D2E146-HT75-45

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D2E146-HT75-45**
Motor	**M2E068-EC**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2150
Power consumption	W	380
Current draw	A	3.30
Capacitor	µF	25
Capacitor voltage	VDB	220
Capacitor standard		S2 (CE)
Min. back pressure	Pa	200
Min. back pressure	in. wg	0.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	3.7

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	3.7 kg
Size	146 mm
Motor size	68
Rotor surface	Unpainted
Terminal box material	PP plastic
Impeller material	Sheet steel, galvanized
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20; installation- and position-dependent as per EN 60034-5
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	Shaft horizontal
Condensation drainage holes	None, open rotor
Mode	S1
Motor mounting	Ball bearing
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Plug; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
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	CSA C22.2 No. 100; UL 1004-1

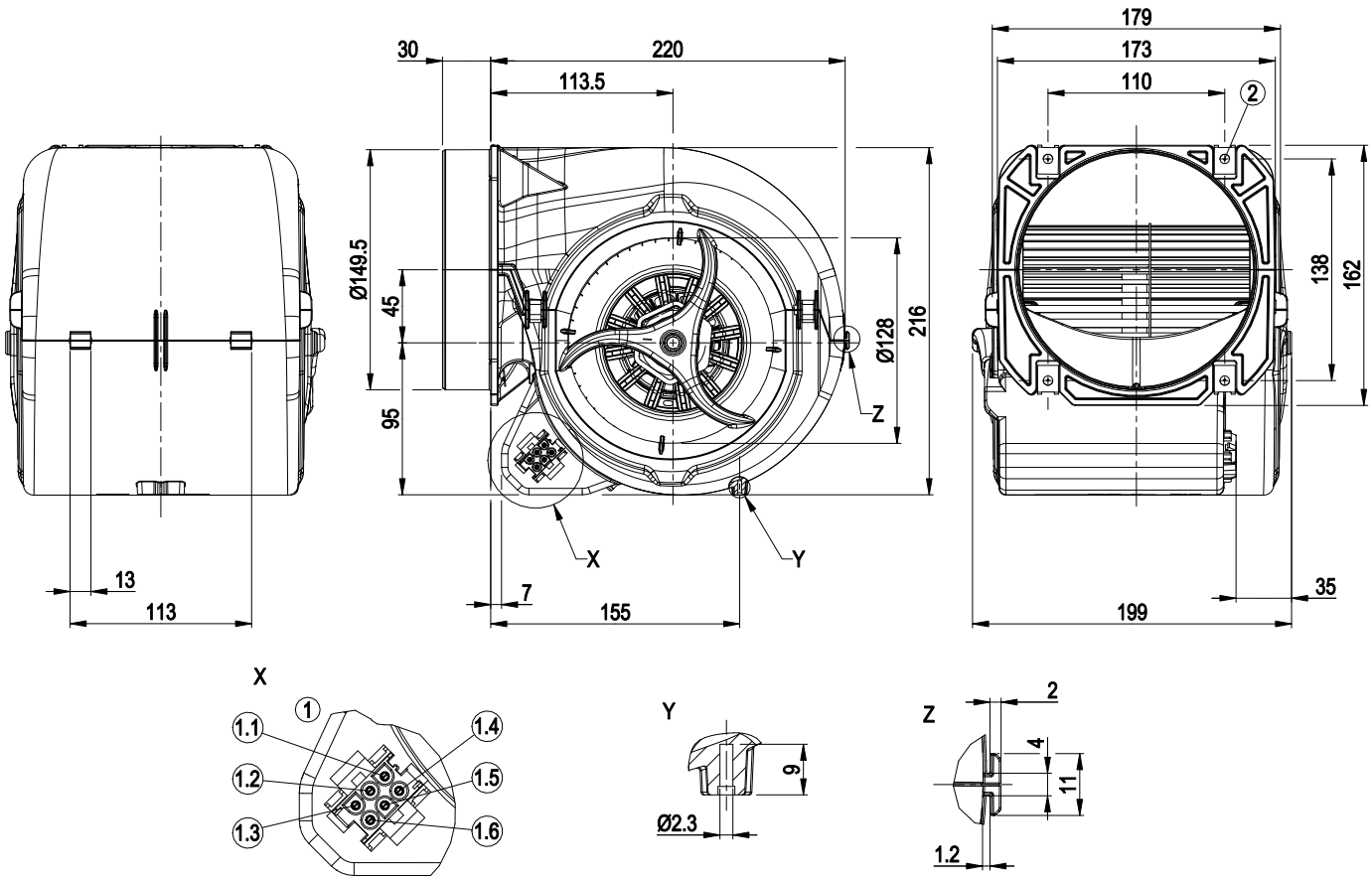
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Product drawing



1	Coded plug system: 6-pole connector housing TE 2178773-1, 6x plug pin TE 926886-1
1.1	L = step 1 (min.)
1.2	L = step 2
1.3	L = step 3
1.4	L = step 4 (max.)
1.5	N
1.6	PE
2	4x sheet metal nut for thread EN ISO 1478-ST 4.8 (min. screw length 14.5 mm plus material thickness of mounting)

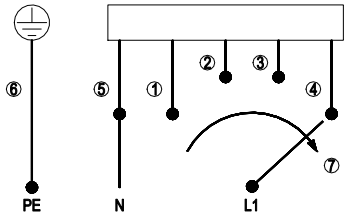
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Connection diagram



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				

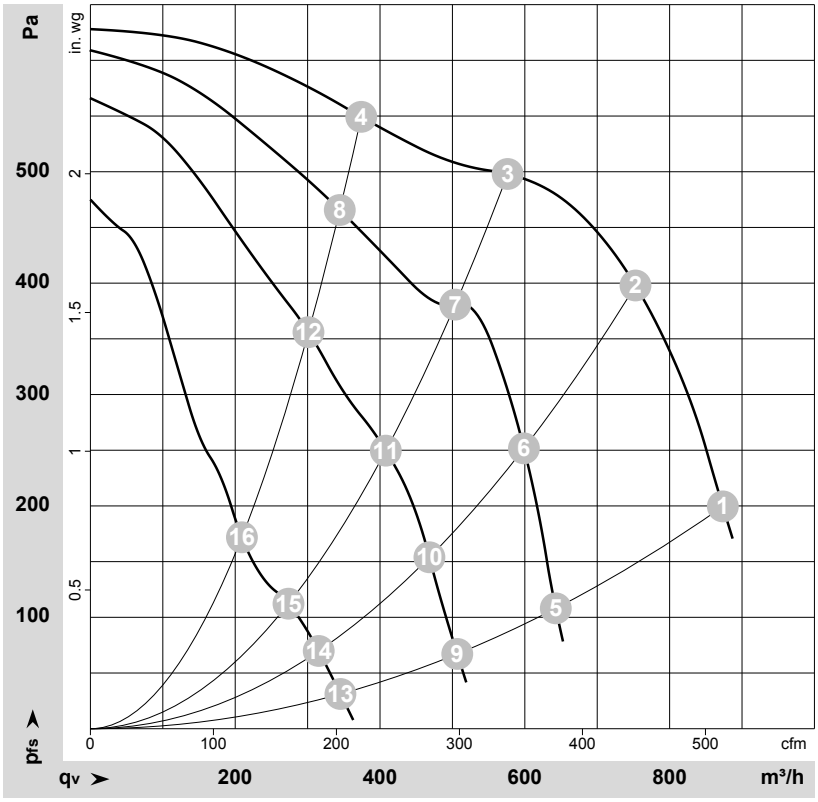
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-64184-1
Measurement: LU-64186-1
Measurement: LU-64196-1
Measurement: LU-64198-1

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	Wired	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	in. wg
1	4	1~	115	60	2150	380	3.30	875	200	515	0.80
2	4	1~	115	60	2540	353	3.05	755	400	445	1.61
3	4	1~	115	60	2830	324	2.82	575	500	340	2.01
4	4	1~	115	60	3015	293	2.56	375	550	220	2.21
5	3	1~	115	60	1580	273	2.44	645	101	380	0.41
6	3	1~	115	60	2035	257	2.35	600	252	355	1.01
7	3	1~	115	60	2480	235	2.22	505	381	295	1.53
8	3	1~	115	60	2735	215	2.10	345	466	200	1.87
9	2	1~	115	60	1275	232	2.09	505	66	300	0.26
10	2	1~	115	60	1615	222	2.04	470	154	275	0.62
11	2	1~	115	60	2035	211	1.97	410	251	240	1.01
12	2	1~	115	60	2430	192	1.87	300	358	175	1.44
13	1	1~	115	60	890	181	1.67	345	31	205	0.12
14	1	1~	115	60	1110	178	1.65	315	70	185	0.28
15	1	1~	115	60	1365	172	1.61	275	113	160	0.45
16	1	1~	115	60	1670	168	1.60	210	169	125	0.68

Wired = Wiring · 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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