D2E160-FI01-01

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E160-FI01-01**
Motor	**M2E068-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1170
Power consumption	W	110
Current draw	A	0.49
Capacitor	µF	2.5
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	100
Min. back pressure	inH2O	0.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	0.52

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	2.6 kg
Fan size	160 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	PP plastic
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Clockwise, 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	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box, capacitor integrated and connected; With plug
Motor protection	Thermal overload protector (TOP) internally connected
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
Approval	EAC

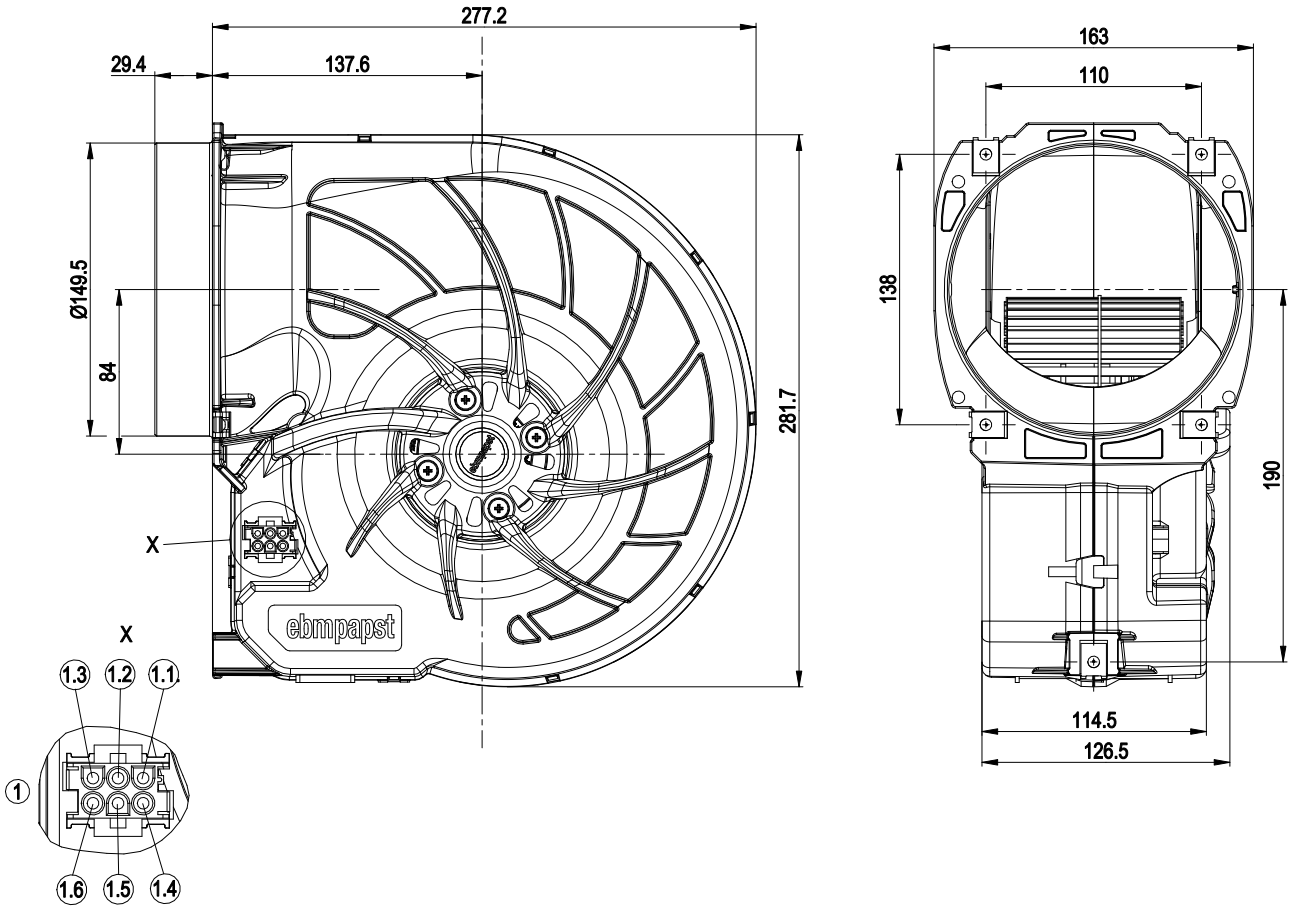
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Product drawing



1	Coded plug system: 6-pole connector housing tyco 926682-3, 6x plug pin tyco 926886-1
1.1	L step 1 (white) (min.)
1.2	Step 2 (red)
1.3	Step 3 (gray)
1.4	L = step 4 (max.)
1.5	N (blue)
1.6	PE (green/yellow)
2	5x sheet metal nut for thread EN ISO 1478-ST4.8, screw length at least 14.5 mm plus thickness of mounting material

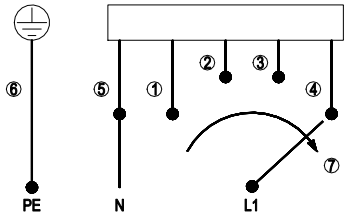
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Connection diagram



The switch must interrupt the circuit when switching.

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

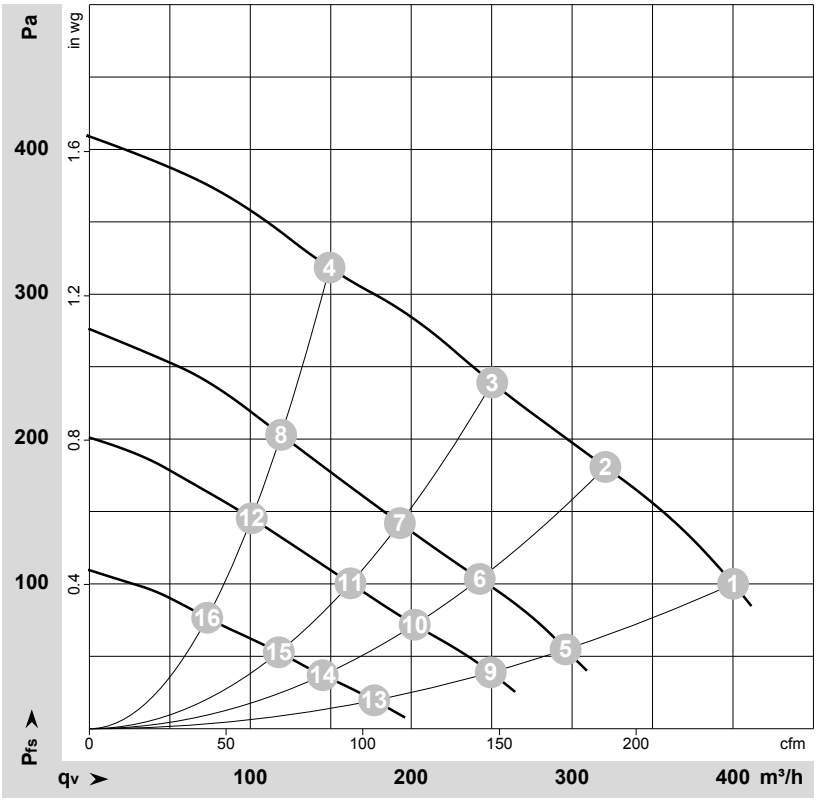
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-72175-1
Measurement: LU-72177-1
Measurement: LU-72179-1
Measurement: LU-72181-1

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	4	230	50	1170	110	0.49	400	100	235	0.40
2	4	230	50	1480	106	0.46	320	180	190	0.72
3	4	230	50	1720	102	0.44	250	240	145	0.96
4	4	230	50	1950	99	0.43	150	320	90	1.28
5	3	230	50	855	74	0.35	295	55	175	0.22
6	3	230	50	1130	73	0.35	245	103	145	0.41
7	3	230	50	1330	71	0.34	195	142	115	0.57
8	3	230	50	1565	69	0.33	120	203	70	0.81
9	2	230	50	720	64	0.31	250	39	145	0.16
10	2	230	50	955	62	0.31	200	72	120	0.29
11	2	230	50	1125	61	0.30	160	100	95	0.40
12	2	230	50	1330	60	0.30	100	146	60	0.59
13	1	230	50	520	50	0.26	175	20	105	0.08
14	1	230	50	695	49	0.26	145	37	85	0.15
15	1	230	50	825	49	0.25	120	53	70	0.21
16	1	230	50	980	48	0.25	75	77	45	0.31

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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