

# AC axial fan

straight blades (A series), single-intake

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## Nominal data

Type	A2D200-AA02-19		
Motor	M2D068-CF		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	2800	3150
Power consumption	W	53	70
Current draw	A	0.15	0.14
Max. back pressure	Pa	75	100
Max. back pressure	in. wg	0.3	0.4
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	75	75
Starting current	A	0.47	0.45

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



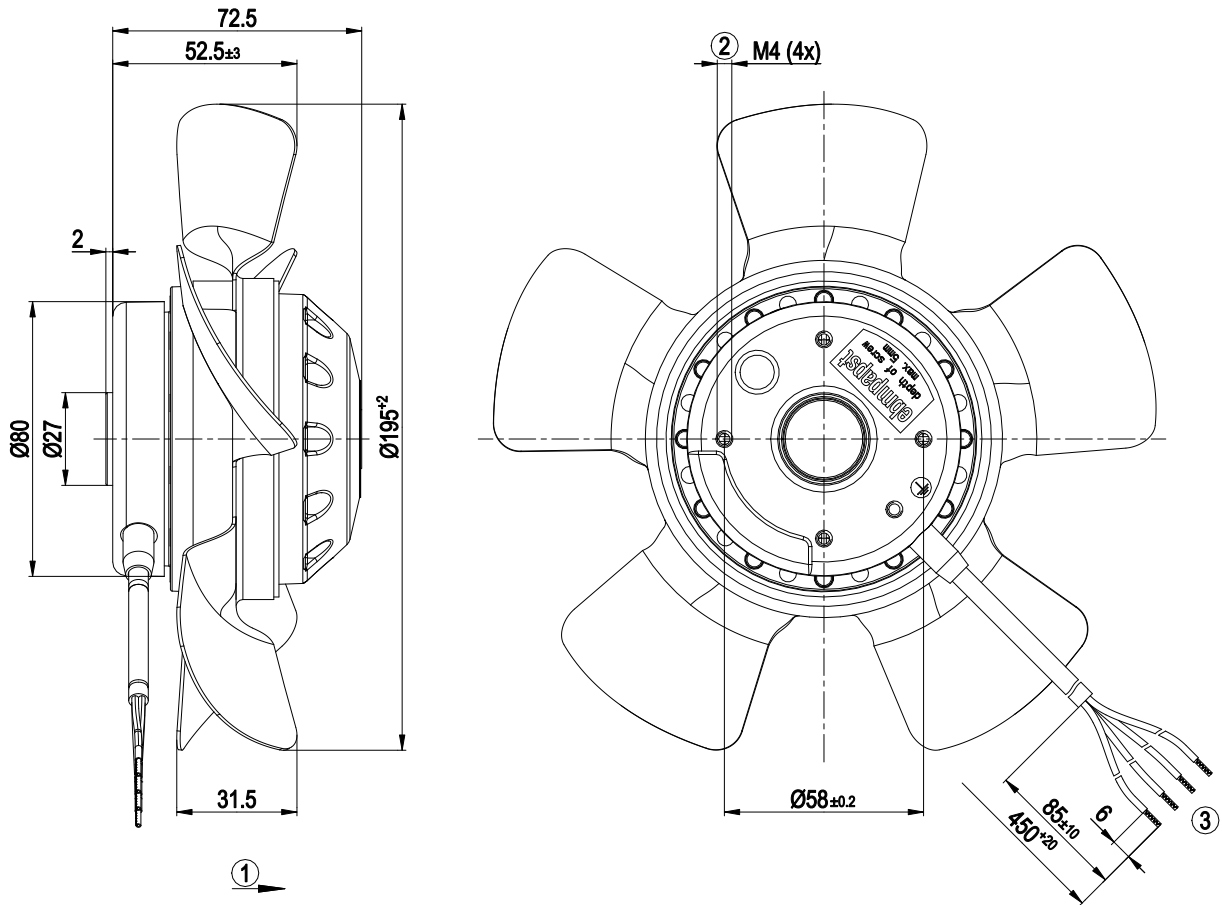
### Technical description

Weight	1.8 kg
Fan size	200 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F5
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection

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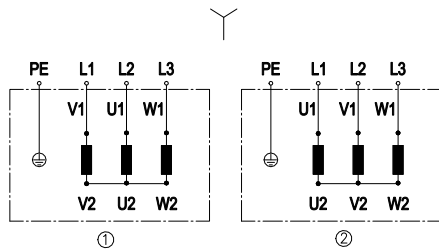
## Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm <sup>2</sup>
	4x splice



## Connection diagram



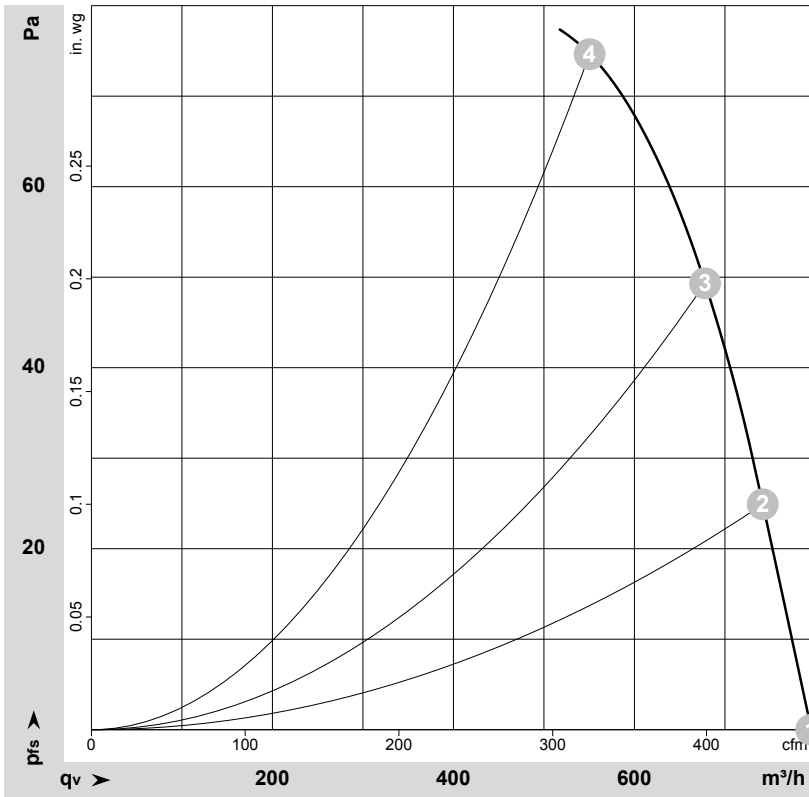
Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green/yellow

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## Curves: Air performance 50 Hz



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

Measurement: LU-58516-1

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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	Y	400	50	2800	53	0.15	795	0	470	0.00
2	Y	400	50	2780	54	0.15	740	25	435	0.10
3	Y	400	50	2775	55	0.15	680	50	400	0.20
4	Y	400	50	2775	55	0.15	550	75	325	0.30

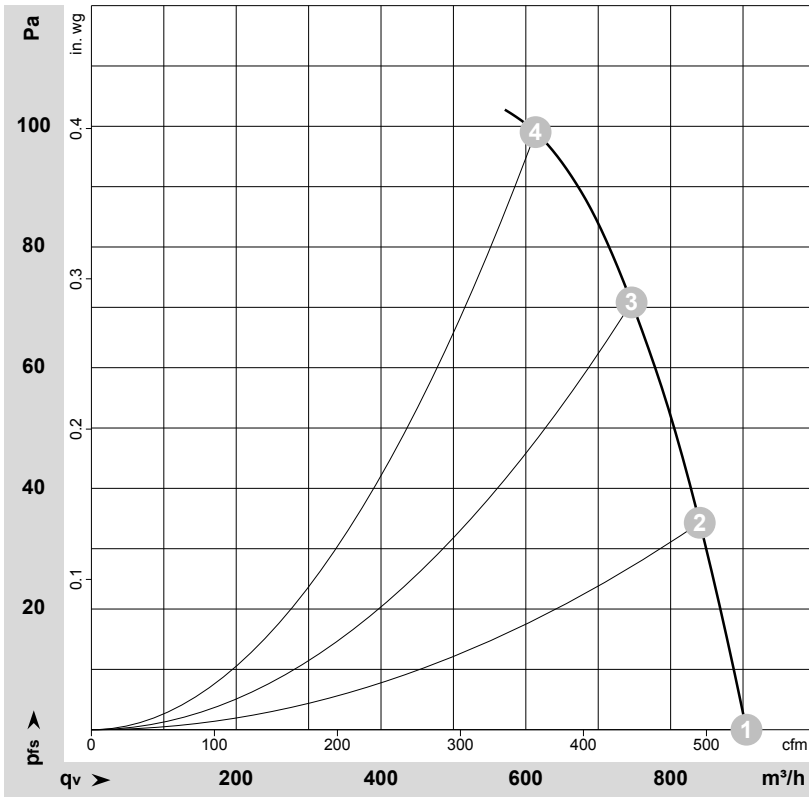
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



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## Curves: Air performance 60 Hz



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

Measurement: LU-58517-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 <sub>e</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	Y	400	60	3150	70	0.14	905	0	535	0.00
2	Y	400	60	3170	71	0.14	840	35	495	0.14
3	Y	400	60	3150	73	0.14	745	70	440	0.28
4	Y	400	60	3155	72	0.14	615	100	360	0.40

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

