W2D250-HJ02-07

AC axial compact fan

sickled blades (S series), single inlet

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W2D250-HJ02-07**
Motor	**M2D068-DC**

Phase		3~
Nominal voltage	VAC	400
Connection		Y
Frequency	Hz	50
Type of data definition		cs
Valid for approval / standard		CE
Speed	min^{-1}	2500
Power input	W	150
Current draw	A	0.27
Max. back pressure	Pa	140
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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}	%	28.4	24.3	28.3
Efficiency grade N		40.1	36	40
Power input P_e	kW	0.14		
Air flow q_v	m^3/h	1450		
Pressure increase p_{fs}	Pa	100		
Speed n	min^{-1}	2530		

Data definition with optimum efficiency. LU-51572
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

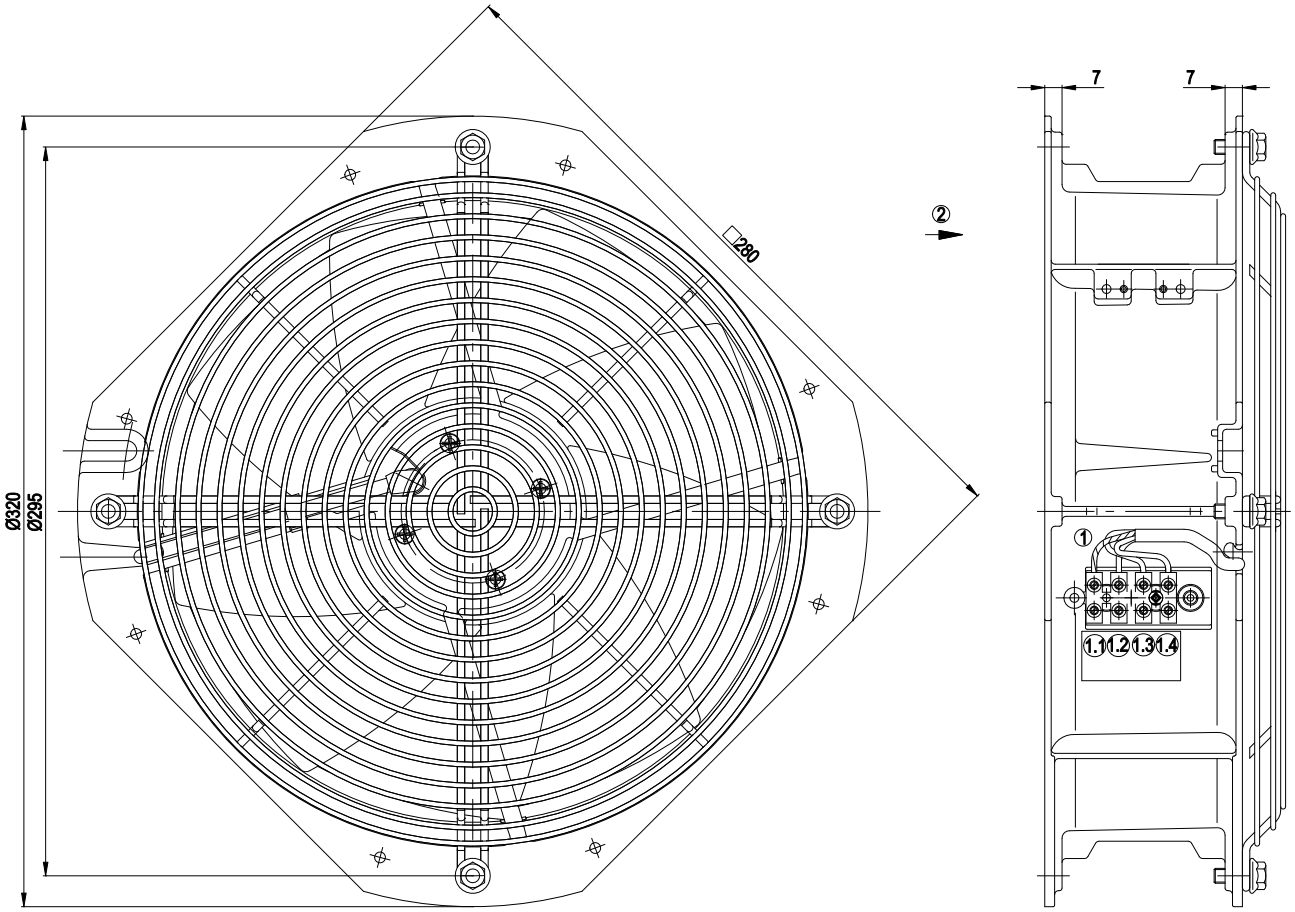
Mass	3.4 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Material of guard grille	Steel, phosphated and plastic-coated in white aluminium (RAL 9006)
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
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
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CSA C22.2 Nr.100; UL 1004-1

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Product drawing



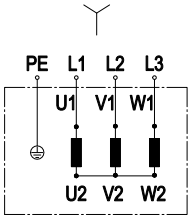
1	Connection line PVC 4G AWG20, 4x brass lead tips crimped
1.1	PE (green / yellow)
1.2	L1=U1 (black)
1.3	L2=V1 (blue)
1.4	L3=W1 (brown)
2	Direction of air flow "V"

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Connection screen



Change direction of rotation by reversing two phases

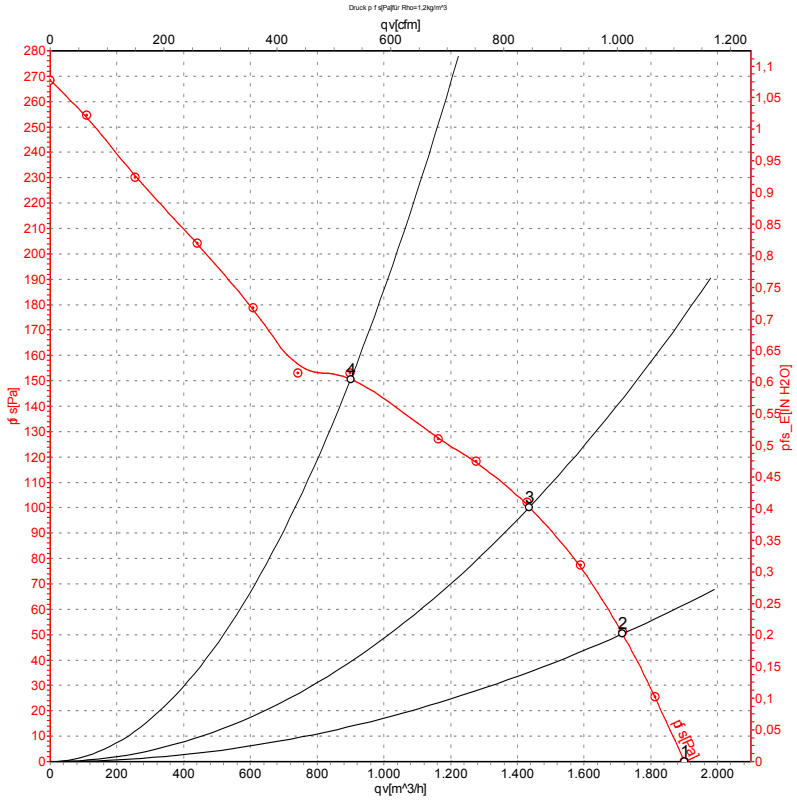
	Three-phase motor	Y	Star connection	L1	black
L2	blue	L3	brown	PE	green/yellow

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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	400	50	2660	115	0.23	1900	0
2	400	50	2610	129	0.25	1715	50
3	400	50	2545	146	0.27	1435	100
4	400	50	2470	164	0.29	900	150

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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