

W2E250-HJ28-01

AC axial compact fan

sickled blades (S series)

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Nominal data

Type	W2E250-HJ28-01		
Motor	M2E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min ⁻¹	2600	2850
Power input	W	115	160
Current draw	A	0.51	0.7
Motor capacitor	µF	3.5	3.5
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Max. back pressure	Pa	150	120
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	55

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency η_{es}	25	24.1	28.1
Efficiency grade N	36.9	36	40
Power input P_e	kW	0.13	
Air flow q_v	m ³ /h	1260	
Pressure increase p_{fs}	Pa	100	
Speed n	min ⁻¹	2430	

Data established at point of optimum efficiency



Technical features

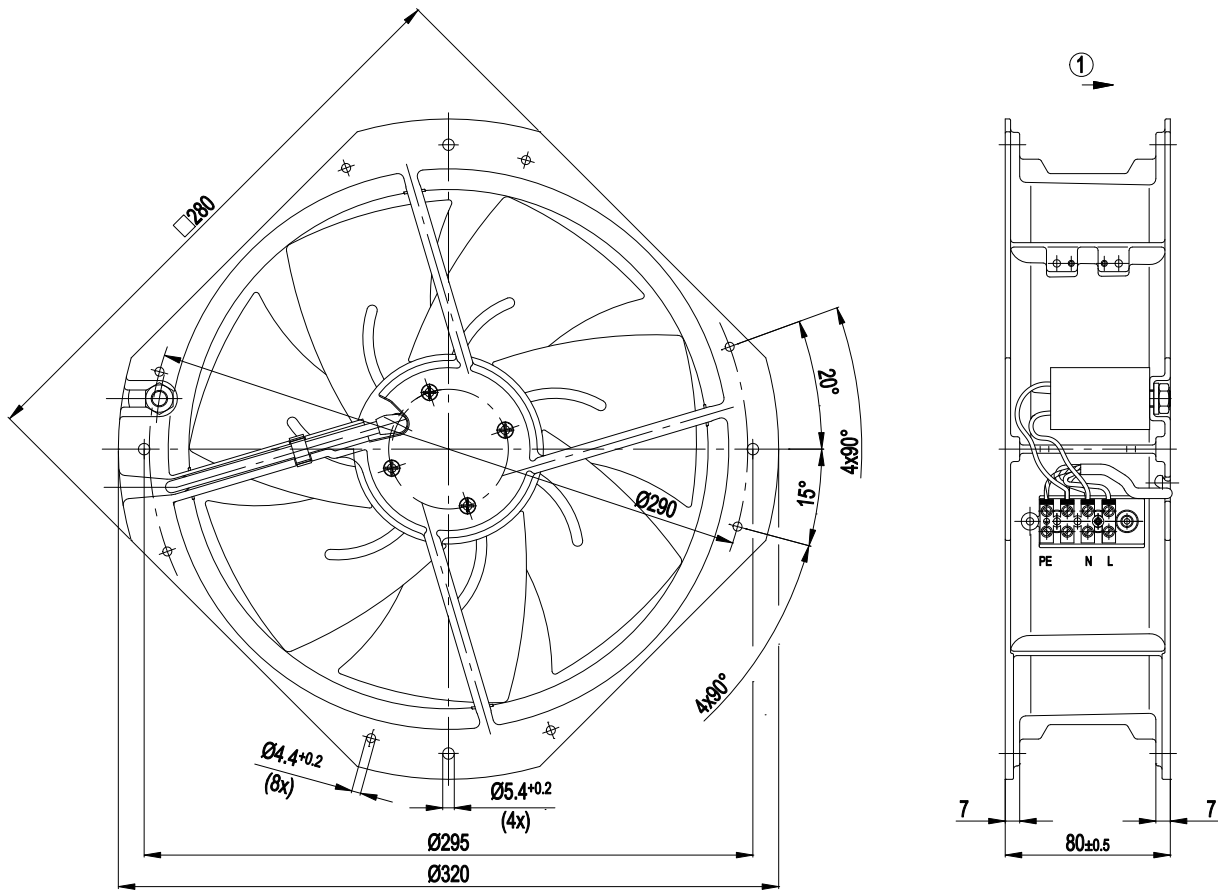
Mass	3.2 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F0
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
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal strips, integrated capacitor connected via terminal strips
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 Nr.77

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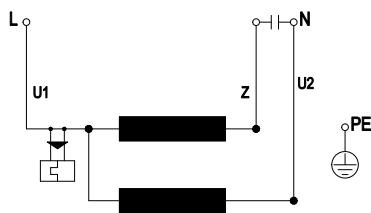
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Product drawing



1 Direction of air flow "V"

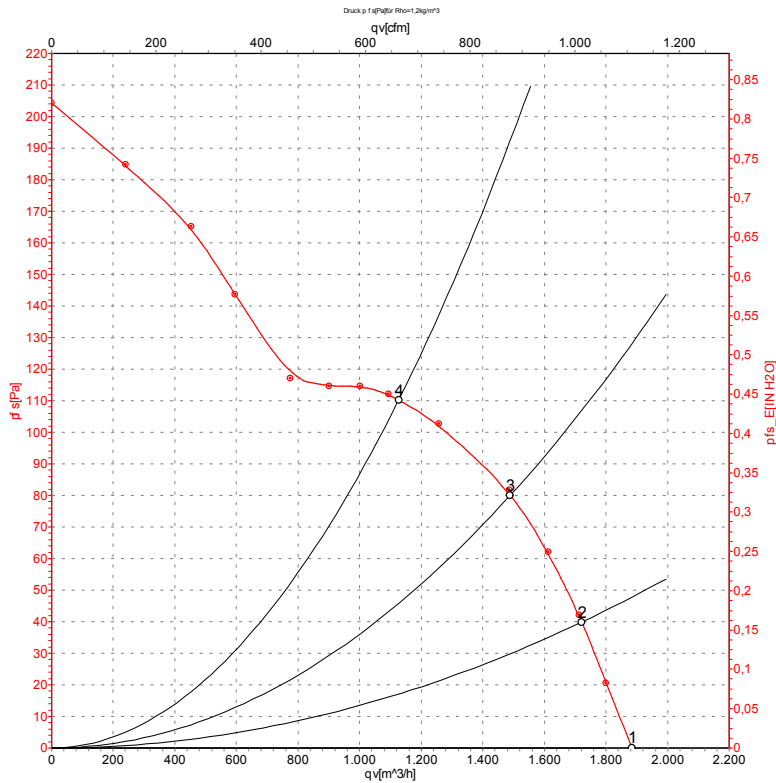
Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				



Charts: Air flow 50 Hz



Measurement: LU-29331

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L_{WA} measured as per ISO 13347 / L_{pA} 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

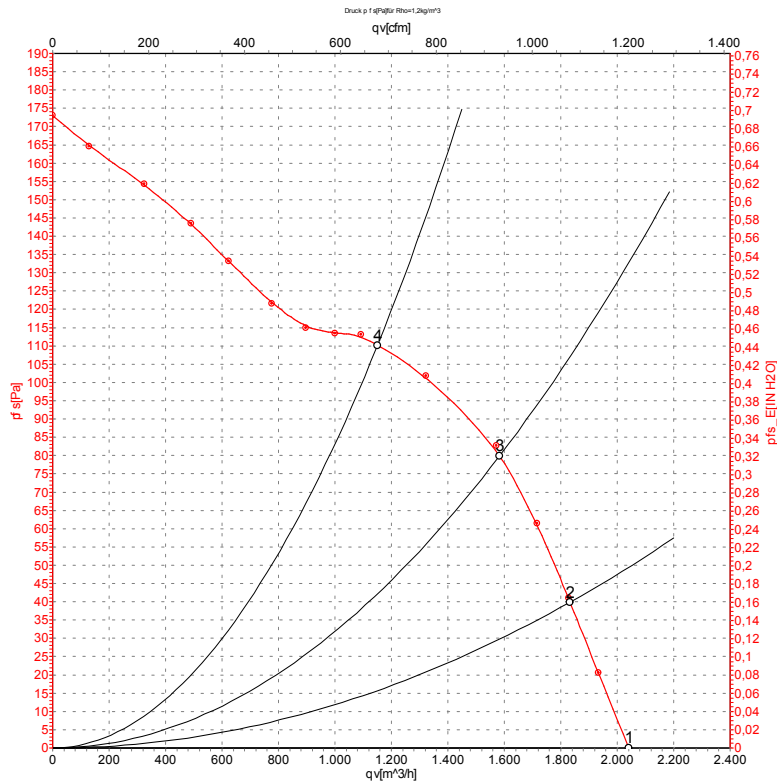
	U	f	n	P _e	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	50	2600	115	0.51	1885	0
2	230	50	2550	124	0.54	1720	40
3	230	50	2485	133	0.57	1490	80
4	230	50	2400	142	0.62	1125	110

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-29332

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L_{WA} measured as per ISO 13347 / L_{pA} 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

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	60	2850	160	0.70	2040	0
2	230	60	2700	167	0.73	1835	40
3	230	60	2585	176	0.76	1585	80
4	230	60	2410	183	0.80	1150	110

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase