


Box Fan R87B

CSM_R87B_DS_E_4_3

Comprehensive Lineup of Single, Double, and Triple Axial Fans with Easy One-step Mounting

- Mounts in a square cutout and conceals the hole-cut to simplify installation work.
- Cover can be set to open either upward or downward for convenience in confined spaces.
- Enhanced accessories (finger guard, filter, plug cord, mounting screws).
- Optional Replacement Filter and Vent Attachment.
- The lineup includes Single, Double, and Triple Box Fans with eight models with plastic blades and eight models with metal blades.



 Refer to *Safety Precautions for All Axial Fans*.

Model Number Structure

Model Number Legend

R87B- A15 PF
 1 2 3 4 5

Attachment

R87B-N
 1 5

Options and Accessories

R87B-P
 1 6 7

Number	Category	Symbol	Meaning of symbol
1	Fan (blade material)	F T N	R87F Axial Fan (with plastic blades) R87T Axial Fan (with metal blades) No fan
	Optional parts	P	Options and accessories
2	Power supply classification	A1	100 VAC
		A3	115 VAC
		A4	200 VAC
		A6	230 VAC
3	Speed classification	H	High speed
		M	Middle speed
		L	Low speed
4	Airflow direction *	None	In
		R	Out
5	Number of fans	None	1
		2	2
		3	3
6	Part type	F	Filter
7	Reference number	01	---

Note: These tables show only how to read model numbers. They do not indicate which products are available. Refer to “*Ratings and Ordering Information*” when placing an order.

* “In” is the direction of external air flowing in.
 “Out” is the direction of internal air flowing out.

Ordering Information

Type	Number of fans	Model	Accessories
Plastic blades High speed	1	R87B-FA <u> </u> A15HPF(R)	Filter Finger guard Plug cord Mounting bolts
	2	R87B-FA <u> </u> A15HPF(R)2	
	3	R87B-FA <u> </u> A15HPF(R)3	
Plastic blades Low speed	1	R87B-FA <u> </u> A15LPPF(R)	
	2	R87B-FA <u> </u> A15LPPF(R)2	
	3	R87B-FA <u> </u> A15LPPF(R)3	
Metal blades High speed	1	R87B-TA <u> </u> A15HPF(R)	
	2	R87B-TA <u> </u> A15HPF(R)2	
	3	R87B-TA <u> </u> A15HPF(R)3	
Metal blades Medium speed	1	R87B-TA <u> </u> A15MPF(R)	
	2	R87B-TA <u> </u> A15MPF(R)2	
	3	R87B-TA <u> </u> A15MPF(R)3	
Attachment	For 1	R87B-N	Filter Finger guard Mounting screws
	For 2	R87B-N2	
	For 3	R87B-N3	
Replacement Filter	Any	R87B-PF01	Set of two filters

Ratings and Ordering Information

Item	Model	R87B-F	R87B-T
Motor type		Single-phase shading coil induction motor (2-pole, open type)	
Terminal type		Terminals	
Insulation class		IEC class B (130°C) UL class A (105°C) CSA class A (105°C)	IEC class B (130°C) UL class A (105°C)
Insulation resistance		100 MΩ min. (at 500 VDC) Between all power supply connection parts and non-current carrying metal parts	
Dielectric strength		2,000 VAC for 1 min Between all power supply connection parts and non-current carrying metal parts	
Ambient operating temperature		-30 to 70°C (with no icing)	-20 to 70°C (with no icing)
Storage temperature		-40 to 85°C (with no icing)	
Ambient humidity		25% to 85%	
Protection		Impedance protection	
Materials	Frame	Die-cast aluminum	
	Blades	Glass polycarbonate	Steel plate (black coating)
Bearings		Ball bearings	
Compliant standards*		PSE, EN/IEC 60335 (CE self-declaration)	
Certified standards*		UL/CSA	UL

Note: The rated current is the total for all fans.

* The compliant standards and certified standards apply to the listed Axial Fans.

Safety Precautions

Refer to *Safety Precautions for All Axial Fans*.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

In the interest of product improvement, specifications are subject to change without notice.

Ratings and Ordering Information

Airflow Direction: In

Item Model	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	Rated rotational speed (r/min) *		Maximum flow rate (m ³ /min) *		Maximum static pressure (Pa) *		Noise (dB) *		Weight
				50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	
R87B-FA1A15HPF	100	85% to 110% rated voltage	50/60	2,700	3,100	1.3	1.5	91	85	49	52	Approx. 1,120 g
R87B-FA3A15HPF	115											
R87B-FA4A15HPF	200											
R87B-FA6A15HPF	230											
R87B-FA1A15LPF	100	85% to 110% rated voltage	50/60	2,100	2,200	0.9	1.0	43	42	42	43	
R87B-FA3A15LPF	115											
R87B-FA4A15LPF	200											
R87B-FA6A15LPF	230											
R87B-TA1A15HPF	100	85% to 110% rated voltage	50/60	2,650	3,000	1.1	1.3	67	63	45	48	Approx. 1,150 g
R87B-TA3A15HPF	115											
R87B-TA4A15HPF	200											
R87B-TA6A15HPF	230											
R87B-TA1A15MPF	100	85% to 110% rated voltage	50/60	2,300	2,600	0.8	1.0	41	45	41	44	
R87B-TA3A15MPF	115											
R87B-TA4A15MPF	200											
R87B-TA6A15MPF	230											

Note: An asterisk (*) indicates a nominal value.

Airflow Direction: Out

Item Model	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	Rated rotational speed (r/min) *		Maximum flow rate (m ³ /min) *		Maximum static pressure (Pa) *		Noise (dB) *		Weight
				50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	
R87B-FA1A15HPFR	100	85% to 110% rated voltage	50/60	2,700	3,100	1.3	1.5	91	85	49	52	Approx. 1,120 g
R87B-FA3A15HPFR	115											
R87B-FA4A15HPFR	200											
R87B-FA6A15HPFR	230											
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R87B-FA3A15LPFR	115											
R87B-FA4A15LPFR	200											
R87B-FA6A15LPFR	230											
R87B-TA1A15HPFR	100	85% to 110% rated voltage	50/60	2,650	3,000	1.1	1.3	67	63	45	48	Approx. 1,150 g
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R87B-TA1A15MPFR	100	85% to 110% rated voltage	50/60	2,300	2,600	0.8	1.0	41	45	41	44	
R87B-TA3A15MPFR	115											
R87B-TA4A15MPFR	200											
R87B-TA6A15MPFR	230											

Note: An asterisk (*) indicates a nominal value.

- The data in this table comes from measurements that were taken with the filter and cover attached.
- The model number of the AC Axial Fan in the Box Fan can be determined from the model number of the Box Fan as follows:

R87B-FA1A15HPF→R87F-A1A15HP

The model number of the Axial Fan can be determined by extracting the underlined portions from the model number of the Box Fan as shown.