A4D350-AN08-22

AC axial fan

sickle-shaped blades (S series)

A4D350-AN08-22 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A4D350-AN08-22**
Motor	**M4D074-DF**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	230	265	360	400	460	460
Wiring		Δ	Δ	Y	Y	Y	Y
Frequency	Hz	50	60	60	50	60	60
Method of obtaining data		ml	ml	ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE	CE	UL 2111
Speed (rpm)	min^{-1}	1370	1600	1470	1370	1600	1600
Power consumption	W	170	255	210	170	255	265
Current draw	A	0.64	0.73	0.38	0.37	0.42	0.43
Max. back pressure	Pa	90	110	80	90	110	110
Max. back pressure	inH2O	0.36	0.44	0.32	0.36	0.44	0.44
Min. ambient temperature	°C	-25	-25	-25	-25	-25	-25
Max. ambient temperature	°C	65	55	55	65	55	55
Starting current	A	1.9	1.95		1.1	1.22	1.22

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	28.7	28.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40.1	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.16
09 Air flow q_v	m^3/h	2105
09 Pressure increase p_{fs}	Pa	82
10 Speed (rpm) n	min^{-1}	1375
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_{fs} / 100 000 Pa

LU-131044

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Technical description

Weight	3.1 kg
Fan size	350 mm
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Blade material	PP plastic
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. The degree of protection is only assured when the intended cable guard and terminal box are installed.
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2
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	Prepared for terminal box installation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection
Approval	UL 1004-1; CSA C22.2 No. 100

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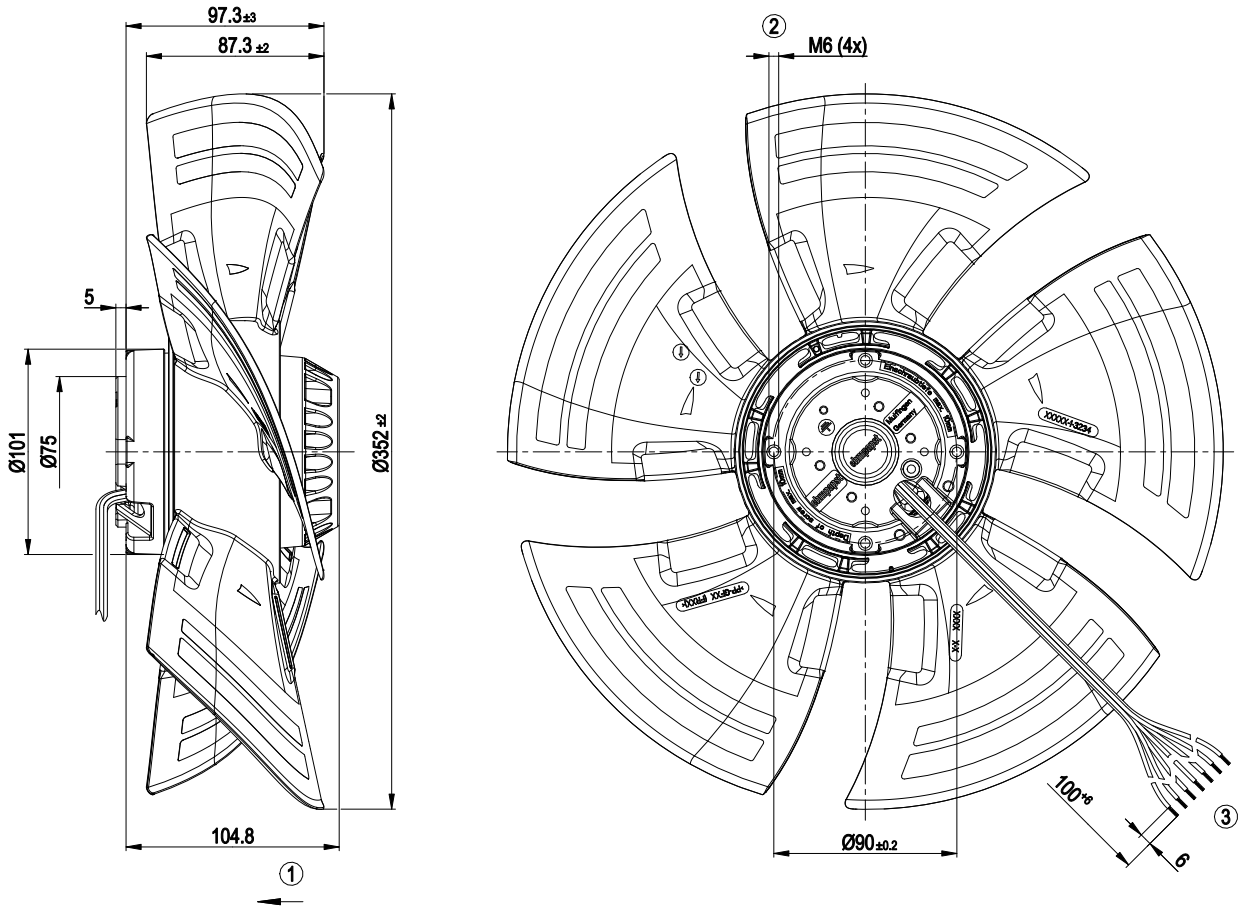
Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 10 mm
3	Cable halogen-silicone-free 7G 0.5 mm², 7x crimped splices

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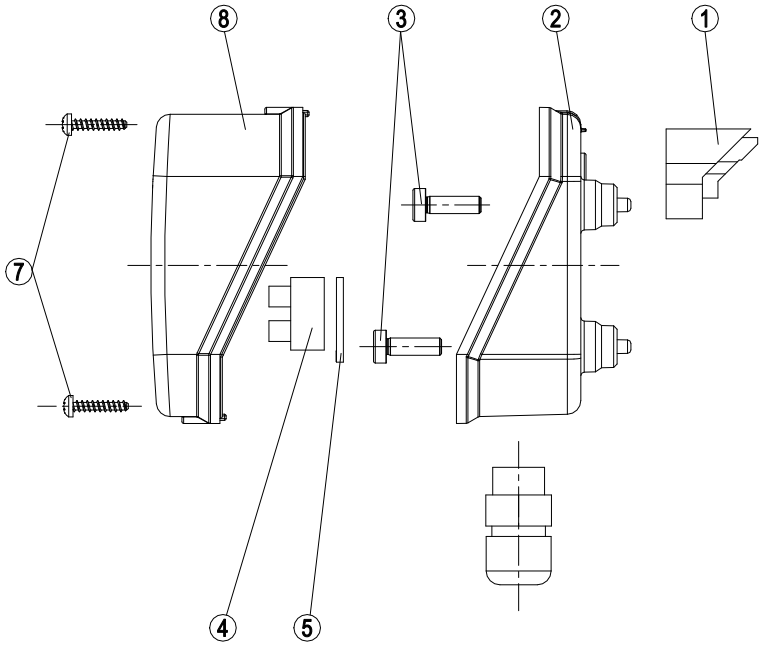
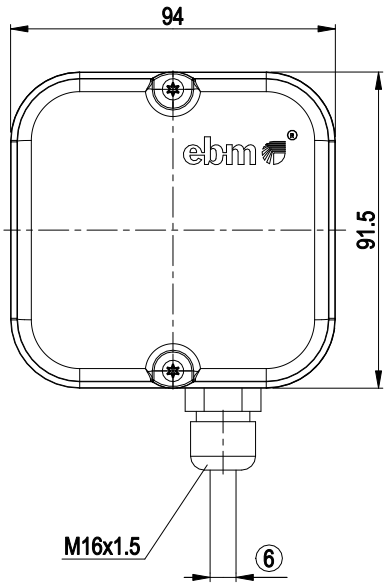
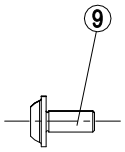
Accessory part







-	Accessory parts, included separately:
1	Grommet
2	Base of terminal box
3	Oval-head screw (2x), tightening torque 2.2 ± 0.3 Nm
4	Terminal strip
5	Labels
6	Cable gland, cable diameter min. 8 mm, max. 10 mm, tightening torque 1.3 ± 0.2 Nm
7	2x oval-head screws, tightening torque 0.5 ± 0.2 Nm
8	Terminal box cover
9	Oval-head screw (4x), tightening torque 5.5 ± 0.8 Nm

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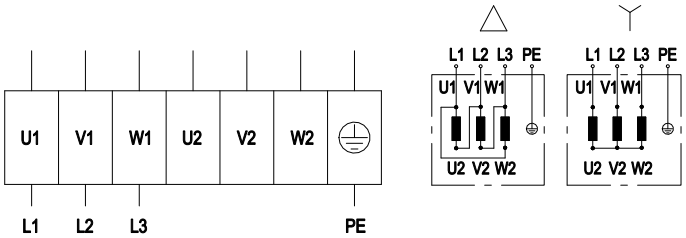
Connection diagram



	Three-phase motor	Y	Star connection	Δ	Delta connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	PE (green/yellow)				

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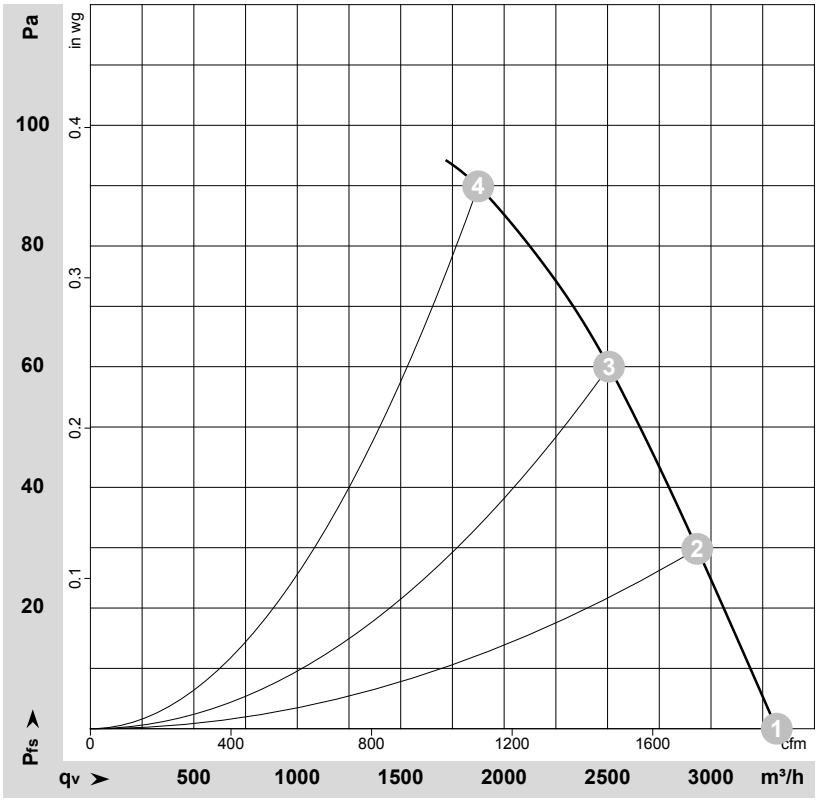
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-131044-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	Y	400	50	1405	136	0.34	61	69	3320	0	1955	0.00
2	Y	400	50	1395	148	0.35	59	66	2935	30	1725	0.12
3	Y	400	50	1380	158	0.35	56	64	2505	60	1475	0.24
4	Y	400	50	1370	170	0.37	56	64	1875	90	1105	0.36

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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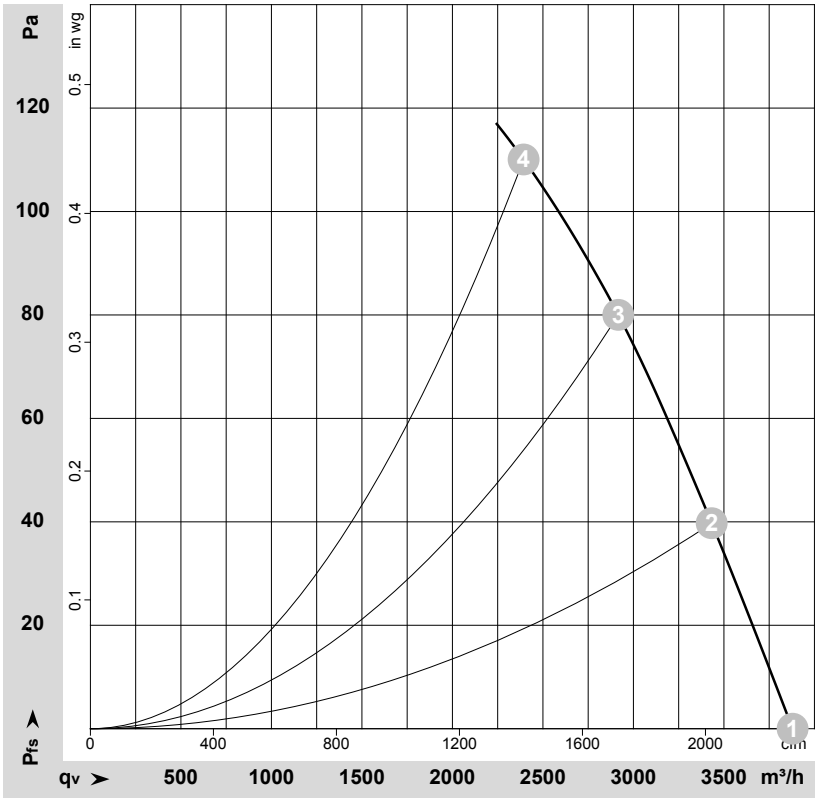
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-137385-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y	460	60	1655	199	0.37	3880	0	2285	0.00
2	Y	460	60	1635	219	0.39	3430	40	2020	0.16
3	Y	460	60	1615	238	0.40	2915	80	1715	0.32
4	Y	460	60	1600	255	0.42	2395	110	1410	0.44

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