# AC axial compact fan

sickled blades (S series)

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#### **Nominal data**

Туре	W2E250-HP0				
Motor	M2E068-CF				
Phase			1~	1~	
Nominal voltag	VAC	230	230		
Frequency	Hz	50	60		
Type of data d	efinition		ml	ml	
Valid for appro	val / standard		CE	CE	
Speed		min-1	2320	2300	
Power input		W	125	160	
Current draw		Α	0.55	0.71	
Motor capacito	or	μF	3	3	
Capacitor volta	age	VDB	400	400	
Capacitor stan	dard		P0 (CE)	P0 (CE)	
Max. back pre-	ssure	Pa	100	110	
Min. ambient t	emperature	°C	-25	-25	
Max. ambient	temperature	°C	60	50	
Starting currer	nt	Α	0.83	0.81	

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





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### **Technical features**

Maria	2.71
Mass	2.7 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	PP plastic
Housing material	Die-cast aluminium
Number of blades	7
Direction of air flow	"\/"
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	EAC; UL 2111; CSA C22.2 Nr.77

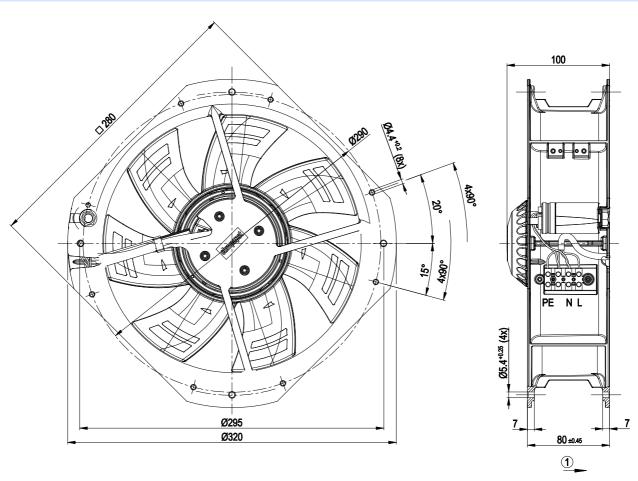




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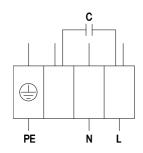
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### **Product drawing**



**Connection screen** 

Direction of air flow "V"



PE green/yellow N blue L black

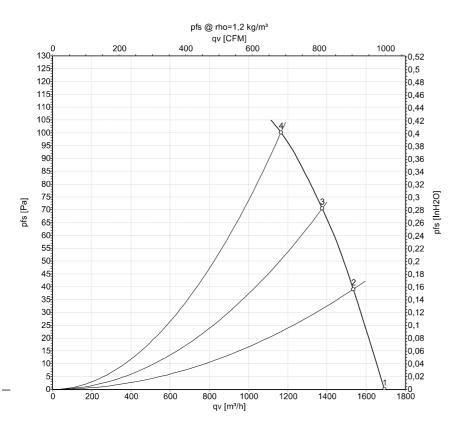




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#### Charts: Air flow 50 Hz



#### Measurement: LU-162612

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 <sub>e</sub>	1	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	p <sub>fs</sub>
	V	Hz	min-1	W	Α	dB(A)	dB(A)	m³/h	Pa
1	230	50	2550	101	0.44	63	70	1695	0
2	230	50	2480	109	0.47	62	69	1535	40
3	230	50	2410	115	0.50	61	68	1375	70
4	230	50	2320	125	0.55	61	68	1165	100

 $U = \text{Supply voltage} \cdot f = \text{Frequency} \cdot n = \text{Speed} \cdot P_e = \text{Power input} \cdot I = \text{Current draw} \cdot \text{LpA}_n = \text{Sound pressure level inlet side} \cdot \text{LwA}_n = \text{Sound power level inlet side} \cdot qv = \text{Air flow p}_s = \text{Pressure increase}$ 

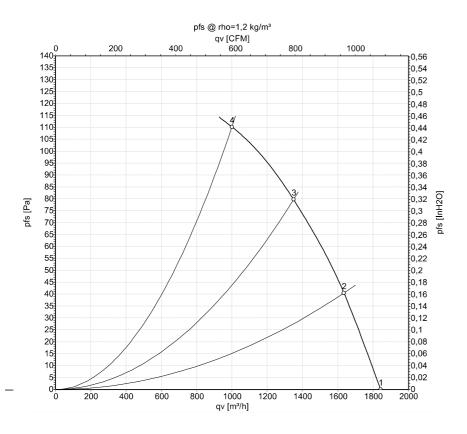




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#### Charts: Air flow 60 Hz



#### Measurement: LU-163044

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 <sub>e</sub>	1	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	p <sub>fs</sub>
	V	Hz	min-1	W	Α	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	60	2750	134	0.59	64	71	1840	0
2	230	60	2600	145	0.63	63	70	1635	40
3	230	60	2420	152	0.66	62	69	1350	80
4	230	60	2300	160	0.71	63	70	1000	110

 $U = \text{Supply voltage} \cdot f = \text{Frequency} \cdot n = \text{Speed} \cdot P_e = \text{Power input} \cdot I = \text{Current draw} \cdot \text{LpA}_n = \text{Sound pressure level inlet side} \cdot \text{LwA}_n = \text{Sound power level inlet side} \cdot qv = \text{Air flow p}_s = \text{Pressure increase}$ 



