W2E250-HL06-01

AC axial compact fan

sickled blades (S series)

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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**W2E250-HL06-01**
Motor	**M2E068-CF**

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}	2550	2700
Power input	W	127	180
Current draw	A	0.56	0.79
Motor capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Max. back pressure	Pa	100	100
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	45
Starting current	A	0.88	0.87

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 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	26.5	24.3	28.3
Efficiency grade N		38.2	36	40
Power input P_e	kW	0.14		
Air flow q_v	m^3/h	1205		
Pressure increase p_{fs}	Pa	115		
Speed n	min^{-1}	2365		

Data definition with optimum efficiency. LU-136540
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

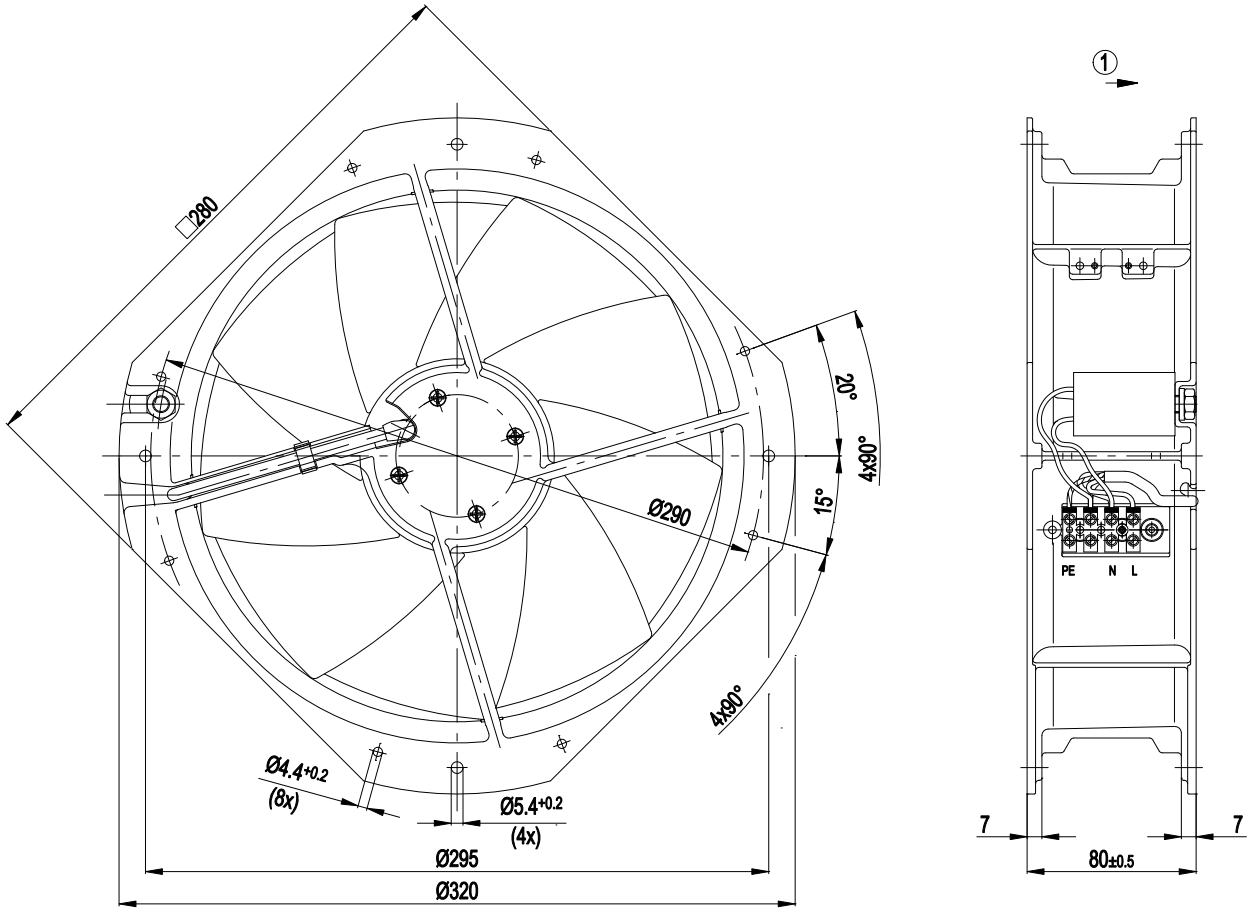
Mass	2.8 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
Humidity 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	CCC; CSA C22.2 Nr.77; EAC; UL 2111

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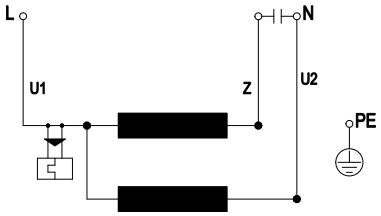
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Product drawing



1	Direction of air flow "V"

Connection screen



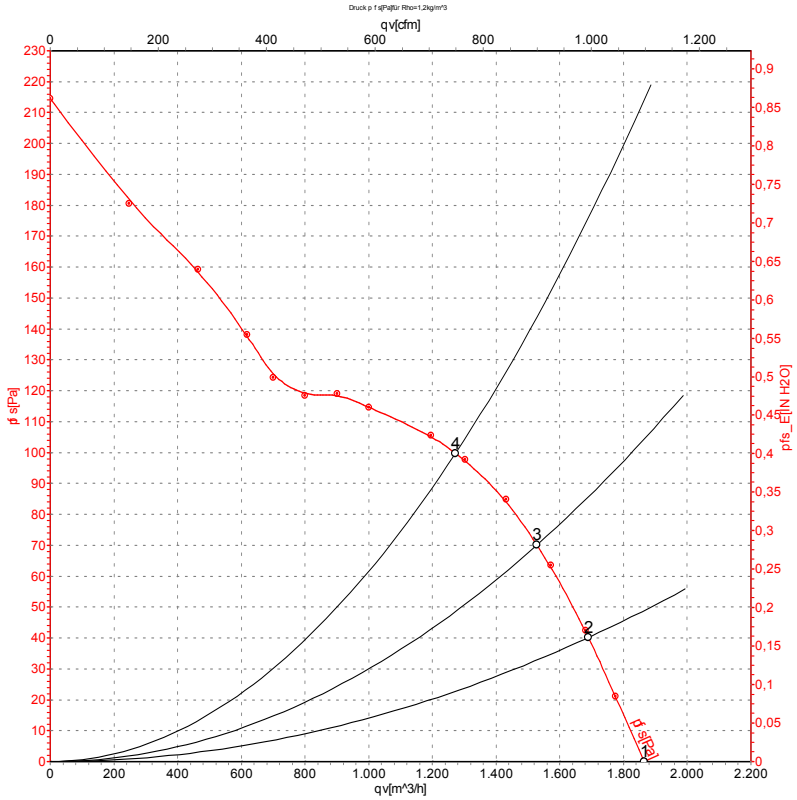
U1	blue	Z	brown	U2	black
PE	green/yellow				

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sickled blades (S series)

Charts: Air flow 50 Hz



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: 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

	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2550	127	0.56	1865	0
2	230	50	2485	136	0.59	1690	40
3	230	50	2440	141	0.61	1530	70
4	230	50	2385	146	0.63	1275	100

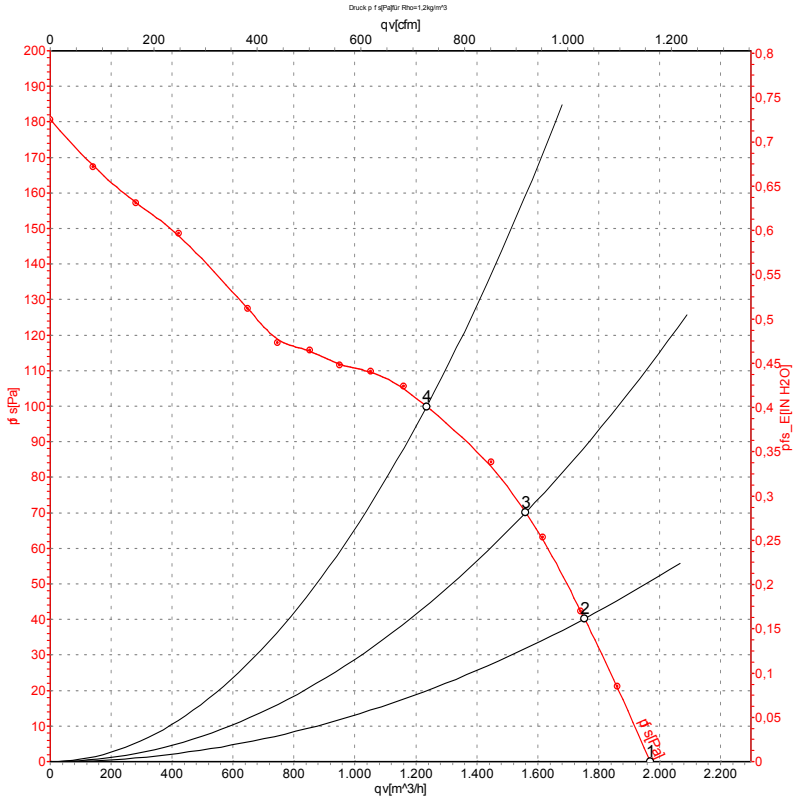
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



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: 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

	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	60	2700	180	0.79	1970	0
2	230	60	2575	186	0.82	1755	40
3	230	60	2485	189	0.83	1560	70
4	230	60	2370	192	0.84	1235	100

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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