W4E400-FK02-30

AC axial fan

sickled blades (S series)

Wall ring with guard grille

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W4E400-FK02-30**
Motor	**M4E074-EI**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	1430	1660
Power input	W	175	255
Current draw	A	0.78	1.12
Motor capacitor	µF	6	6
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	120	70
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	55
Starting current	A	2.25	2

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}	%	32.1	25.4	29.4
Efficiency grade N		42.7	36	40
Power input P_e	kW	0.21		
Air flow q_v	m^3/h	2780		
Pressure increase p_{fs}	Pa	90		
Speed n	min^{-1}	1395		

Data definition with optimum efficiency. LU-55925
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	8.5 kg
Size	400 mm
Surface of rotor	Coated in black
Material of terminal box	ABS plastic, black
Material of blades	Sheet steel, coated in black
Material of wall ring	Sheet steel, pre-galvanised and coated with black plastic
Material of guard grille	Steel, phosphated and coated with black plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-2
Max. permissible ambient motor temp. (transp./ storage)	+80 °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	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 box
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2004); CE

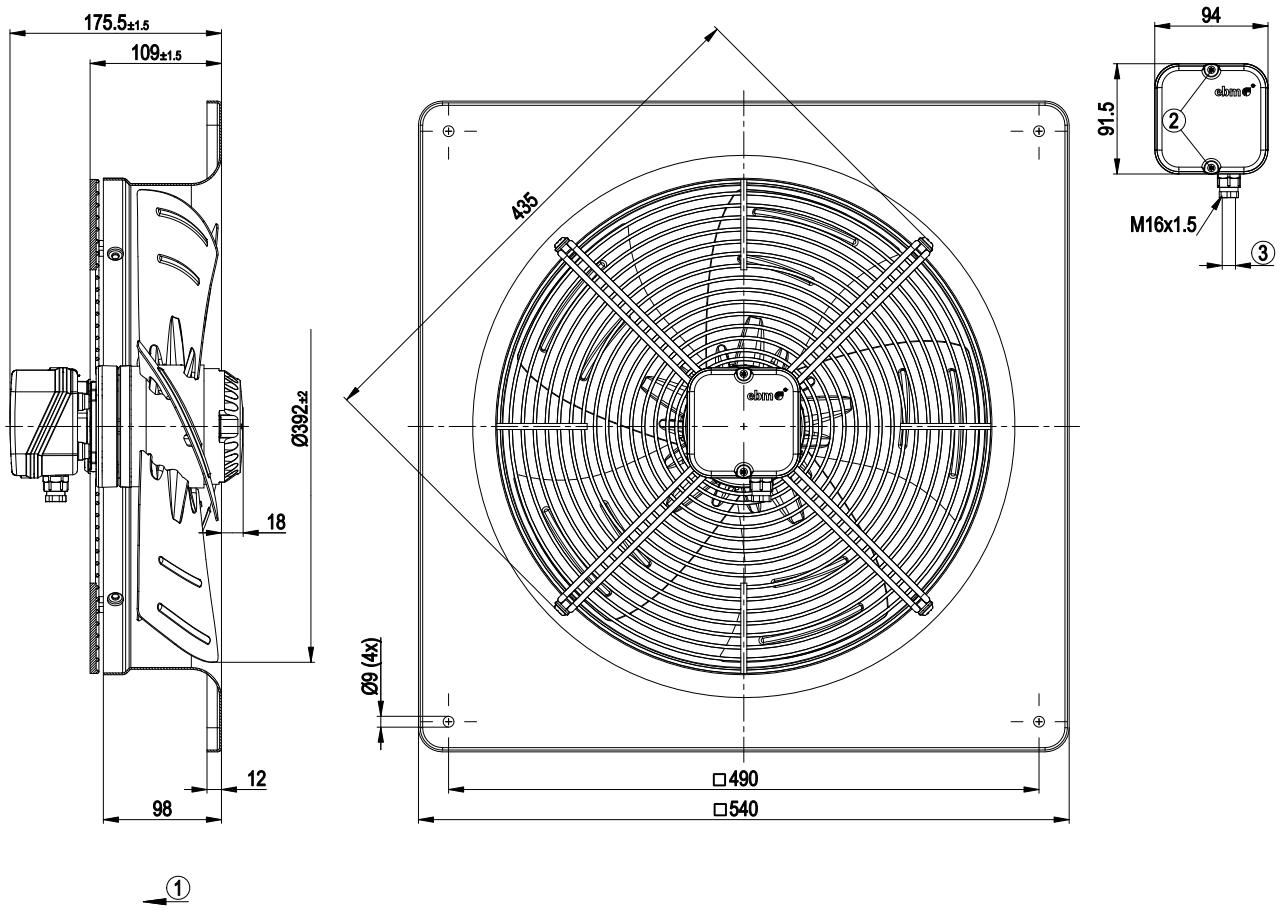
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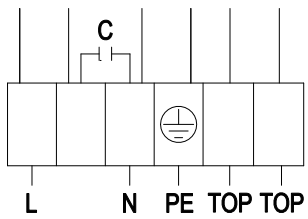
Wall ring with guard grille

Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.5±0.1 Nm
3	Cable diameter min. 4 mm, max. 10 mm, tightening torque 2±0.3 Nm

Connection screen



L	blue	N	black	PE	green/yellow
TOP	grey				

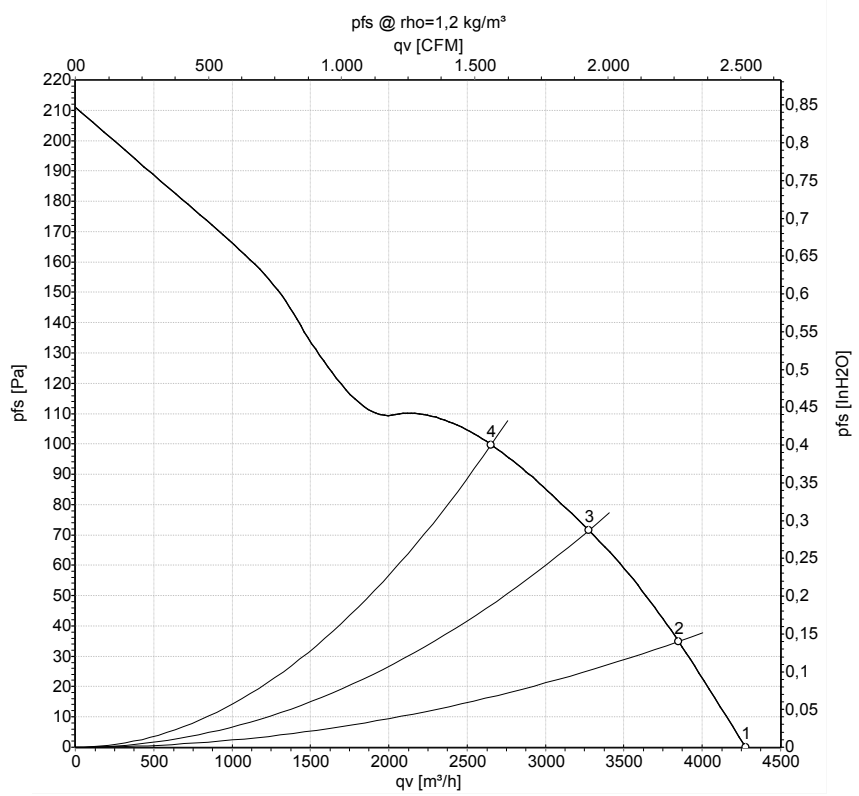
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Wall ring with guard grille

Charts: Air flow 50 Hz



Measurement: LU-55925

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	1430	175	0.78	4275	0
2	230	50	1425	186	0.84	3850	35
3	230	50	1410	203	0.91	3275	72
4	230	50	1395	220	0.97	2655	100

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

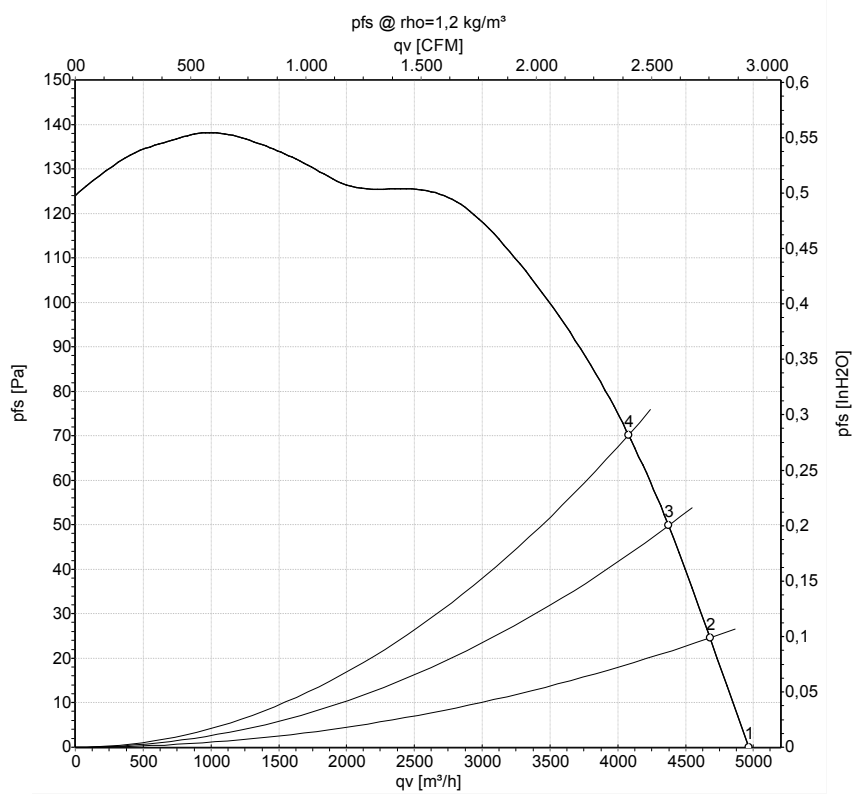
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Charts: Air flow 60 Hz



Measurement: LU-55926

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	60	1660	255	1.12	4965	0
2	230	60	1660	265	1.17	4680	25
3	230	60	1640	280	1.23	4375	50
4	230	60	1620	291	1.27	4080	70

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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