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Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142**Nominal data**

<b>Type</b>	<b>W4E500-GM03-01</b>		
<b>Motor</b>	<b>M4E110-GF</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1300	1400
Power input	W	680	880
Current draw	A	3.0	3.88
Motor capacitor	µF	12	12
Capacitor voltage	VDB	450	450
Max. back pressure	Pa	150	100
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	65	40

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	Overall efficiency $\eta_{es}$	Actual	Request 2013	Request 2015
Efficiency category	Static	Efficiency grade N	40	36	40
Variable speed drive	No	Power input $P_e$	kW	0.65	
Specific ratio*	1.00	Air flow $q_v$	m <sup>3</sup> /h	5765	
		Pressure increase $p_{fs}$	Pa	129	
		Speed n	min <sup>-1</sup>	1315	

Data established at point of optimum efficiency

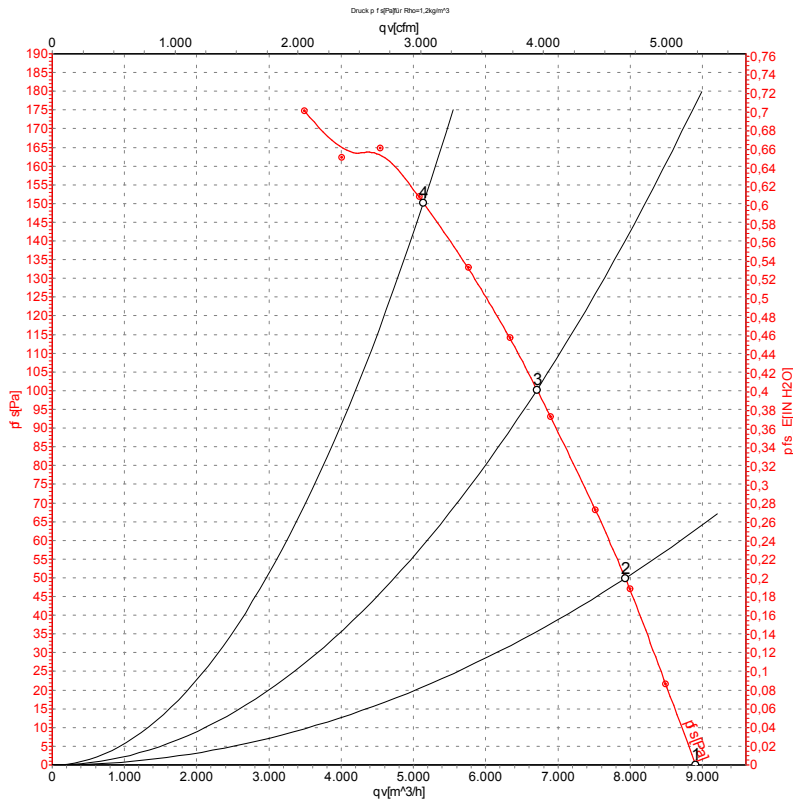
\* Specific ratio =  $1 + p_s / 100\,000\text{ Pa}$



## Technical features

<b>Mass</b>	18 kg
<b>Size</b>	500 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of terminal box</b>	PC/ABS plastic Bayblend FR110
<b>Material of blades</b>	Press-fitted sheet steel blank, sprayed with PP plastic
<b>Material of guard grille</b>	Steel, phosphated and coated in black plastic
<b>Number of blades</b>	5
<b>Direction of air flow</b>	"V"
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F4-1
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	On rotor and stator sides
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Electrical leads</b>	Via terminal box, integrated capacitor connected via terminal box
<b>Motor protection</b>	Thermal overload protector (TOP) brought out
<b>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 61800-5-1; CE
<b>Approval</b>	GOST; VDE; UL 1004-1; CSA C22.2 Nr.100

## Charts: Air flow 50 Hz



Measurement: LU-107128

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	Pe	I	LpA <sub>in</sub>	LwA <sub>in</sub>	LwA <sub>out</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	50	1380	513	2.25	68	75	75	8905	0
2	230	50	1355	571	2.50	65	72	72	7930	50
3	230	50	1330	623	2.73	63	70	70	6705	100
4	230	50	1300	680	3.00	65	72	71	5140	150

U = Supply voltage · f = Frequency · n = Speed · Pe = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · LwA<sub>out</sub> = Sound power level outlet side  
 qv = Air flow · p<sub>fs</sub> = Pressure increase

