S4E400-AA06-15

AC axial fan

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**S4E400-AA06-15**	
Motor	**M4E068-EC**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	1390
Power input	W	140
Current draw	A	0.61
Motor capacitor	µF	5
Capacitor voltage	VDB	400
Capacitor standard		P0 (CE)
Max. back pressure	Pa	90
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	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
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}	%	30.4	25	29
Efficiency grade N		41.4	36	40
Power input P_e	kW	0.18		
Air flow q_v	m^3/h	2475		
Pressure increase p_{fs}	Pa	80		
Speed n	min^{-1}	1315		

Data definition with optimum efficiency. LU-24432
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

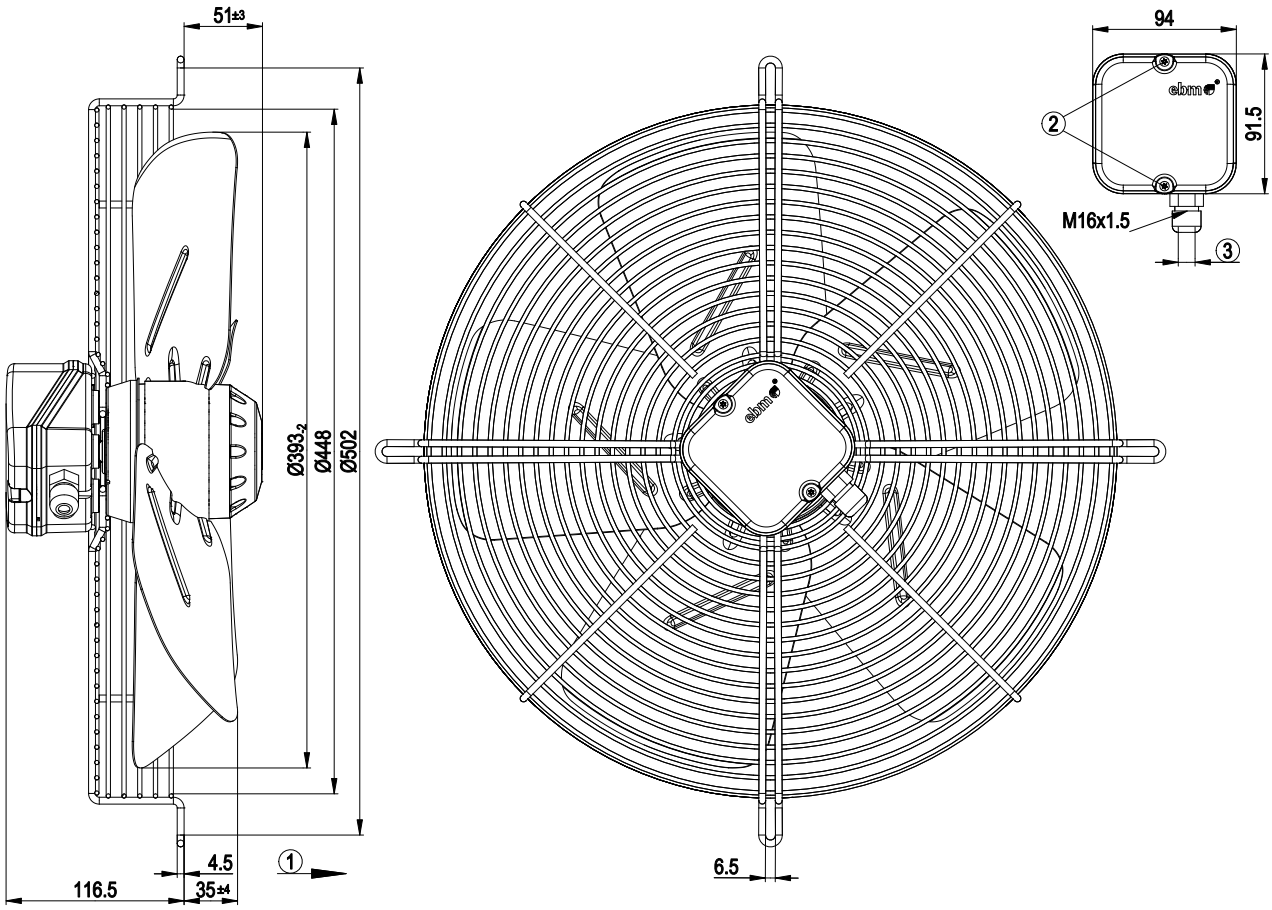
Technical features

Mass	4.7 kg
Size	400 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F5
Max. permissible ambient motor temp. (transp./ storage)	+ 70 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing with anti-freezing grease
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	P0/S0
Product conforming to standard	EN 60335-1

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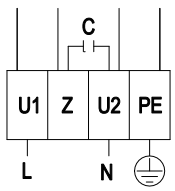
AC axial fan

Product drawing



1	Direction of air flow "A"
2	Tightening torque 0.5±0.1 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3±0.2 Nm

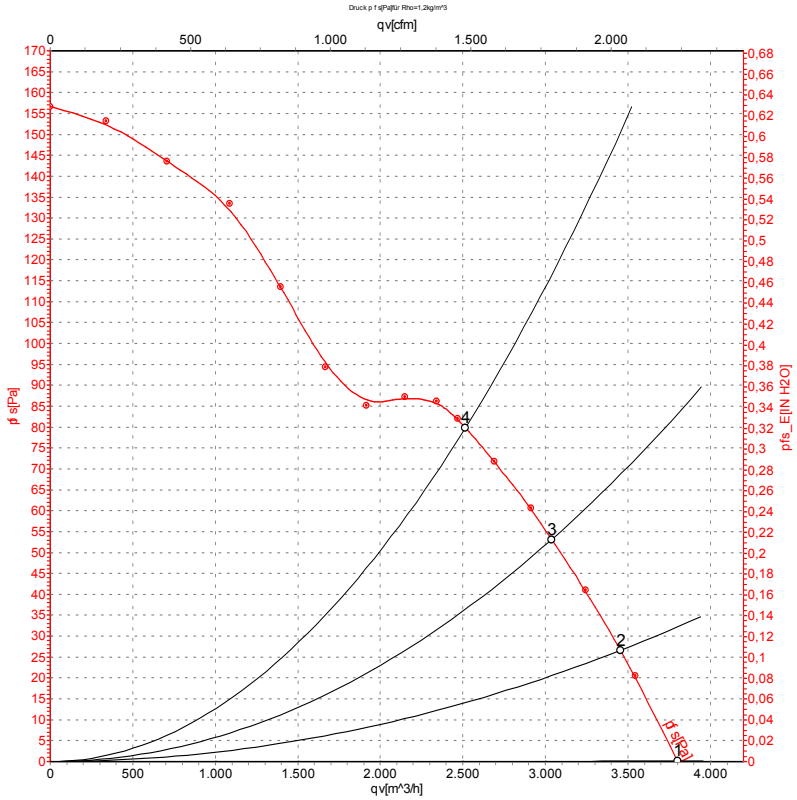
Connection screen



L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-24432

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	230	50	1405	129	0.57	3800	0
2	230	50	1380	146	0.64	3455	27
3	230	50	1350	162	0.71	3040	53
4	230	50	1315	180	0.78	2515	80

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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