AC axial compact fan

W2E142-BB05-01 ebmpapst Datesheet

sales@fansco.com

www.fansco.com

Nominal data

Type	W2E142-BB05-01		
Motor	M2E052-BA		
Phase		1~	1~
Nominalvoltage	VAC	115	115
Frequency	Hz	50	60
Methodofobtainingdata		fa	fa
Validforapproval/standard		CE	CE
Speed(rpm)	min^{-1}	2800	3350
Powerconsumption	W	27	28
Currentdraw	A	0.24	0.25
Capacitor	µF	3	3
Capacitorvoltage	VDB	220	220
Capacitorstandard		S0(CE)	S0(CE)
Min.ambienttemperature	°C	-25	-25
Max.ambienttemperature	°C	55	65

ml=Max.load·me=Max.efficiency·fa=Freeair·cs=Customerspecification·ce=Customerequipment
Subjecttochange

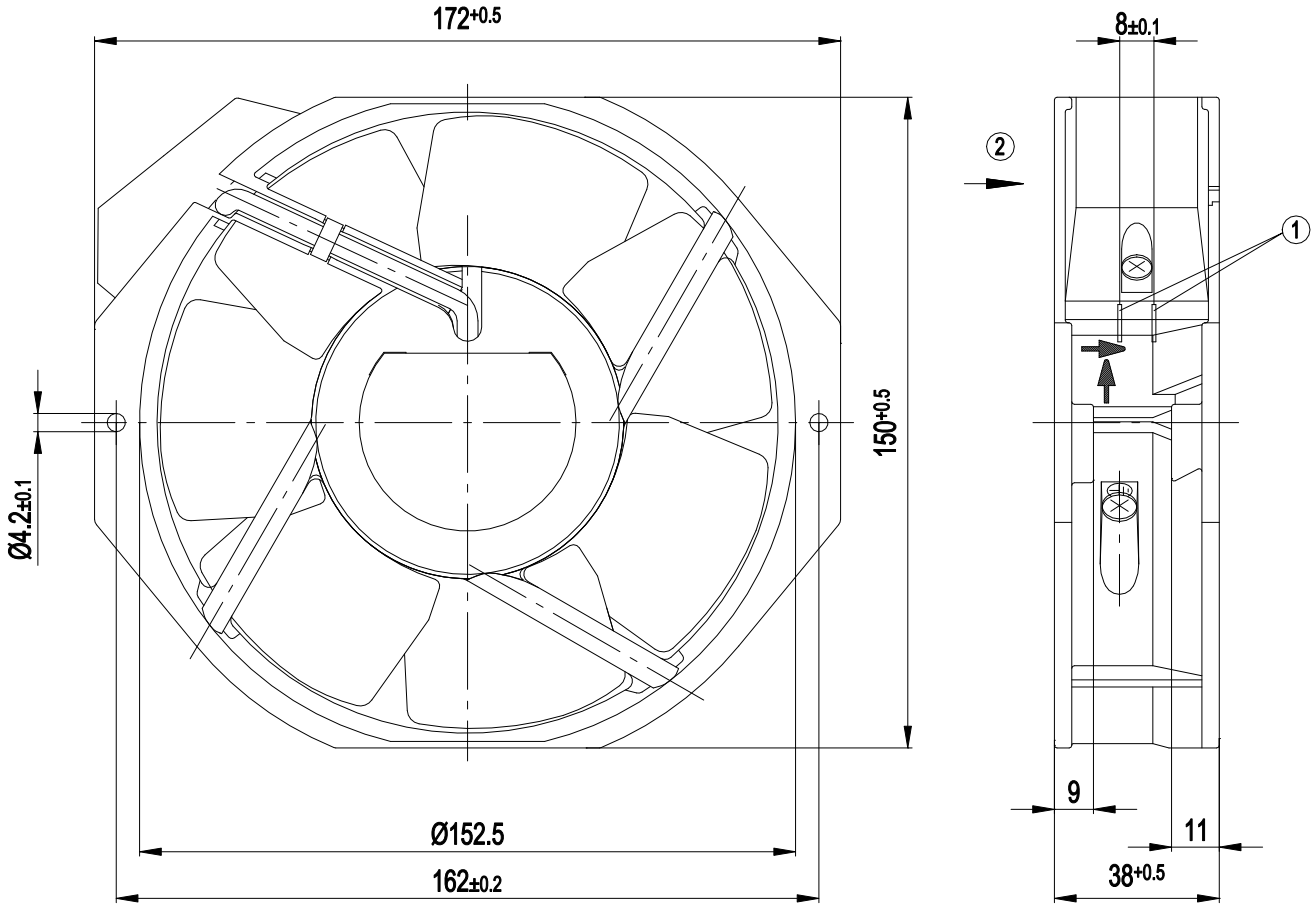
W2E142-BB05-01 ebmpapst Datesheet sales@fansco.com www.fansco.com

Technical description

Weight	0.77 kg
Size	142 mm
Motor size	52
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum, painted black
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP22; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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
Electrical hookup	Plug
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE; UKCA
Approval	UL 507; CSA C22.2 No. 113; VDE; EAC; CCC

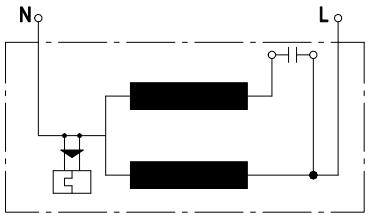
AC axial compact fan

Product drawing



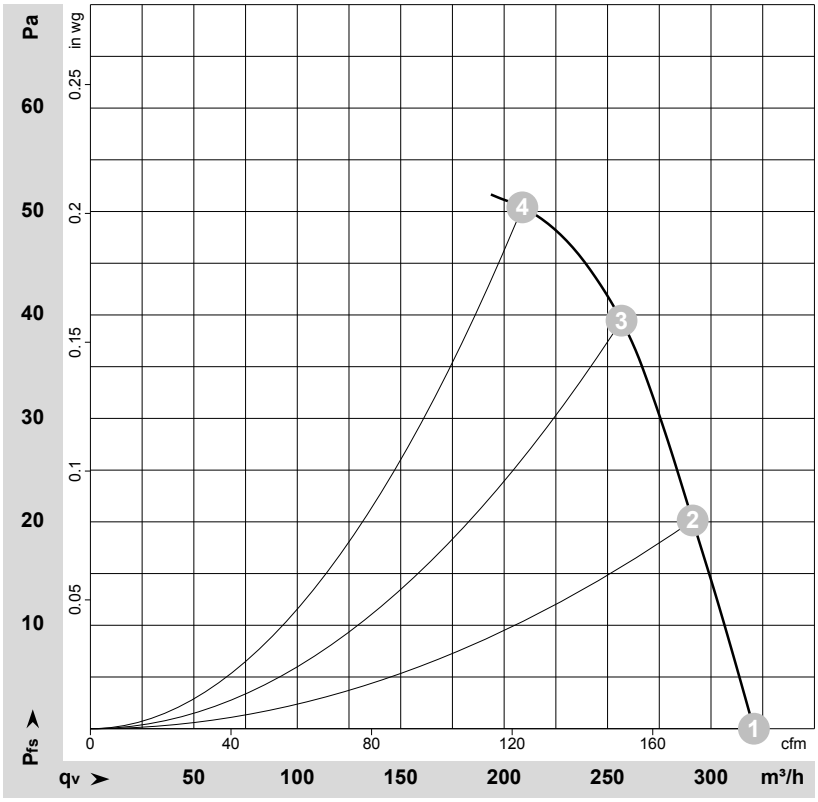
1	2x flat plug 2.8 x 0.5 mm
2	Direction of air flow "V"

Connection diagram



AC axial compact fan

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-64115-1

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.

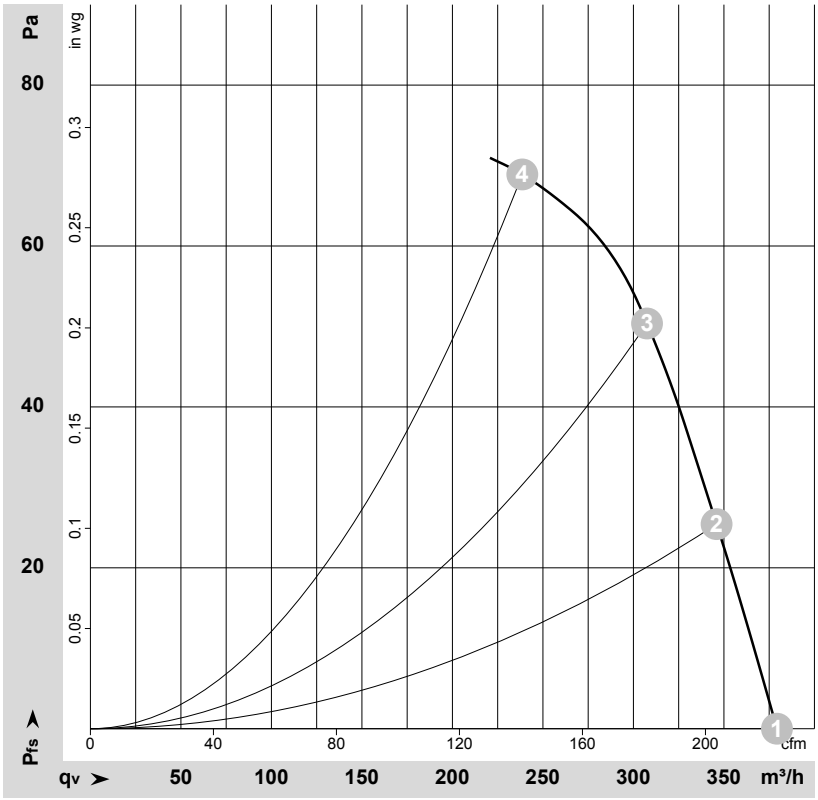
Measured values

	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	115	50	2800	27	0.24	320	0	190	0.00
2	115	50	2810	24	0.23	290	20	170	0.08
3	115	50	2780	25	0.23	255	40	150	0.16
4	115	50	2770	25	0.23	210	50	125	0.20

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

AC axial compact fan

Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-64116-1

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

	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	115	60	3350	28	0.25	380	0	225	0.00
2	115	60	3305	27	0.24	345	25	205	0.10
3	115	60	3255	28	0.24	310	50	180	0.20
4	115	60	3230	29	0.25	240	70	140	0.28

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