D2E146-FW37-12

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E146-FW37-12**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1820
Power consumption	W	192
Current draw	A	0.84
Capacitor	µF	4
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	180
Min. back pressure	inH2O	0.72
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	1.1

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	3.3 kg
Fan size	146 mm
Impeller material	Sheet steel, galvanized
Housing material	PP plastic
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
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
Electrical hookup	With plug; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE

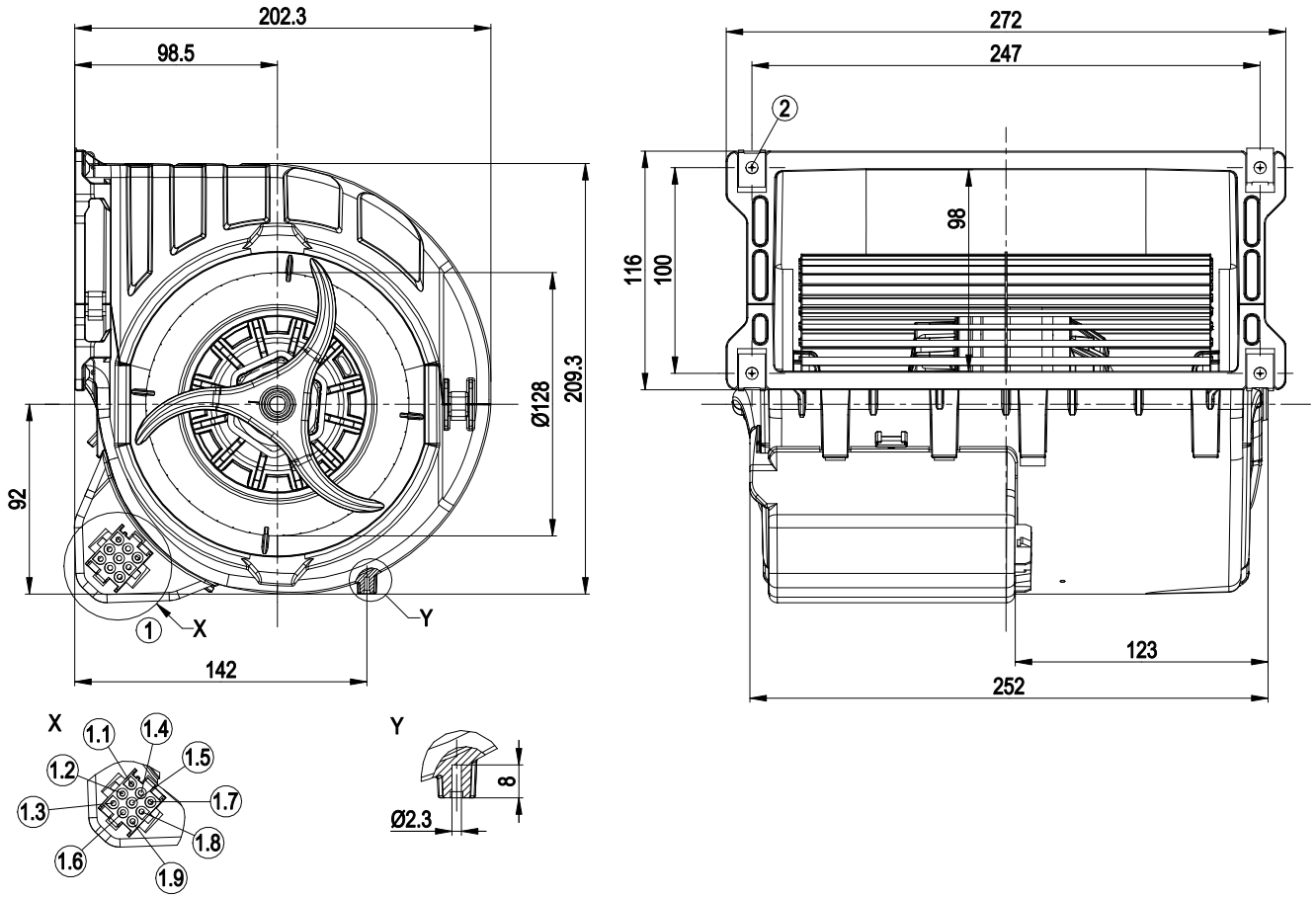
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Product drawing



1	Coded plug system: 9-pole connector housing tyco 927231-5, 7x plug pin tyco 926886-1
1.1	L = step 1
1.2	L = step 2
1.3	L = step 3
1.4	L = step 4
1.5	L = step 5
1.6	not used
1.7	not used
1.8	N
1.9	Protective earth
2	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus material thickness of attachment)

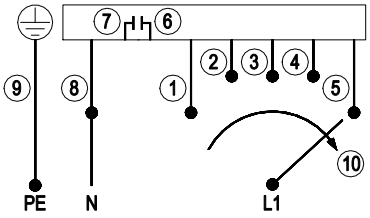
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Connection diagram



The switch must interrupt the circuit when switching.

1	Step 1 (min.)	2	Step 2	3	Step 3
4	Step 4	5	Step 5 (max.)	6	Capacitor
7	Capacitor	8	N	9	Protective earth
10	Speed increasing				

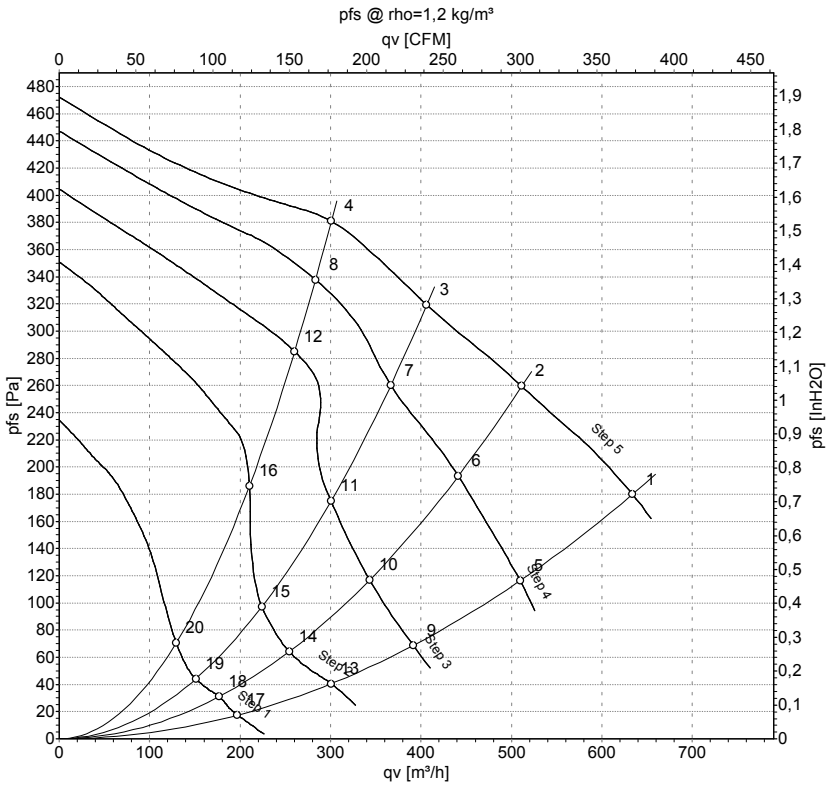
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Curves: Air performance 50 Hz



Measurement: LU-62288-1
Measurement: LU-62289-1
Measurement: LU-62290-1
Measurement: LU-62291-1
Measurement: LU-62292-1

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	1820	192	0.84	635	180	375	0.72
2	5	230	50	2135	173	0.75	510	260	300	1.04
3	5	230	50	2345	153	0.67	405	320	240	1.28
4	5	230	50	2590	122	0.53	300	380	175	1.53
5	4	230	50	1470	175	0.76	510	117	300	0.47
6	4	230	50	1845	160	0.70	440	194	260	0.78
7	4	230	50	2105	145	0.64	365	257	215	1.03
8	4	230	50	2395	120	0.54	285	338	165	1.36
9	3	230	50	1125	155	0.68	390	69	230	0.28
10	3	230	50	1430	148	0.65	345	116	200	0.47
11	3	230	50	1740	138	0.61	300	175	175	0.70
12	3	230	50	2240	111	0.50	260	285	155	1.14
13	2	230	50	880	137	0.60	300	41	175	0.16
14	2	230	50	1085	134	0.59	255	64	150	0.26
15	2	230	50	1315	130	0.57	225	97	130	0.39
16	2	230	50	1950	110	0.50	210	215	125	0.86
17	1	230	50	620	119	0.52	195	17	115	0.07
18	1	230	50	775	117	0.51	175	32	105	0.13
19	1	230	50	900	115	0.51	150	44	90	0.18
20	1	230	50	1145	111	0.49	130	71	75	0.29

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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