A4E350-AQ02-13

AC axial fan

sickle-shaped blades (S series)

A4E350-AQ02-13 ebmpapst Datasheet
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Nominal data

Type	**A4E350-AQ02-13**		
Motor	**M4E074-EI**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1450	1700
Power consumption	W	145	205
Current draw	A	0.68	0.9
Capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. back pressure	Pa	100	100
Max. back pressure	in. wg	0.4	0.4
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	20
Starting current	A	2.0	1.9

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 (prEN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	31.4	28.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		42.6	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.17
09 Air flow q_v	m^3/h	2400
09 Pressure increase p_{fs}	Pa	81
10 Speed (rpm) n	min^{-1}	1405
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-192356

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.

The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

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Technical description

Weight	4.1 kg
Size	350 mm
Motor size	74
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, 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	H1+
Ambient temperature note	As a fan for use with industrial evaporators, suitable for ambient temperatures between -40°C and +20°C, occasional start-up at up to +40°C permissible.
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °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 with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Connector with cable
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE; UKCA
Approval	CCC

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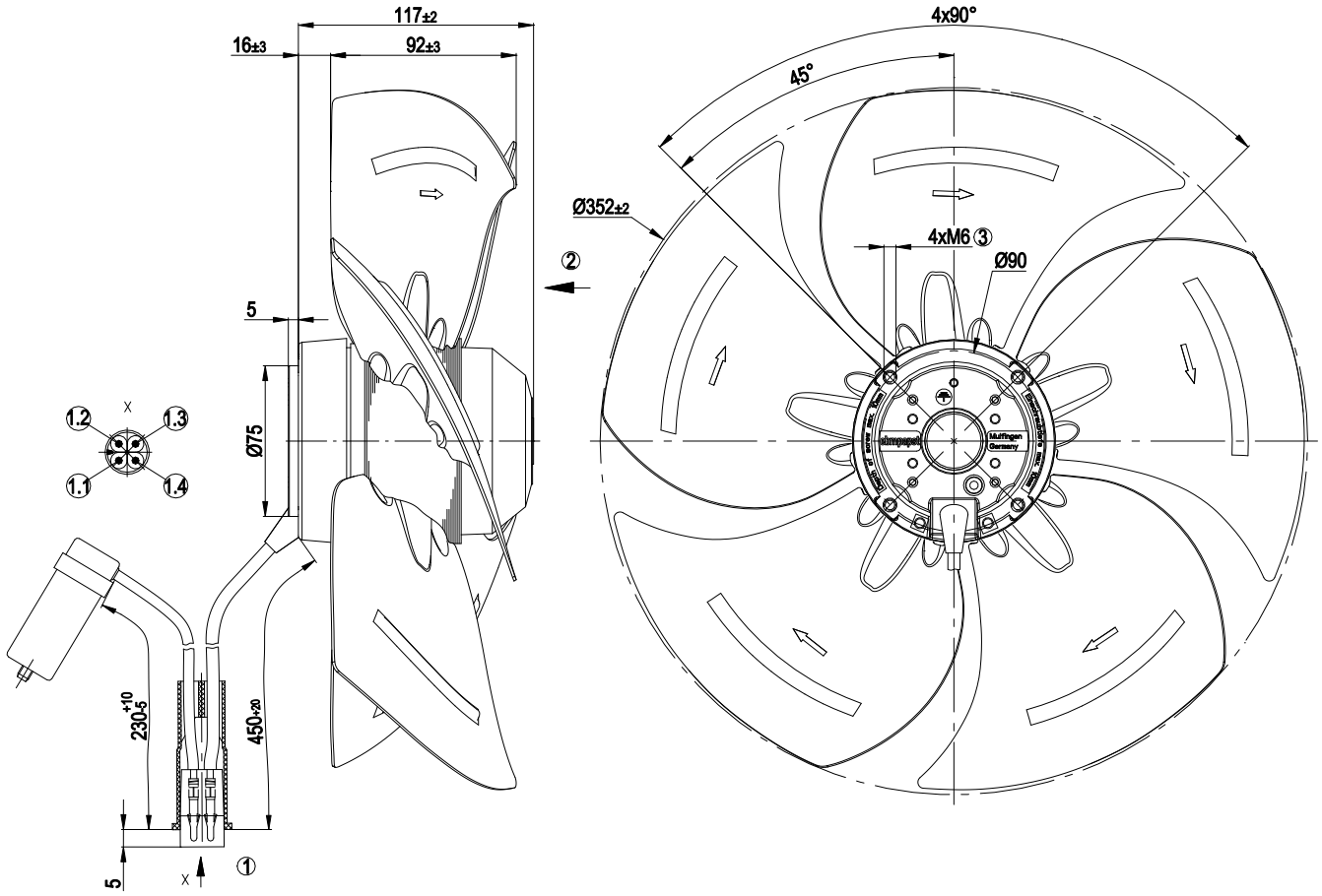
Product drawing



1	Cable silicone 4G 0.5 mm², 4-pole connector housing tyco 925075-7, 2x plug pin tyco 163555-6, 2x plug pin tyco 163303-8
1.1	brown + capacitor
1.2	black + capacitor
1.3	blue
1.4	green/yellow
2	Direction of air flow "V"
3	Max. clearance for screw 10 mm

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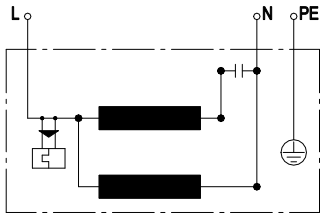
Connection diagram



L	blue	N	black	PE	green/yellow

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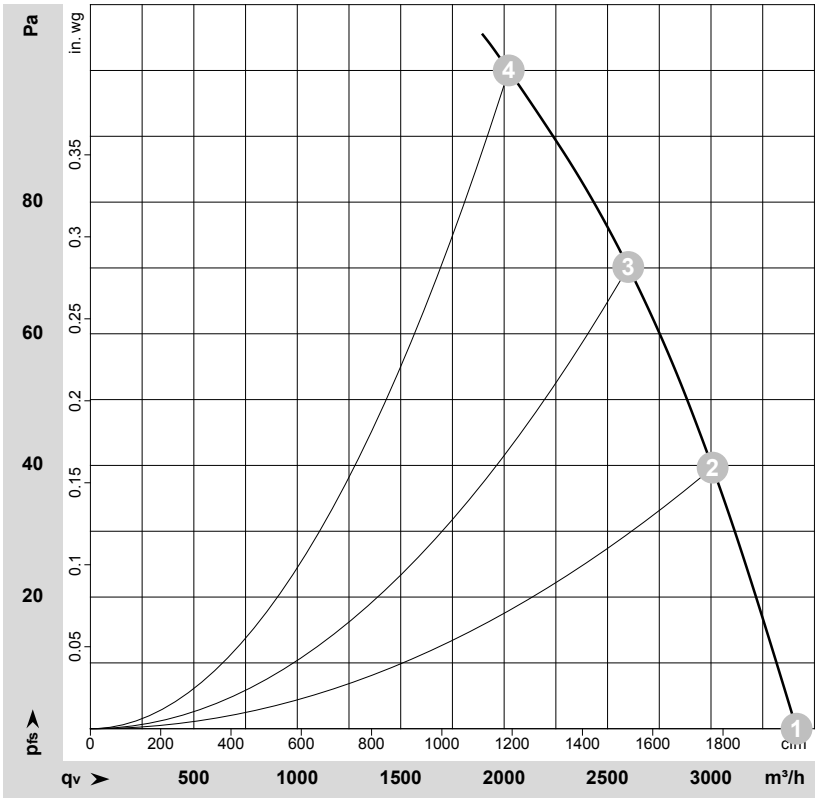
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-71990-1

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	m^3/h	Pa	cfm	in. wg
1	1~	230	50	1450	145	0.68	3415	0	2010	0.00
2	1~	230	50	1430	156	0.72	3010	40	1770	0.16
3	1~	230	50	1420	168	0.77	2600	70	1530	0.28
4	1~	230	50	1400	187	0.84	2020	100	1190	0.40

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

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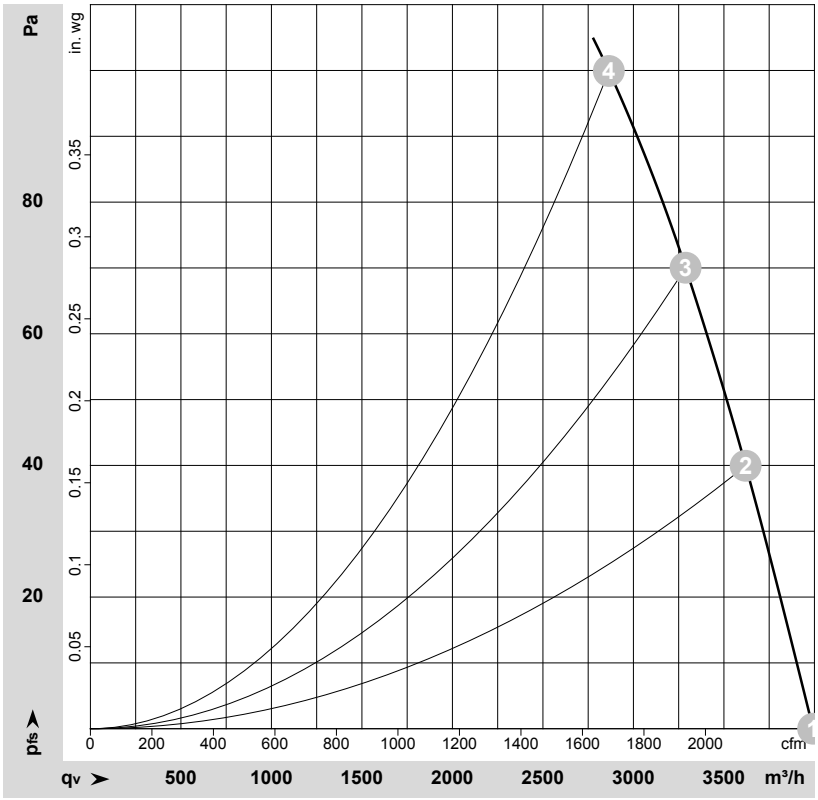
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-71991-1

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	m^3/h	Pa	cfm	in. wg
1	1~	230	60	1700	205	0.90	3995	0	2350	0.00
2	1~	230	60	1665	220	0.96	3620	40	2130	0.16
3	1~	230	60	1645	233	1.02	3290	70	1935	0.28
4	1~	230	60	1620	251	1.09	2865	100	1685	0.40

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