D2E160-FK11-02

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E160-FK11-02**	
Motor	**M2E068-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1400
Power consumption	W	180
Current draw	A	0.8
Capacitor	µF	4
Capacitor voltage	VDB	400
Capacitor standard		P2 (CE)
Min. back pressure	Pa	150
Min. back pressure	inH2O	0.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40
Starting current	A	0.80

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	3.1 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	With plug; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	EAC

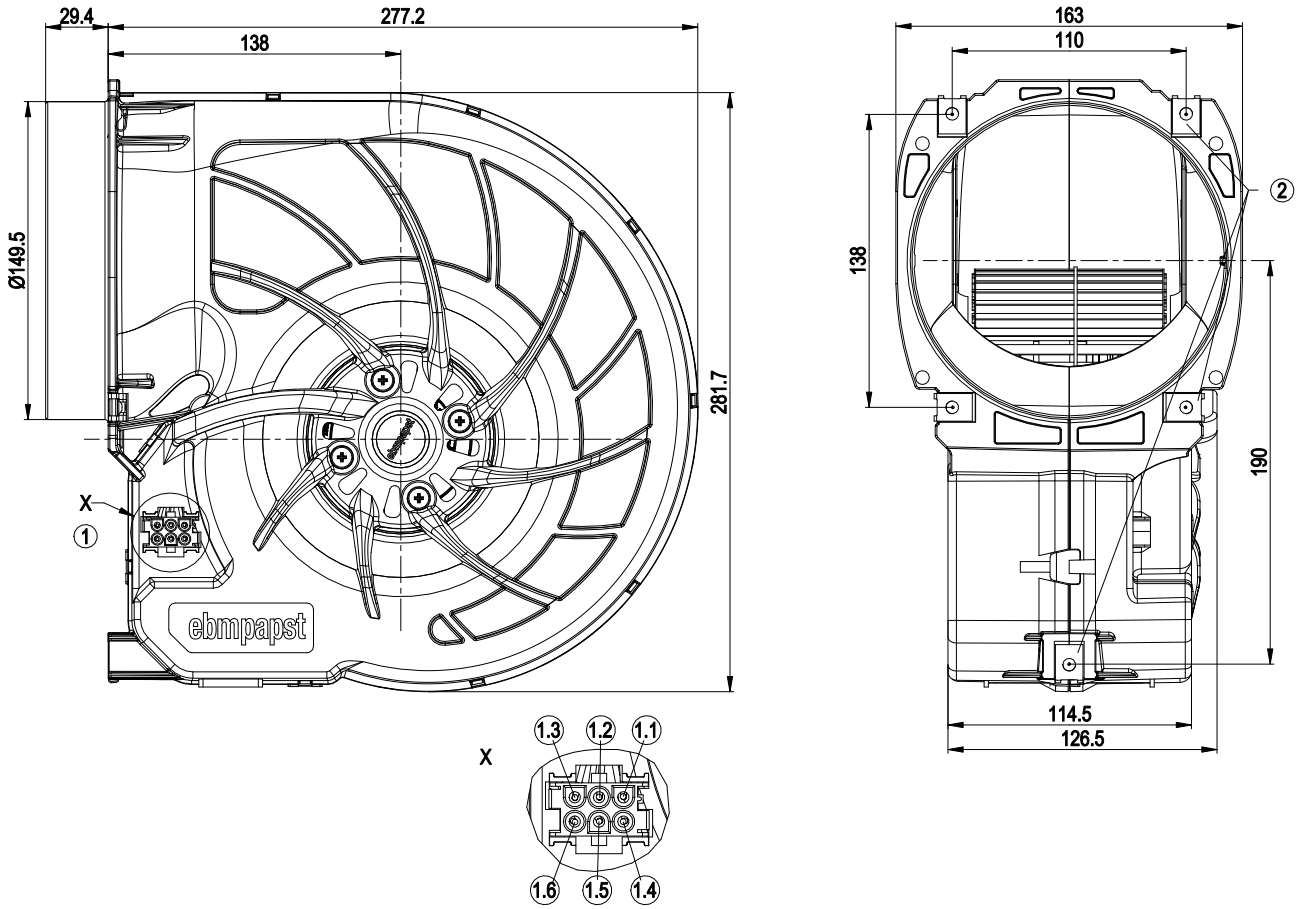
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Product drawing



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

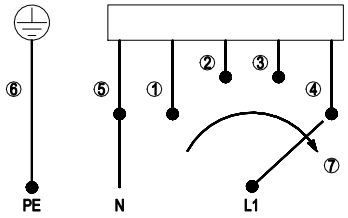
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Connection diagram



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				

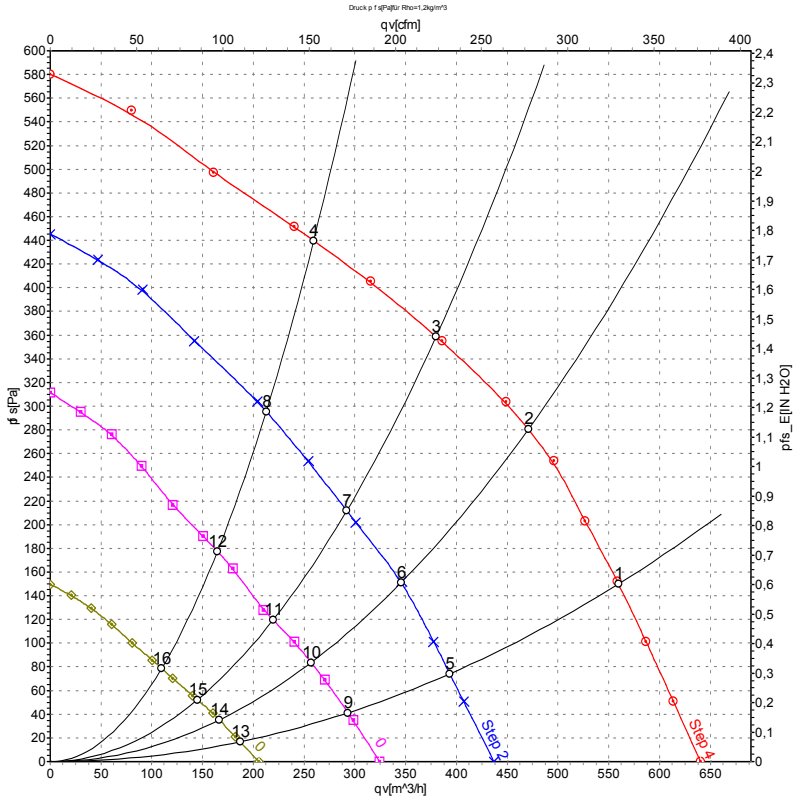
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Curves: Air performance 50 Hz



Measurement: LU-72109-1
Measurement: LU-72112-1
Measurement: LU-72115-1
Measurement: LU-72118-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	4	230	50	1400	180	0.80	57	69	560	150	330	0.60
2	4	230	50	1780	166	0.72	59	71	470	280	275	1.12
3	4	230	50	2035	158	0.68	61	73	380	360	225	1.45
4	4	230	50	2260	146	0.63	63	75	260	440	150	1.77
5	3	230	50	1010	120	0.56	48	60	395	74	230	0.30
6	3	230	50	1315	116	0.54	51	63	345	153	205	0.61
7	3	230	50	1575	111	0.53	54	66	290	212	170	0.85
8	3	230	50	1855	104	0.50	58	70	215	296	125	1.19
9	2	230	50	770	96	0.46	41	53	295	42	170	0.17
10	2	230	50	1005	94	0.46	44	56	255	84	150	0.34
11	2	230	50	1210	91	0.45	46	58	220	119	130	0.48
12	2	230	50	1450	88	0.44	51	63	165	177	95	0.71
13	1	230	50	495	76	0.38	30	42	185	17	110	0.07
14	1	230	50	665	75	0.38	33	45	165	35	100	0.14
15	1	230	50	805	74	0.37	35	47	145	52	85	0.21
16	1	230	50	985	73	0.37	41	53	110	79	65	0.32

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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