D2E146-FW37-09

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E146-FW37-09**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		-
Speed (rpm)	min^{-1}	1350
Power consumption	W	235
Current draw	A	1.05
Capacitor	µF	6
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50
Starting current	A	1.2

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

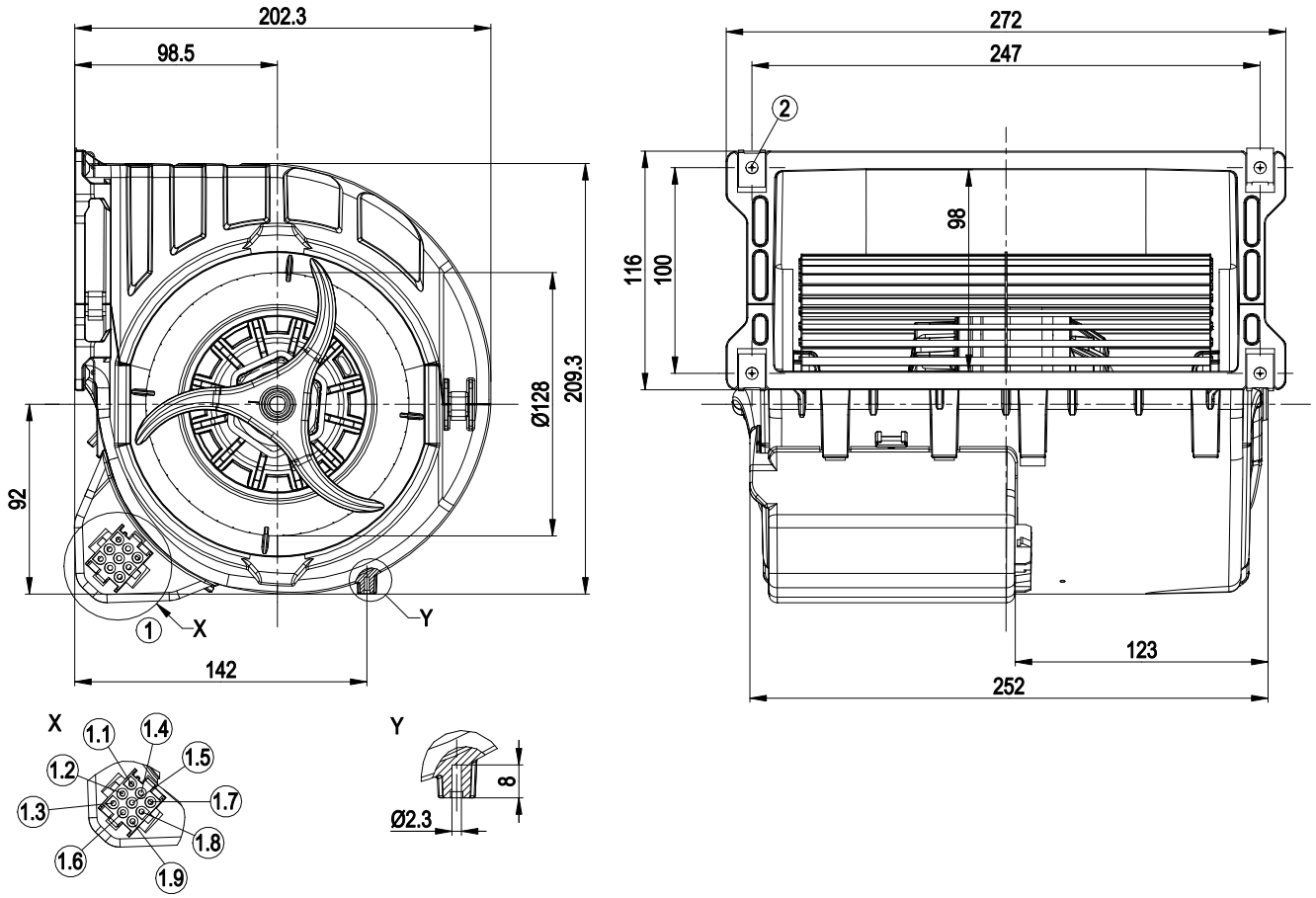
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Product drawing



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)

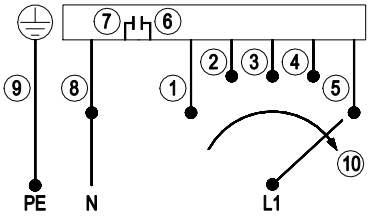
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Connection diagram



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				

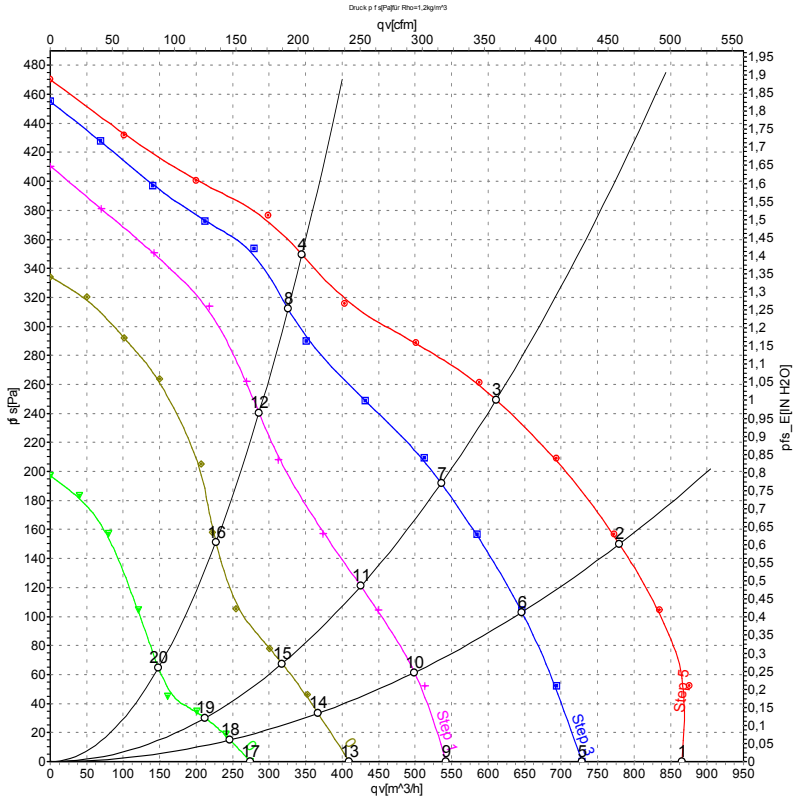
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Curves: Air performance 50 Hz



Measurement: LU-59827-1
Measurement: LU-59829-1
Measurement: LU-59831-1
Measurement: LU-59833-1
Measurement: LU-59835-1

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	1350	235	1.05	865	0	510	0.00
2	5	230	50	1735	221	0.97	780	150	460	0.60
3	5	230	50	2080	205	0.90	610	250	360	1.00
4	5	230	50	2455	176	0.79	345	350	205	1.41
5	4	230	50	1015	187	0.85	730	0	430	0.00
6	4	230	50	1445	179	0.82	645	105	380	0.42
7	4	230	50	1835	166	0.79	535	192	315	0.77
8	4	230	50	2315	140	0.71	325	312	190	1.25
9	3	230	50	830	151	0.71	540	0	320	0.00
10	3	230	50	1130	147	0.70	500	64	295	0.26
11	3	230	50	1470	141	0.69	425	121	250	0.49
12	3	230	50	1995	123	0.64	285	240	170	0.96
13	2	230	50	640	128	0.62	410	0	240	0.00
14	2	230	50	885	125	0.61	365	34	215	0.14
15	2	230	50	1125	122	0.60	320	68	185	0.27
16	2	230	50	1600	114	0.58	225	150	135	0.60
17	1	230	50	395	105	0.53	275	0	160	0.00
18	1	230	50	575	104	0.52	245	16	145	0.06
19	1	230	50	740	103	0.52	210	30	125	0.12
20	1	230	50	1065	99	0.51	150	64	85	0.26

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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