W2E250-HQ52-11

AC axial fan

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W2E250-HQ52-11**
Motor	**M2E068-DF**

Phase		1~	1~	1~	1~	1~	1~
Nominal voltage	VAC	230	230	230	230	230	230
Frequency	Hz	50	50	60	60	60	60
Type of data definition		ml	ml	ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	UL 2111	CE	UL 2111
Speed	min^{-1}	2530	2500	2600	2600	2730	2730
Power input	W	142	136	185	195	190	210
Current draw	A	0.63	0.61	0.82	0.83	0.84	0.89
Motor capacitor	µF	3.5	3	3	3	3.5	3.5
Capacitor voltage	VDB	400	400	400	400	400	400
Capacitor standard		P0 (CE)	P0 (CE)	P0 (CE)	UL	P0 (CE)	UL
Max. back pressure	Pa	120	120	130	130	105	105
Min. ambient temperature	°C	-25	-25	-25	-25	-25	-25
Max. ambient temperature	°C	70	70	70	70	55	55
Starting current	A	1.17	1.15	1.07		1.12	

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}	%	28.3	24.3	28.3
Efficiency grade N		40	36	40
Power input P_e	kW	0.14		
Air flow q_v	m^3/h	1205		
Pressure increase p_{fs}	Pa	121		
Speed n	min^{-1}	2530		

Data definition with optimum efficiency. LU-155463
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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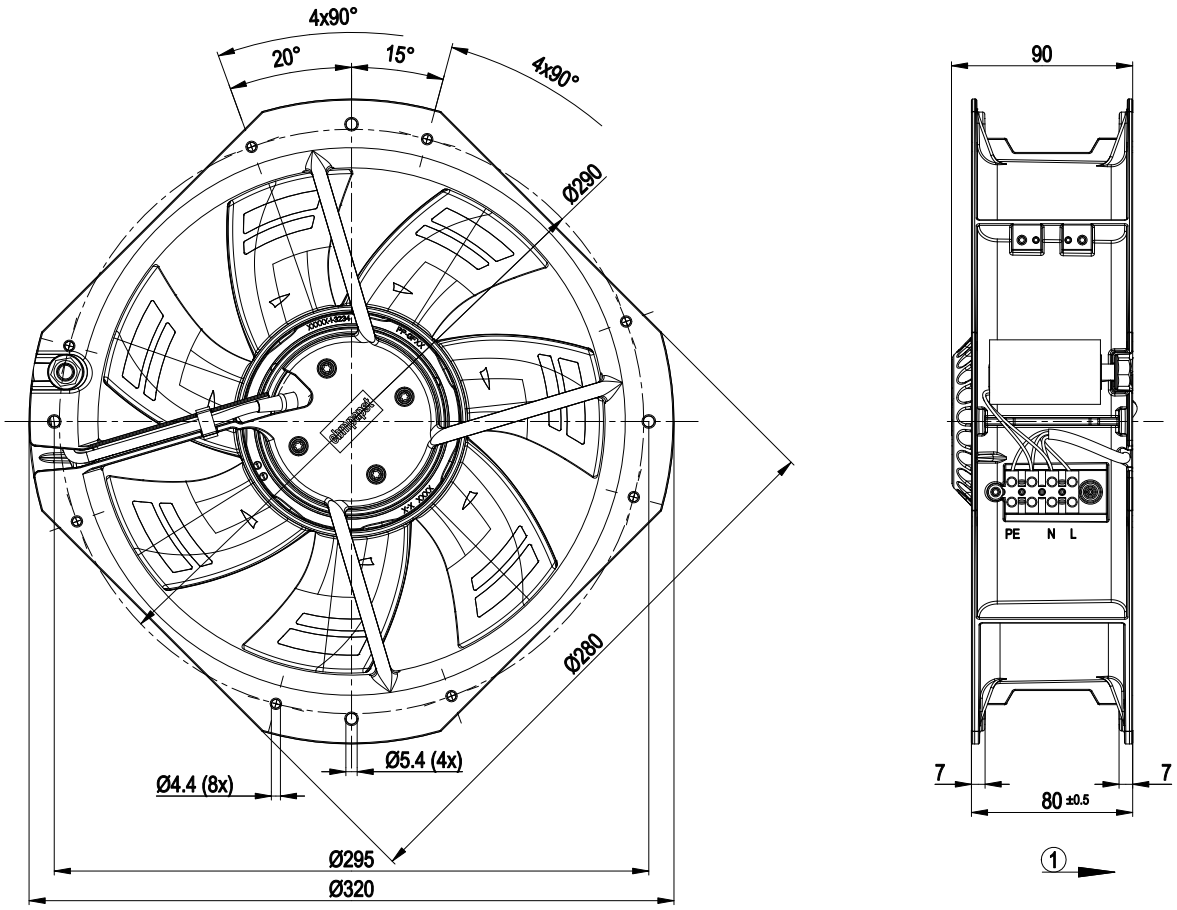
Technical features

Mass	3.3 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
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	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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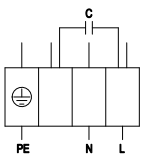
AC axial fan

Product drawing



1	Direction of air flow "V"

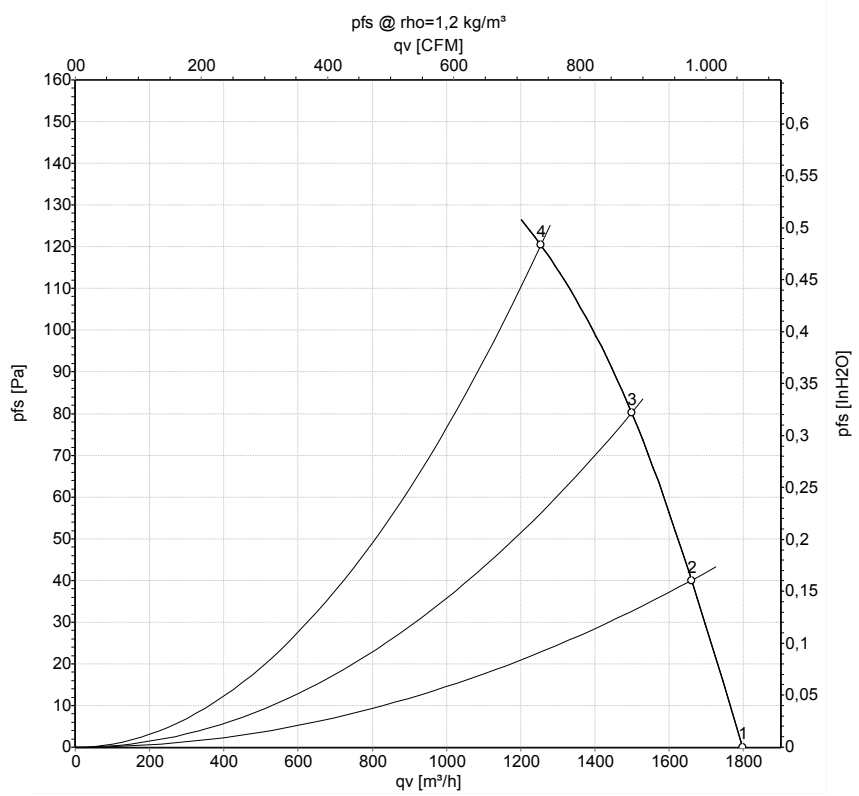
Connection screen



PE	green/yellow	N	blue	L	black

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Charts: Air flow 50 Hz



Measurement: LU-155463

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.

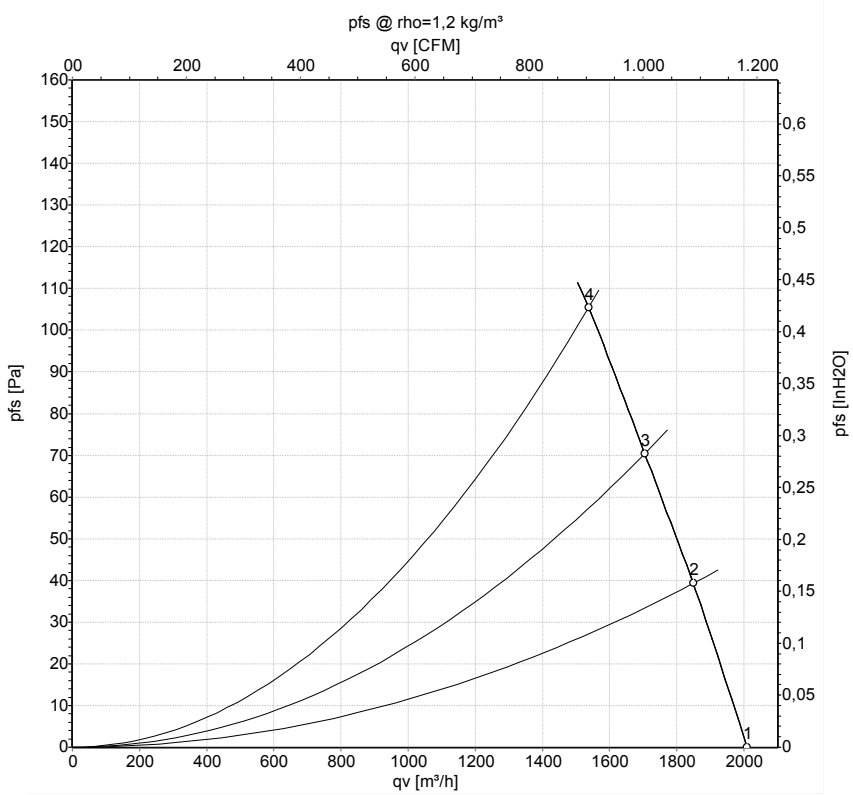
Measured values

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	2690	116	0.51	63	69	1800	0
2	230	50	2640	125	0.55	63	70	1660	40
3	230	50	2585	133	0.58	63	70	1500	80
4	230	50	2530	142	0.63	63	70	1255	120

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-155467

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	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	60	2990	167	0.73	65	72	2010	0
2	230	60	2920	174	0.76	71	79	1850	40
3	230	60	2845	181	0.79	74	82	1705	70
4	230	60	2730	190	0.84	72	80	1535	105

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
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