

AC axial fan

sickle-shaped blades (S series)

Fan housing with guard grille

Nominal data

Type	W4E400-DS02-38	
Motor	M4E074-GA	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min ⁻¹	1400
Power consumption	W	270
Current draw	A	1.22
Capacitor	µF	8
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Max. back pressure	Pa	80
Max. back pressure	in. wg	0.32
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55
Starting current	A	2.8

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	30.3	30.3	09 Power consumption P_e	kW	0.29
02 Measurement category		A		09 Air flow q_v	m³/h	3205
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	101
04 Efficiency grade N		40	40	10 Speed (rpm) n	min ⁻¹	1380
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = $1 + p_b / 100\,000\text{ Pa}$ LU-138521



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Technical description

Weight	10 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	ABS plastic, black
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, pre-galvanized and coated with black plastic
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box; Capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE

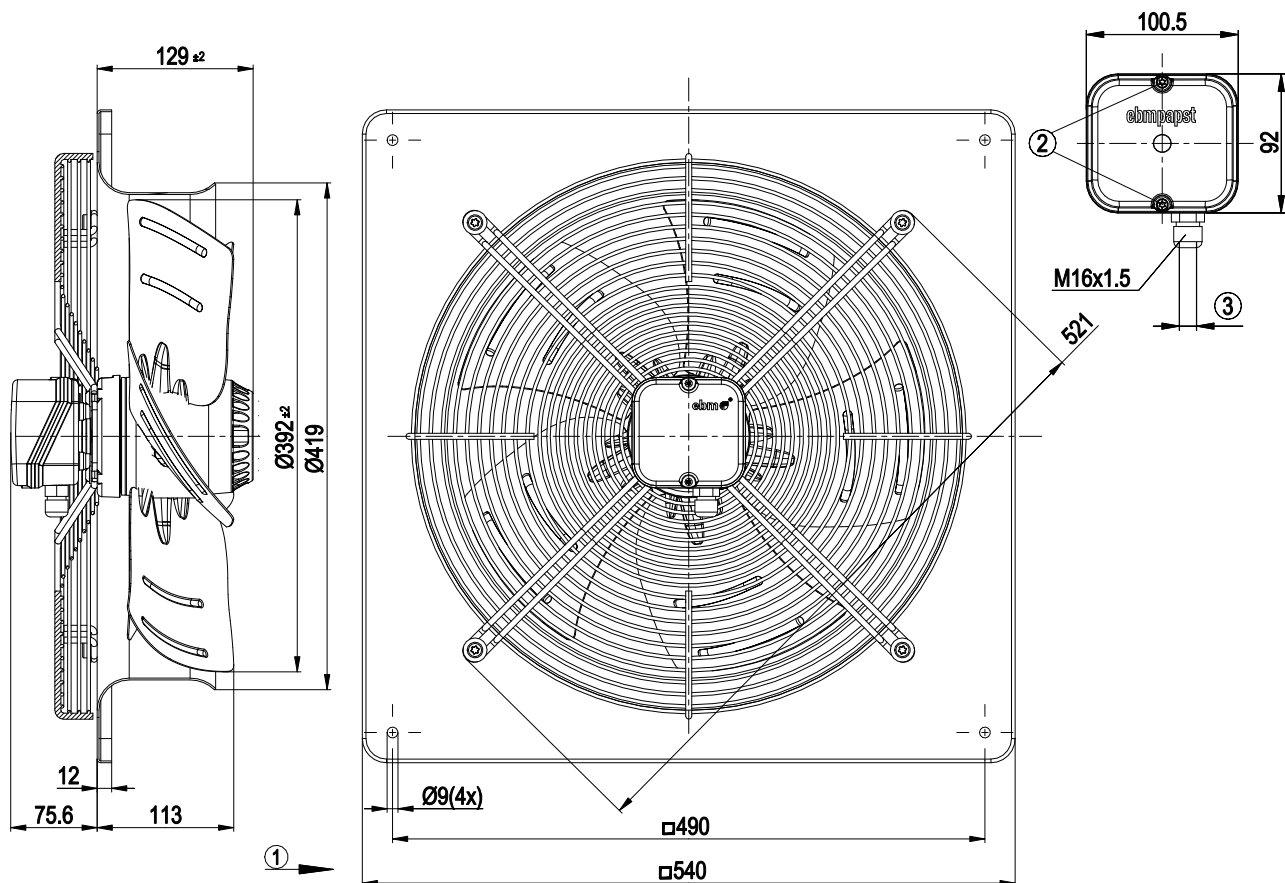


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Product drawing

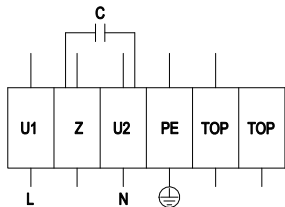


- | | |
|---|---|
| 1 | Direction of air flow "A" |
| 2 | Tightening torque 1.5 ± 0.2 Nm |
| 3 | Cable diameter: min. 7 mm, max. 14 mm, tightening torque 2 ± 0.3 Nm |

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Connection diagram



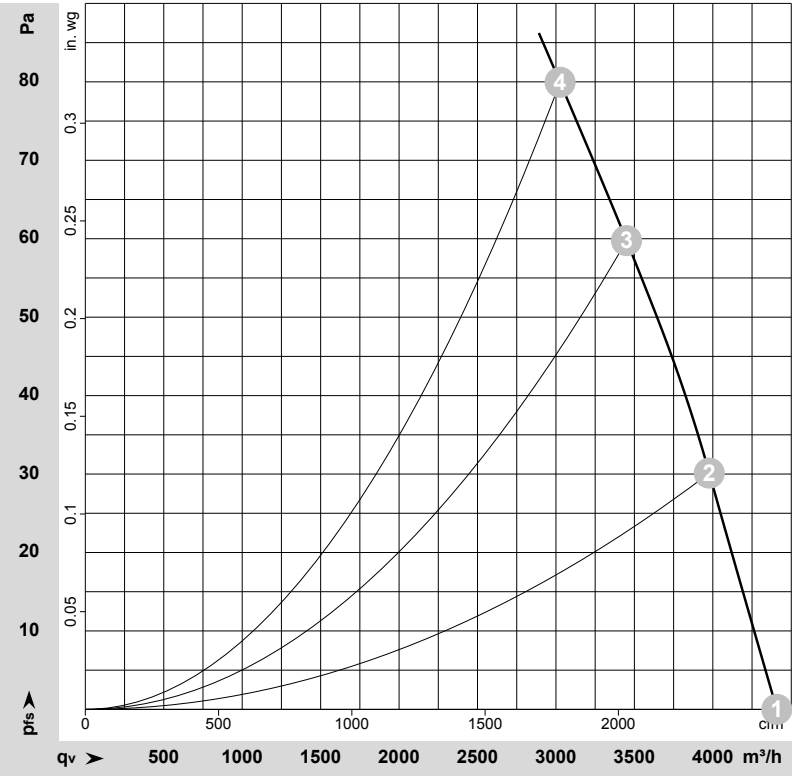
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow	TOP	gray	TOP	gray



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-72368-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	1~	230	50	1385	251	1.14	4410	0	2595	0.00
2	1~	230	50	1365	264	1.19	3975	30	2340	0.12
3	1~	230	50	1345	280	1.26	3450	60	2030	0.24
4	1~	230	50	1340	283	1.27	3025	80	1780	0.32

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

