

AC axial fan

straight blades (A series)

A2E165-AA17-01 ebmpapst Datasheet
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 Amtsgericht (court of registration) Stuttgart · HRA 590344
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Nominal data

Type	A2E165-AA17-01		
Motor	M2E068-CF		
Phase		1~	1~
Nominal voltage	VAC	240	240
Nominal voltage range	VAC	220 .. 240	220 .. 240
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2850	3400
Power consumption	W	40	42
Current draw	A	0.18	0.18
Capacitor	µF	1.5	1.5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. back pressure	Pa	65	90
Max. back pressure	inH ₂ O	0.26	0.36
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	-	-

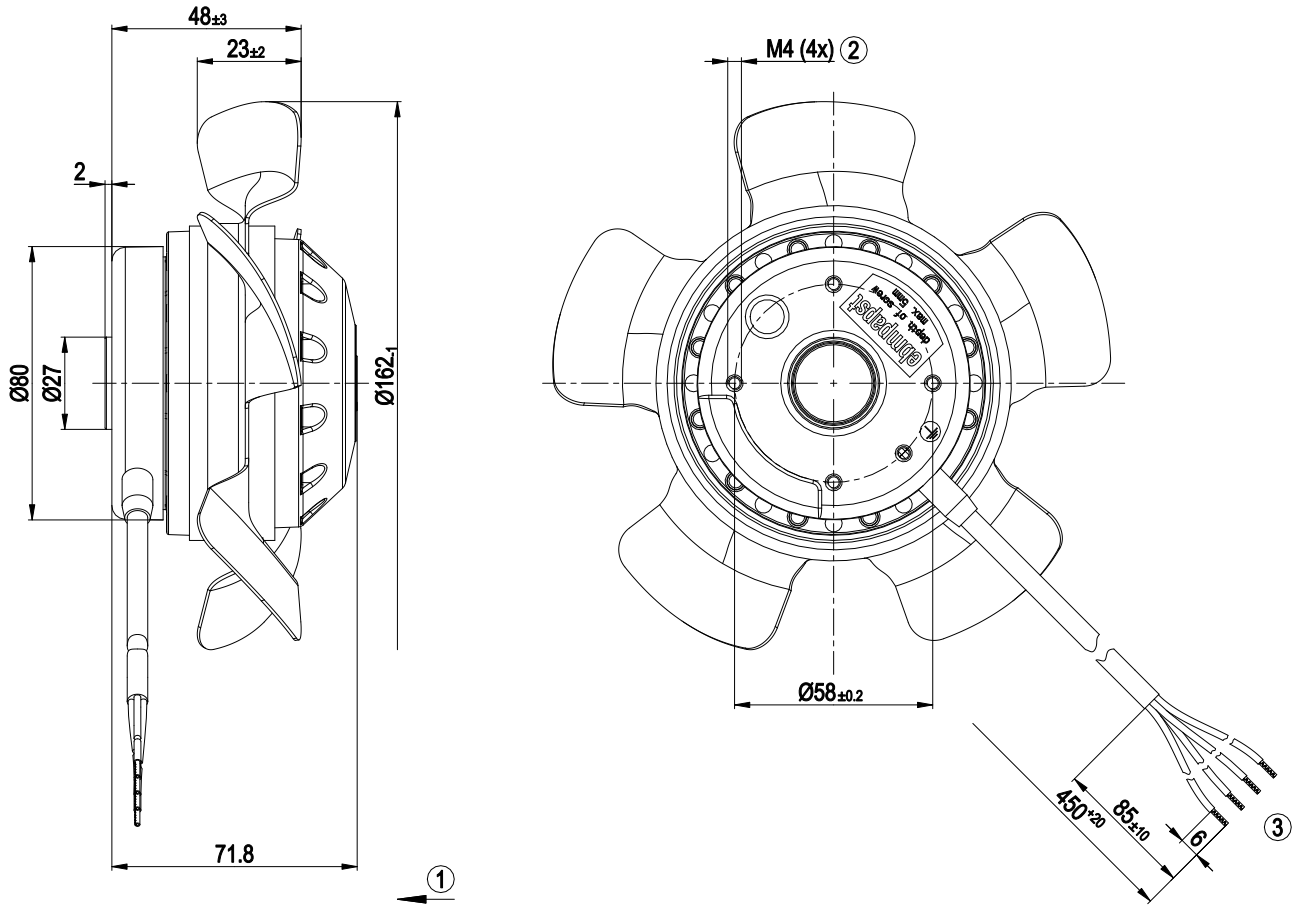
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
 Subject to change



Technical description

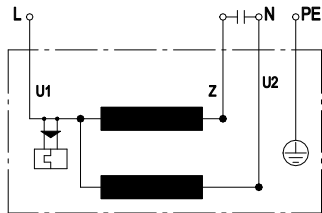
Weight	1.6 kg
Fan size	165 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / 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	Shaft horizontal or rotor on top; rotor on bottom on request
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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

Product drawing



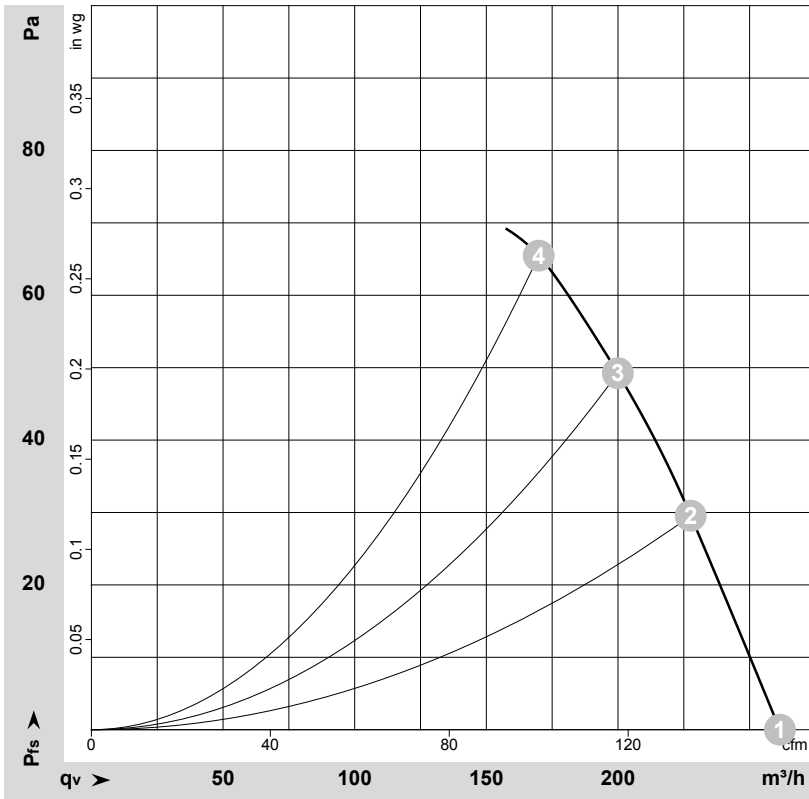
1	Airflow direction "V"
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm ² , 4x crimped splices

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

Curves: Air performance 50 Hz



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

Measurement: LU-7312-1

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.

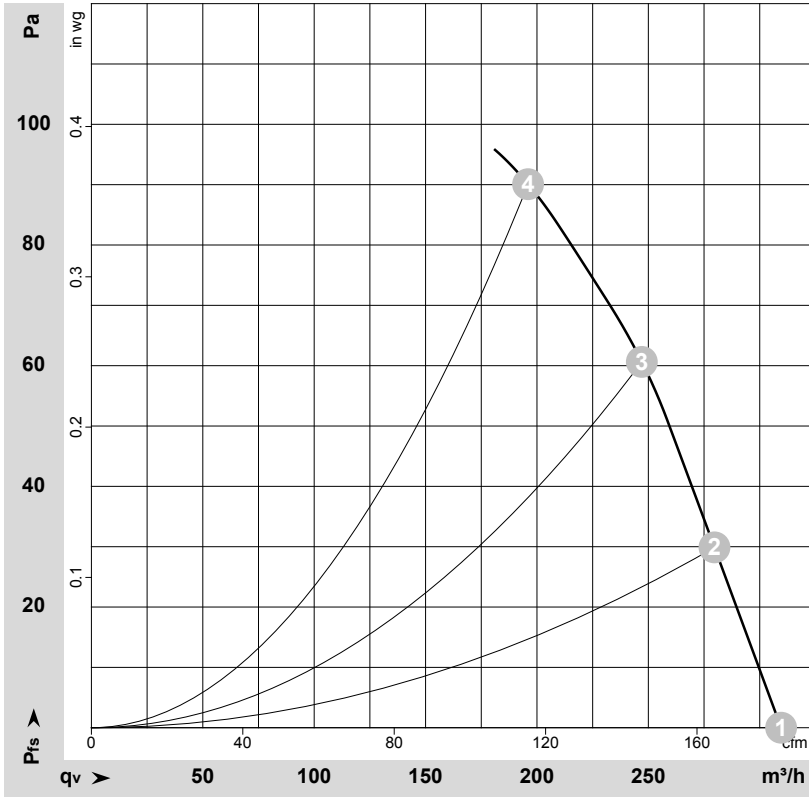
Measured values

	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	inH ₂ O
1	240	50	2850	40	0.18	260	0	155	0.00
2	240	50	2845	40	0.20	230	30	135	0.12
3	240	50	2845	40	0.20	200	50	120	0.20
4	240	50	2840	40	0.20	170	65	100	0.26

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



Curves: Air performance 60 Hz



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

Measurement: LU-7313-1

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

	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	inH2O
1	240	60	3400	42	0.18	310	0	180	0.00
2	240	60	3370	43	0.19	280	30	165	0.12
3	240	60	3360	44	0.19	245	60	145	0.24
4	240	60	3365	44	0.19	195	90	115	0.36

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

