D2E146-FW37-13

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D2E146-FW37-13**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	1350
Power input	W	235
Current draw	A	1.05
Motor capacitor	µF	6
Capacitor voltage	VDB	400
Capacitor standard		P2 (CE)
Min. back pressure	Pa	0
Max. ambient temperature	°C	50
Starting current	A	1.2

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

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Technical features

Mass	3.3 kg
Size	146 mm
Surface of rotor	Partially cast in aluminium
Material of impeller	Sheet steel, hot-galvanised
Housing material	Plastic, Polyfort PP-T20
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	5
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	CE

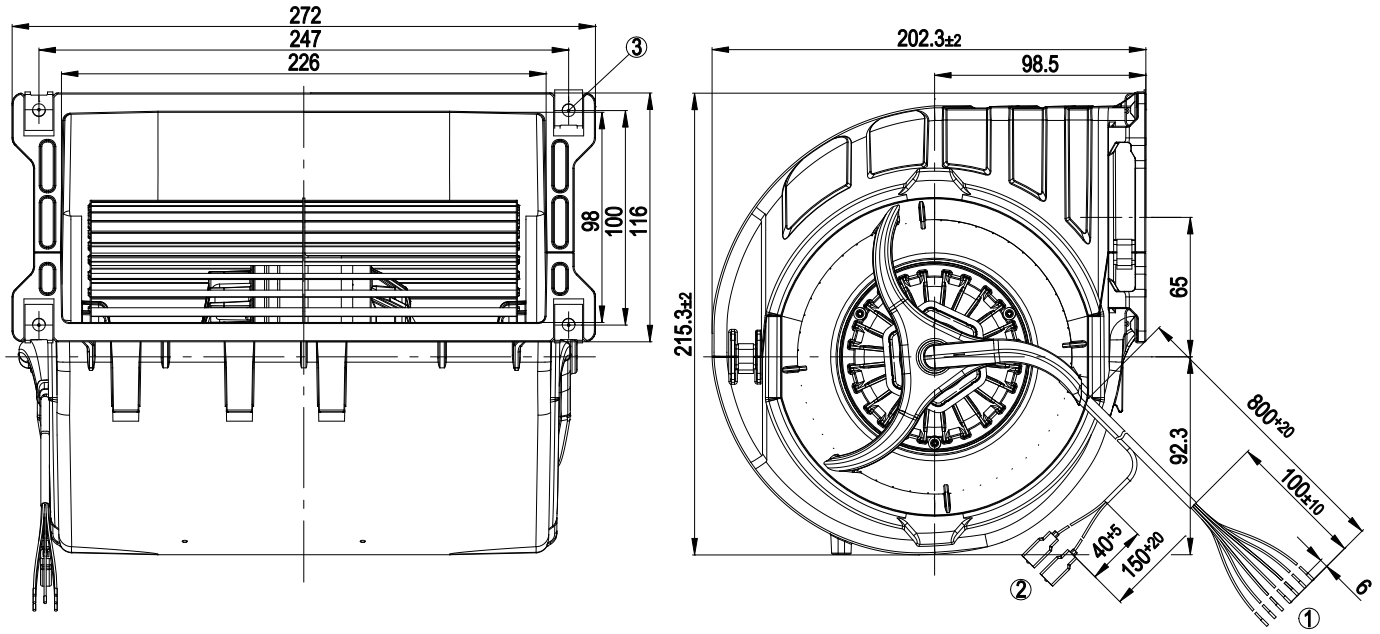
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Product drawing



1	Connection line AWG22, 7 x brass lead tips crimped
2	Connection line AWG22 for capacitor, 2 x receptacles for tabs (AMP no. 160389-3) crimped
3	4 x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

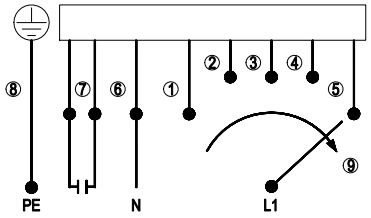
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Connection screen



When changing speeds, switch must break the circuit

1	Stage 1(min.), red
2	Stage 2, orange
3	Stage 3, violet
4	Stage 4, grey
5	Stage 5 (max.), black
6	N, blue
7	Capacitor, yellow and brown
8	Protective earth, green/yellow
9	Speed increase

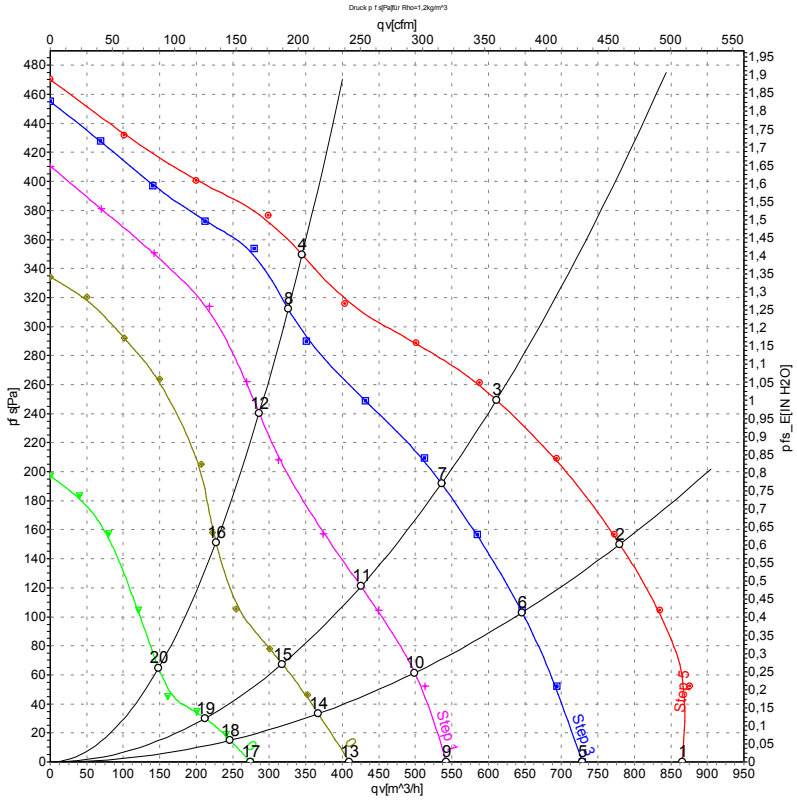
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Charts: Air flow 50 Hz



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

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Stage	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	5	230	50	1350	235	1.05	865	0
2	5	230	50	1735	221	0.97	780	150
3	5	230	50	2080	205	0.90	610	250
4	5	230	50	2455	176	0.79	345	350
5	4	230	50	1015	187	0.85	730	0
6	4	230	50	1445	179	0.82	645	105
7	4	230	50	1835	166	0.79	535	192
8	4	230	50	2315	140	0.71	325	312
9	3	230	50	830	151	0.71	540	0
10	3	230	50	1130	147	0.70	500	64
11	3	230	50	1470	141	0.69	425	121
12	3	230	50	1995	123	0.64	285	240
13	2	230	50	640	128	0.62	410	0
14	2	230	50	885	125	0.61	365	34
15	2	230	50	1125	122	0.60	320	68
16	2	230	50	1600	114	0.58	225	150
17	1	230	50	395	105	0.53	275	0
18	1	230	50	575	104	0.52	245	16
19	1	230	50	740	103	0.52	210	30
20	1	230	50	1065	99	0.51	150	64

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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