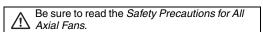
CSM_R87F_R87T_DS_E_3_2

Optimum Cooling with a Comprehensive Lineup of Axial Fans

- Low noise level, long service life, and resistance to the environment.
- Shaft supported by ball bearings for highly-reliable operation.
- Plastic-bladed models (44 type) and metal-bladed models (28 type) included in series.
- R87T-A□A15H-WR Water-resistant AC Axial Fans (IP X7 degree of protection) added to series.
- CE marking compliant and certified by UL and CSA.

Note: The compliant standards and certified safety standards depend on the product. Check the information given for available models of Axial fans and the information in *Characteristics*.





Model Number Structure

Model Number Legend

R87	- 🔲 🗀						-
1	2	3	4	5	6	7	8

Basi		

R87F: Plastic blade R87T: Metal blade

2. Rated voltage

A1: 100 VAC A3: 115 VAC A4: 200 VAC A6: 230 VAC

3. Frame material

A: Die-cast

4. Frame size 0: 150 dia.

1: 120 × 120 9: 92 × 92 8: 80 × 80

5. Frame thickness

3: 25 5: 38 7: 55

6. Rotational speed

H: High M: Medium L: Low

7. Terminal type

No marking: Lead wires

P: Terminals (See note 1.)

8. Type

No marking: Standard WR: Water-resistant

Note: 1. A Plug Cord (R87F-PC) is available as an option for models with terminals.

2. These tables show only how to read product markings. They do not indicate which products are available. Refer to "Ratings and Ordering Information" when ordering.

Ordering Information

Available Models

AC Axial Fans

Series	Size (mm)	Model	Datasheet available			
	$120\times120\times t38$	R87F-A□A15	Refer to page 2.			
R87F	$120\times120\times t25$	R87F-A□A13	Refer to page 4.			
(plastic	$92 \times 92 \times t25$	R87F-A□A93	Refer to page 6.			
blades)	$80 \times 80 \times t38$	Refer to page 8.				
	$80 \times 80 \times t25$	R87F-A□A83	Refer to page 10.			
·	$120\times120\times t38$	R87T-A□A15H-WR	Refer to page 12.			
	150-dia. × t55	R87T-A□A07	Refer to page 14.			
R87T (metal	150-dia. × t38	R87T-A□A05	Refer to page 16.			
blades)	$120\times120\timest38$	R87T-A□A15	Refer to page 18.			
	$80 \times 80 \times t38$	R87T-A□A85	Refer to page 20.			
	$80\times80\times t25$	R87T-A□A83	Refer to page 22.			

Options

Product name	Model	Datasheet available				
Plug Cord	R87F-PC	Refer to page 24.				
Finger Guard	R87F-FG□	Refer to page 25.				
Filter	R87F-FL□(S)	Refer to page 26.				

Note: Mounting screws are not provided.

Safety Precautions

Refer to the "Safety Precautions for All Axial Fans".

AC Axial Fans with Terminals (120 \times 120 \times t38 mm) $R87F-A\square A15$

Specifications

Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation	Frequency (Hz)	cur	ted rent) *	Rated input (W) *		Rated rotational speed (r/min) *		tational flow rate		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (%)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87F-A1A15HP	100			0.230	0.220								99.0	42	
R87F-A3A15HP	115	85% to 110%	50/60	0.200	0.180	15	1.4	0.750	2 200	2.7	3.1	93.1			46
R87F-A4A15HP	200	rated voltage	30/60	0.110		2,750	3,200	2.7	3.1	93.1	99.0	42	46		
R87F-A6A15HP	230			0.100	0.085										
R87F-A1A15MP	100			0.210	0.180	4-5		2,450	2,700	2.2	2.5	63.7	63.7	39	42
R87F-A3A15MP	115	85% to 110%	E0/60	0.190	0.160		4.4								
R87F-A4A15MP	200	rated voltage	50/60	0.100	0.090	15	14								
R87F-A6A15MP	230			0.085	0.075										
R87F-A1A15LP	100			0.170	0.150										
R87F-A3A15LP	115	85% to 110%	F0/00	0.150	0.130	4.4	10	0.400	0.050	2.0 2.1	0.1	44.4	44.4	00	38
R87F-A4A15LP	200	rated voltage	50/60	0.080	0.070	11	10	10 2,100	00 2,250		2.1	44.1	44.1	36	
R87F-A6A15LP	230			0.072	0.064										

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)
Insulation resistance	100 M Ω min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	−30 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Glass polycarbonate
Bearings	Ball bearings
Weight	Approx. 540 g
Compliant standards	PSE, EN/IEC 60335 (CE marking compliant)
Certified standards	UL/CSA

Screw hole for grounding

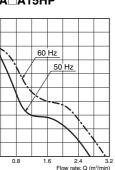
M4 screw: 0.7 pitch

Terminal shape

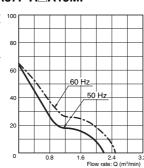
Faston #110 terminals (or equivalent)

Flow Rate and Static Pressure Characteristics (Reference Values)

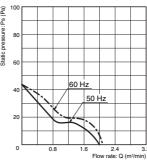
R87F-A□A15HP



R87F-A□A15MP



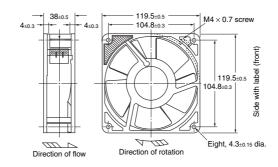
R87F-A□A15LP



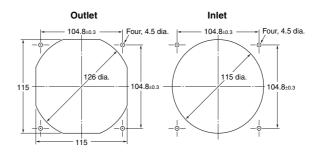
Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)





Panel Cutouts



Options

Name	Model	Datasheet available
Plug Cord	R87F-PC	Refer to page 24.
Finger Guard	R87F-FG120	Refer to page 25.
Filter	R87F-FL120(S)	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Terminals (120 \times 120 \times t25 mm) R87F-A A13

Specifications

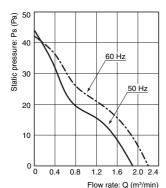
Ratings and Ordering Information

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

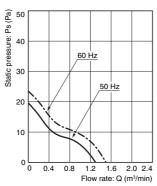
Item Rated voltage (V)		Permitted voltage fluctuation range (%)	Frequency (Hz)	cur	ted rent) *	Rated (W	input) *	rotat	ted ional eed in) *	flow	mum rate nin) *	sta pres	mum itic sure i) *		e (dB) *
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87F-A1A13HP	100			0.180	0.150										
R87F-A3A13HP	115	85% to 110%	E0/60	0.160	0.130	14	12	2,400	2,800	1.9	2.2	44.1	42.2	39	43
R87F-A4A13HP	200	rated voltage	50/60	0.096	0.078		12	2,400							
R87F-A6A13HP	230			0.085	0.068										
R87F-A1A13LP	100			0.140	0.110										
R87F-A3A13LP	115	85% to 110% rated voltage 50/60	F0/00	0.130	0.100	10	10	1 700	0.000	4.0	4.5	10.0	00.5	00	0.4
R87F-A4A13LP	200		0.070	0.055	12	10	1,700	2,000	1.3	1.5	19.6	23.5	32	34	
R87F-A6A13LP	230		0.052	0.045											

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)
Insulation resistance	100 M Ω min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-30 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Glass polycarbonate
Bearings	Ball bearings
Weight	Approx. 350 g
Compliant standards	PSE, EN/IEC 60335 (CE marking compliant)
Certified standards	UL/CSA

R87F-A□A13HP



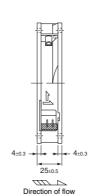
R87F-A□A13LP

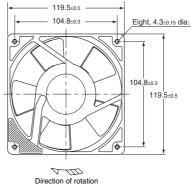


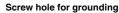
Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)









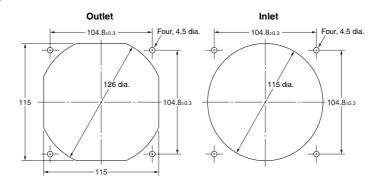


Terminal shape



Faston #110 terminal (or equivalent)

Panel Cutouts



Options

Name	Model	Datasheet available					
Plug Cord	R87F-PC	Refer to page 24.					
Finger Guard	R87F-FG120	Refer to page 25.					
Filter	R87F-FL120(S)	Refer to page 26.					

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Terminals (92 \times 92 \times t25 mm) $R87F\text{-}A\square A93$

Specifications

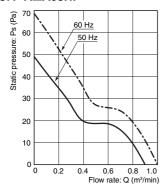
Ratings and Ordering Information

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

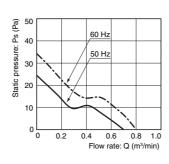
Item Rate Voltag (V)		Permitted voltage fluctuation range (%)	Frequency (Hz)	cur	ted rent) *	Rated (W	input) *	rotat spe	ted ional eed in) *	_	mum rate nin) *	Maxi sta pres (Pa	tic		e (dB) *	
Model		range (%)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	
R87F-A1A93HP	100				0.150	0.130										
R87F-A3A93HP	115	85% to 110%	50/60	0.125	0.100	13	11	2.550	3,050	0.9	1.0	49.0	68.6	33	36	
R87F-A4A93HP	200	rated voltage	50/60	0.070	0.060		11	2,550								
R87F-A6A93HP	230			0.055	0.050											
R87F-A1A93LP	100	85% to 110% rated voltage 50/60			0.100	0.085										
R87F-A3A93LP	115		F0/00	0.090	0.075	7	_	1,900	2,200	0.7	0.8	24.5	34.3	00	00	
R87F-A4A93LP	200		50/60	0.050	0.043	/	7 6							29	32	
R87F-A6A93LP	230			0.045	0.040											

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)
Insulation resistance	100 MΩ min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-30 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Glass polycarbonate
Bearings	Ball bearings
Weight	Approx. 300 g
Compliant standards	PSE, EN/IEC 60335 (CE marking compliant)
Certified standards	UL/CSA

R87F-A□A93HP



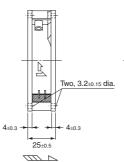
R87F-A□A93LP

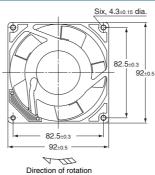


Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)







Screw hole for grounding



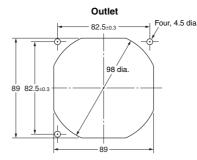
Terminal shape

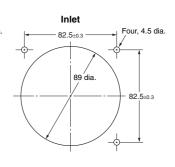


Panel Cutouts

Direction of flow

Panel cutting reference dimensions (note 3 mounting holes)





Options

Name	Model	Datasheet available
Plug Cord	R87F-PC	Refer to page 24.
Finger Guard	R87F-FG90	Refer to page 25.
Filter	R87F-FL90	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Terminals (80 \times 80 \times t38 mm) $R87F-A \square A85$

Specifications

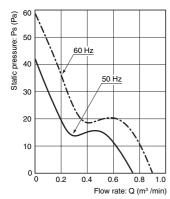
Ratings and Ordering Information

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

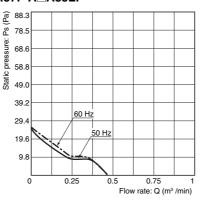
Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)			Rated input rot		Rated rotational speed (r/min) *		flow rate		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87F-A1A85HP	100			0.140	0.115										
R87F-A3A85HP	115	85% to 110%	50/60	0.120	0.100	10	9	2.700	2 200	0.0	0.9	42.1	58.8	32	36
R87F-A4A85HP	200	rated voltage	50/60	0.080	0.060	10	9	2,700	3,200	8.0	0.9	42.1	36.6	32	36
R87F-A6A85HP	230			0.060	0.050										
R87F-A1A85LP	100			0.090	0.080										
R87F-A3A85LP	115	85% to 110%	F0/00	0.080	0.070	7	_	0.000	0.500	0.0	0.7	05.0	00.0	00	00
R87F-A4A85LP	200	rated voltage	50/60	0.050	0.040	1	6	2,200	2,500	0.6	0.7	25.0	32.0	26	29
R87F-A6A85LP	230			0.040	0.040										

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)
Insulation resistance	100 M Ω min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-30 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Glass polycarbonate
Bearings	Ball bearings
Weight	Approx. 280 g
Compliant standards	PSE, EN/IEC 60335 (CE marking compliant)
Certified standards	UL/CSA

R87F-A□A85HP



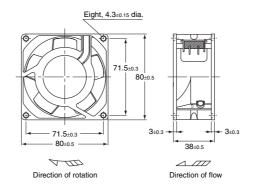
R87F-A□A85LP



Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)





Screw hole for grounding

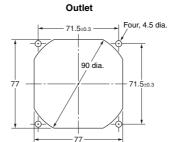


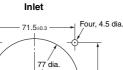
Terminal shape



Faston #110 terminal (or equivalent)

Panel Cutouts





Options

Name	Model	Datasheet available
Plug Cord	R87F-PC	Refer to page 24.
Finger Guard	R87F-FG80	Refer to page 25.
Filter	R87F-FL80	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Lead Wires (80 \times 80 \times t25 mm) $R87F\text{-}A\square A83$

Specifications

Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	cur	ted rent) *		input)*	Rated rotational speed (r/min) *		ional flow rate		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (76)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87F-A1A83H	100			0.097	0.080										
R87F-A3A83H	115	85% to 110%	50/60	0.085	0.070	7	6	2.600	2 000	0.6	0.7	39.2	53.9	32	36
R87F-A4A83H	200	rated voltage	50/60	0.048	0.041	/	О	2,000	3,000	0.6	0.7	39.2	53.9	32	36
R87F-A6A83H	230			0.046	0.039										
R87F-A1A83L	100			0.063	0.055										
R87F-A3A83L	115	85% to 110%	F0/00	0.055	0.048	_	4	1 000	0.400	0.4	0.5	10.5	00.5	00	00
R87F-A4A83L	200	rated voltage	50/60	0.033	0.030	5	4	1,900	2,100	0.4	0.5	19.5	23.5	28	30
R87F-A6A83L	230			0.028	0.024										

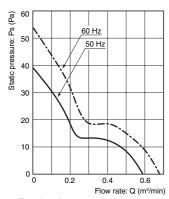
Motor type	Single-phase shading coil induction motor (2-pole, open type)
Terminal type	Lead wires
Insulation class	IEC class B (130°C) UL class A (105°C) CSA class A (105°C)
Insulation resistance	100 MΩ min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	−30 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Glass polycarbonate
Bearings	Ball bearings
Weight	Approx. 230 g
Compliant standards	EN/IEC 60335 (CE marking compliant)
Certified standards	UL/CSA

Screw hole for grounding M4 screw: 0.7 pitch

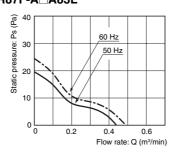
Four, 4.5 dia

Flow Rate and Static Pressure Characteristics (Reference Values)

R87F-A□A83H



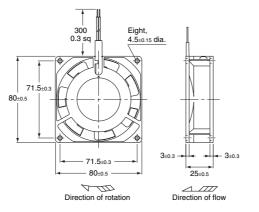
R87F-A□A83L



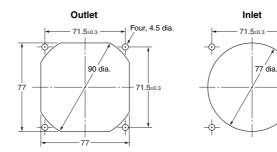
Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)





Panel Cutouts



Options

Names	Model	Datasheet available
Finger Guard	R87F-FG80	Refer to page 25.
Filter	R87F-FL80	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Water-resistant AC Axial Fans with Lead Wires (120 \times 120 \times 138 mm) $R87T-A \square A15H-WR$

Specifications

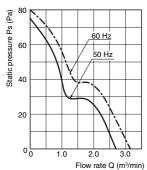
Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	(A) *		t Rated input		Rated rotational speed (r/min) *		Maximum flow rate (m³/min) *		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87T-A1A15H-WR	100			0.350	0.280										
R87T-A3A15H-WR	115	85% to 110%	50/60	0.300	0.240	22	20	0.550	0.000	2.7	3.2	75.0	00.0	42	46
R87T-A4A15H-WR	200	rated voltage	50/60	0.170	0.135			2,550	2,900	2.7	3.2	75.0	80.0	42	40
R87T-A6A15H-WR	200 to 230			0.145	0.115	15 to 2	22								

Motor type		Single-phase shading coil induction motor (2-pole, open type)					
Terminal type		Lead wires					
Insulation class		IEC class B (130°C) UL class A (105°C) CSA class A (105°C)					
Insulation resist	ance	100 $M\Omega$ min. (at 500 VDC) between all power supply connections and uncharged metal parts.					
Insulation withst	tand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.					
Degree of protect	tion	P X7					
Ambient operating temperature		-20 to 70°C (no icing)					
Ambient storage temperature		-40 to 85°C (no icing)					
Ambient humidit	ty	95% max.					
Protection		Impedance protection					
Materials	Frame	Die-cast aluminum Black coating					
	Blades	Zinc die-cast					
Bearings		Ball bearings					
Weight		Approx. 650 g					
Standards		EN/IEC 60335 (CE marking compliant)					
Certified standar	rds	cUL					

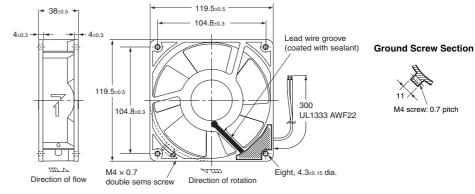
R87T-A□A15H-WR



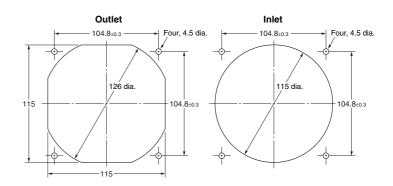
Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)





Panel Cutouts



Options

Name	Model	Page number
Finger Guard	R87F-FG120	Refer to page 25.
Filter	R87F-FL120(S)	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Lead Wires (150-dia. \times t55 mm) $R87T-A \square A07$

Specifications

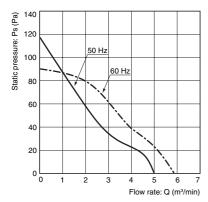
Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	current (A) *		Rated input (W) *		Rated rotational speed (r/min) *		Maximum flow rate (m³/min) *		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87T-A1A07H	100			0.480	0.420										
R87T-A3A07H	115	85% to 110%	50/60	0.420	0.370	40	40	0.000	0.050	F 0	F 0	110	88	52	F.C.
R87T-A4A07H	200	rated voltage	50/60	0.240	0.210	43	40	2,800	3,250	5.0	5.8	118	00	52	56
R87T-A6A07H	230			0.210	0.190										

Motor type	Single-phase shading coil induction motor (2-pole, open type)
Terminal type	Lead wires
Insulation class	IEC class B (130°C) UL class A (105°C)
Insulation resistance	100 M Ω min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-20 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Thermal protection
Materials	Frame: Die-cast aluminum Blades: Steel plate (black coating)
Bearings	Ball bearings
Weight	Approx. 1,200 g
Compliant standards	EN/IEC 60335 (CE marking compliant)
Certified standards	UL

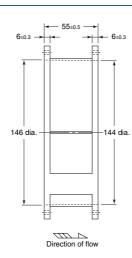
R87T-A□A07H

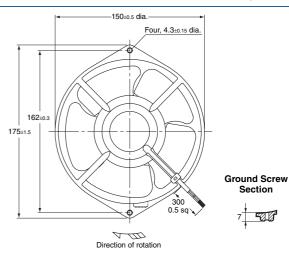


Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

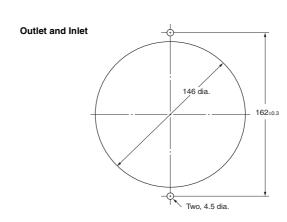
Dimensions (Unit: mm)







Panel Cutouts



Options

Name	Model	Datasheet available					
Finger Guard	R87F-FG150	Refer to page 25.					

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Lead Wires (150-dia. \times t38 mm) $R87T\text{-}A\Box A05$

Specifications

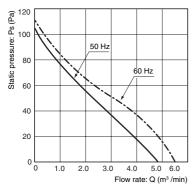
Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	CUTTON		Rated input (W) *		Rated rotational speed (r/min) *		flow rate		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87T-A1A05H	100			0.550	0.460										
R87T-A3A05H	115	85% to 110%	E0/60	0.470 0.390	50	50 40	0.050	0.400	4.0		104	407	56	50	
R87T-A4A05H	200	rated voltage	9	0.260	0.220	50	48	2,650	3,100	4.8	5.7	104	107	90	58
R87T-A6A05H	230			0.220	0.190										

Motor type	Single-phase shading coil induction motor (2-pole, open type)
Terminal type	Lead wires
Insulation class	IEC class B (130°C) UL class A (105°C)
Insulation resistance	100 M Ω min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-20 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Thermal protection
Materials	Frame: Die-cast aluminum Blades: Steel plate (mat black baked coating)
Bearings	Ball bearings
Weight	Approx. 840 g
Compliant standards	EN/IEC 60335 (CE marking compliant)
Certified standards	UL

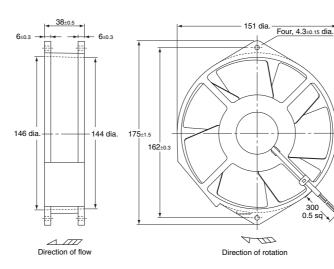
R87T-A□A05H



Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)

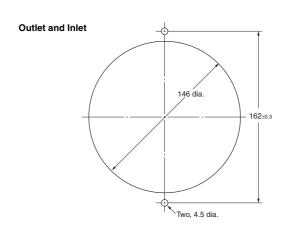








Panel Cutouts



Options

Name	Model	Datasheet available
Finger Guard	R87F-FG150	Refer to page 25.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Terminals (120 \times 120 \times t38 mm) R87T-A A 5

Specifications

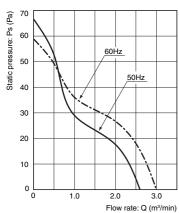
Ratings and Ordering Information

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

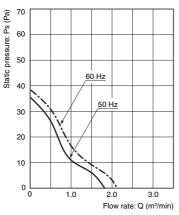
Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	cur	ted rent) *	Rated (W	input) *	Rated rotational speed (r/min) *		rotational speed		rotational speed		rotational speed		rotational speed		rotational flow		Maximum static pressure (Pa) *		Noise (dB)	
Model		range (%)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz								
R87T-A1A15HP	100			0.250	0.210																		
R87T-A3A15HP	115	85% to 110%	50/60	0.215	0.190	20	18 2	2,700	3,100	2.6	3.0	66.6	58.8	42	46								
R87T-A4A15HP	200	rated voltage		0.130	0.110																		
R87T-A6A15HP	230			0.105	0.095																		
R87T-A1A15MP	100			0.220	0.190			2,350	2,750														
R87T-A3A15MP	115	85% to 110%	50/00	0.200	0.170	10	14			4 7	0.0	00.7	07.0	00	40								
R87T-A4A15MP	200	rated voltage 5		0.110	0.100	16				1.7	2.0	36.7	37.3	36	40								
R87T-A6A15MP	230			0.100	0.085																		

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)
Insulation resistance	100 MΩ min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-20 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Steel plate (black coating)
Bearings	Ball bearings
Weight	Approx. 570 g
Compliant standards	PSE, EN/IEC 60335 (CE marking compliant)
Certified standards	UL

R87T-A□A15HP



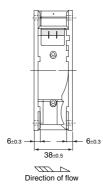
R87T-A□A15MP

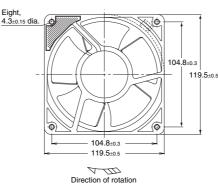


Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)







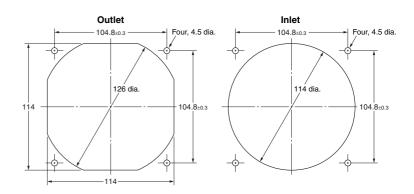
Screw hole for grounding



Terminal shape



Panel Cutouts



Options

Name	Model	Datasheet available
Plug Cord	R87F-PC	Refer to page 24.
Finger Guard	R87F-FG120	Refer to page 25.
Filter	R87F-FL120(S)	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Lead Wires (80 \times 80 \times t38 mm) $R87T\text{-}A\Box A85$

Specifications

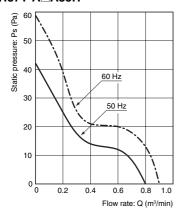
Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	cur	Rated current (A) *				Maximum flow rate (m³/min) *		Maximum static pressure (Pa) *		Noise (dB)		
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87T-A1A85H	100			0.180	0.160										
R87T-A3A85H	115	85% to 110%	E0/60	0.155 0.135	10	40 40	0.000	0.000	0.00	0.00	40	50	07	40	
R87T-A4A85H	200	rated voltage 50/60	50/60	0.085	0.075	12	10	2,800	3,300	0.80	0.90	42	58	37	40
R87T-A6A85H	230			0.080	0.070										

Motor type	Single-phase shading coil induction motor (2-pole, open type)
Terminal type	Lead wires
Insulation class	IEC class B (130°C) UL class A (105°C)
Insulation resistance	100 MΩ min. (at 500 VDC) between all power supply connections and uncharged metal parts.
Insulation withstand voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.
Ambient operating temperature	-20 to 70°C (no icing)
Ambient storage temperature	-40 to 85°C (no icing)
Ambient humidity	25% to 85%
Protection	Impedance protection
Materials	Frame: Die-cast aluminum Blades: Steel plate (black coating)
Bearings	Ball bearings
Weight	Approx. 440 g
Compliant standards	EN/IEC 60335 (CE marking compliant)
Certified standards	UL

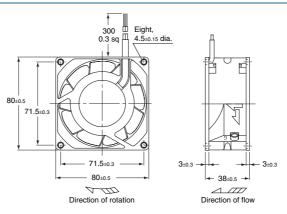
R87T-A□A85H



Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)

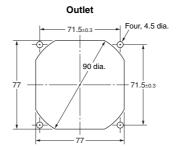


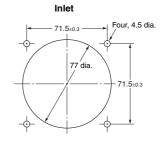


Screw hole for grounding



Panel Cutouts





Options

Name	Model	Datasheet available
Finger Guard	R87F-FG80	Refer to page 25.
Filter	R87F-FL80	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

AC Axial Fans with Lead Wires (80 \times 80 \times t25 mm) $R87T\text{-}A\Box A83$

Specifications

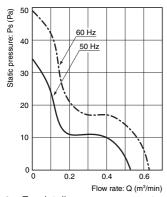
Ratings and Ordering Information

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

Item	Rated voltage (V)	Permitted voltage fluctuation range (%)	Frequency (Hz)	curi	Rated current (A)*		•		Maximum flow rate (m³/min)*		Maximum static pressure (Pa)*		Noise (dB)*		
Model		range (/o)		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
R87T-A1A83H	100			0.180	0.150										
R87T-A3A83H	115	85% to 110%	E0/60	0.150	0 0.130		0.500	0.000	0.5	0.0	24.0	40.0	00	00	
R87T-A4A83H	200	rated voltage	10% 50/60	0.087	0.075	12	11 2	2,500	3,000	0.5	0.6	34.0	49.0	33	36
R87T-A6A83H	230			0.075	0.065										

Motor type		Single-phase shading coil induction motor (2-pole, open type)					
Terminal type		Lead wires					
Insulation class		IEC class B (130°C) UL class A (105°C)					
Insulation resista	ance	100 MΩ min. (at 500 VDC) between all power supply connections and uncharged metal parts.					
Insulation withst	and voltage	2,000 VAC (1 minute) between all power supply connections and uncharged metal parts.					
Ambient operating temperature		-20 to 70°C (no icing)					
Ambient storage temperature		-40 to 85°C (no icing)					
Ambient humidit	y	25% to 85%					
Protection		Impedance protection					
Materials	Frame	Die-cast aluminum					
waterials	Blades	Steel plate (black coating)					
Bearings		Ball bearings					
Weight		Approx. 330 g					
Standards		EN/IEC 60335 (CE marking compliant)					
Certified standar	ds	UL					

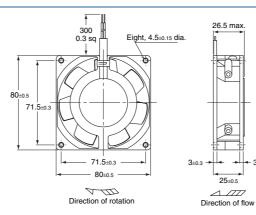
R87T-A□A83H



Note: For details on measurement conditions, refer to Flow Rate and Static Pressure on Safety Precautions for All Axial Fans.

Dimensions (Unit: mm)

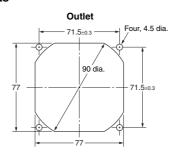


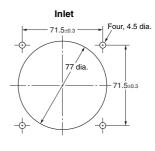


Screw hole for grounding



Panel Cutouts





Options

Name	Model	Datasheet available
Finger Guard	R87F-FG80	Refer to page 25.
Filter	R87F-FL80	Refer to page 26.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Plug Cord R87F-PC

Accessories (Order Separately)

Available Models

Cord length	Model number	Weight (g)
1 m	R87F-PC	39
2 m	R87F-PC-20	69

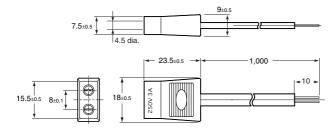
R87F-PC Rating: 250 VAC, 3 A

UL-certified Plug Cord



Dimensions (Unit: mm)

R87F-PC



Connectable to Faston #110 terminals (or equivalent).

Note: This Plug Cord is used for Axial Fans with terminals.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Finger Guards R87F-FG

Accessories (Order Separately)

Available Models

Size	Model number	Weight (g)
150 dia.	R87F-FG150	Approx. 58
120 × 120	R87F-FG120	Approx. 45
92 × 92	R87F-FG90	Approx. 25
80 × 80	R87F-FG80	Approx. 20

Applicable Axial Fans

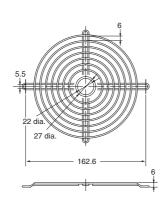
AC Axial Fan		Finger Guard	
Size	Model	Filiger Guard	
150 dia.	R87T-A□A0 Series	R87F-FG150	
120 × 120	R87F-A□A1 Series R87T-A□A1 Series	R87F-FG120	
92 × 92	R87F-A□A9 Series	R87F-FG90	
80 × 80	R87F-A□A8 Series R87T-A□A8 Series	R87F-FG80	

Note: Finger Guards reduce the flow rate by approximately 2% to 5%.

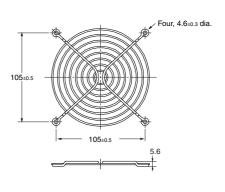
Dimensions (Unit: mm)

Material: steel, Joints: spot welded, Surface: nickel-chrome plated

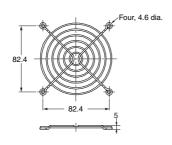
R87F-FG150



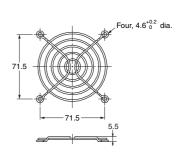
R87F-FG120



R87F-FG90



R87F-FG80



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

R87F-FL

Accessories (Order Separately)

Available Models

Size	Model number	Weight (g)
120 × 120	R87F-FL120	Approx. 43
92 × 92	R87F-FL90	Approx. 30
80 × 80	R87F-FL80	Approx. 21
120 × 120	R87F-FL120S	Approx. 19

Applicable Axial Fans

AC Axial Fan		Filter	
Size	Model	Plastic	Aluminum
150 dia.	R87T-A□A0 Series		
120×120	R87F-A□A1 Series R87T-A□A1 Series	R87F-FL120	R87F-FL120S
92 × 92	R87F-A□A9 Series	R87F-FL90	
80 × 80	R87F-A□A8 Series R87T-A□A8 Series	R87F-FL80	

Note: Filters reduce the flow rate by approximately 20% to 40%. Ensure that there is no clogging.

R87F-FL Plastic Filter Guard Hedia Plastic filter

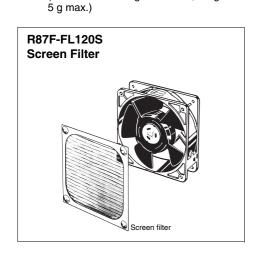
Mounting Method

- Attach the guard to the Fan using the mounting bolts. (There are no mounting bolts provided with the Plastic Filter.)
- With the media held between the retainer and the guard, hook the retainer to the guard. (The Media and retainer can be one-touch mounted/dismounted.)

Note: Use the following model number to order the Media only.

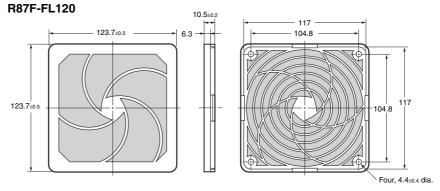
R87F-FL□-M□ (□: 120, 90, or 80)

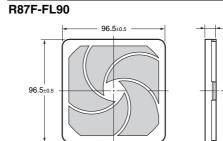
(One set containing five Media, weight:

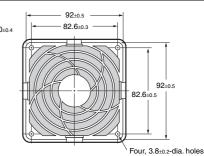


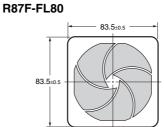
Dimensions

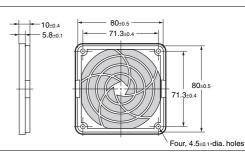
(Unit: mm)



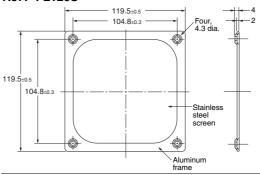








R87F-FL120S



- Note: 1. The Screen Filter is made using aluminium and has an EMI/RFI shielding effect.
 - 2. When mounting the Screen Filter, make sure that it does not come in contact with the fan blades.
 - 3. The screen is a 30×30 aluminum mesh.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

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