D2E160-FI01-09

AC centrifugal fan

forward curved, dual inlet

with housing (flange)



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Nominal data

Type	**D2E160-FI01-09**
Motor	**M2E068-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	1170
Power input	W	110
Current draw	A	0.49
Motor capacitor	µF	2.5
Capacitor voltage	VDB	400
Capacitor standard		P2 (CE)
Min. back pressure	Pa	100
Max. ambient temperature	°C	45
Starting current	A	0.52

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	2.65 kg
Size	160 mm
Surface of rotor	Uncoated
Material of impeller	Steel plate
Housing material	PP plastic, black
Motor suspension	Motor mounted via brackets on one side
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
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	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box, integrated capacitor connected via terminal box; With plug
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	GOST

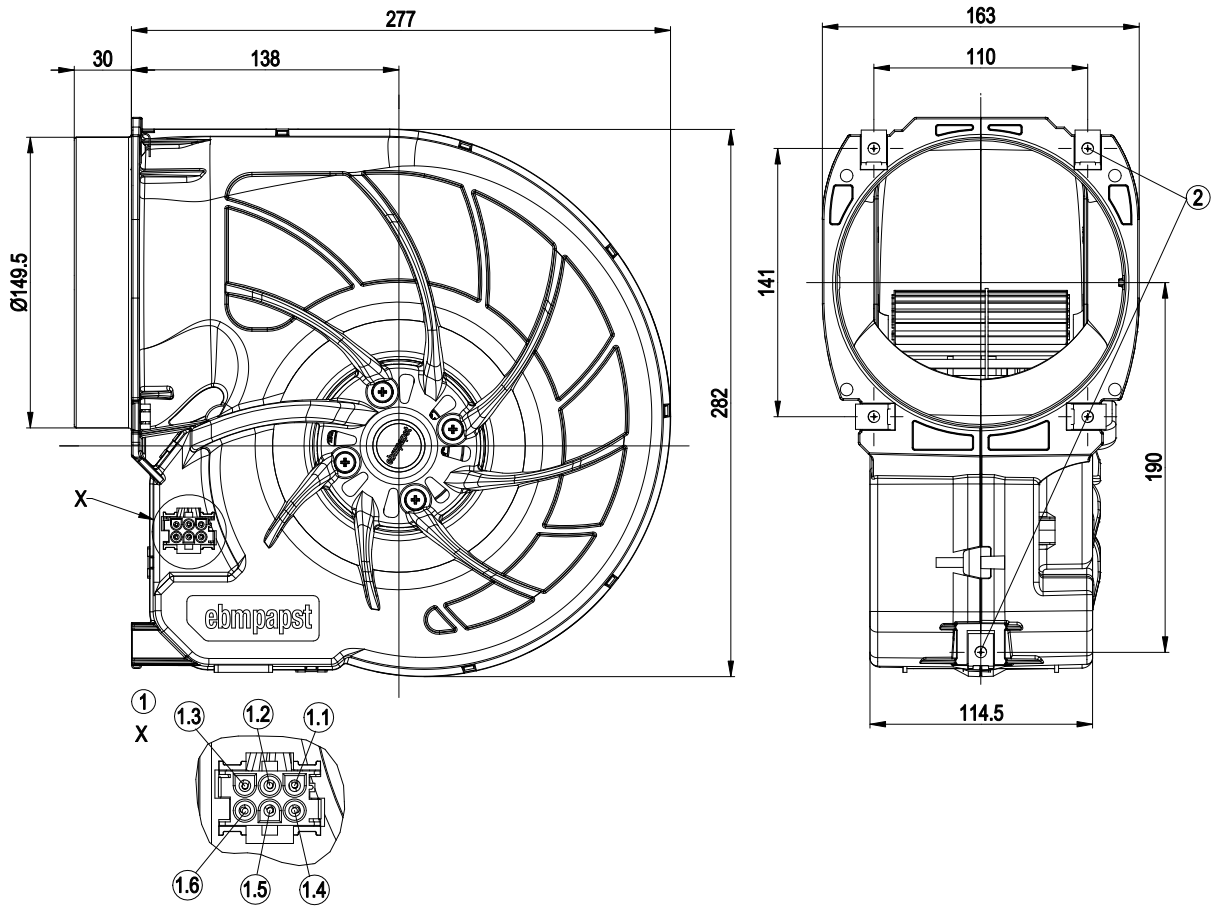
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Product drawing



1	Connector housing Universal Mate-N-Lok AMP no. 926 682-3 with 6 x plug pin AMP no. 926 886-1
1.1	Step 1
1.2	Step 2
1.3	Step 3
1.4	Step 4
1.5	N
1.6	PE
2	5 x sheet metal nut for thread EN ISO 1478-ST4.8, min. screw length 14.5mm plus thickness of mounting material

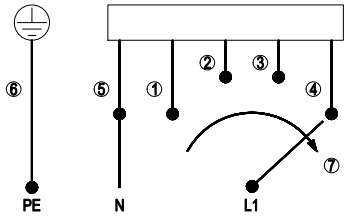
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Connection screen



When changing speeds, switch must break the circuit

1	Step 1 (min.)	2	Step 2	3	Step 3
4	Step 4 (max.)	5	N	6	PE protective earth
7	Speed increase				

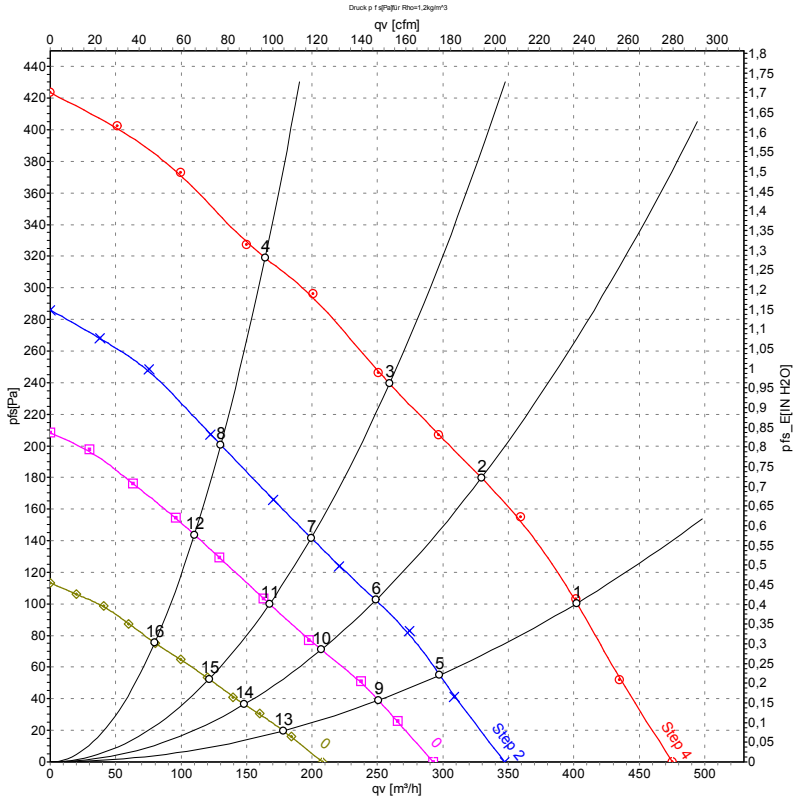
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Charts: Air flow 50 Hz



Measurement: LU-72175
Measurement: LU-72177
Measurement: LU-72179
Measurement: LU-72181

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	4	230	50	1170	110	0.49	400	100
2	4	230	50	1450	106	0.46	330	180
3	4	230	50	1690	103	0.45	260	240
4	4	230	50	1930	99	0.43	165	320
5	3	230	50	850	74	0.35	300	55
6	3	230	50	1100	73	0.35	250	102
7	3	230	50	1310	72	0.34	200	142
8	3	230	50	1535	70	0.33	130	201
9	2	230	50	710	64	0.31	250	39
10	2	230	50	930	63	0.31	205	71
11	2	230	50	1105	62	0.30	170	100
12	2	230	50	1305	60	0.30	110	144
13	1	230	50	515	50	0.26	180	20
14	1	230	50	675	49	0.26	150	36
15	1	230	50	810	49	0.25	120	53
16	1	230	50	960	48	0.25	80	75

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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