

W2D250-HH14-09

AC axial compact fan

sickled blades (S series)



W2D250-HH14-09 ebmpapst Datasheet

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Nominal data

Type	W2D250-HH14-09				
Motor	M2D068-CC				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	460	460
Connection		Y	Y	Y	Y
Frequency	Hz	50	60	60	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	UL 2111
Speed	min ⁻¹	2465	2580	2800	2800
Power input	W	110	145	165	175
Current draw	A	0.2	0.23	0.23	0.24
Max. back pressure	Pa	95	95	120	120
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	85	60	60	60

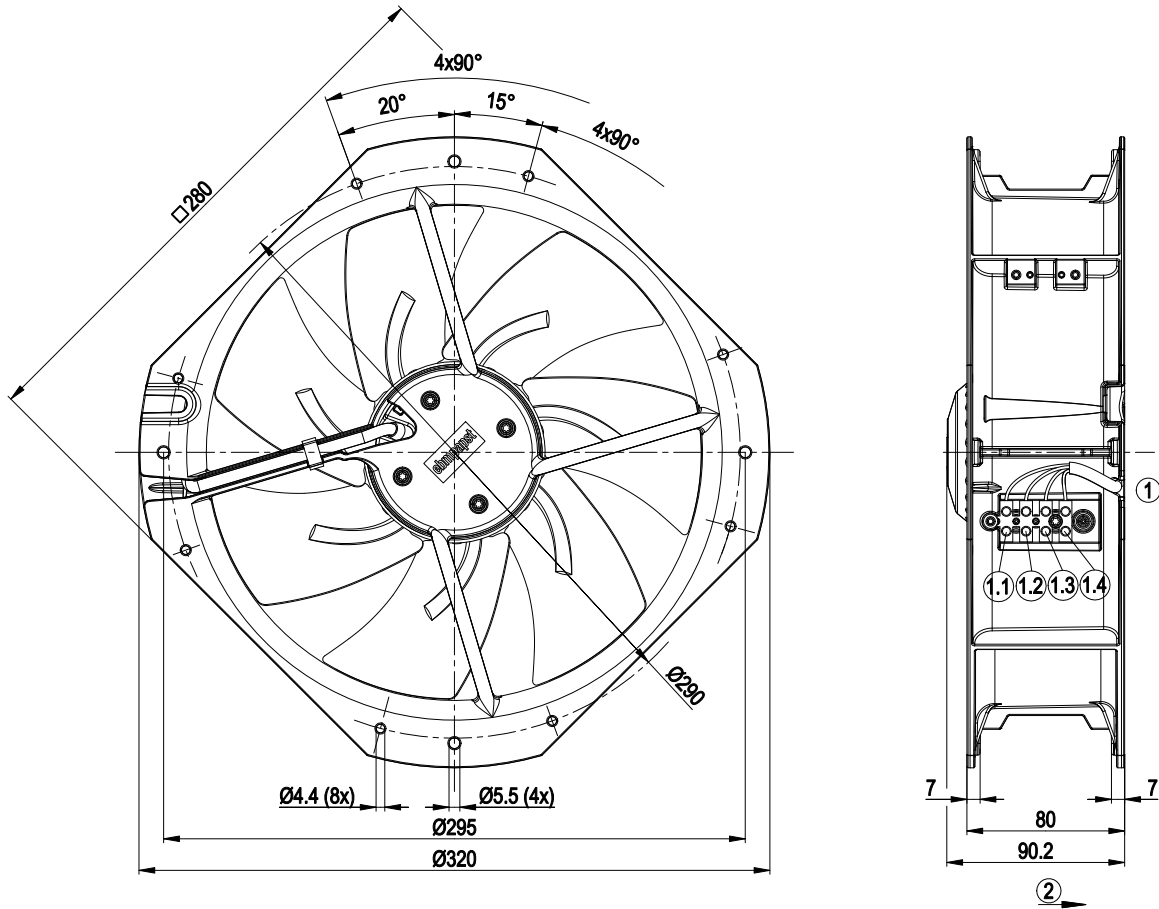
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



Technical features

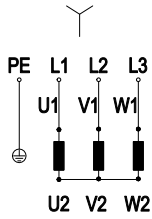
Mass	2.6 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F5
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	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 Nr.100

Product drawing



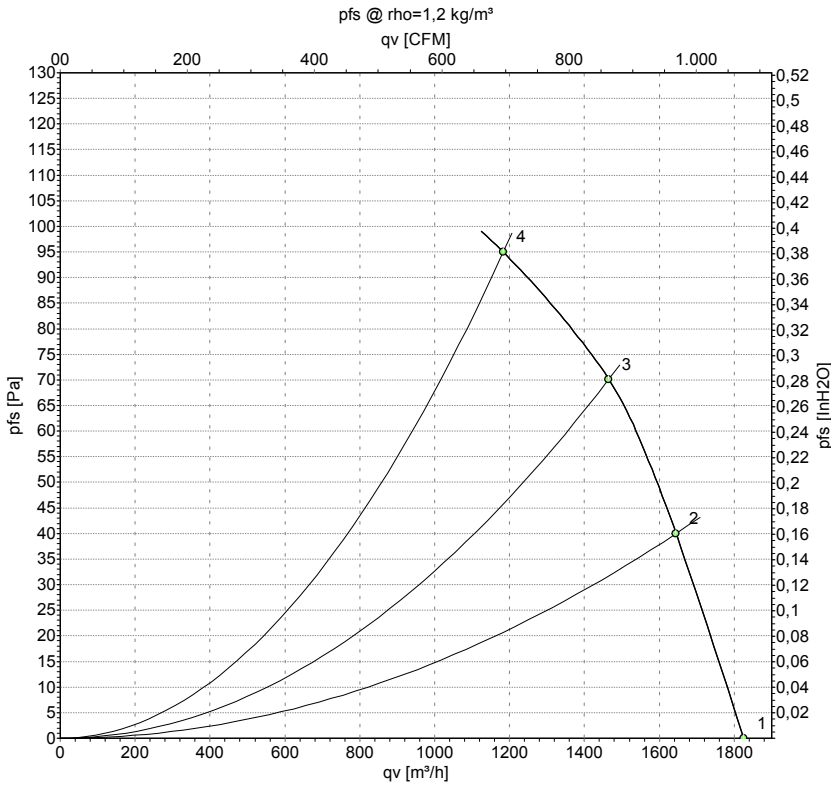
1	Connection line PFA AWG20, 4x lead tips crimped
1.1	PE (green/yellow)
1.2	L1=U1 (black)
1.3	L2=V1 (blue)
1.4	L3=W1 (brown)
2	Direction of air flow "V"

Connection screen



Y	Star connection	L1	black	L2	blue
L3	brown	PE	green/yellow		

Charts: Air flow 50 Hz



Measurement: LU-113550

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.

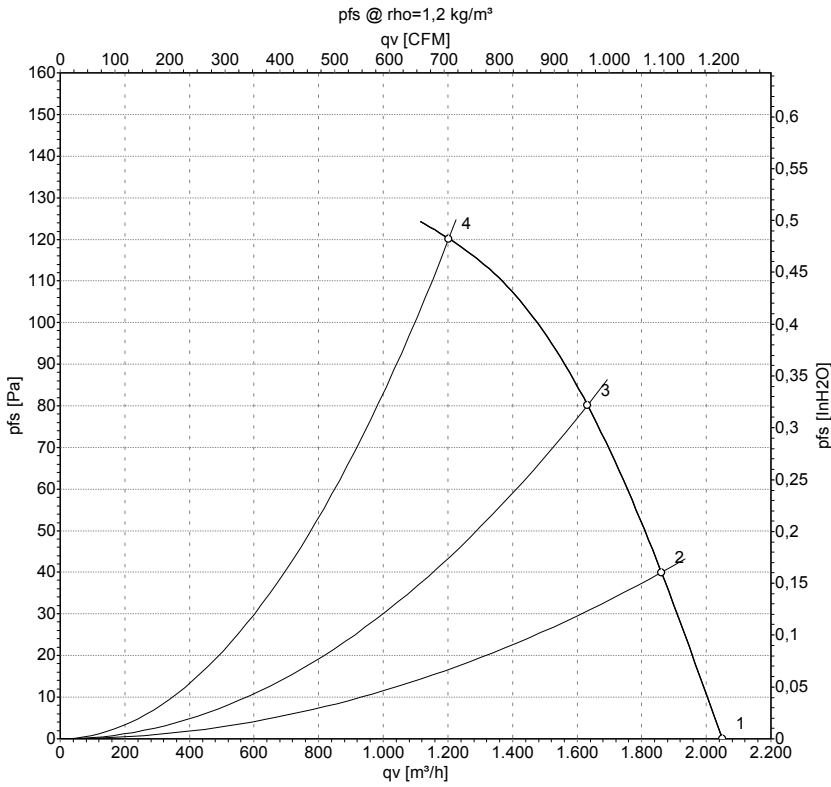
Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	400	50	2465	110	0.20	1825	0
2	400	50	2400	117	0.21	1645	40
3	400	50	2350	123	0.22	1465	70
4	400	50	2305	131	0.22	1185	95

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



Charts: Air flow 60 Hz



Measurement: LU-113559

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	460	60	2800	165	0.23	2050	0
2	460	60	2675	171	0.25	1860	40
3	460	60	2590	182	0.26	1630	80
4	460	60	2485	195	0.27	1205	120

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

