A4D350-AA04-20

AC axial fan

straight blades (A series)

A4D350-AA04-20 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A4D350-AA04-20**
Motor	**M4D068-EC**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	255	255	440	440
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		-	-	-	-
Speed (rpm)	min^{-1}	1400	1600	1400	1600
Power consumption	W	140	200	140	200
Current draw	A	0.54	0.52	0.31	0.3
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	-	-	-	-

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}	%	31.2	28.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		42.7	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.15
09 Air flow q_v	m^3/h	1790
09 Pressure increase p_{fs}	Pa	98
10 Speed (rpm) n	min^{-1}	1325
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-138398

ebmpapst

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Technical description

Weight	3.2 kg
Fan size	350 mm
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. The degree of protection is only assured when the intended cable guard and terminal box are installed.
Insulation class	"B"
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 with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

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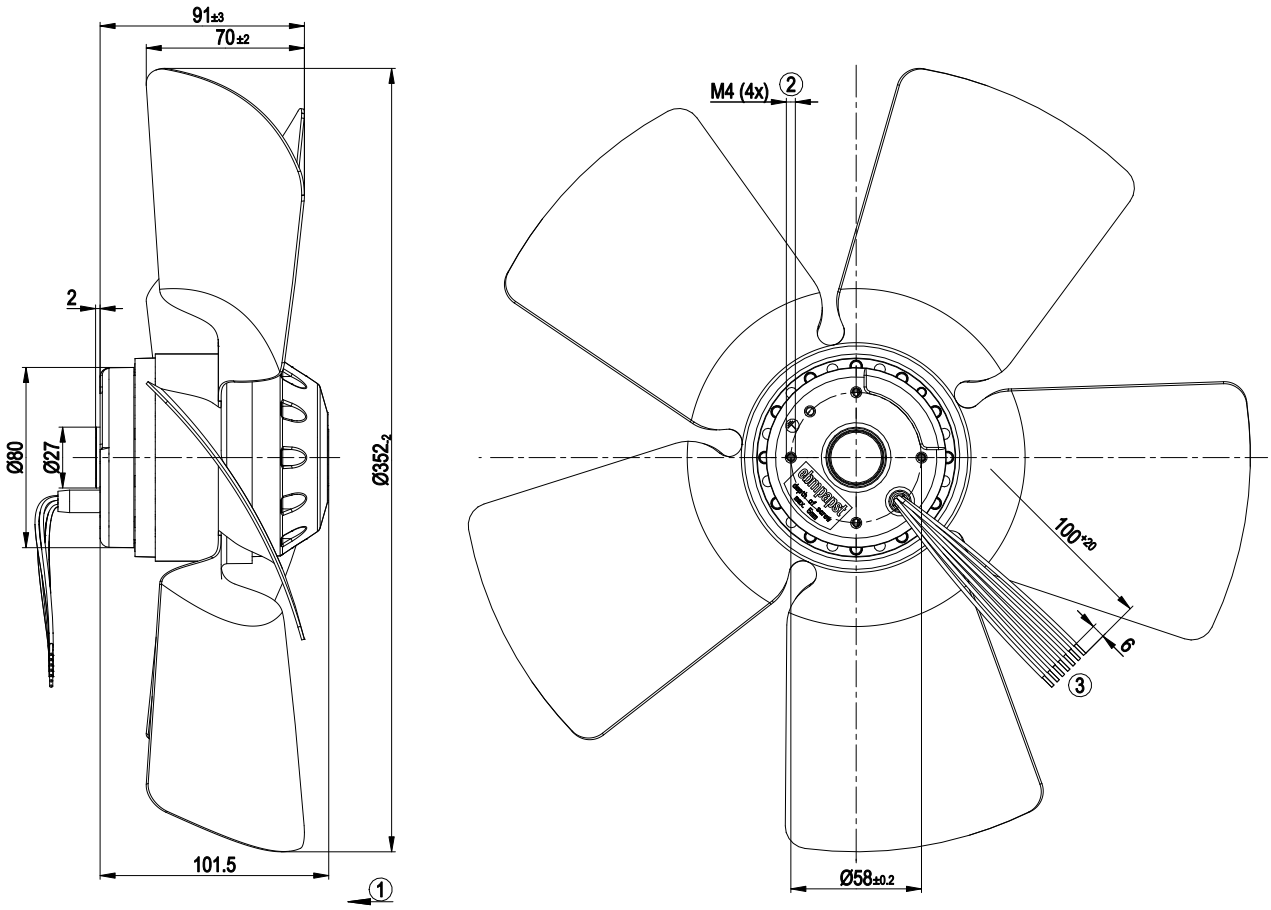
Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 5 mm
3	Cable Dipotherm 7G 0.5 mm², 7x tin-plated wire ends

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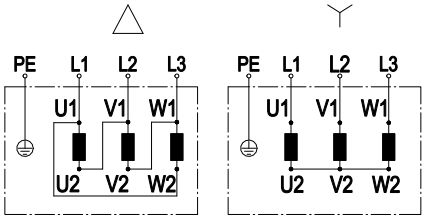
Connection diagram



Change of rotation direction by reversing two phases

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

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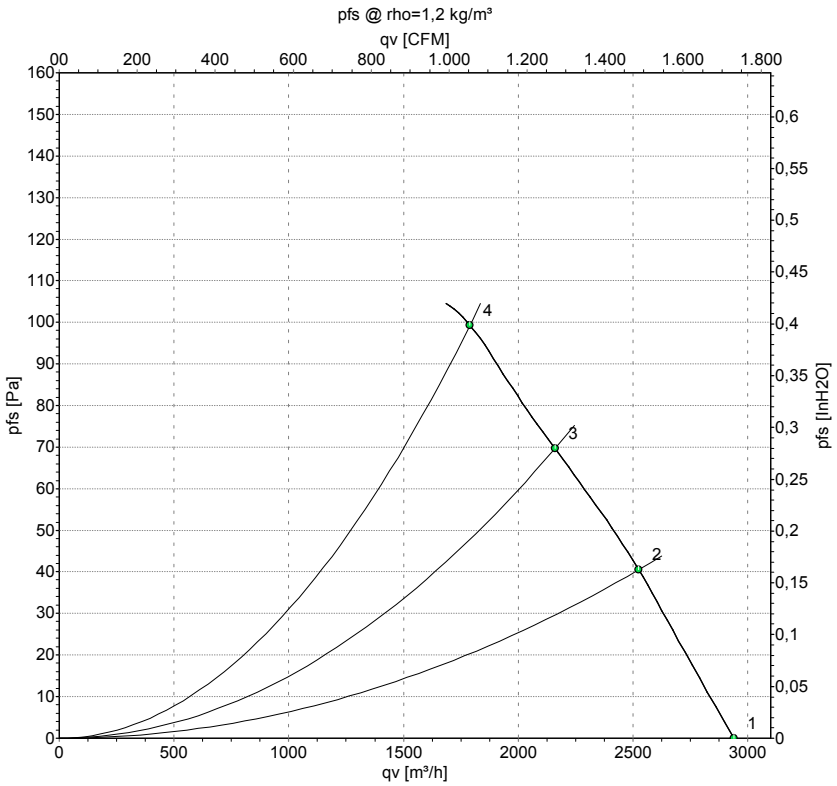
Curves: Air performance 50 Hz



Measurement: LU-138398-1

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	440	50	1400	140	0.31	2940	0	1730	0.00
2	Y	440	50	1355	140	0.31	2525	40	1485	0.16
3	Y	440	50	1345	143	0.31	2160	70	1270	0.28
4	Y	440	50	1325	155	0.31	1790	100	1055	0.40

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

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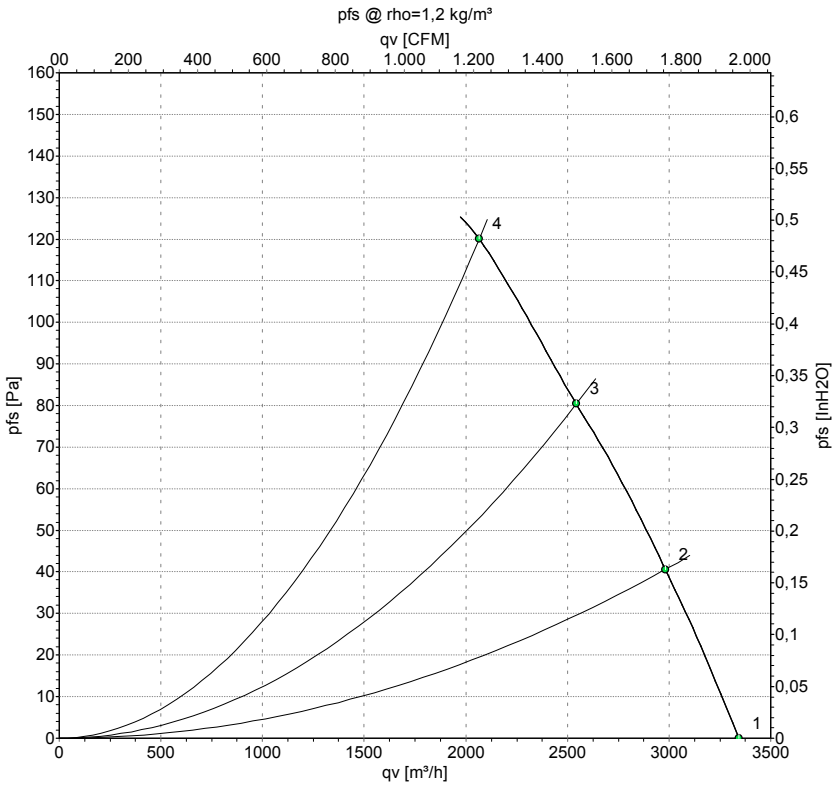
Curves: Air performance 60 Hz



Measurement: LU-138403-1

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	440	60	1600	200	0.30	3345	0	1970	0.00
2	Y	440	60	1545	200	0.32	2980	40	1755	0.16
3	Y	440	60	1520	213	0.34	2545	80	1495	0.32
4	Y	440	60	1490	229	0.36	2065	120	1215	0.48

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