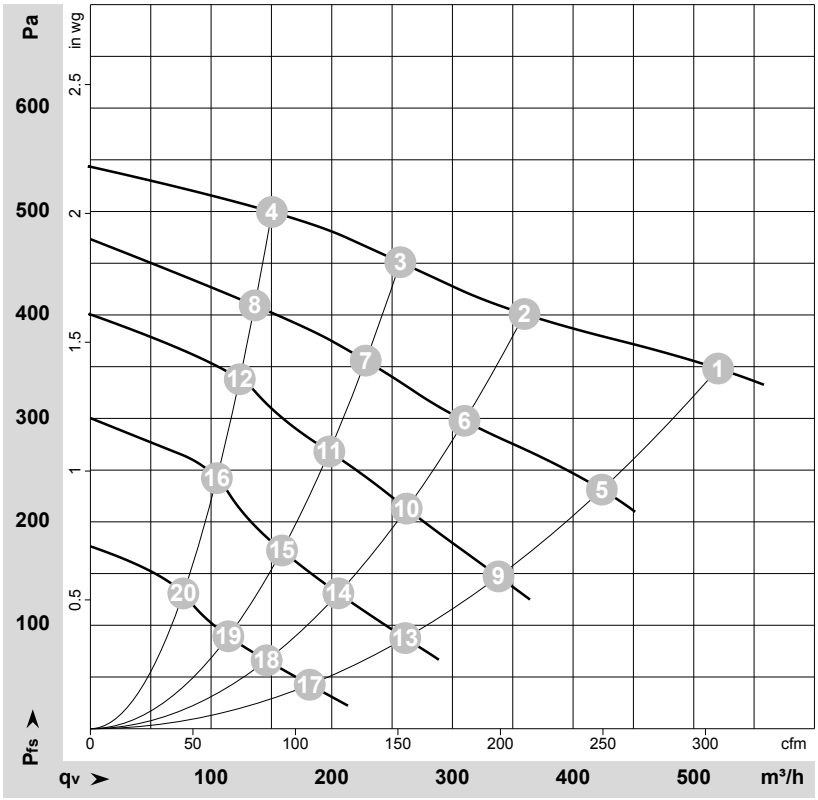
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-27808-1
Measurement: LU-27809-1
Measurement: LU-27810-1
Measurement: LU-27811-1
Measurement: LU-27812-1

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

	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	5	230	50	2300	195	0.86	520	350	305	1.41
2	5	230	50	2445	170	0.75	360	400	210	1.61
3	5	230	50	2510	159	0.71	255	450	150	1.81
4	5	230	50	2580	149	0.67	150	500	90	2.01
5	4	230	50	1870	168	0.73	425	231	250	0.93
6	4	230	50	2120	152	0.66	310	296	180	1.19
7	4	230	50	2235	142	0.62	230	357	135	1.43
8	4	230	50	2335	133	0.58	135	411	80	1.65
9	3	230	50	1520	151	0.66	340	147	200	0.59
10	3	230	50	1805	140	0.61	260	213	155	0.86
11	3	230	50	1945	133	0.59	200	268	115	1.08
12	3	230	50	2200	118	0.52	125	343	75	1.38
13	2	230	50	1175	134	0.59	260	88	155	0.35
14	2	230	50	1410	129	0.57	205	131	120	0.53
15	2	230	50	1565	125	0.55	160	172	95	0.69
16	2	230	50	1870	113	0.50	105	246	60	0.99
17	1	230	50	830	115	0.51	180	42	105	0.17
18	1	230	50	995	113	0.50	145	66	85	0.26
19	1	230	50	1115	112	0.49	115	88	65	0.35
20	1	230	50	1360	107	0.48	75	132	45	0.53

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

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