D2E146-HS35-96

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E146-HS35-96**
Motor	**M2E068-DF**

Phase		1~	1~
Nominal voltage	VAC	230	240
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2000	2050
Power consumption	W	240	250
Current draw	A	1.05	1.05
Capacitor	µF	6	6
Capacitor voltage	VDB	450	450
Capacitor standard		P2 (CE)	P2 (CE)
Min. back pressure	Pa	170	175
Min. back pressure	inH2O	0.68	0.7
Min. ambient temperature	°C	-20	-20
Max. ambient temperature	°C	45	50
Starting current	A	1.21	

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	3.2 kg
Fan size	146 mm
Impeller material	PP plastic
Housing material	PP plastic, black
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20; 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, open rotor
Mode	S1
Motor bearing	Calotte 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
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	VDE

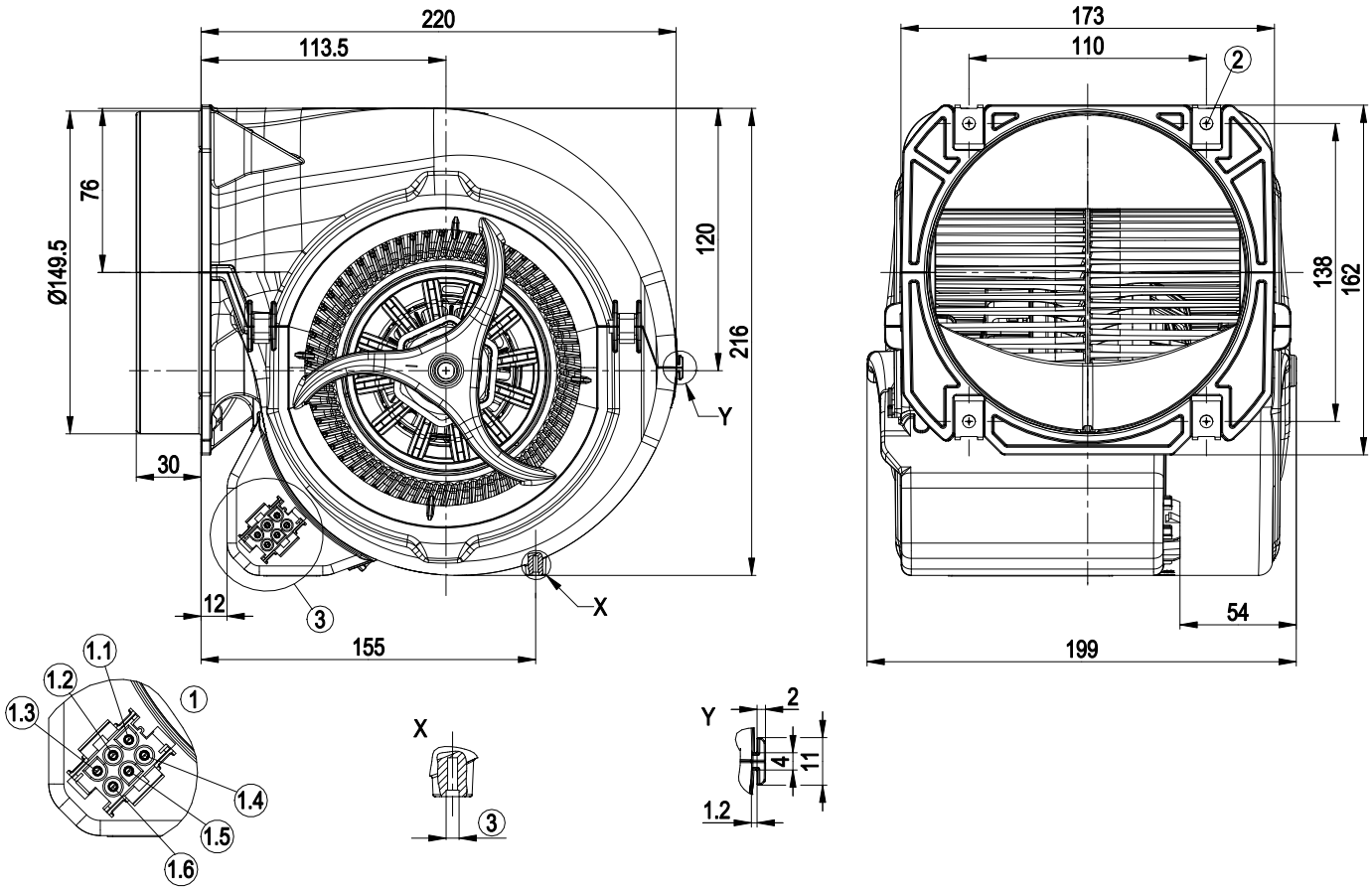
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Product drawing



1	Coded plug system: 6-pole connector housing tyco 1586860-1, 6x plug pin tyco 926886-1
1.1	L = step 1
1.2	L = step 2
1.3	L = step 3
1.4	L = step 4
1.5	N
1.6	Protective earth
2	4 x sheet metal nut for thread EN ISO 1478-ST4.8 (screw length at least 14.5 mm plus thickness of mounting material)
3	For M3 thread, max. clearance for screw 8 mm

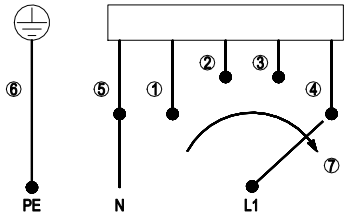
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Connection diagram



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				

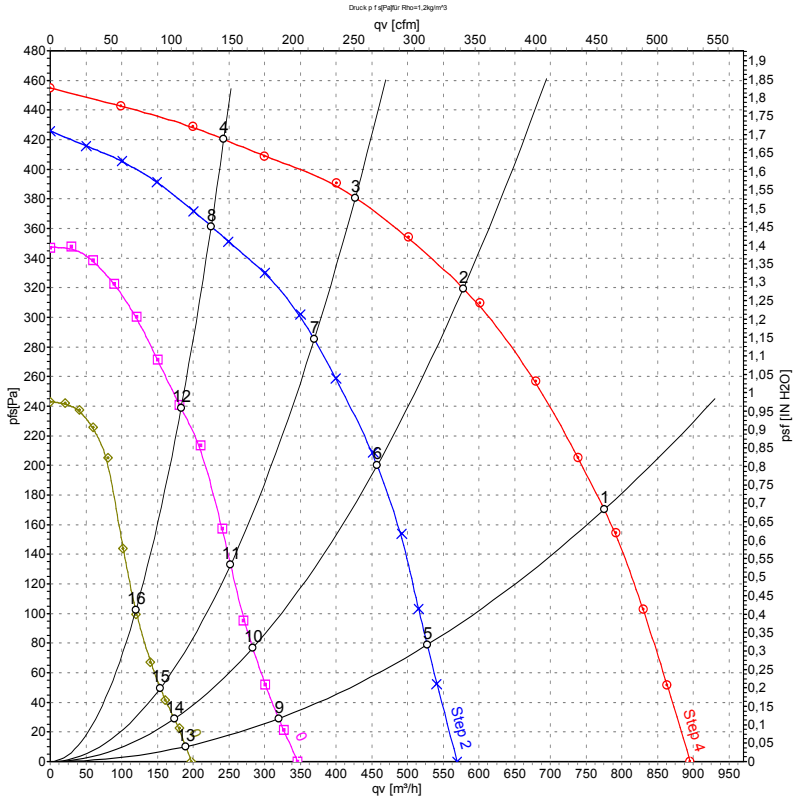
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Curves: Air performance 50 Hz



Measurement: LU-132988-1
Measurement: LU-132990-1
Measurement: LU-132991-1
Measurement: LU-132992-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	4	230	50	2000	240	1.05	775	170	455	0.68
2	4	230	50	2315	207	0.90	580	320	340	1.28
3	4	230	50	2490	187	0.81	425	380	250	1.53
4	4	230	50	2625	168	0.73	245	420	145	1.69
5	3	230	50	1340	168	0.79	525	79	310	0.32
6	3	230	50	1850	151	0.74	455	201	270	0.81
7	3	230	50	2155	134	0.68	370	285	220	1.14
8	3	230	50	2435	112	0.61	225	362	130	1.45
9	2	230	50	830	132	0.63	320	29	190	0.12
10	2	230	50	1155	127	0.62	285	77	165	0.31
11	2	230	50	1480	120	0.60	250	133	150	0.53
12	2	230	50	1985	103	0.55	185	239	110	0.96
13	1	230	50	500	113	0.55	190	10	110	0.04
14	1	230	50	715	111	0.54	175	29	100	0.12
15	1	230	50	920	108	0.53	155	50	90	0.20
16	1	230	50	1305	103	0.52	120	101	70	0.41

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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