

# AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D2E146-HT67-A8 ebmpapst Datasheet

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## Nominal data

Type	D2E146-HT67-A8		
Motor	M2E068-EC		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		-	-
Speed (rpm)	min <sup>-1</sup>	1850	2100
Power input	W	355	400
Current draw	A	1.55	1.75
Motor capacitor	µF	8	8
Capacitor voltage	VDB	450	450
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	200
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	55	50
Starting current	A	1.8	1.9

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	3.6 kg
Size	146 mm
Surface of rotor	Uncoated
Material of terminal box	PP plastic
Material of impeller	Sheet steel, galvanised
Housing material	PP plastic
Material of guard grille	PP plastic
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
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, open rotor
Operation mode	S1
Motor bearing	Calotte bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	With plug; Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Approval	VDE

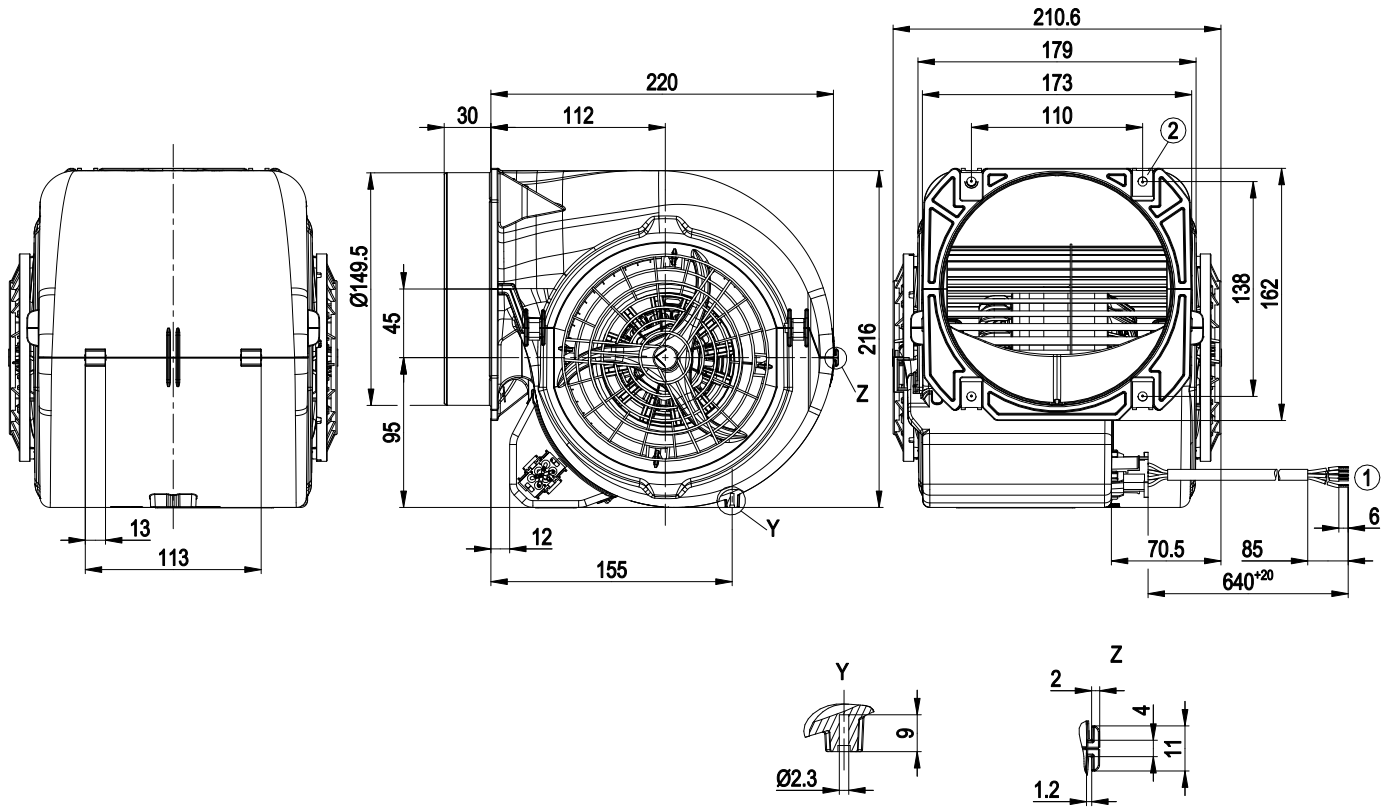


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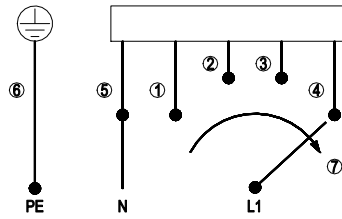
## Product drawing



- |   |   |
|---|---|
| 1 | Connection line PVC 6G 0.5 mm <sup>2</sup> , 6x lead tips crimped |
| 2 | 4x sheet metal nut for EN ISO 1478-ST4.8 thread                   |



## Connection screen



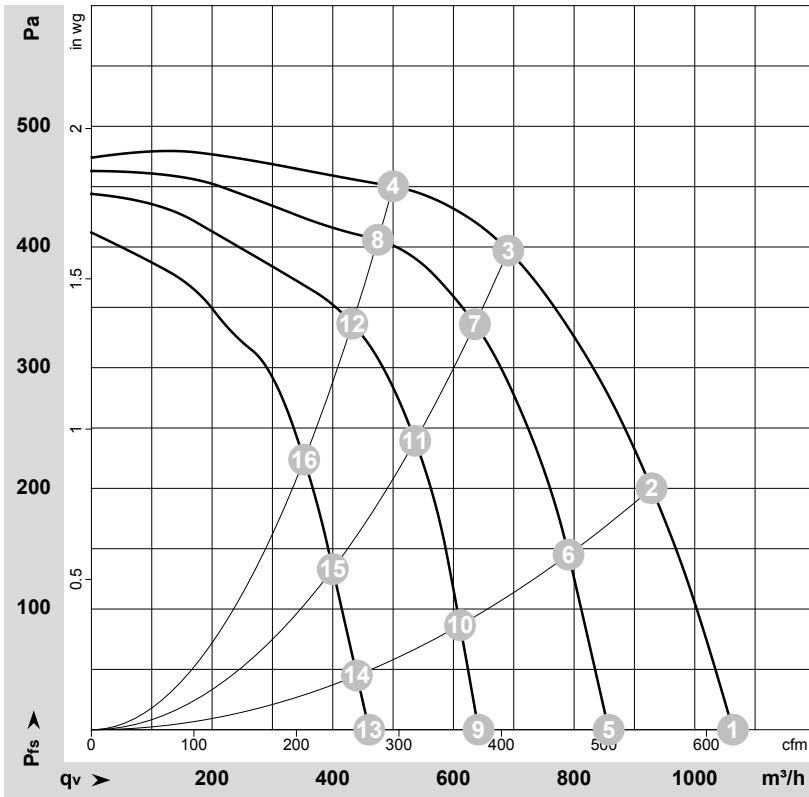
The switch must interrupt the circuit on switchover.

1	Level 1 / min. (white)
2	Level 2 (red)
3	Level 3 (grey)
4	Level 4 (black)
5	N (blue)
6	PE (green/yellow)
7	Speed increase

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## Charts: Air flow 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-45713-1  
Measurement: LU-45715-1  
Measurement: LU-45717-1  
Measurement: LU-45719-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	Pe	I	qv	Pfs	qv	Pfs
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH2O
1	4	230	50	1850	355	1.55	1065	0	625	0.00
2	4	230	50	2155	317	1.38	930	200	545	0.80
3	4	230	50	2440	266	1.16	690	400	405	1.61
4	4	230	50	2580	234	1.02	500	450	295	1.81
5	3	230	50	1550	285	1.26	855	0	505	0.00
6	3	230	50	1855	261	1.18	790	145	465	0.58
7	3	230	50	2245	220	1.03	635	337	375	1.35
8	3	230	50	2465	187	0.90	475	406	280	1.63
9	2	230	50	1195	233	1.05	640	0	380	0.00
10	2	230	50	1455	222	1.02	610	88	360	0.35
11	2	230	50	1905	195	0.93	535	240	315	0.96
12	2	230	50	2240	166	0.84	430	337	255	1.35
13	1	230	50	875	195	0.89	460	0	270	0.00
14	1	230	50	1055	191	0.88	440	45	260	0.18
15	1	230	50	1440	179	0.84	400	133	235	0.53
16	1	230	50	1860	158	0.78	355	225	210	0.90

U = Supply voltage · f = Frequency · n = Speed (rpm) · Pe = Power input · I = Current draw · qv = Air flow · pfs = Pressure increase

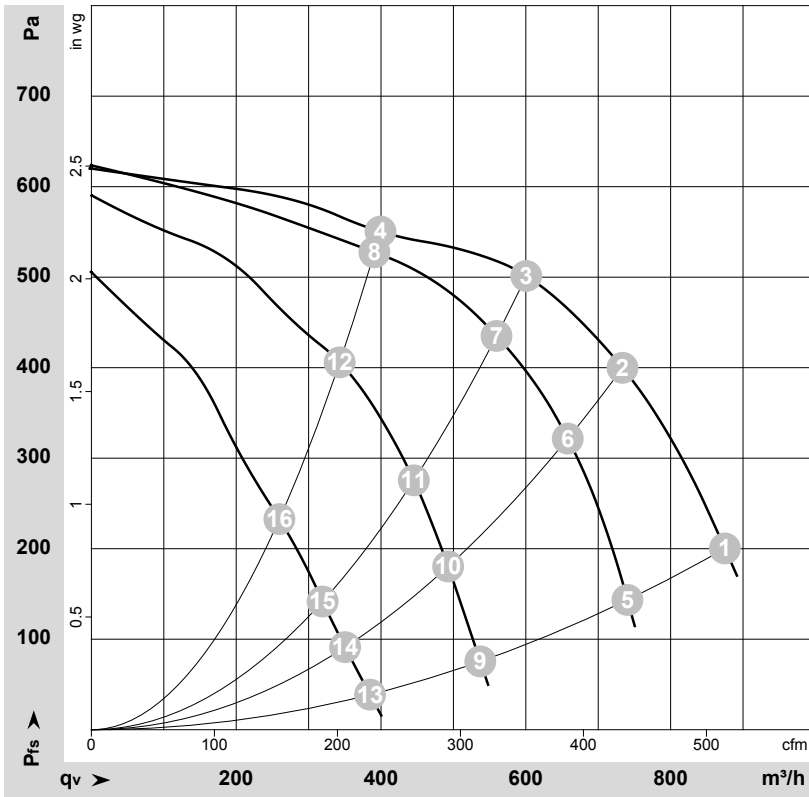


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## Charts: Air flow 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-45714-1  
 Measurement: LU-45716-1  
 Measurement: LU-45718-1  
 Measurement: LU-45720-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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 <sub>e</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH2O
1	4	230	60	2100	400	1.75	875	200	515	0.80
2	4	230	60	2480	377	1.64	735	400	430	1.61
3	4	230	60	2705	358	1.57	600	500	355	2.01
4	4	230	60	2895	339	1.50	400	550	235	2.21
5	3	230	60	1785	295	1.37	740	143	435	0.57
6	3	230	60	2220	277	1.33	660	323	385	1.30
7	3	230	60	2530	258	1.29	560	436	330	1.75
8	3	230	60	2815	232	1.23	390	528	230	2.12
9	2	230	60	1330	228	1.10	535	76	315	0.31
10	2	230	60	1685	220	1.09	495	181	290	0.73
11	2	230	60	2035	208	1.07	445	277	260	1.11
12	2	230	60	2525	184	1.02	345	409	200	1.64
13	1	230	60	955	187	0.92	385	38	225	0.15
14	1	230	60	1180	183	0.91	350	89	205	0.36
15	1	230	60	1435	179	0.90	320	142	190	0.57
16	1	230	60	1870	169	0.88	260	233	155	0.94

U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

