



**SHYUAN YA**  
THE NEW STANDARD



## PRODUCT GUIDE

AC Centrifugal Fan | AC Centrifugal Blower | AC Metal Bladed Fan | AC Axial Fan & Blower



# The Company

## The New Standard

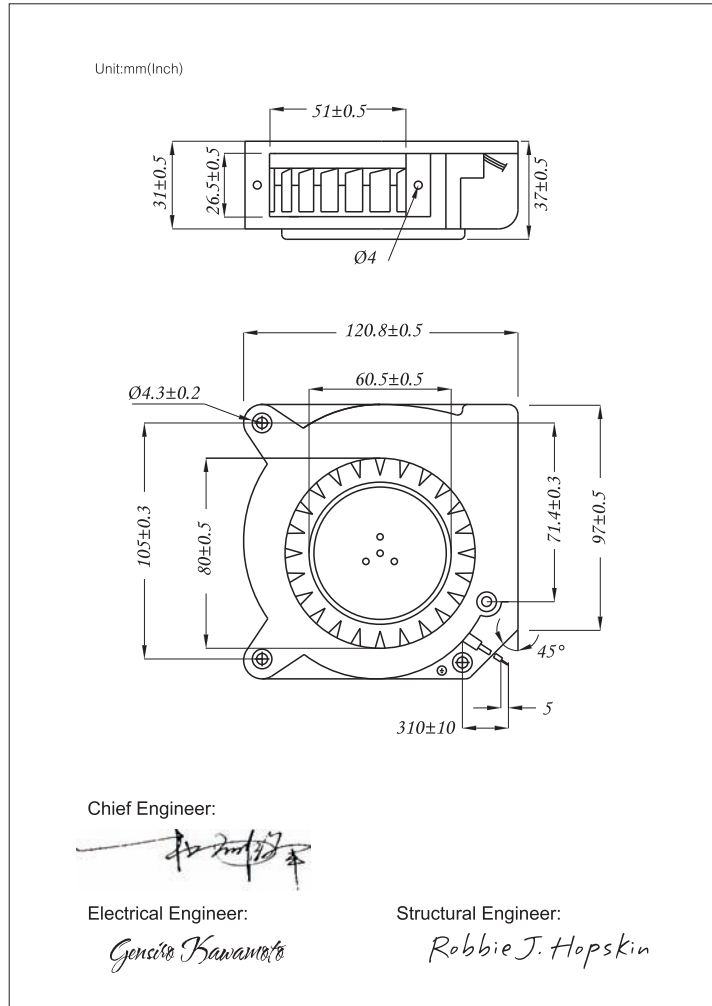
Shyuan Ya was founded in 1982 by a group of engineers who specialized in the ventilation of hazardous chemicals. They recognized a need for the same type of high performance air systems to control unwanted heat and substances. For the last 28 years, Shyuan Ya has developed the industries most dependable axial fans, motorized impellers, and centrifugal blowers. After years of dedication to quality control, the company received ISO 9001:2008 certification by ICR while its products were approved by UL, CE, TUV, and RoHS. Shyuan Ya strives to set a new standard in the art of air movement and thermal management.



# Research and Development

## A Leader in Innovation

Each year, Shyuan Ya raises the bar even further by incorporating the cutting edge designs and the high quality materials into their products. High precision bearings, which are long life and maintenance free, are all standard. Additionally, each product carries Shyuan Ya's patented silicon lamination designs which have a higher metal induction and a lower magnetic loss than any other manufacturers. Most importantly, 100% products inspection is conducted in the end of production line in order to provide high standard and reliable products toward customers. At the end of this year, Shyuan Ya will feature a new line of DC backward curved centrifugal fan that will have a higher efficiency rating than AC impellers of the same size.





# Shyuan Ya Part Number System

AC Centrifugal Fan AC Centrifugal Blower AC Metal Bladed Fan

Example B A 1V 155 95T F P A B1 2 C

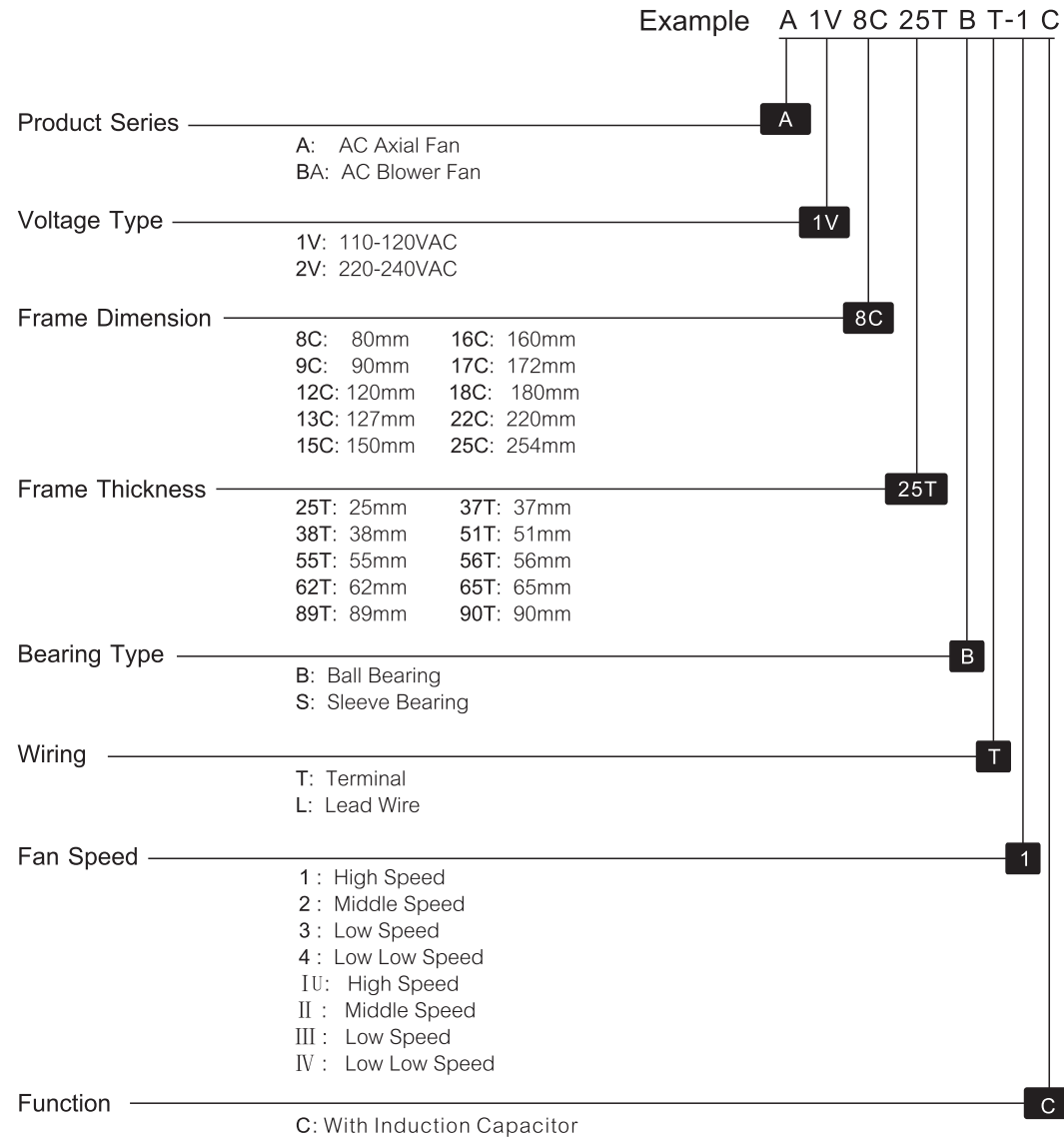
Product Series	A: Standard Axial Fan B: Motorized Impeller C: Centrifugal Blower	B
Current Type	A: AC D: DC	A
Voltage Type	1V: 115VAC 2V: 230VAC 3V: 380VAC 4V: 400VAC 12V: 12VDC 24V: 24VDC 48V: 48VDC	1V
Frame Dimension	120: 120mm 180: 180mm 140: 140mm 190: 190mm 146: 146mm 220: 220mm 155: 155mm 225: 225mm 175: 175mm 250: 250mm	155
Frame Thickness	55T: 55mm 84T: 84mm 100T: 100mm 69T: 69mm 85T: 85mm 107T: 107mm 71T: 71mm 95T: 95mm 110T: 110mm 75T: 75mm 98T: 98mm 112T: 112mm 80T: 80mm	95T
Rotation Direction	F: Forward Motion B: Backward Motion	F
Blade Material	A: Aluminum M: Metal P: Plastic	P
Frame Shape & Material	A: Axial Fan E: Metal Frame(Square) B: Axial Fan with Guard F: Metal Frame(Round) C: Aluminum Frame(Square) G: Aluminum (Other Shapes) D: Aluminum Frame(Round) H: Metal Frame(Other Shapes)	A
Model Type	A1: A1 Model B1: B1 Model B7: B7 Model B33: B33 Model B38: B38 Model	B1
Fan Speed	1: High Speed 2: Middle Speed 3: Low Speed	2
Function	C: With Induction Capacitor	C





# Shyuan Ya Part Number System

## AC Axial Fan & Blower





# TABLE OF CONTENTS



**06**  
**24**  
AC Centrifugal Fan

BA155-95T-2C	Ø155x95mm
BA155-110T-2C	Ø155x110mm
BA175-69T-2C	Ø175x69mm
BA175-84T -2C	Ø175x84mm
BA175-95T -2C	Ø175x95mm
BA180-54T -1C	Ø180x54mm
BA180-85T-2C	Ø180x85mm
BA190-69T-2C	Ø190x69mm
BA190-84T-2C	Ø190x84mm
BA190-95T-2C	Ø190x95mm
BA220-71T-1C	Ø220x71mm
BA220-71T-2C	Ø220x71mm
BA225-69T-2C	Ø225x69mm
BA225-85T-2C	Ø225x85mm
BA225-99T-2C	Ø225x99mm
BA225-107T-2C	Ø225x107mm
BA250-89T-2C	Ø250x89mm
BA250-99T -2C	Ø250x99mm
BA250-112T -2C	Ø250x112mm

**25**  
**32**  
AC Centrifugal Blower



CA120-98T-2C	Ø120x98 mm
CA120-98T-4C	Ø120x98 mm
CA140-100T-1C	Ø140x100 mm
CA140-100T-2C	Ø140x100 mm
CA140-100T-3C	Ø140x100 mm
CA146-100T-2C	Ø146x100 mm
CA146-100T-3C	Ø146x100 mm
CA160-100T-2C	Ø160x100 mm
CA160-100T-3C	Ø160x100 mm
BA12C37T-2	121x121x37mm
BA22C56T-1C	220x220x56mm



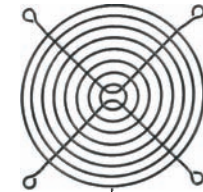
**33**  
**37**  
AC Metal Bladed Fan

AA200-80T-FMC-2C	225x225x80 mm
AA200-80T-FMC-3C	225x225x80 mm
AA250-80T-FMC-2C	280x280x80 mm
AA250-80T-FME-2C	370x370x 87 mm
AA250-80T-FMF-2C	Ø320x87 mm



**38**  
**59**  
AC Axial Fan

A8C25T-1	80x80x25mm
A8C38T-1	80x80x38mm
A9C25T-1	92x92x25mm
A9C38T-1	92x92x38mm
A12C25T-1	120x120x25mm
A12C38T-1	120x120x38mm
A12C38T- IU	120x120x38mm
A12C38T- II	120x120x38mm
A12C38T-III	120x120x38mm
A12C38T-IV	120x120x38mm
A13C38T-1	127x127x38mm
A15C38T-1C	151x172x38mm
A15C51T-1C	151x172x51mm
A15C51T-1U	151x172x51mm
A15C55T-1C	150x170x55mm
A16C62T-1CB	160x160x62mm
A16C62T-1CF	160x160x62mm
A17C51T-1C	Ø170x51mm
A17C51T-4C	Ø170x51mm
A18C65T-1C	180x180x65mm
A18C90T-1C	180x180x90mm
AA254-89T-2C	Ø254x89mm
A25C89T-3C	Ø254x89mm



**60**  
**62**  
Accessories

Finger Guard
Plastic Fan Filter
Fan Power Cord
Inlet Ring



## AC Centrifugal Fan

Shyuan Ya's motorized Impellers feature a backward-curved centrifugal fan with an external-rotor motor. Each impeller is made of reinforced polyamide fiber glass and comes standard with long-life maintenance-free dual ball bearings. The blades have highly efficient inlet designs and reduced noise levels. This line comes in 18 models ranging from Ø155 to Ø250 mm, delivering up to 1024 cfm of airflow power.









# Ø155x110mm BA155-110T Series AC Centrifugal Fan



## Specification:

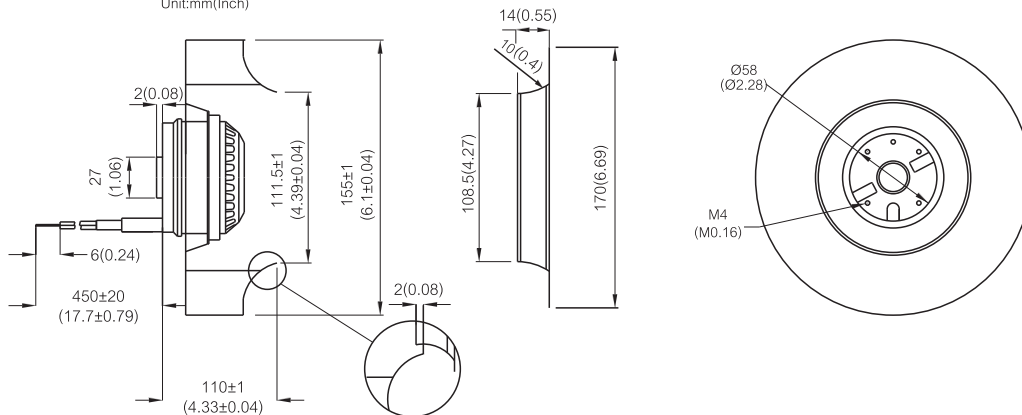
Air Flow	282 ~ 318 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1250g



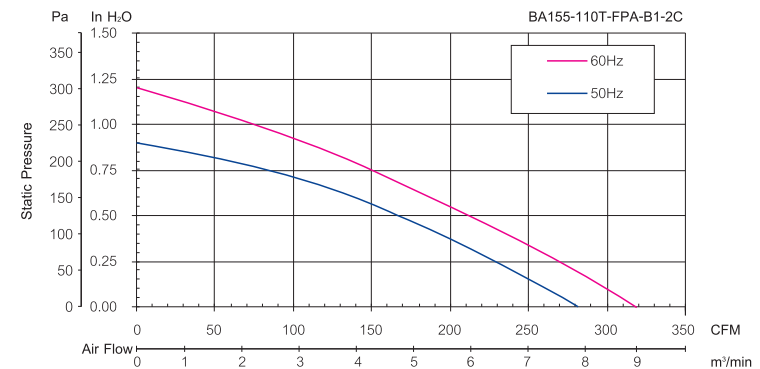
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
BA1V155-110T-FPA-B1-2C	115V	50/60	0.34/0.36	35/42	2640/2980	282/318	8.0/9.0	0.90/1.20	61/64	4μF 200VAC
BA2V155-110T-FPA-B1-2C	230V	50/60	0.17/0.19	34/41	2660/2990	282/318	8.0/9.0	0.90/1.20	61/64	1μF 400VAC

## Outline Drawing:

Unit:mm(Inch)



## Characteristic Curves:





# Ø175x69mm BA175-69T Series AC Centrifugal Fan



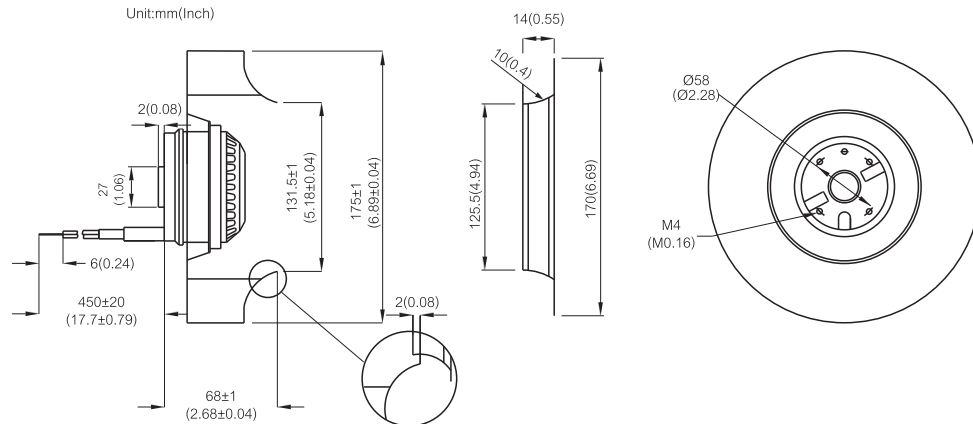
### Specification:

Air Flow	287 ~ 331 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1270g

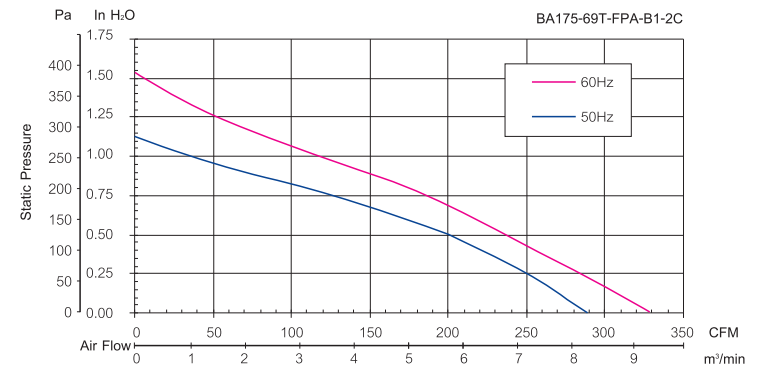


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V175-69T-FPA-B1-2C	115V	50/60	0.43/0.46	46/53	2650/2990	289/331	8.2/9.4	1.13/1.54	64/67	5µF 200VAC
BA2V175-69T-FPA-B1-2C	230V	50/60	0.23/0.23	49/54	2630/3000	287/331	8.1/9.4	1.13/1.54	64/67	1.5µF 400VAC

### Outline Drawing:



### Characteristic Curves:





# Ø175x84mm BA175-84T Series AC Centrifugal Fan



### Specification:

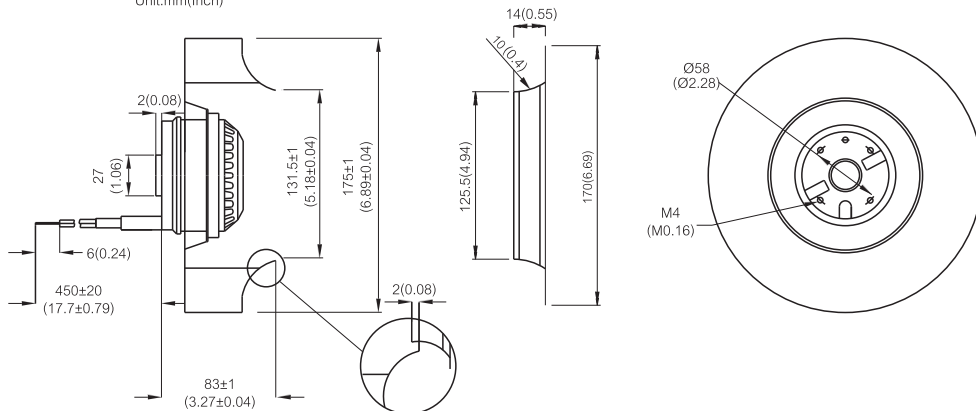
Air Flow	348 ~ 389 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1280g



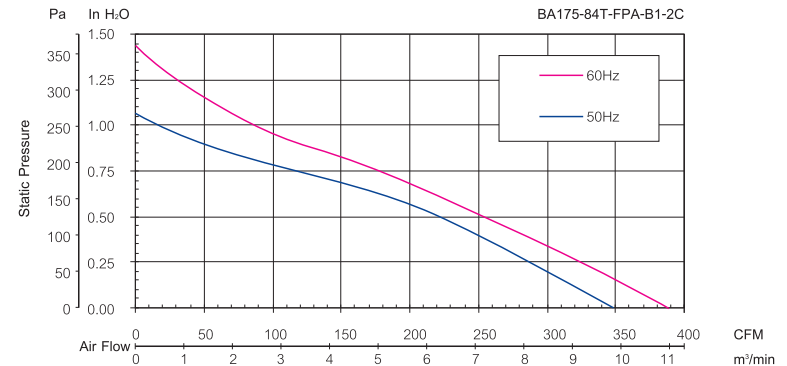
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V175-84T-FPA-B1-2C	115V	50/60	0.45/0.49	48/57	2540/2820	348/389	9.9/11.0	1.07/1.44	63/67	5µF 200VAC
BA2V175-84T-FPA-B1-2C	230V	50/60	0.24/0.25	51/58	2540/2840	348/389	9.9/11.0	1.07/1.44	63/67	1.5µF 400VAC

### Outline Drawing:

Unit:mm(Inch)



### Characteristic Curves:





# Ø175x95mm BA175-95T Series AC Centrifugal Fan



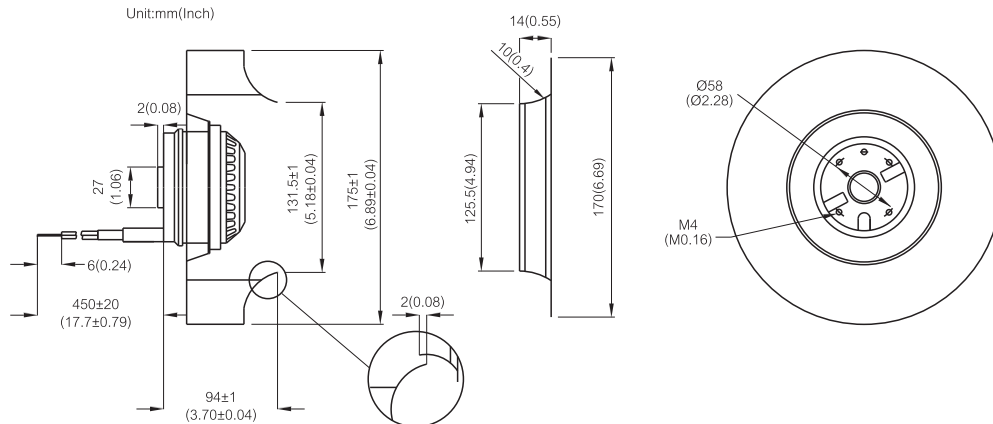
### Specification:

Air Flow	371 ~ 421 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1730g

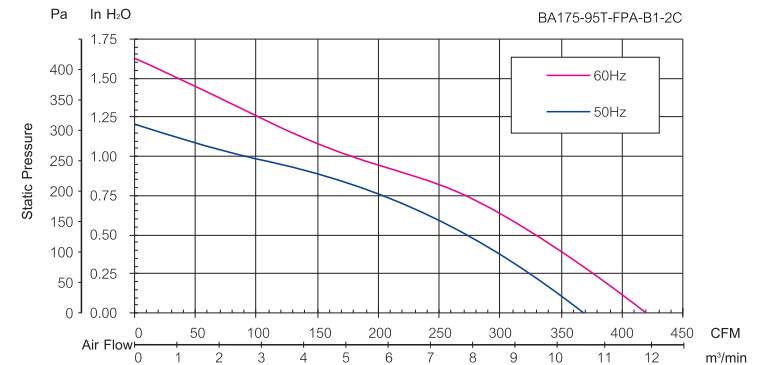


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V175-95T-FPA-B1-2C	115V	50/60	0.43/0.61	49/67	2700/3050	371/419	10.5/11.9	1.19/1.61	61/64	8µF 200VAC
BA2V175-95T-FPA-B1-2C	230V	50/60	0.21/0.29	47/64	2720/3090	371/421	10.5/11.9	1.21/1.63	61/64	2µF 400VAC

### Outline Drawing:



### Characteristic Curves:





# Ø180x54mm BA180-54T Series AC Centrifugal Fan



### Specification:

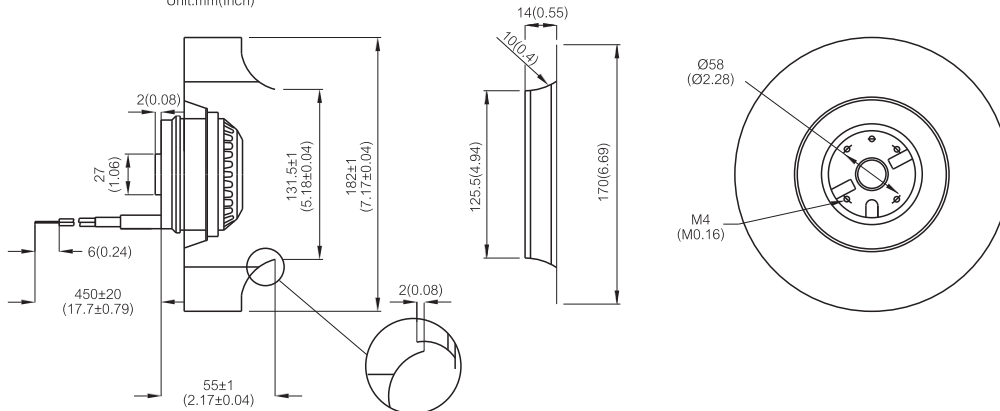
Air Flow	229 ~ 267 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1300g



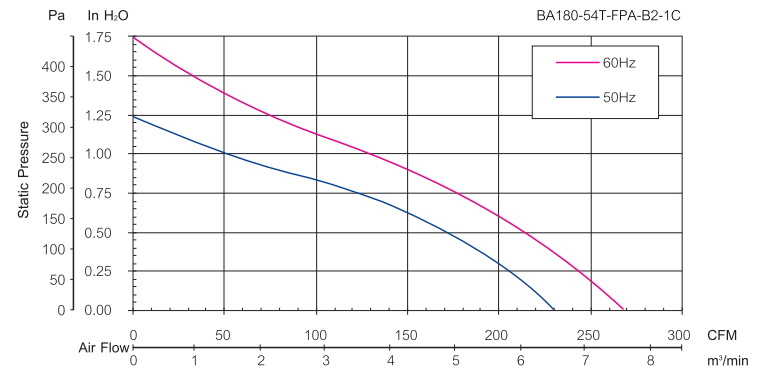
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V180-54T-FPA-B2-1C	115V	50/60	0.55/0.51	54/58	2700/3150	230/266	6.5/7.5	1.25/1.74	64/67	6µF 200VAC
BA2V180-54T-FPA-B2-1C	230V	50/60	0.28/0.25	52/56	2700/3150	229/267	6.5/7.5	1.24/1.74	64/67	1.5µF 400VAC

### Outline Drawing:

Unit:mm(Inch)



### Characteristic Curves:





# Ø180x85mm BA180-85T Series AC Centrifugal Fan



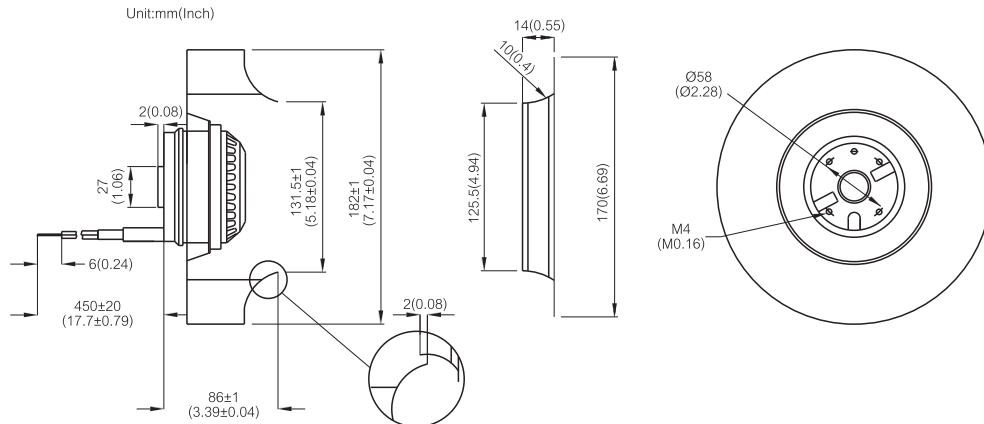
### Specification:

Air Flow	387 ~ 426 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1370g

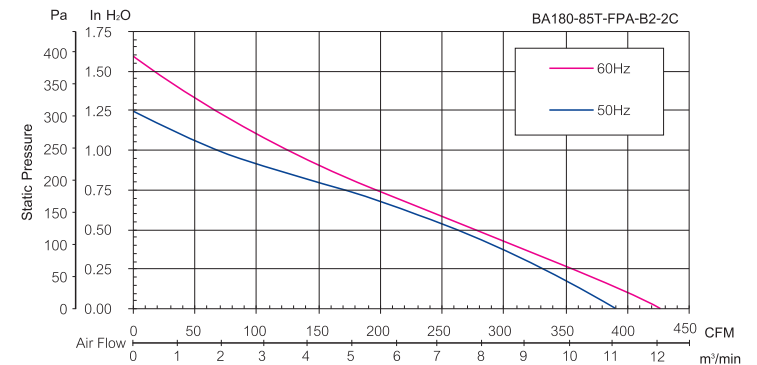


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V180-85T-FPA-B2-2C	115V	50/60	0.66/0.80	73/91	2550/2800	387/426	11/12.1	1.22/1.58	62/64	8µF 200VAC
BA2V180-85T-FPA-B2-2C	230V	50/60	0.34/0.40	74/92	2550/2800	389/426	11/12.1	1.24/1.59	62/64	2µF 400VAC

### Outline Drawing:



### Characteristic Curves:





# Ø190x69mm BA190-69T Series AC Centrifugal Fan



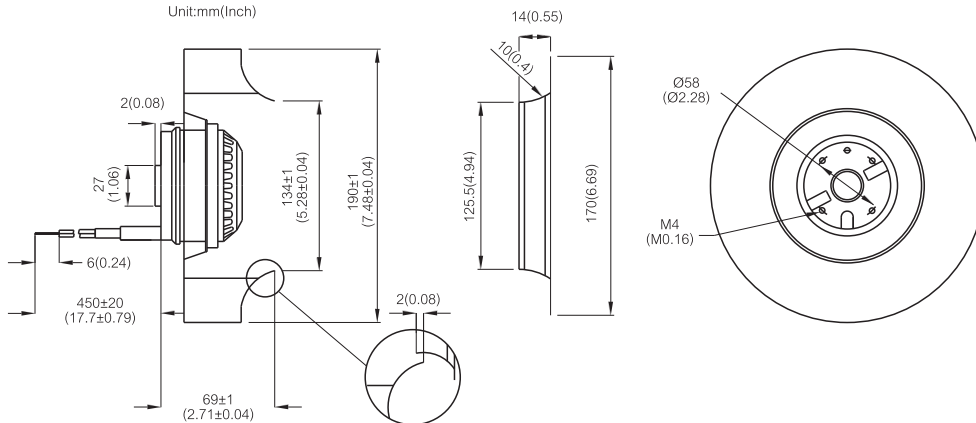
### Specification:

Air Flow	339 ~ 378 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1360g

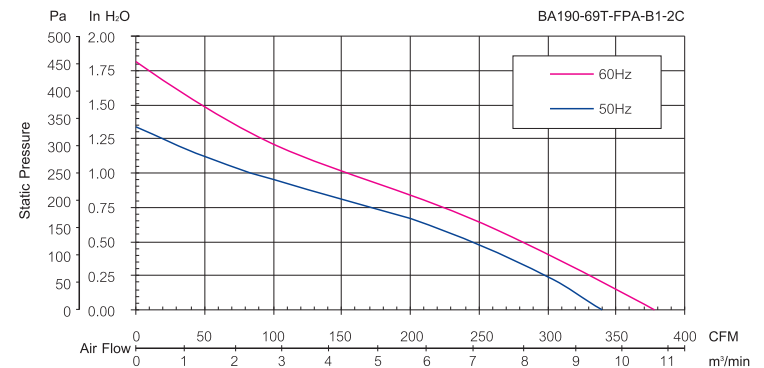


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V190-69T-FPA-B1-2C	115V	50/60	0.54/0.64	60/73	2480/2750	339/376	9.6/10.6	1.34/1.81	63/66	8µF 200VAC
BA2V190-69T-FPA-B1-2C	230V	50/60	0.27/0.33	60/73	2490/2760	341/378	9.7/10.7	1.34/1.81	63/66	2µF 400VAC

### Outline Drawing:



### Characteristic Curves:





# Ø190x84mm BA190-84T Series AC Centrifugal Fan



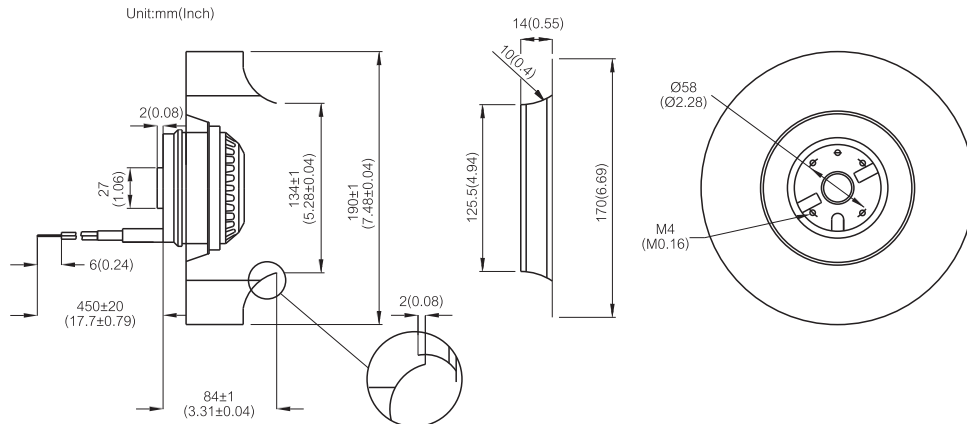
### Specification:

Air Flow	384 ~ 416CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1390g

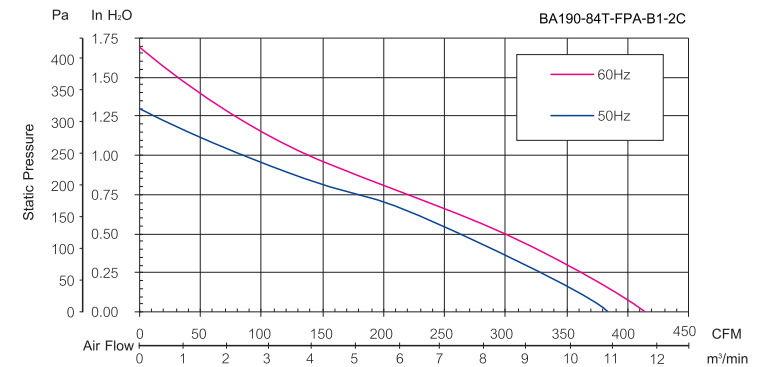


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V190-84T-FPA-B1-2C	115V	50/60	0.54/0.65	60/74	2360/2560	384/416	10.8/11.7	1.30/1.70	62/65	8µF 200VAC
BA2V190-84T-FPA-B1-2C	230V	50/60	0.27/0.33	60/75	2370/2560	385/416	10.9/11.7	1.30/1.70	62/65	2µF 400VAC

### Outline Drawing:



### Characteristic Curves:





# Ø190x95mm BA190-95T Series AC Centrifugal Fan



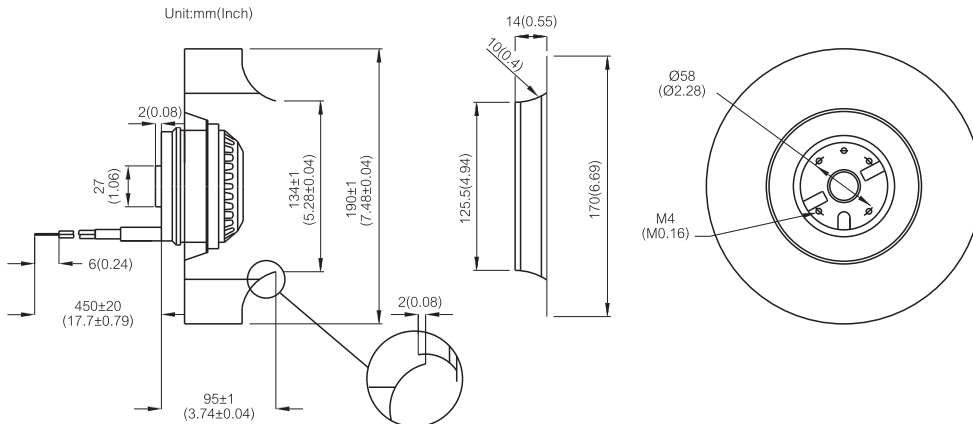
### Specification:

Air Flow	410 ~ 451 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1790g

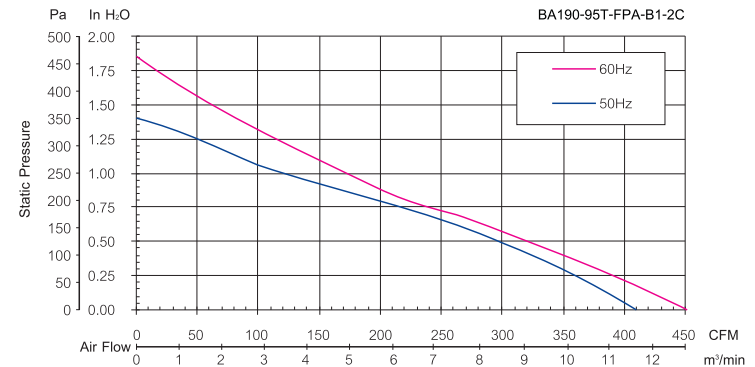


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
BA1V190-95T-FPA-B1-2C	115V	50/60	0.50/0.70	57/77	2490/2660	411/451	11.7/12.8	1.40/1.85	65/67	10μF 200VAC
BA2V190-95T-FPA-B1-2C	230V	50/60	0.25/0.35	57/77	2470/2660	410/449	11.6/12.7	1.40/1.85	65/67	2.5μF 400VAC

### Outline Drawing:



### Characteristic Curves:





# Ø220x71mm BA220-71T Series AC Centrifugal Fan

## Specification:



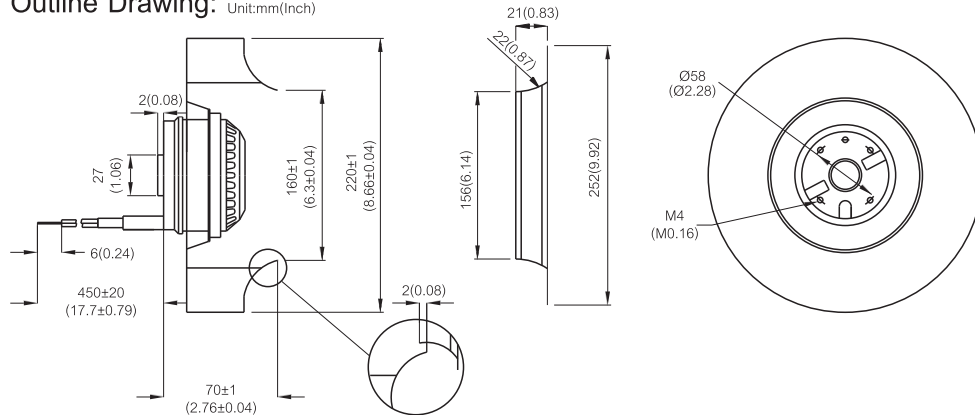
Air Flow	482 ~ 590CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +70°C
Weight	1410g



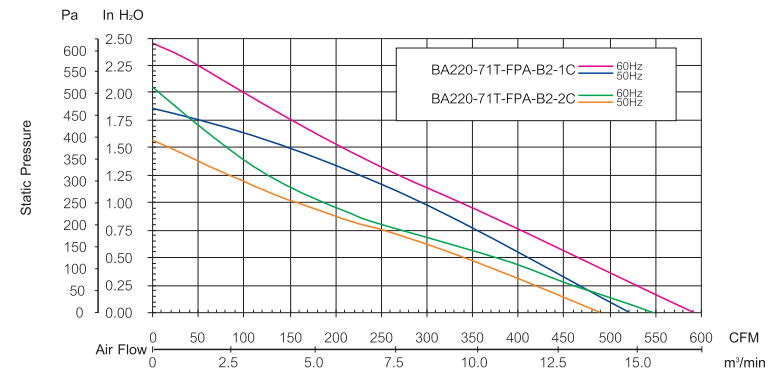
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V220-71T-FPA-B2-1C ※	115V	50/60	0.89/0.92	87/105	2650/3000	509/586	14.4/16.6	1.81/2.45	72/73	10µF 200VAC
BA2V220-71T-FPA-B2-1C ※	230V	50/60	0.45/0.47	88/107	2650/3000	519/590	14.7/16.7	1.86/2.46	72/73	2.5µF 400VAC
BA1V220-71T-FPA-B2-2C	115V	50/60	0.77/0.79	82/91	2450/2750	482/545	13.7/15.4	1.57/2.05	66/67	8µF 200VAC
BA2V220-71T-FPA-B2-2C	230V	50/60	0.38/0.40	82/91	2450/2750	488/548	13.8/15.4	1.57/2.05	66/67	2µF 400VAC

If model with "※", without UL approval.

## Outline Drawing: Unit:mm(Inch)



## Characteristic Curves:





# Ø225x69mm BA225-69T Series AC Centrifugal Fan

## Specification:



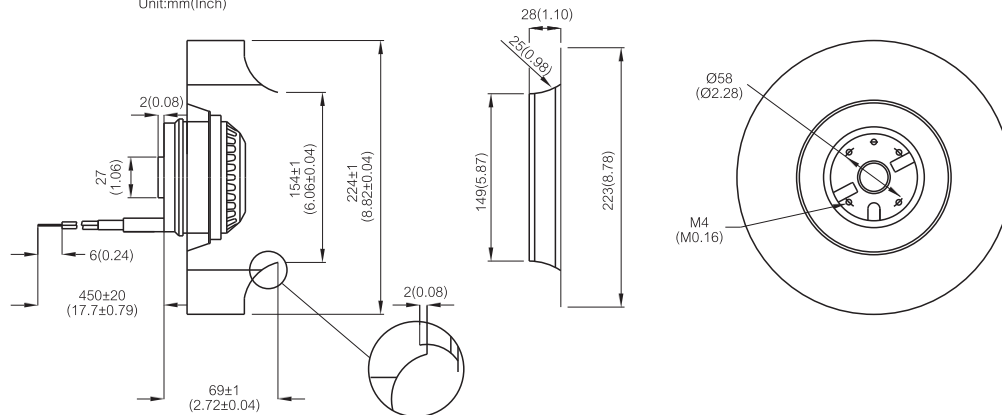
Air Flow	460 ~ 527 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	1420g



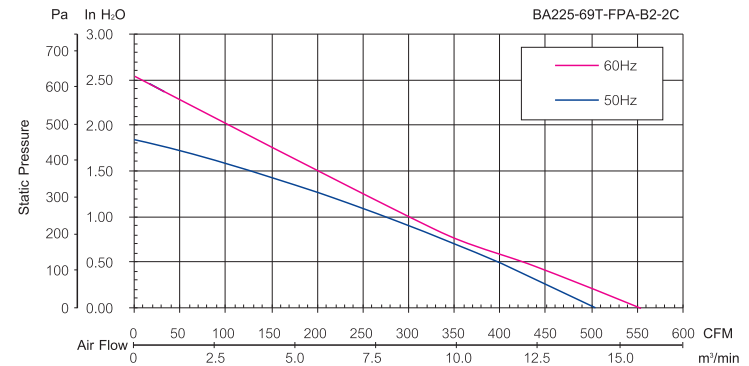
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
BA1V225-69T-FPA-B2-2C	115V	50/60	0.92/0.99	94/113	2600/3000	460/526	13.0/14.9	1.96/2.67	68/71	12μF 200VAC
BA2V225-69T-FPA-B2-2C	230V	50/60	0.47/0.53	98/121	2600/3000	461/527	13.1/14.9	1.96/2.67	68/71	3μF 400VAC

## Outline Drawing:

Unit:mm(Inch)



## Characteristic Curves:





# Ø225x85mm BA225-85T Series AC Centrifugal Fan



### Specification:

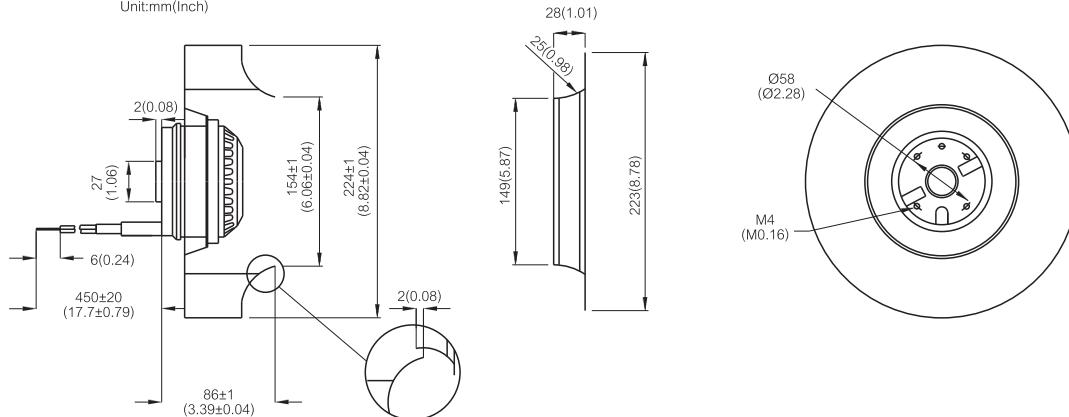
Air Flow	586 ~ 669CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	1960g



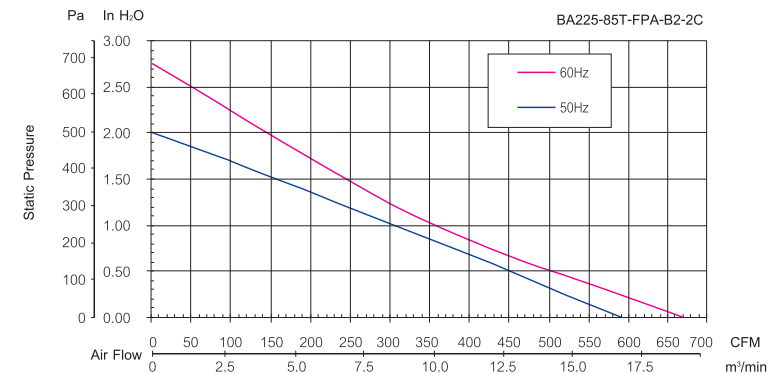
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V225-85T-FPA-B2-2C	115V	50/60	1.08/1.20	112/136	2600/2950	586/669	16.6/19.0	1.99/2.71	68/71	12µF 200VAC
BA2V225-85T-FPA-B2-2C	230V	50/60	0.55/0.60	113/136	2600/2950	587/669	16.7/19.0	2.00/2.73	68/71	3µF 400VAC

### Outline Drawing:

Unit:mm(Inch)



### Characteristic Curves:







# Ø225x107mm BA225-107T Series AC Centrifugal Fan



### Specification:

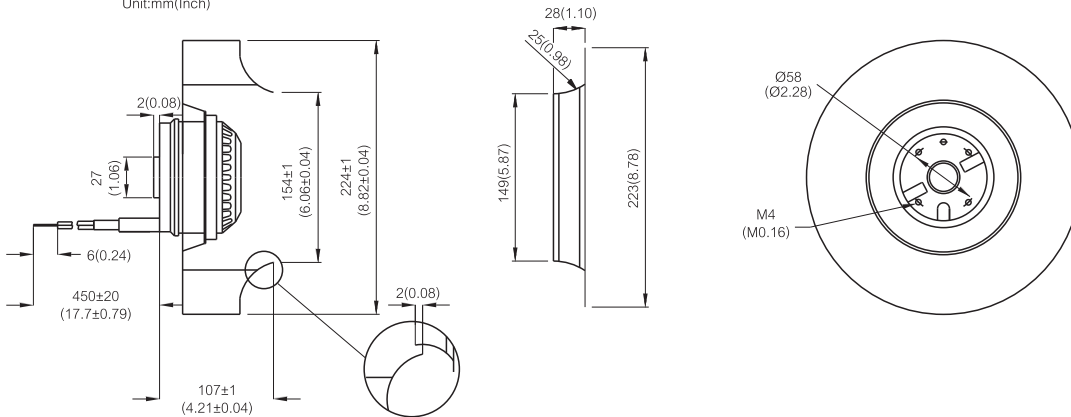
Air Flow	711 ~ 807CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	2370g



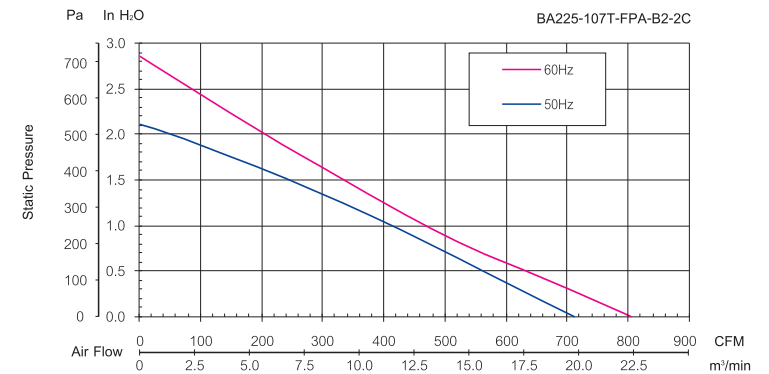
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V225-107T-FPA-B2-2C	115V	50/60	1.18/1.44	125/164	2600/2950	711/804	20.1/22.8	2.11/2.85	69/73	16µF 200VAC
BA2V225-107T-FPA-B2-2C	230V	50/60	0.58/0.73	125/165	2600/2950	711/807	20.1/22.9	2.12/2.87	69/73	4µF 400VAC

### Outline Drawing:

Unit:mm(Inch)



### Characteristic Curves:



# Ø250x89mm BA250-89T Series AC Centrifugal Fan



### Specification:

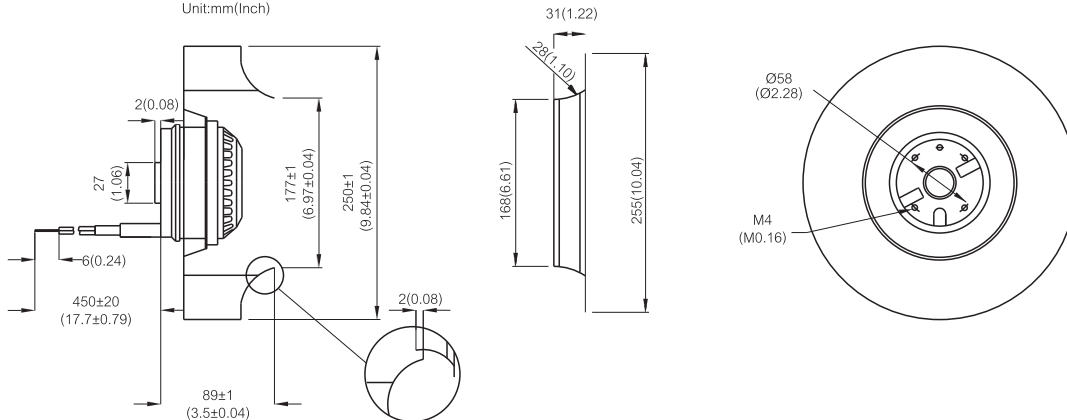
Air Flow	700 ~ 774 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	2370g



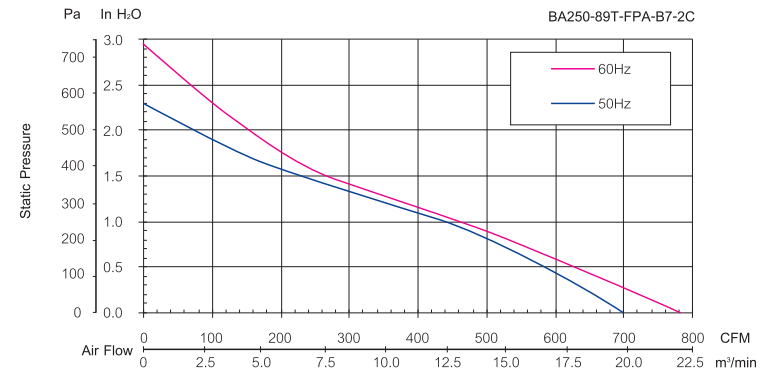
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
BA1V250-89T-FPA-B7-2C	115V	50/60	1.05/1.45	118/158	2550/2800	700/761	19.8/21.6	2.29/2.92	70/73	16μF 200VAC
BA2V250-89T-FPA-B7-2C	230V	50/60	0.52/0.73	116/158	2550/2800	702/774	19.9/21.9	2.29/2.96	70/73	4μF 400VAC

### Outline Drawing:

Unit:mm(Inch)



### Characteristic Curves:





# Ø250x99mm BA250-99T Series AC Centrifugal Fan



### Specification:

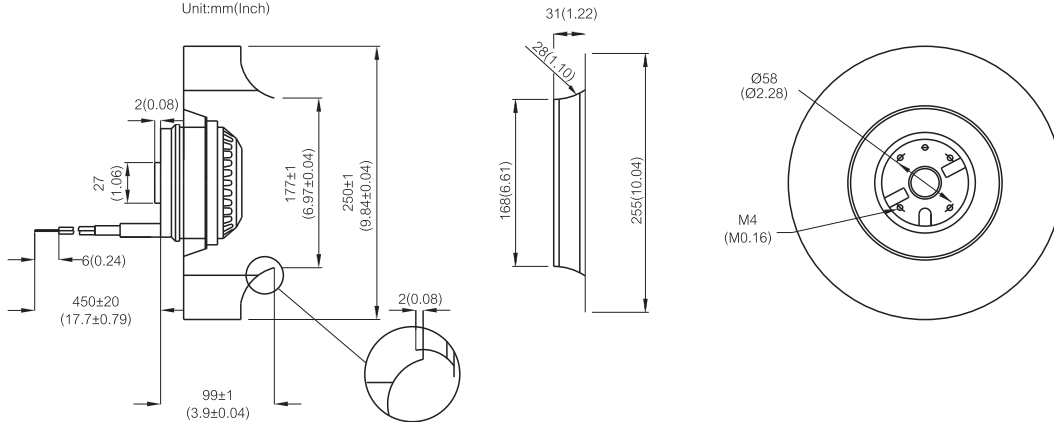
Air Flow	824 ~ 909 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	2670g



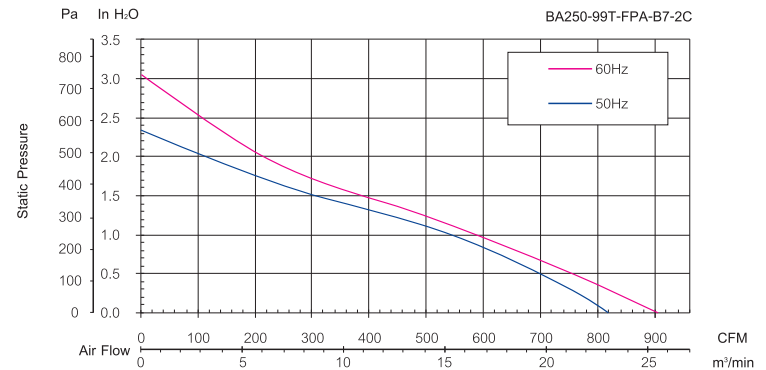
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V250-99T-FPA-B7-2C	115V	50/60	1.35/1.86	152/207	2550/2800	824/909	23.3/25.7	2.40/3.09	72/75	20µF 200VAC
BA2V250-99T-FPA-B7-2C	230V	50/60	0.68/0.94	151/207	2550/2800	824/909	23.3/25.7	2.37/3.07	74/75	5µF 400VAC

### Outline Drawing:

Unit:mm(Inch)



### Characteristic Curves:





# Ø250x112mm BA250-112T Series AC Centrifugal Fan



### Specification:

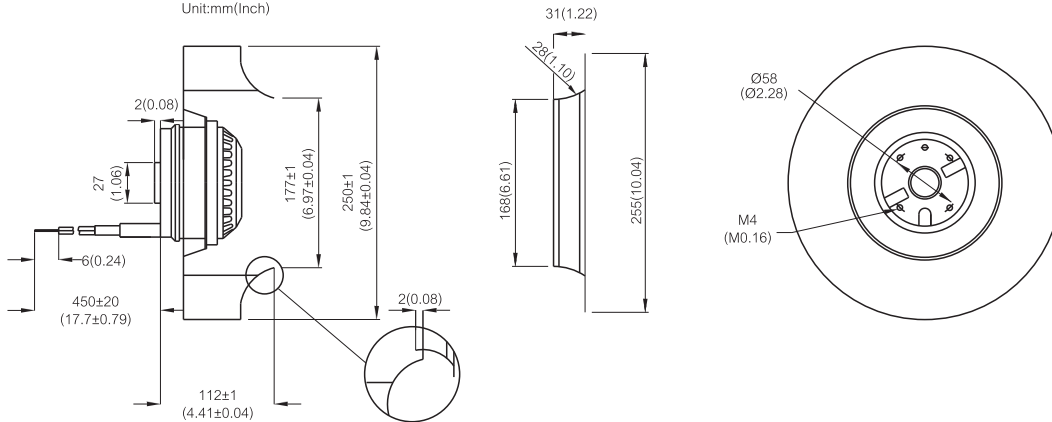
Air Flow	945 ~ 1024 CFM
Impeller	Plastic PA (Polyamide Glass-fiber Reinforced)
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	2700g



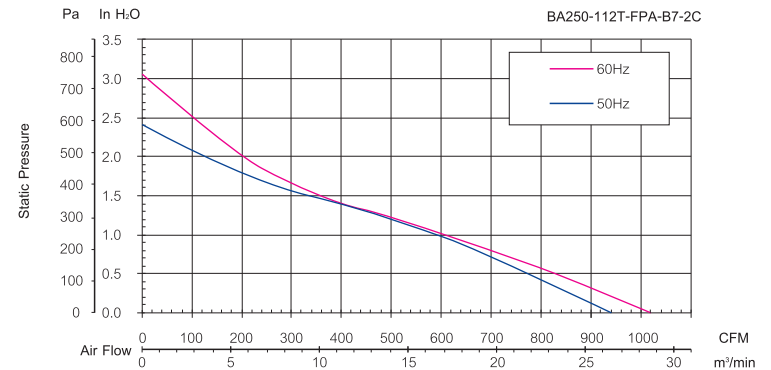
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
BA1V250-112T-FPA-B7-2C	115V	50/60	1.44/1.98	164/222	2500/2700	945/1011	26.8/28.6	2.41/3.08	74/75	20µF 200VAC
BA2V250-112T-FPA-B7-2C	230V	50/60	0.72/0.98	164/220	2500/2700	947/1024	26.8/29.0	2.42/3.06	74/75	5µF 400VAC

### Outline Drawing:

Unit:mm(Inch)



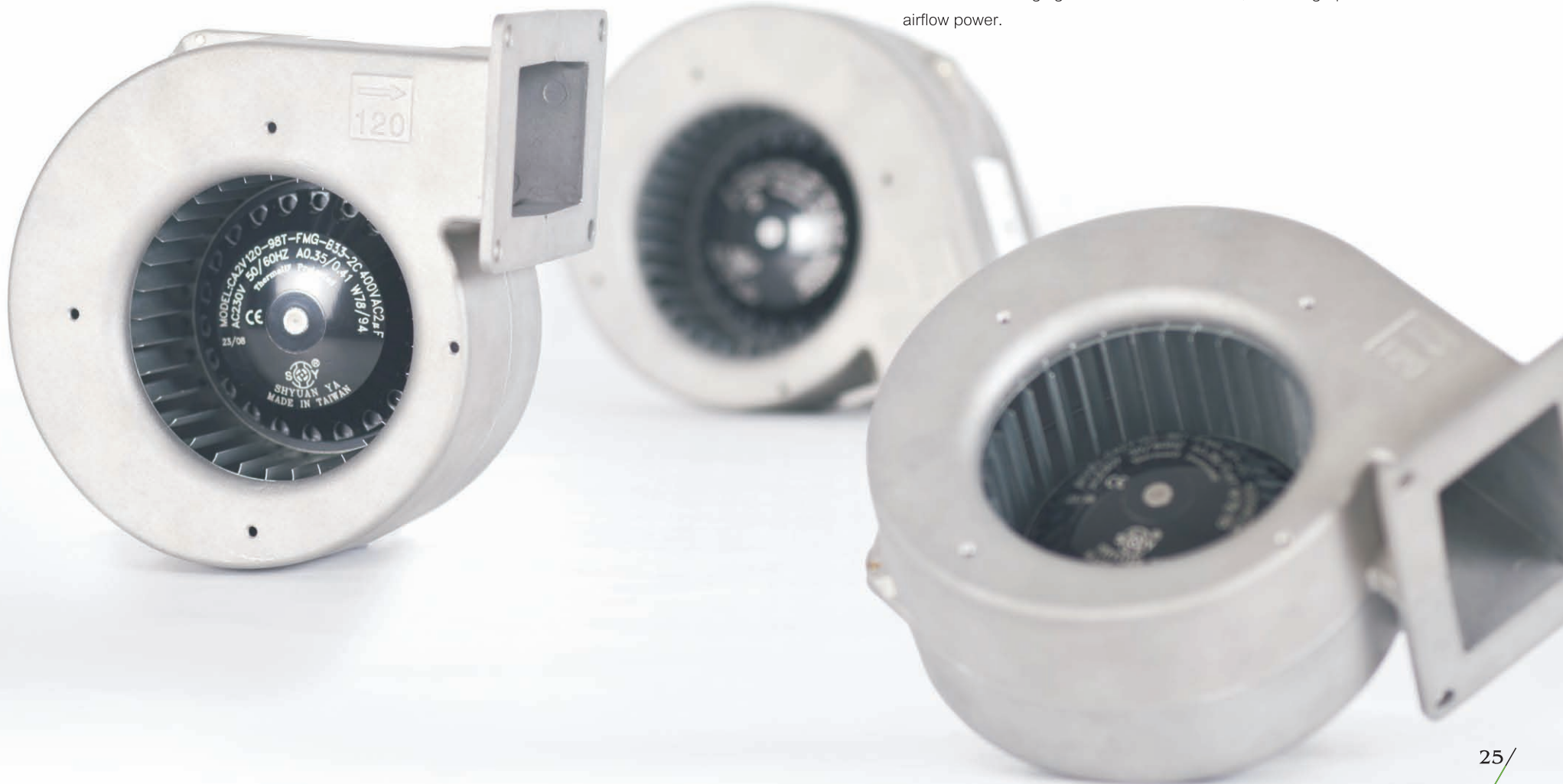
### Characteristic Curves:





## AC Centrifugal Blower

Shyuan Ya's centrifugal blowers features a single-Inlet forward-curved design and die-cast aluminum housing. Each blower also features an external rotor motor and galvanized sheet steel impeller. Each fan comes standard with long-life maintenance-free dual ball bearings. This line comes in five models ranging from Ø120 to Ø160 mm, delivering up to 400 cfm of airflow power.







# Ø140x100mm CA140-100T Series AC Centrifugal Blower

## Specification:

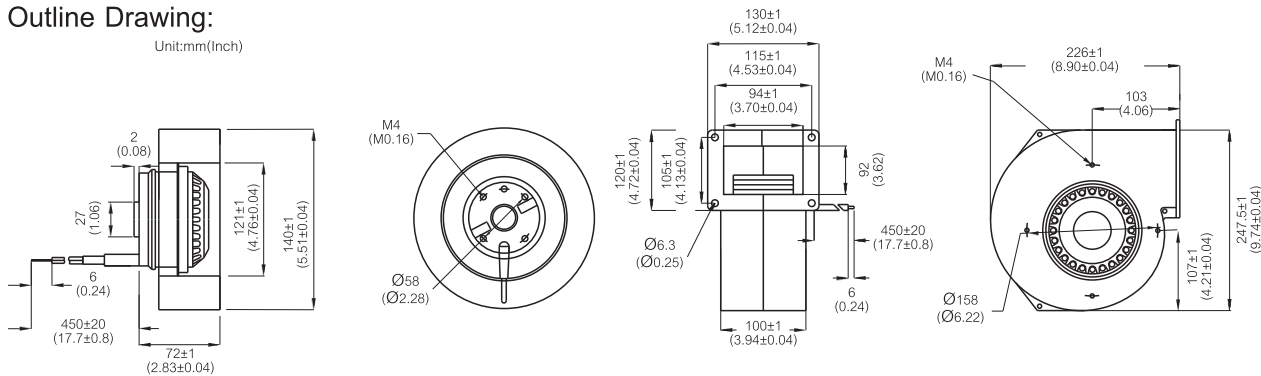
Air Flow	286~ 297 CFM
Impeller	Die-cast Aluminum Housing Galvanised Sheet Steel Impeller
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C
Weight	3350g



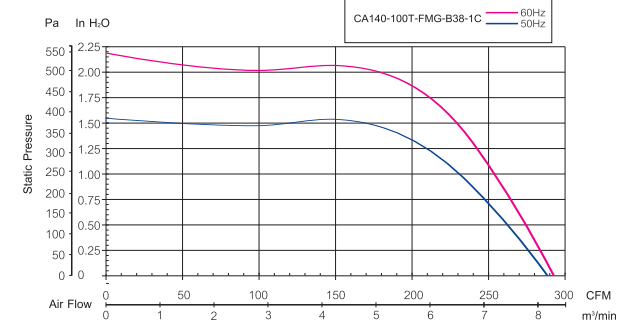
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
CA1V140-100T-FMG-B38-1C	115V	50/60	1.35/1.78	155/203	2380/2430	286/292	8.1/8.3	1.55/2.17	70/70	16μF 200VAC
CA2V140-100T-FMG-B38-1C	230V	50/60	0.67/0.89	154/203	2400/2460	292/297	8.3/8.4	1.55/2.17	70/70	4μF 400VAC

## Outline Drawing:

Unit:mm(Inch)



## Characteristic Curves:





# Ø140x100mm CA140-100T Series AC Centrifugal Blower



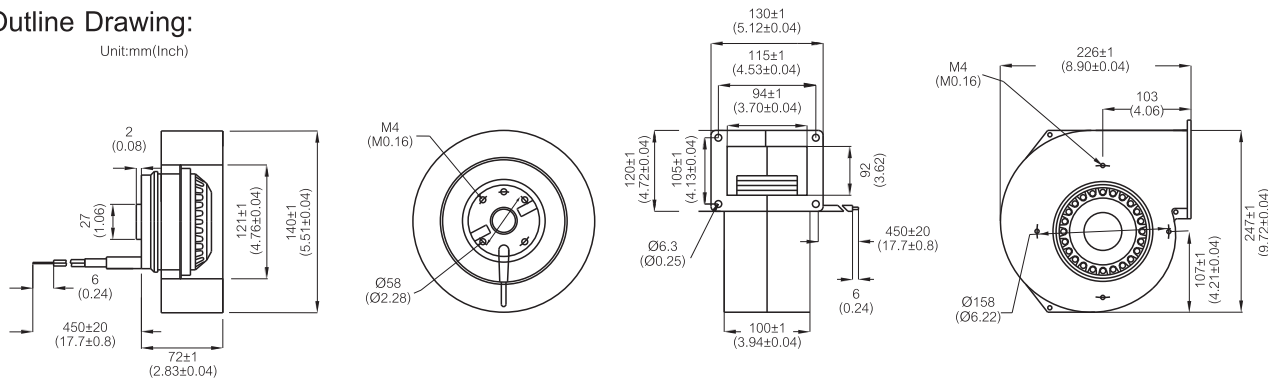
## Specification:

Air Flow	217~ 250 CFM
Impeller	Die-cast Aluminum Housing Galvanised Sheet Steel Impeller
Motor	Capacitor-Run Induction and External Rotor Motor
Rotor	Black Paint
Bearing	Dual Ball Bearing, Permanently Lubricated
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Lead Wire	AWG# 18 UL
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	2C→ -20°C to +60°C; 3C→ -20°C to +70°C
Weight	2C→3000g; 3C→2580g

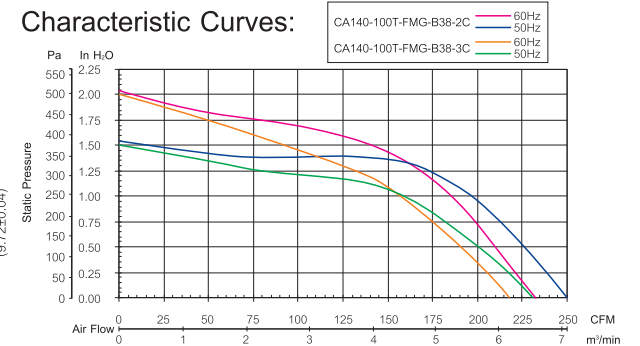
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
CA1V140-100T-FMG-B38-2C	115V	50/60	1.06/1.22	120/140	1800/1670	250/232	7.1/6.6	1.55/2.05	64/62	12µF 200VAC
CA2V140-100T-FMG-B38-2C	230V	50/60	0.54/0.63	124/144	1790/1630	250/232	7.1/6.6	1.55/2.05	64/62	3µF 400VAC
CA1V140-100T-FMG-B38-3C	115V	50/60	0.88/0.99	101/113	1490/1410	231/218	6.6/6.2	1.51/2.0	60/58	10µF 200VAC
CA2V140-100T-FMG-B38-3C	230V	50/60	0.44/0.50	102/113	1530/1440	231/217	6.6/6.1	1.51/2.0	60/58	2.5µF 400VAC

## Outline Drawing:

Unit:mm(Inch)



## Characteristic Curves:

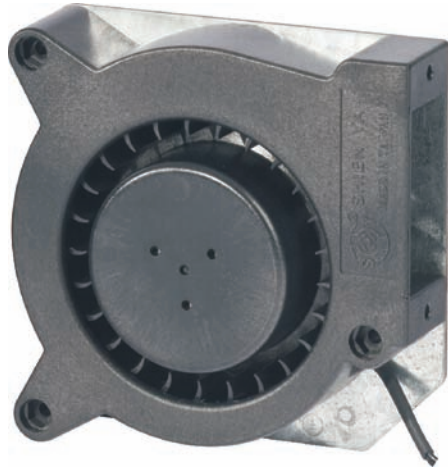








# 121x121x37mm BA12C37T Series AC BLOWER



## Specification:

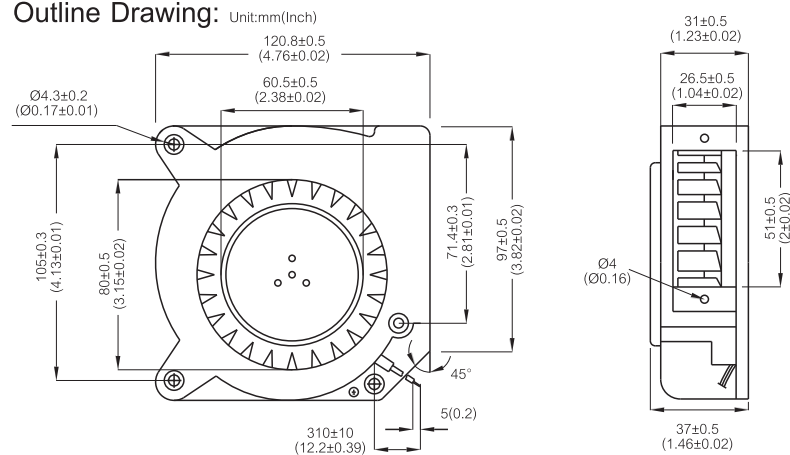
Air Flow	22~ 23 CFM
Housing	Spiral Housing of Fiberglass-Reinforced Polycarbonate Housing Base of Galvanized Steel Plate
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	625g



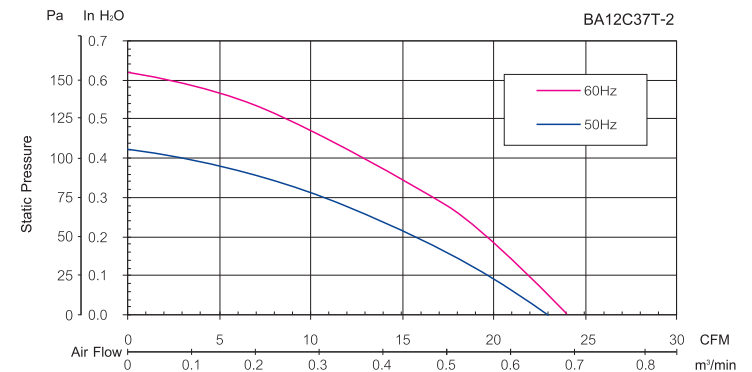
Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
BA1V12C37TBL-2	B,S	115V	50/60	0.27/0.24	21/19	2500/2500	22/23	0.62/0.65	0.42/0.62	53/54
BA2V12C37TBL-2	B,S	230V	50/60	0.14/0.12	21/20	2500/2500	22/23	0.62/0.65	0.42/0.62	53/54

For "Sleeve" bearing version, change the "B" in the model number to "S".

## Outline Drawing:



## Characteristic Curves:





## 220x220x56mm BA22C56T Series AC BLOWER



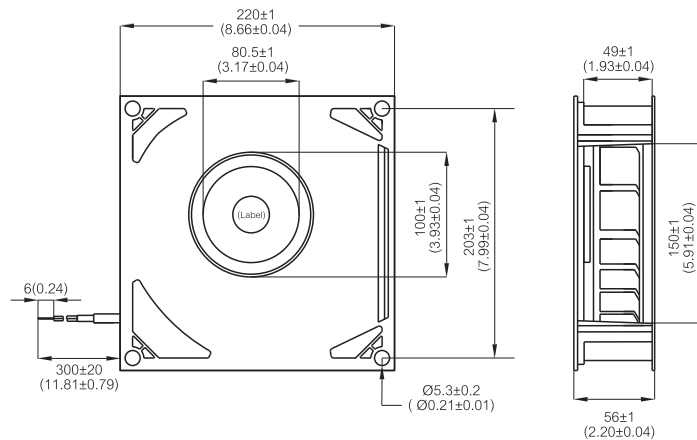
### Specification:

Air Flow	103~ 120 CFM
Housing	Spiral Housing of Fiberglass-Reinforced Polycarbonate Housing Base of Galvanized Steel Plate
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball
Termination	Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to + 80°C for Ball Type
Weight	1750g

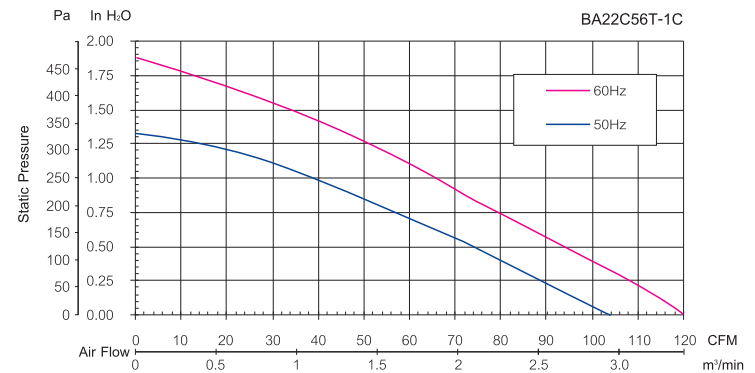


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
BA1V22C56TBL-1C	B	115V	50/60	0.34/0.42	37/45	2900/3300	103/117	2.92/3.32	1.33/1.88	64/66
BA2V22C56TBL-1C	B	230V	50/60	0.16/0.20	36/44	3300/3300	104/120	2.94/3.39	1.33/1.88	64/66

Outline Drawing: Unit:mm(Inch)



Characteristic Curves:





## AC Metal Bladed Fan

Shyuan Ya's metal bladed axial fans features die-cast aluminum housing with sheet-metal blades welded directly on an external-rotor motor. Each fan comes standard with long-life maintenance-free dual ball bearings. This line comes in four models ranging from 225 by 80 mm to 280 by 80 mm, delivering up to 1170 cfm of airflow power.





# 225x225x80mm

AA200-80T Series AC Square Axial Fan



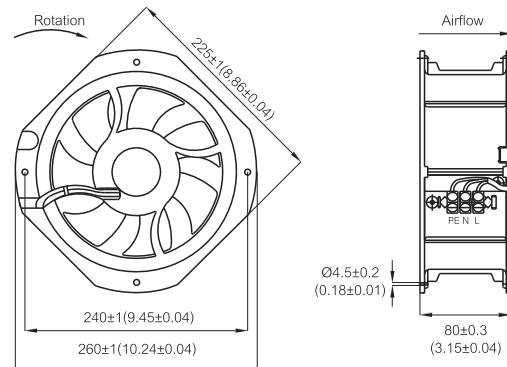
### Specification:

Air Flow	497~611 CFM
Housing	Die-cast Aluminum
Blades	Sheet-Steel,Welded onto Rotor
Bearing	Dual Ball Bearing, Permanently Lubricated
Termination	Terminals
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +60°C(Humidity 30%~85% RH)
Weight	1920g

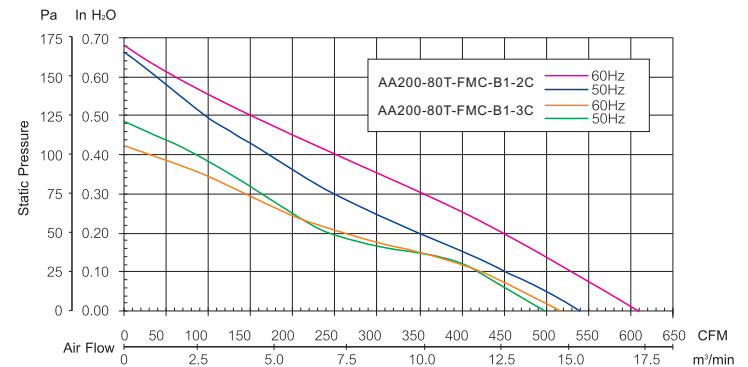


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H₂O)	Noise dB(A)	Capacitor (μF)
AA1V200-80T-FMC-B1-2C	115V	50/60	0.68/0.65	66/74	2480/2830	538/611	15.2/17.3	0.68/0.69	60/63	6μF 200VAC
AA2V200-80T-FMC-B1-2C	230V	50/60	0.33/0.33	66/75	2490/2820	538/609	15.2/17.2	0.68/0.69	60/63	1.5μF 400VAC
AA1V200-80T-FMC-B1-3C	115V	50/60	0.40/0.53	46/60	2360/2450	499/517	14.1/14.7	0.48/0.42	58/59	6μF 200VAC
AA2V200-80T-FMC-B1-3C	230V	50/60	0.20/0.26	44/58	2360/2440	497/517	14.0/14.7	0.48/0.42	58/59	1.5μF 400VAC

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:



# 280x280x80mm

AA250-80T Series

AC Square Axial Fan

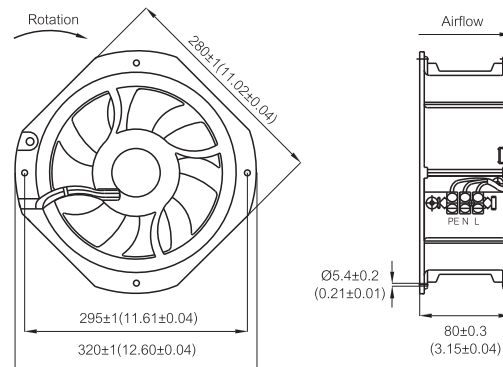
## Specification:

Air Flow	1058~1170 CFM
Housing	Die-cast Aluminum
Blades	Sheet-Steel,Welded onto Rotor
Bearing	Dual Ball Bearing, Permanently Lubricated
Termination	Terminals
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +50°C (Humidity 30%~85% RH)
Weight	2760g

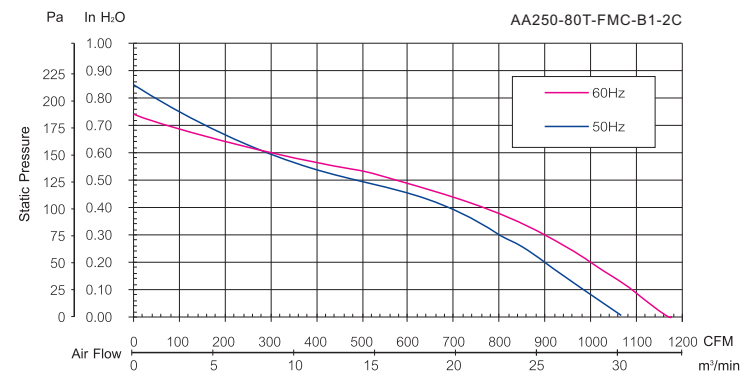


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
AA1V250-80T-FMC-B1-2C	115V	50/60	1.14/1.60	129/180	2560/2820	1065/1170	30.2/33.1	0.84/0.75	68/70	16μF 200VAC
AA2V250-80T-FMC-B1-2C	230V	50/60	0.57/0.79	130/179	2550/2810	1058/1162	30.0/32.9	0.84/0.75	68/70	4μF 400VAC

## Outline Drawing: Unit:mm(Inch)



## Characteristic Curves:





# 370x370x88mm

AA250-80T Series

AC Square Plate Axial Fan



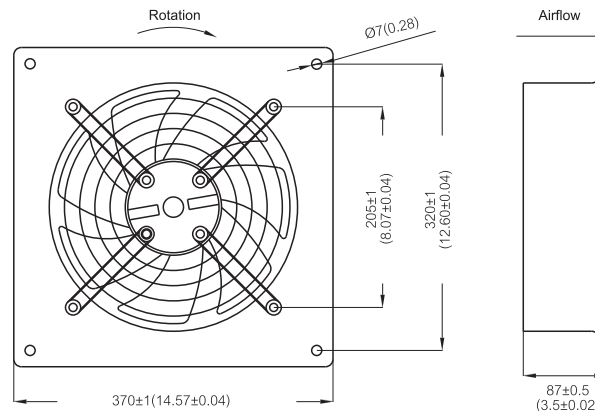
## Specification:

Air Flow	941~990 CFM
Housing	All Metal Construction, Painted Black
Blades	Sheet-Steel, Welded onto Rotor
Bearing	Dual Ball Bearing, Permanently Lubricated
Termination	Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +50°C (Humidity 30%~85% RH)
Weight	4000g

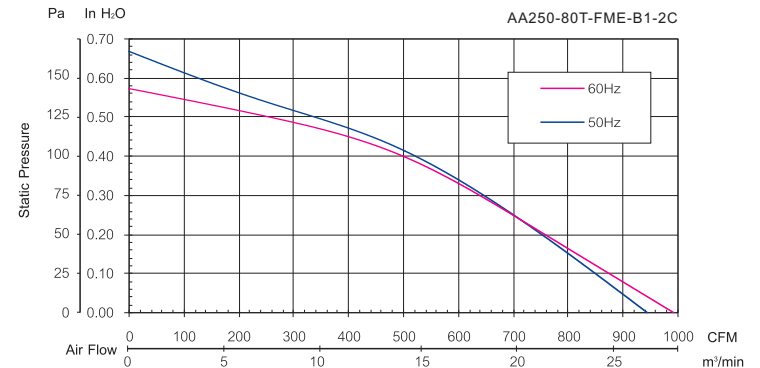


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (μF)
AA1V250-80T-FME-B1-2C	115V	50/60	1.07/1.38	120/157	2390/2520	941/990	26.7/28.0	0.65/0.56	73/74	12μF 200VAC
AA2V250-80T-FME-B1-2C	230V	50/60	0.55/0.70	124/160	2390/2520	948/983	26.9/27.8	0.65/0.56	73/74	3μF 400VAC

Outline Drawing: Unit:mm(Inch)



Characteristic Curves:





# Ø320x88mm AA250-80T Series AC Round Plate Axial Fan



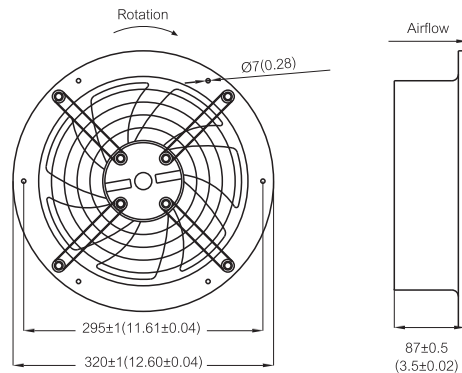
### Specification:

Air Flow	941~990 CFM
Housing	All Metal Construction, Painted Black
Blades	Sheet-Steel,Welded onto Rotor
Bearing	Dual Ball Bearing, Permanently Lubricated
Termination	Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to +50°C (Humidity 30%~85% RH)
Weight	3350g

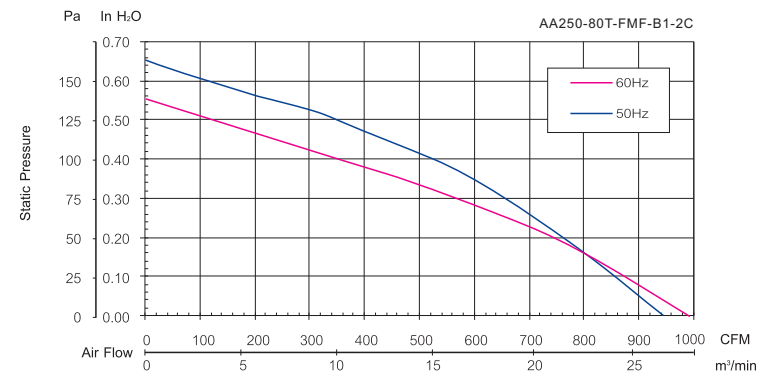


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)	Capacitor (µF)
AA1V250-80T-FMF-B1-2C	115V	50/60	1.07/1.38	120/157	2390/2520	941/990	26.7/28.0	0.66/0.54	73/74	12µF 200VAC
AA2V250-80T-FMF-B1-2C	230V	50/60	0.55/0.70	124/160	2390/2520	948/983	26.9/27.8	0.66/0.54	73/74	3µF 400VAC

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





## AC Axial Fan & Blower

Shyuan Ya's axial fans feature aluminum housing fiber glass reinforced impellers. Each impeller is made of reinforced polyamide fiber glass and comes standard. Each fan comes standard with long-life maintenance-free dual ball bearings. This line comes in five models ranging from 23 models ranging from 80 by 25 mm to 254 by 89 mm, delivering up to 835 cfm of airflow power.





# 80x80x25mm A8C25T Series AC Axial Fan



## Specification:

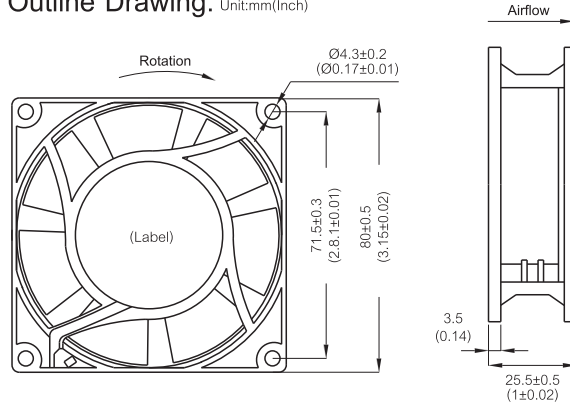
Air Flow	18 ~ 22 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	223g



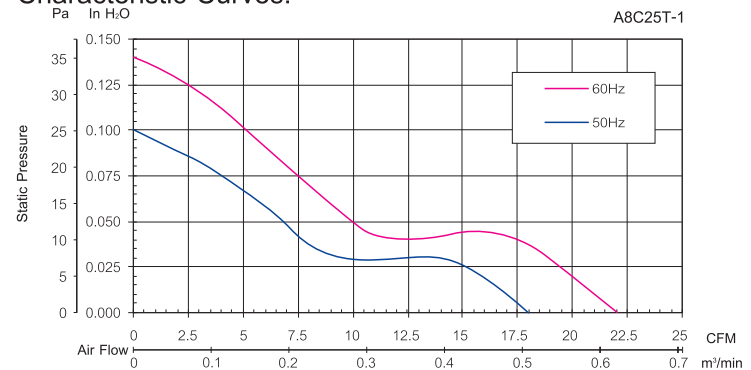
Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V8C25TBL-1	B	115V	50/60	0.07/0.06	6/5	2400/2900	18/22	0.50/0.60	0.10/0.14	25/32
A2V8C25TBL-1	B	230V	50/60	0.05/0.04	9/7	2400/3000	18/22	0.50/0.60	0.10/0.14	25/32
A1V8C25TSL-1	S	115V	50/60	0.09/0.08	8/7	2400/3000	18/22	0.50/0.60	0.10/0.14	25/32
A2V8C25TSL-1	S	230V	50/60	0.05/0.04	10/8	2400/2900	18/22	0.50/0.60	0.10/0.14	25/32

For "Terminal" version, change the "L" in the model number to "T"

## Outline Drawing: Unit:mm(Inch)



## Characteristic Curves:







# 80x80x38mm A8C38T Series AC Axial Fan



### Specification:

Air Flow	26~ 31 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight(g)	232g

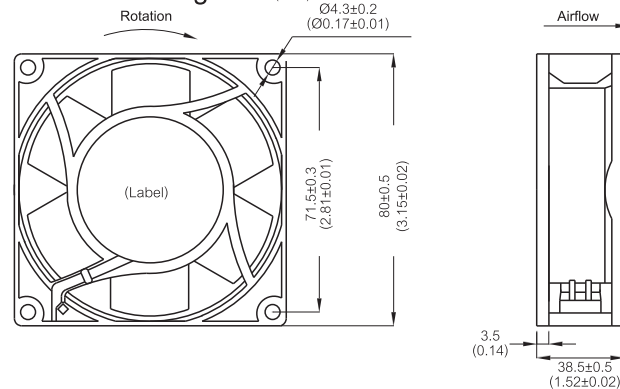


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V8C38TBL-1	B,S	115V	50/60	0.15/0.12	11/9	2700/3100	26/31	0.75/0.90	0.13/0.20	35/39
A2V8C38TBL-1	B,S	230V	50/60	0.08/0.06	11/9	2700/3100	26/31	0.75/0.90	0.13/0.20	35/39

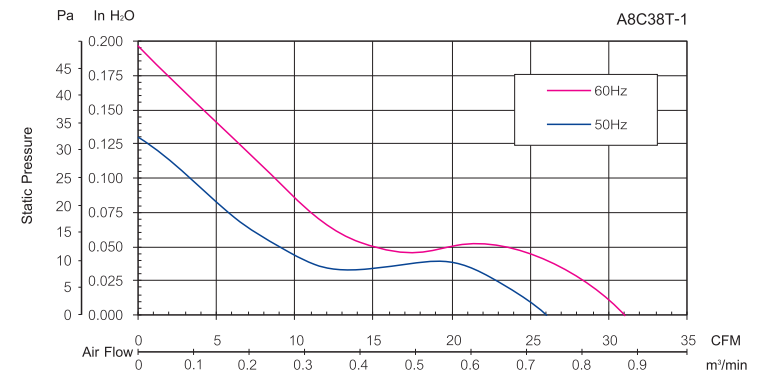
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 92x92x25mm A9C25T Series AC Axial Fan



### Specification:

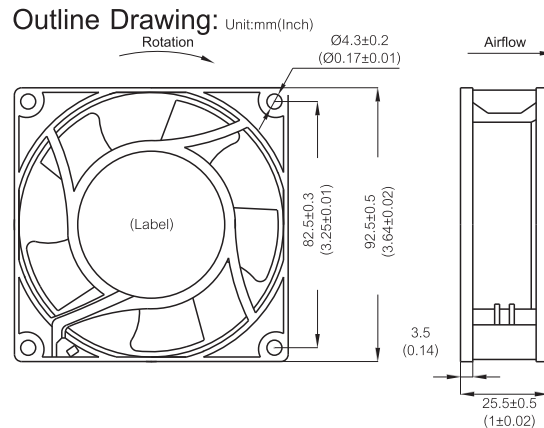
Air Flow	30 ~ 36 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	300g



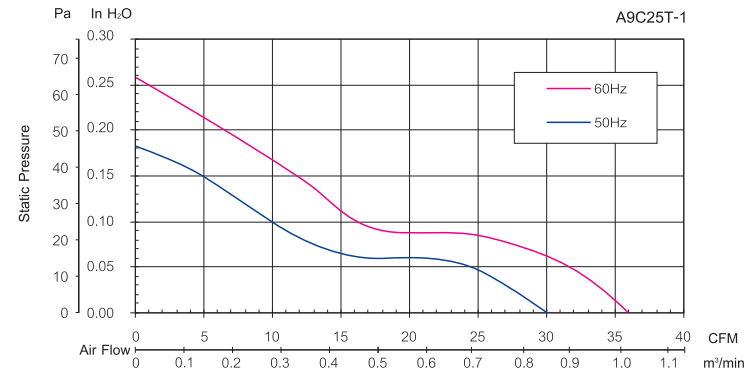
Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V9C25TBL-1	B,S	115V	50/60	0.14/0.11	11/9	2700/3200	30/36	0.85/1.00	0.18/0.26	40/45
A2V9C25TBL-1	B,S	230V	50/60	0.07/0.06	12/10	2600/3100	30/36	0.85/1.00	0.18/0.26	40/45

For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"



### Characteristic Curves:





# 92x92x38mm A9C38T Series AC Axial Fan



### Specification:

Air Flow	42~ 49 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight(g)	446g

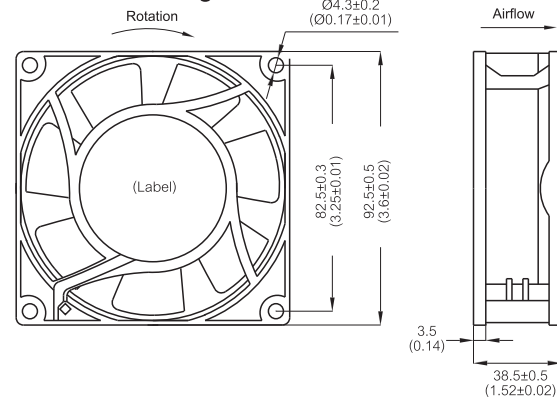


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V9C38TBL-1	B,S	115V	50/60	0.19/0.15	14/11	2800/3200	42/49	1.20/1.40	0.20/0.28	40/45
A2V9C38TBL-1	B,S	230V	50/60	0.10/0.08	15/12	2800/3200	42/49	1.20/1.40	0.20/0.28	40/45

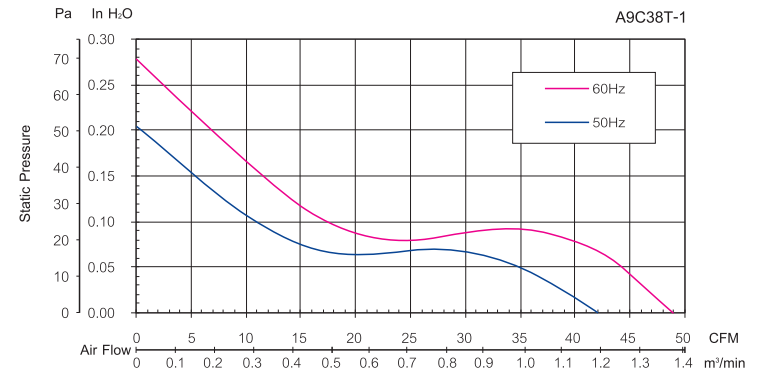
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 120x120x25mm A12C25T Series AC Axial Fan



### Specification:

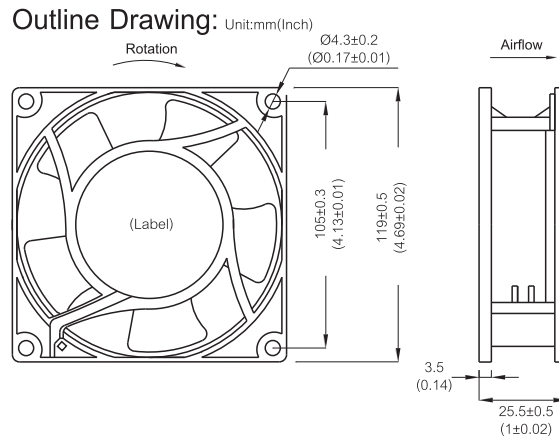
Air Flow	61 ~ 72 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	346g



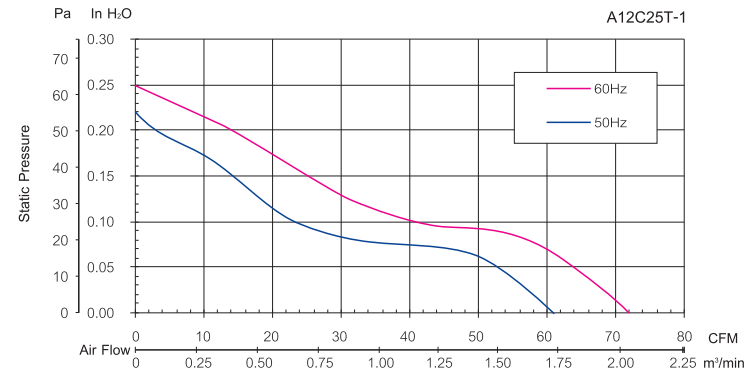
Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V12C25TBL-1	B,S	115V	50/60	0.15/0.12	13/10	2600/3100	61/72	1.80/2.00	0.22/0.25	42/45
A2V12C25TBL-1	B,S	230V	50/60	0.07/0.06	13/10	2600/3000	61/72	1.80/2.00	0.22/0.25	42/45

For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"



### Characteristic Curves:





# 120x120x38mm A12C38T Series AC Axial Fan



### Specification:

Air Flow	103 ~ 117 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight(g)	515g

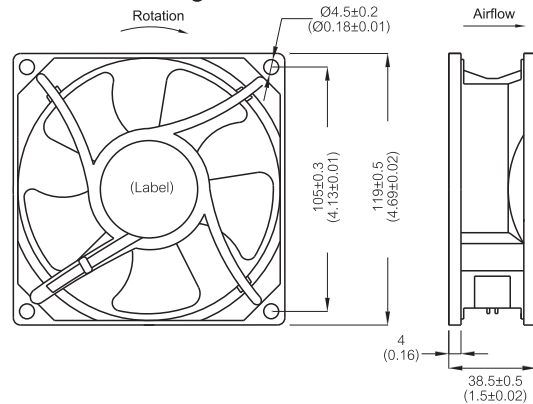


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V12C38TBL-1	B,S	115V	50/60	0.22/0.18	16/14	2700/3000	103/117	2.90/3.30	0.31/0.26	43/47
A2V12C38TBL-1	B,S	230V	50/60	0.11/0.09	16/14	2700/3100	103/117	2.90/3.30	0.31/0.26	43/47

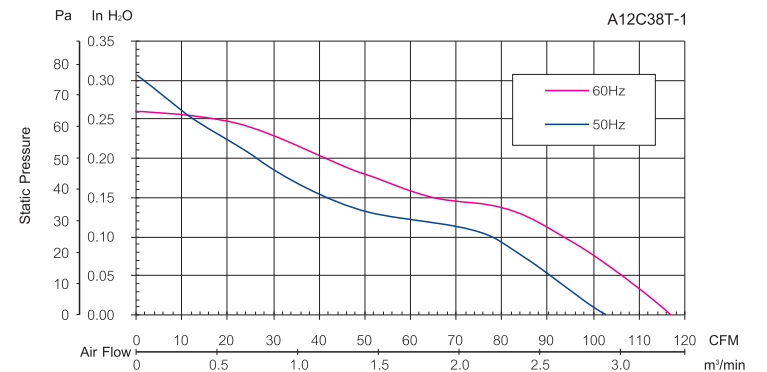
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 120x120x38mm A12C38T Series AC Axial Fan



### Specification:

Air Flow	85 ~ 97 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	515g

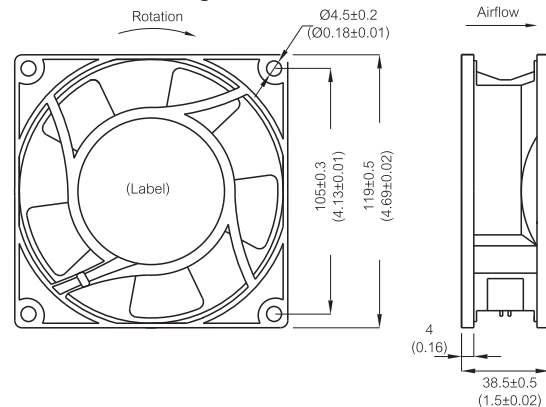


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V12C38TBL- IU	B,S	115V	50/60	0.26/0.21	20/16	2600/3000	85/97	2.40/2.80	0.28/0.26	44/48
A2V12C38TBL- IU	B,S	230V	50/60	0.13/0.10	20/16	2700/3100	85/97	2.40/2.80	0.28/0.26	44/48

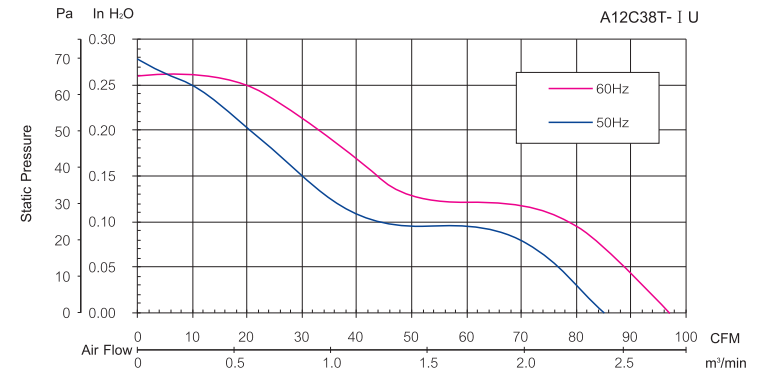
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 120x120x38mm A12C38T Series AC Axial Fan



### Specification:

Air Flow	81 ~ 83 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	515g

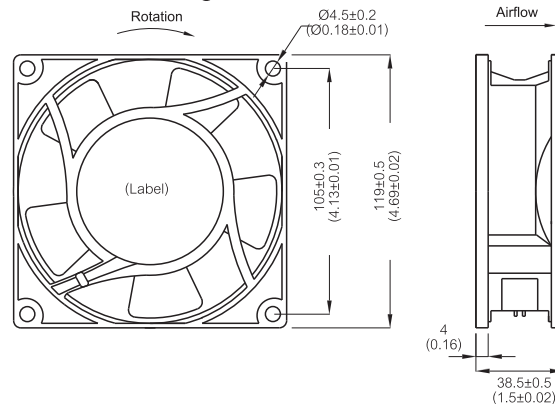


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V12C38TBL-II	B,S	115V	50/60	0.14/0.13	11/11	2500/2500	83/81	2.30/2.20	0.20/0.09	43/42
A2V12C38TBL-II	B,S	230V	50/60	0.07/0.06	12/11	2500/2500	83/81	2.30/2.20	0.20/0.09	43/42

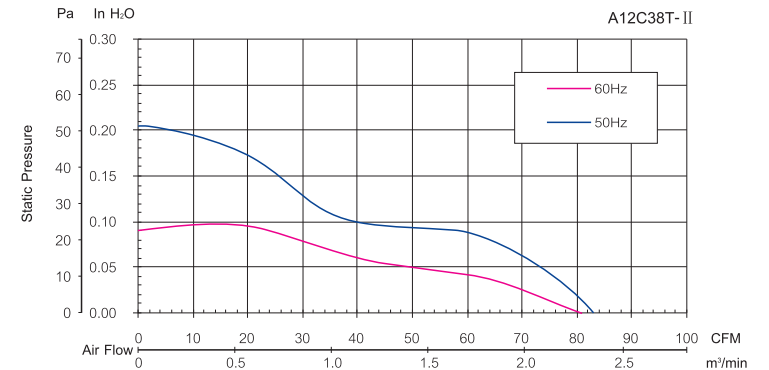
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 120x120x38mm A12C38T Series AC Axial Fan



### Specification:

Air Flow	61 ~ 64 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	515g

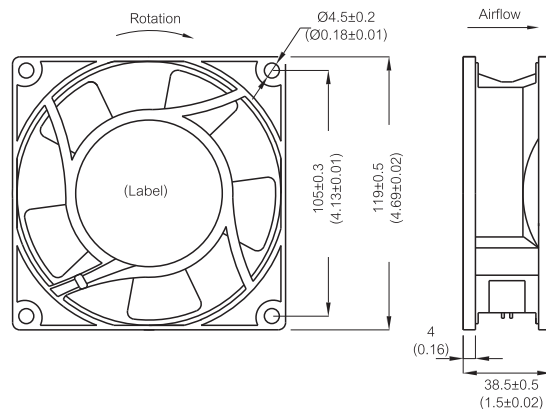


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V12C38TBL-III	B,S	115V	50/60	0.13/0.11	11/10	2000/1900	61/64	1.70/1.80	0.11/0.08	34/35
A2V12C38TBL-III	B,S	230V	50/60	0.07/0.06	12/10	1900/2000	61/64	1.70/1.80	0.11/0.08	34/35

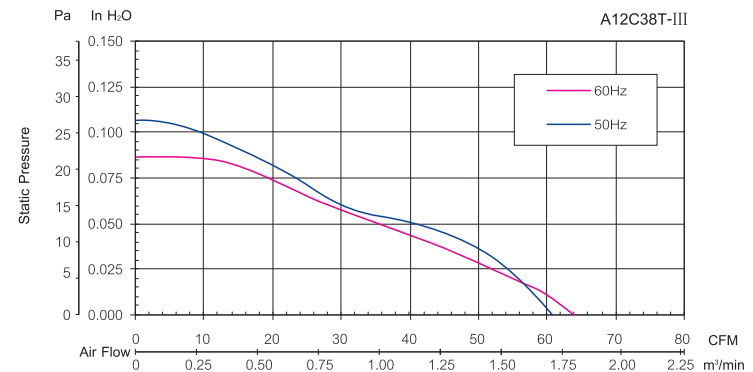
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:







# 120x120x38mm A12C38T Series AC Axial Fan



### Specification:

Air Flow	56 ~ 61 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	515g

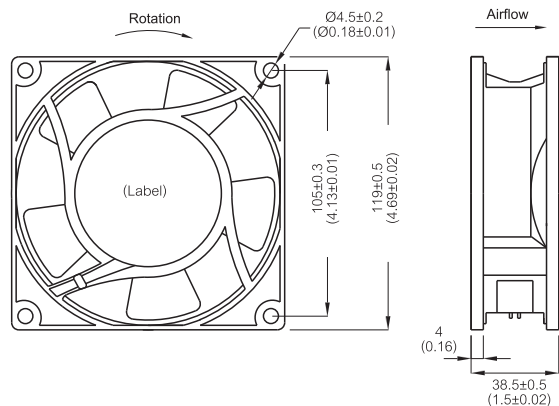


Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V12C38TBL-IV	B,S	115V	50/60	0.08/0.07	7/6	1900/1700	61/56	1.70/1.50	0.09/0.07	34/33
A2V12C38TBL-IV	B,S	230V	50/60	0.05/0.04	9/8	1900/1800	59/59	1.60/1.60	0.09/0.07	33/33

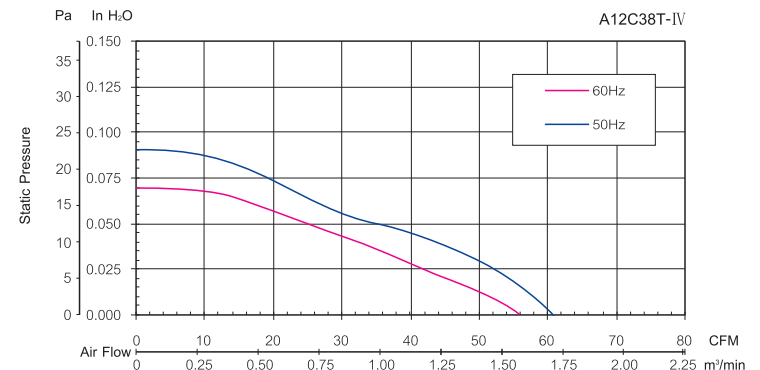
For "Sleeve" bearing version, change the "B" in the model number to "S".

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 127x127x38mm A13C38T Series AC Axial Fan



### Specification:

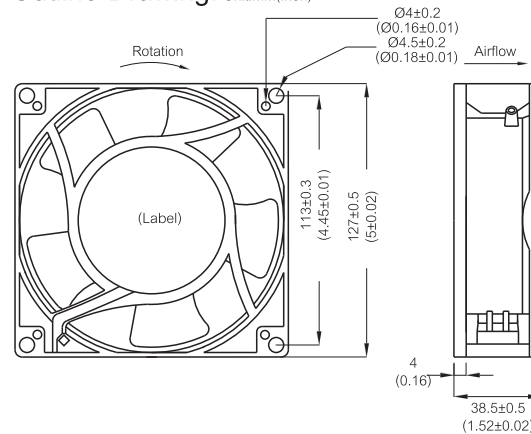
Air Flow	107 ~ 123 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball or Sleeve
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Impedance Protected
Operating Temperature	-10°C to + 70°C for Sleeve Type -20°C to + 80°C for Ball Type
Weight	562g



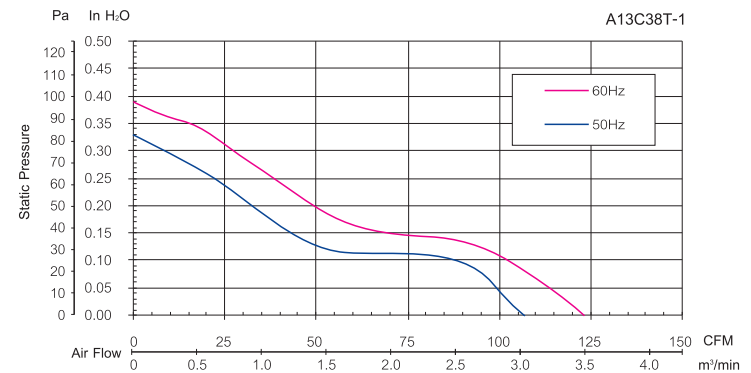
Item Code	Bearing Availability	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V13C38TBL-1	B,S	115V	50/60	0.32/0.26	24/20	2700/3100	107/123	3.00/3.40	0.33/0.39	47/50
A2V13C38TBL-1	B,S	230V	50/60	0.16/0.13	25/20	2700/3100	107/123	3.00/3.40	0.33/0.39	47/50

For "Sleeve" bearing version, change the "B" in the model number to "S".  
For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 151x172x38mm A15C38T Series AC Axial Fan



### Specification:

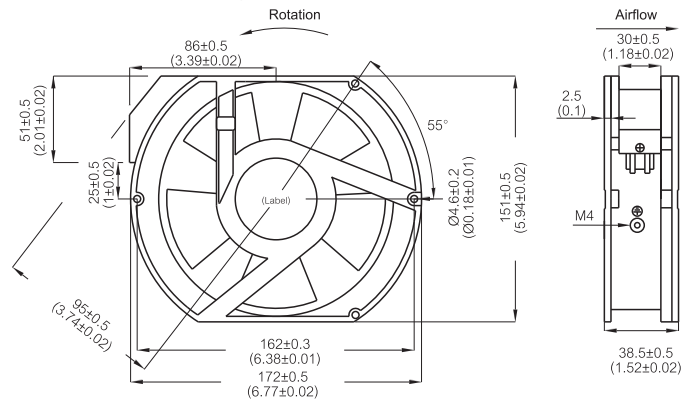
Air Flow	99 ~ 229 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	693g



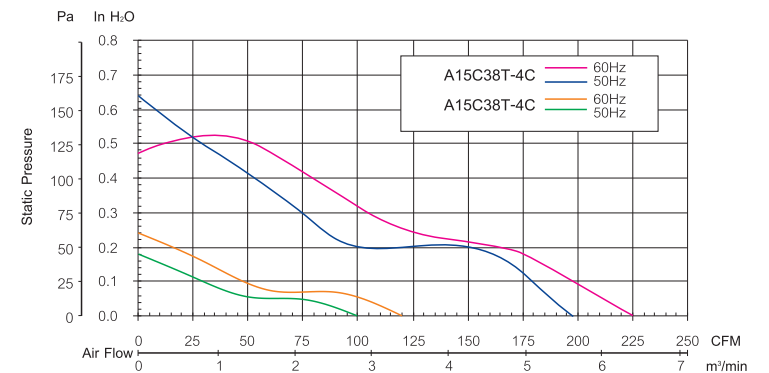
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V15C38TBL-1C	115V	50/60	0.22/0.29	25/32	2900/3300	198/225	5.60/6.40	0.64/0.47	58/62
A2V15C38TBL-1C	230V	50/60	0.11/0.14	25/31	2900/3400	198/229	5.60/6.50	0.64/0.70	58/62
A1V15C38TBL-4C	115V	50/60	0.15/0.15	16/16	1450/1735	100/119	2.80/3.40	0.18/0.25	40/45
A2V15C38TBL-4C	230V	50/60	0.06/0.07	14/13	1450/1730	99/117	2.80/3.30	0.18/0.24	40/45

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 151x172x51mm A15C51T Series AC Axial Fan



### Specification:

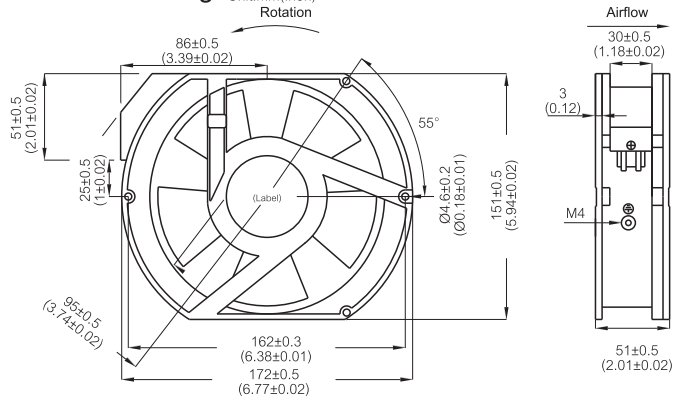
Air Flow	178 ~ 212 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)/ Impedance Protected
Operating Temperature	-20°C to + 80°C
Weight	875g



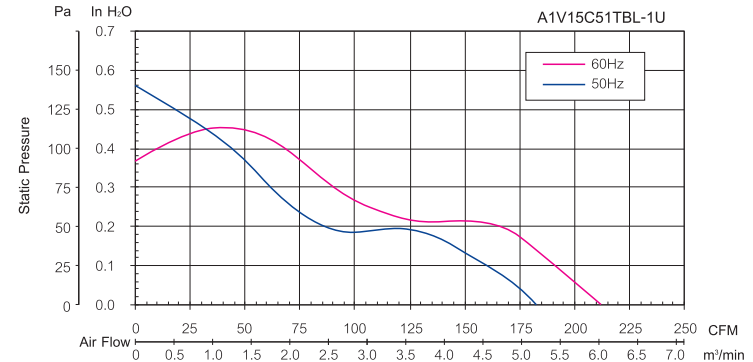
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V15C51TBL-1U	115V	50/60	0.76/0.53	47/36	2800/3300	178/210	5.00/5.90	0.56/0.37	54/58
A2V15C51TBL-1U	230V	50/60	0.41/0.29	51/39	2800/3300	183/212	5.20/6.00	0.56/0.37	54/58

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 151x172x51mm A15C51T Series AC Axial Fan



### Specification:

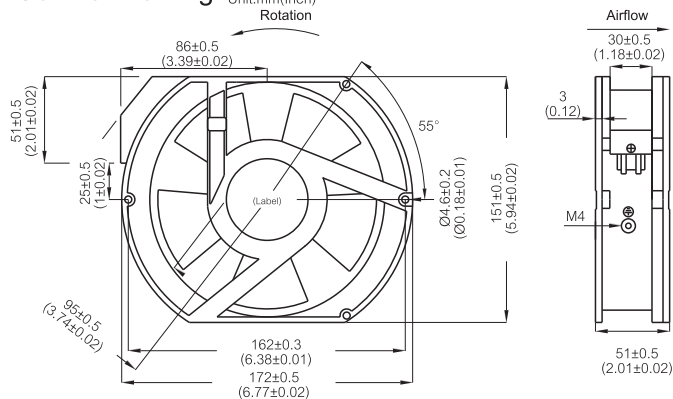
Air Flow	261 ~ 295 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)/ Impedance Protected
Operating Temperature	-20°C to + 80°C
Weight	875g



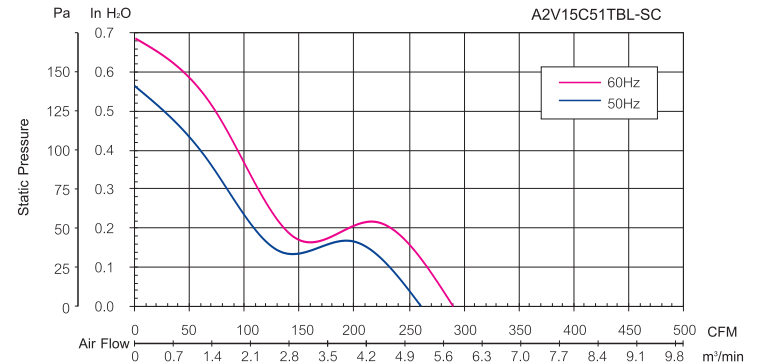
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V15C51TBL-SC	115V	50/60	—	—	—	—	—	—	—
A2V15C51TBL-SC	230V	50/60	0.19/0.23	40/52	2777/3106	261/295	5.20/6.00	0.56/0.69	54/58

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 151x172x51mm A15C51T Series AC Axial Fan



### Specification:

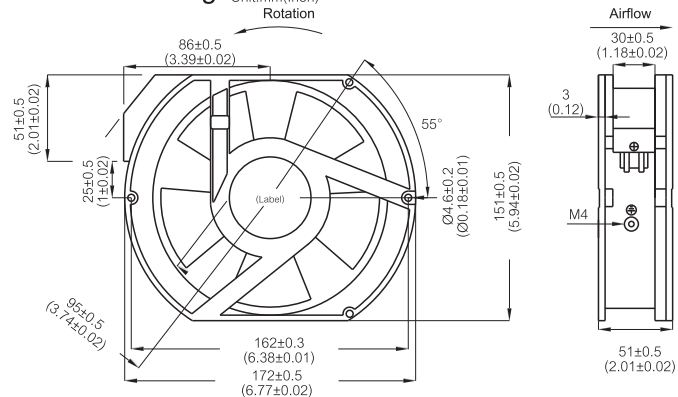
Air Flow	99 ~ 230 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)/ Impedance Protected
Operating Temperature	-20°C to + 80°C
Weight	875g

Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V15C51TBL-1C	115V	50/60	0.22/0.28	25/31	2900/3300	198/226	5.60/6.40	0.66/0.40	57/61
A2V15C51TBL-1C	230V	50/60	0.11/0.15	25/32	2900/3300	198/230	5.60/6.50	0.66/0.64	57/61
A1V15C51TBL-4C	115V	50/60	0.15/0.15	17/16	1455/1470	99/118	2.80/3.40	0.18/0.26	39/45
A2V15C51TBL-4C	230V	50/60	0.06/0.07	14/14	1455/1735	99/119	2.80/3.40	0.18/0.25	39/44

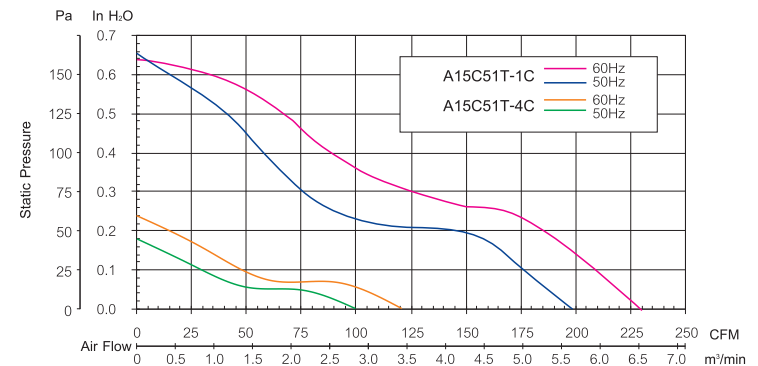


For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:



# 150x170x55mm A15C55T Series AC Axial Fan



### Specification:

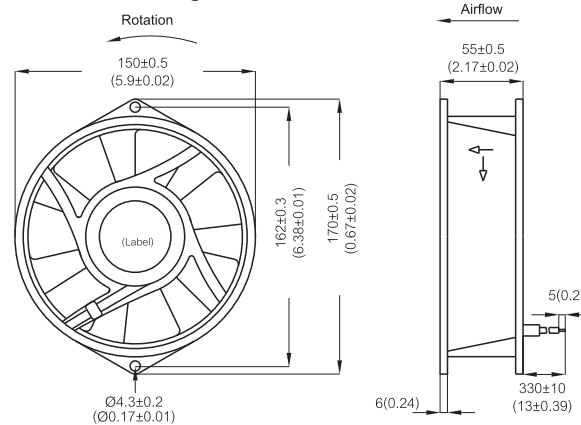
Air Flow	202 ~ 239 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	1000g

(Reverse Blow)

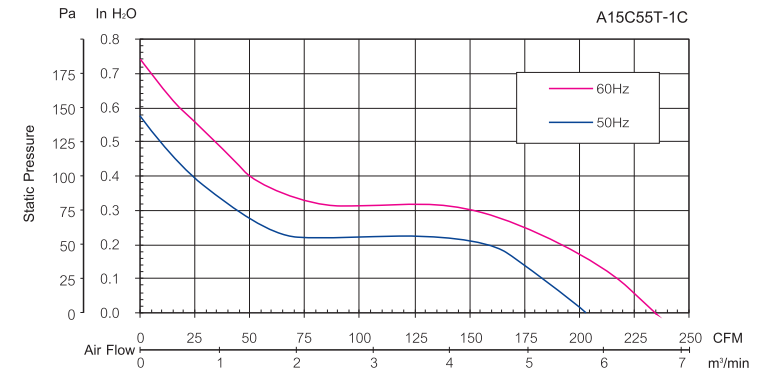


Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V15C55TBL-1C	115V	50/60	0.34/0.38	38/44	2900/3400	204/235	5.80/6.70	0.58/0.74	57/61
A2V15C55TBL-1C	230V	50/60	0.17/0.19	37/43	2900/3400	202/239	5.70/6.80	0.58/0.74	57/61

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 160x160x62mm A16C62T Series AC Axial Fan



### Specification:

Air Flow	261 ~ 307 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	1400g

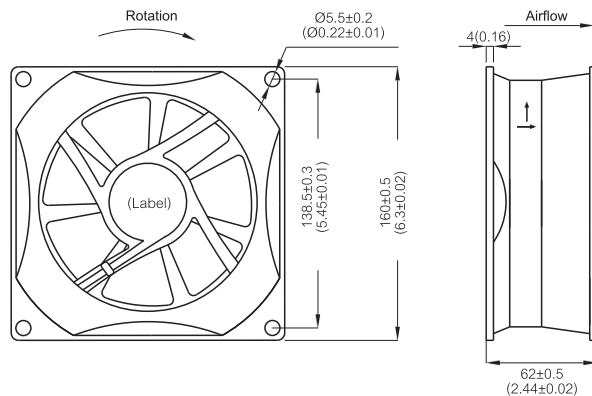
(Reverse Blow)



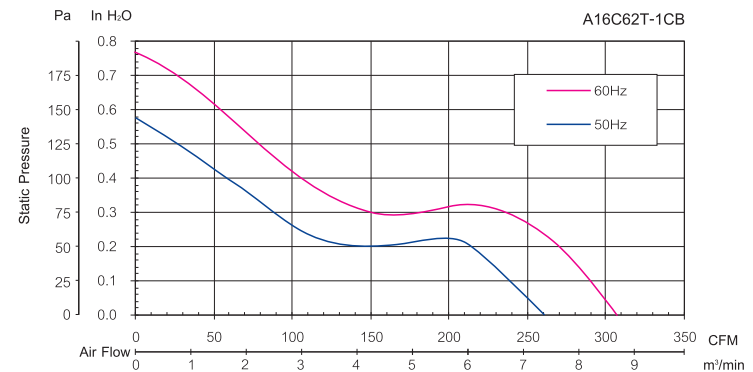
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V16C62TBL-1CB	115V	50/60	0.45/0.50	51/58	2900/3400	261/307	7.40/8.70	0.58/0.77	60/64
A2V16C62TBL-1CB	230V	50/60	0.23/0.25	51/57	2900/3400	261/305	7.40/8.60	0.58/0.77	60/64

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# 160x160x62mm A16C62T Series AC Axial Fan



### Specification:

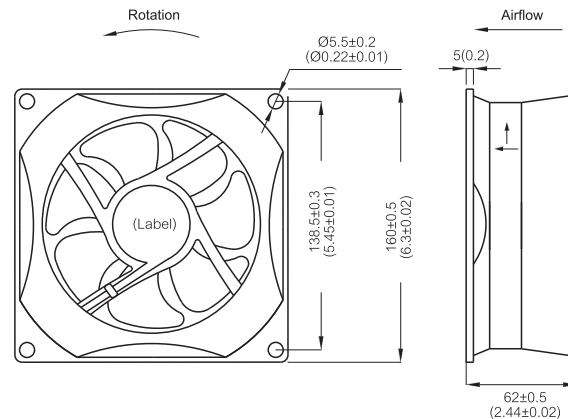
Air Flow	239 ~ 288 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	1400g



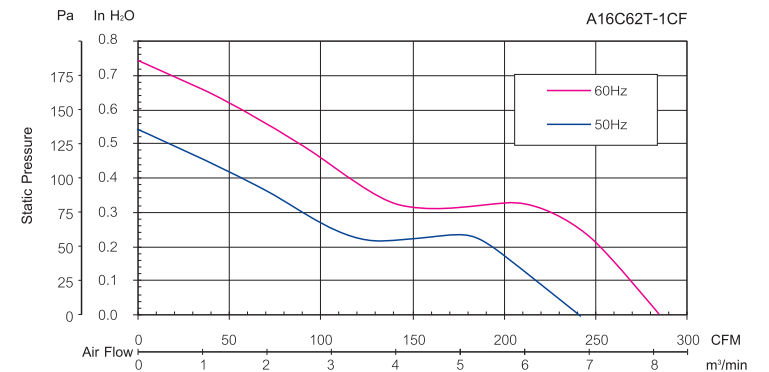
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V16C62TBL-1CF	115V	50/60	0.45/0.50	51/57	2900/3400	241/285	6.80/8.10	0.54/0.74	51/56
A2V16C62TBL-1CF	230V	50/60	0.23/0.24	50/55	2900/3500	239/288	6.70/8.20	0.54/0.74	51/56

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# Ø170x51mm A17C51T Series AC Axial Fan



## Specification:

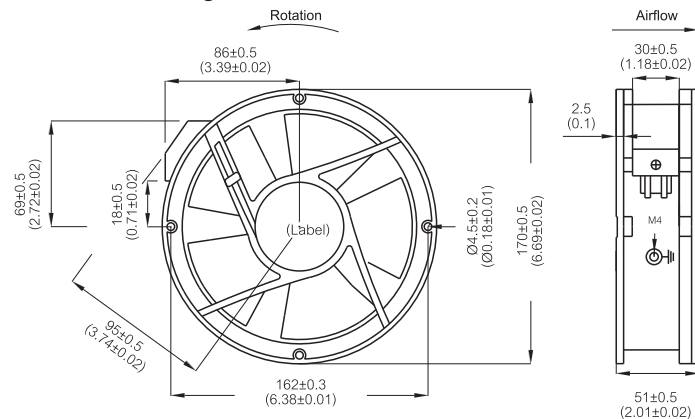
Air Flow	100 ~ 225 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Thermoplastic PBT, UL94V-0
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	875g

Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V17C51TBL-1C	115V	50/60	0.22/0.28	25/31	2900/3400	195/225	5.57/6.42	0.61/0.39	57/61
A2V17C51TBL-1C	230V	50/60	0.11/0.14	24/30	2900/3300	195/225	5.57/6.42	0.61/0.66	57/61
A1V17C51TBL-4C	115V	50/60	0.15/0.15	17/16	1450/1750	100/121	2.83/3.41	0.18/0.25	39/44
A2V17C51TBL-4C	230V	50/60	0.06/0.06	14/13	1450/1750	101/120	2.85/3.41	0.18/0.25	39/44

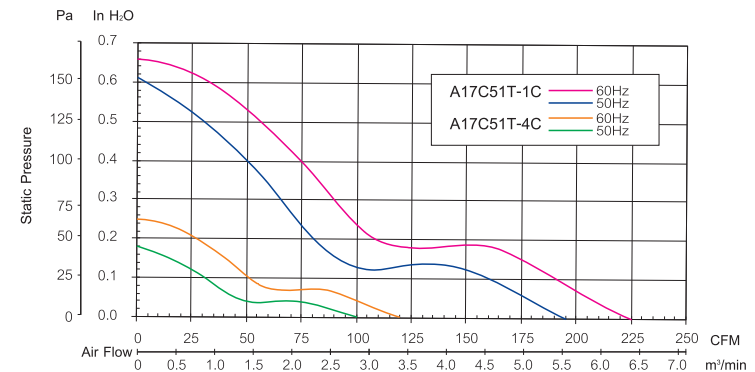


For "Terminal" version, change the "L" in the model number to "T"  
UL safety approval is for "Terminal" model version only.

## Outline Drawing: Unit:mm(Inch)



## Characteristic Curves:



# 180x180x65mm A18C65T Series AC Axial Fan



### Specification:

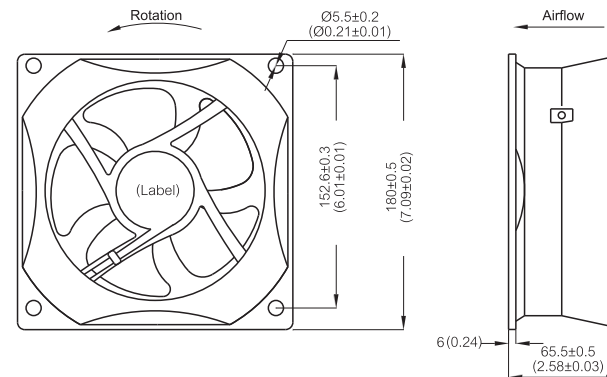
Air Flow	342 ~ 394 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally Protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	1600g



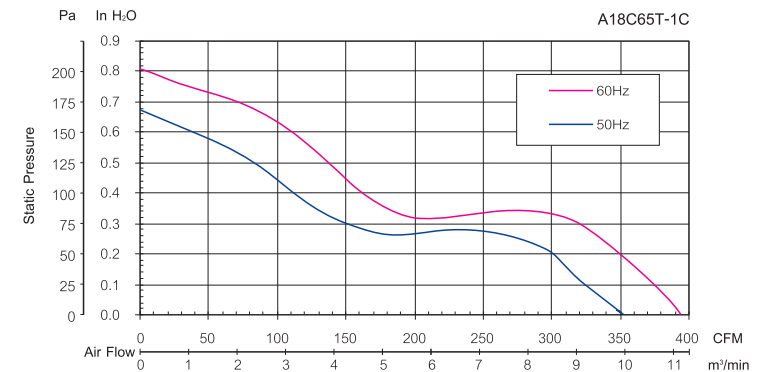
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V18C65TBL-1C	115V	50/60	0.49/0.66	56/74	2800/3150	342/365	9.70/10.30	0.67/0.61	58/61
A2V18C65TBL-1C	230V	50/60	0.26/0.33	58/76	2900/3300	352/394	9.90/11.10	0.67/0.81	58/61

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:



# 180x180x90mm A18C90T Series AC Axial Fan



### Specification:

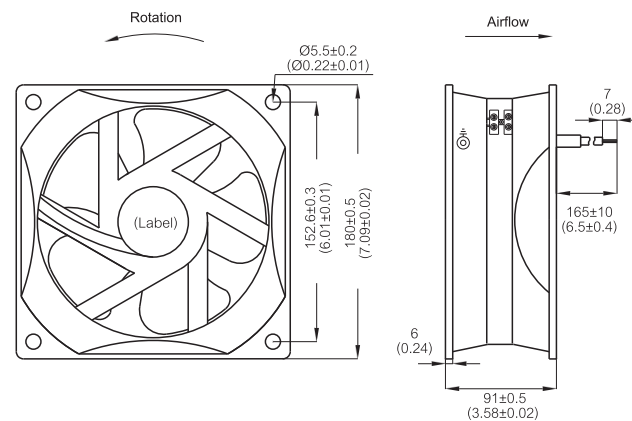
Air Flow	376 ~ 434 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)
Operating Temperature	-20°C to + 80°C
Weight	1600g



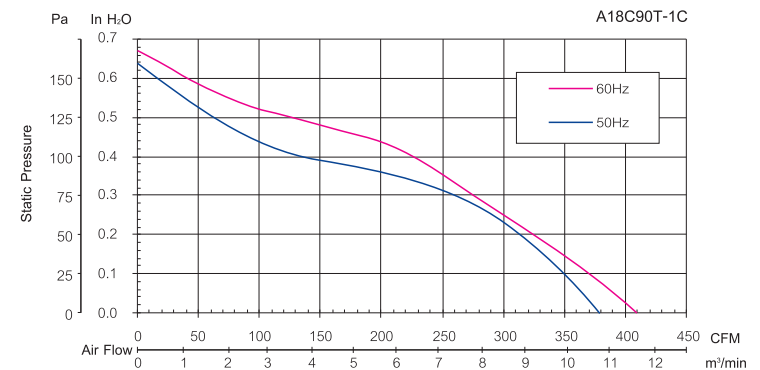
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V18C90TBL-1C	115V	50/60	0.47/0.66	57/77	2800/3000	376/409	10.60/11.60	0.64/0.67	58/61
A2V18C90TBL-1C	230V	50/60	0.25/0.33	58/76	2800/3200	378/434	10.70/12.30	0.79/0.73	58/62

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





## Ø254x89mm AA254C89T Series AC Axial Fan



### Specification:

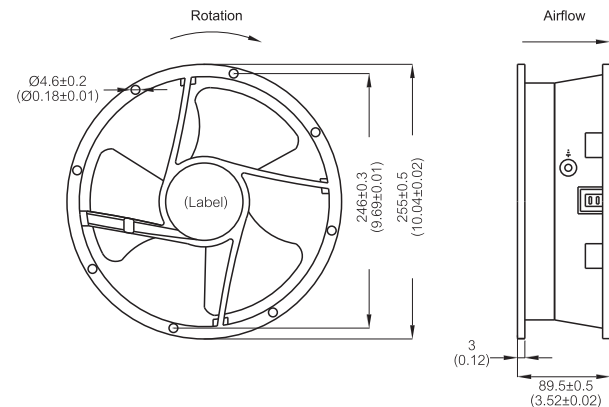
Air Flow	780 ~ 835 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)
Operating Temperature	-30°C to + 80°C
Weight	1600g



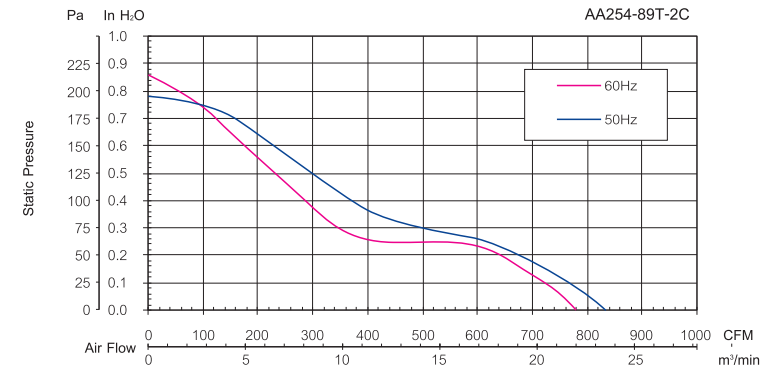
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m <sup>3</sup> /min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
AA1V254-89T-FPD-BL3-2C	115V	50/60	0.95/1.15	97/129	2550/2700	780/834	22.10/23.60	0.86/0.78	68/70
AA2V254-89T-FPD-BL3-2C	230V	50/60	0.55/0.60	98/130	2600/2700	785/835	22.20/23.60	0.86/0.78	68/70

For "Terminal" version, change the "L" in the model number to "T"

### Outline Drawing: Unit:mm(Inch)



### Characteristic Curves:





# Ø254x89mm A25C89T Series AC Axial Fan



## Specification:

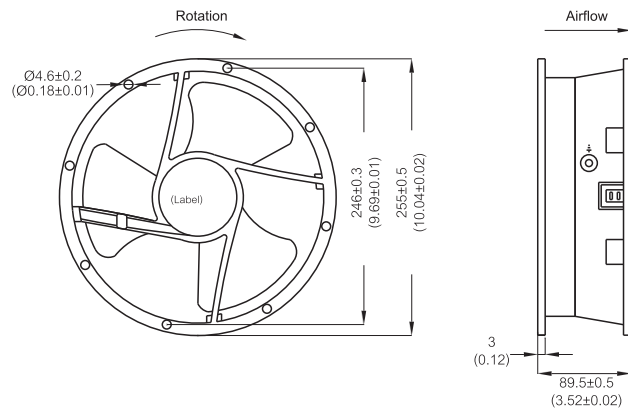
Air Flow	443 ~ 529 CFM
Housing	Die-Cast Aluminum, Painted Black
Impeller	Injection Molded of Flame Retardant Polycarbonate, Black
Bearing	Ball
Termination	Terminals or Lead Wire
Operating Voltage Range	85VAC to 125VAC for 115V Type 185VAC to 245 VAC for 230V Type
Insulation	Class "B" or "F"
Safety	Thermally protected (Auto Restart)
Operating Temperature	-30°C to + 80°C
Weight	1600g



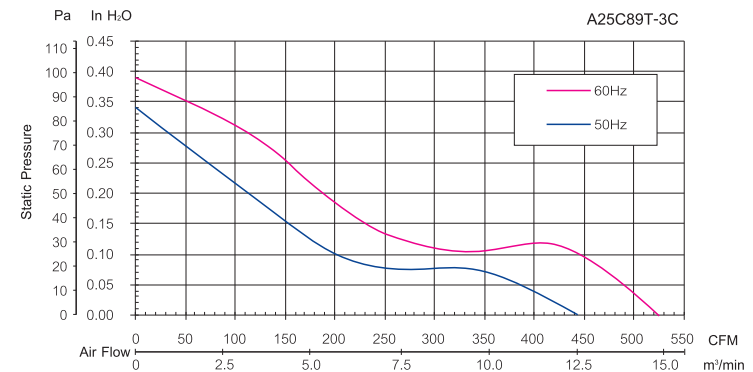
Item Code	Rated Voltage	Frequency (Hz)	Rated Current(A)	Input Power(W)	Speed (RPM)	Air Flow (CFM)	Air Flow (m³/min)	Static Pressure (inch-H <sub>2</sub> O)	Noise dB(A)
A1V25C89TBL-3C	115V	50/60	0.35/0.36	38/40	1400/1700	443/525	12.50/14.90	0.34/0.27	49/53
A2V25C89TBL-3C	230V	50/60	0.19/0.18	39/40	1400/1700	445/529	12.60/15.00	0.34/0.39	49/53

For "Terminal" version, change the "L" in the model number to "T"

## Outline Drawing: Unit:mm(Inch)

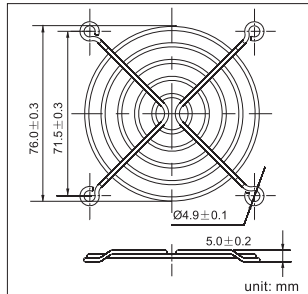


## Characteristic Curves:





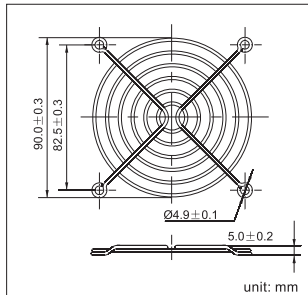
# Finger Guard



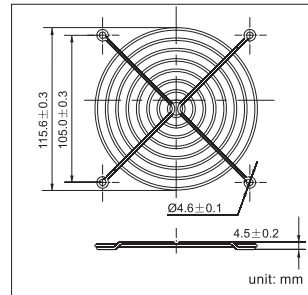
FGW-080 Series

The FGW Series Wire Form Fan Guards are designed for tubeaxial fans in 80mm; 92mm; 120mm; 172mm; 254mm size and other custom design products.

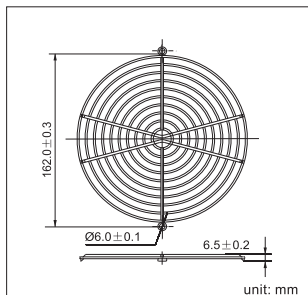
- Materials: Bright basic wire.
- Finish: bright nickel chrome plating.
- Weld joints to withstand 220 lbs pull force.
- Part meets Ø6.35mm plug gauge test.



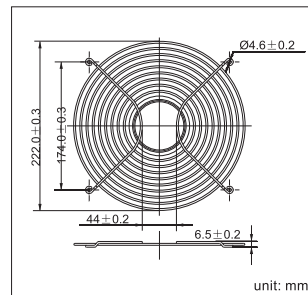
FGW-090 Series



FGW-120 Series



FGW-162 Series

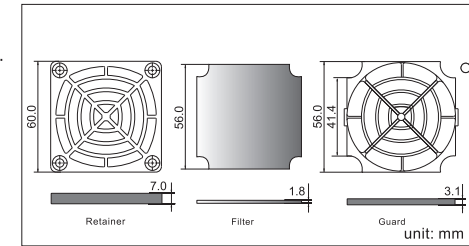


FGW-254 Series

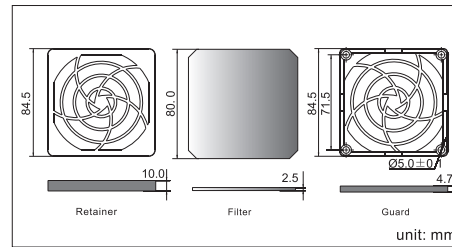
# Plastic Fan Filter

The PPF Series Plastic Fan Filter are designed for tubeaxial fan in 60mm; 80mm; 92mm; 120mm; 172mm size and other custom design products.

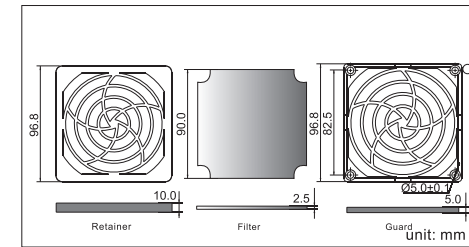
- Retainer & Guard Material: Flame - Retardant plastic ABS thermoplastic, Rated UL94V-0.
- Retainer & Guard Color: Standard black.
- Filter Material: Polyurethane(PU) Foam.
- Filter Density: 30PPI, 45PPI, 60PPI (pores per inch).



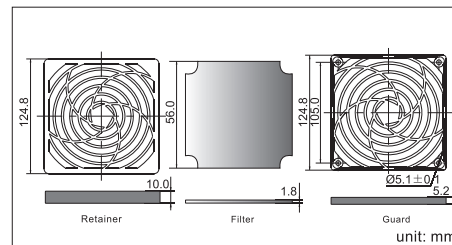
PPF-060 Series



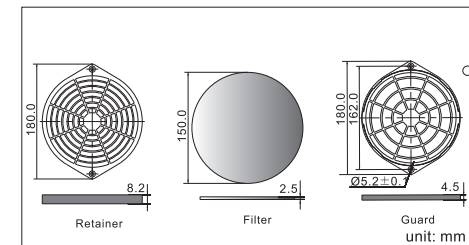
PPF-080 Series



PPF-090 Series



PPF-120 Series



PPF-162 Series

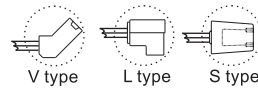


# Fan Power Cord

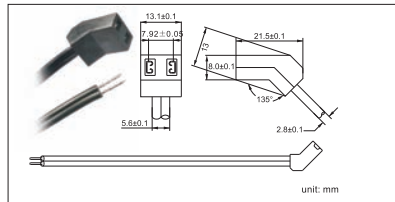
The FPC Series Power Cords come in a variety of lengths, connector designs, and cord ends. This line of fan cords is suitable for all tube axial fans with a terminal connector. The connectors are available in three configurations while the cord ends can be blunt cut or power plug. Cord lengths come in 12", 24", 36", 48", 60", 72", 84", 96", 108", and 120". Custom designs and lengths are available upon request.

### Specifications :

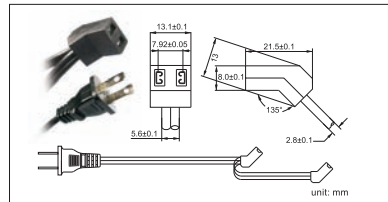
- UL Listed-CSA approved.
- Three types of connector:
  - a. 45° Style connector (V Type).
  - b. 90° Style connector (L Type).
  - c. 180° Style connector (S Type).



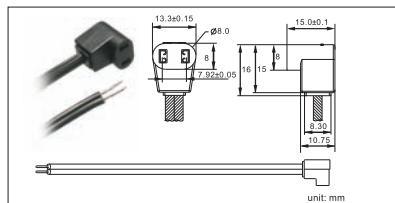
Cable Length	
mm	inch
305	12
610	24
915	36
1220	48
1525	60
1830	72
2130	84
2440	96
2745	108
3050	120



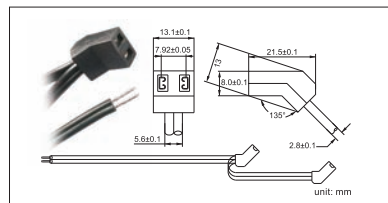
FPC-V Series



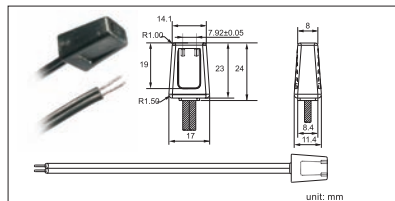
FPC-VP Series



FPC-L Series



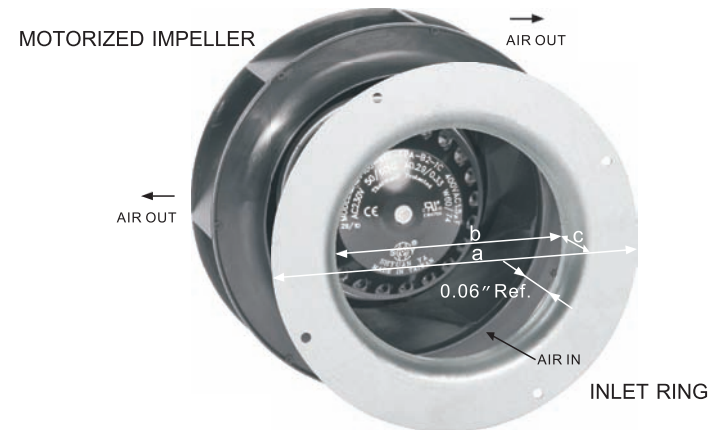
FPC-VW Series



FPC-S Series



# Inlet Rings



Impeller Number	Impeller Diameter	Inlet Ring Max. Dimensions mm(Inches)		
		a	b	c
BA155-95T, BA155-110T	Ø 155	170 (6.69)	108.5 (4.27)	14 (0.55)
BA175-69T, BA175-84T BA175-95T	Ø 175	170 (6.69)	125.5 (4.94)	14 (0.55)
BA180-54T, BA185-85T	Ø 180	170 (6.69)	125.5 (4.94)	14 (0.55)
BA190-69T, BA190-84T BA190-95T	Ø 190	170 (6.69)	125.5 (4.94)	14 (0.55)
BA220-71T	Ø 220	252 (9.92)	156 (6.14)	21 (0.83)
BA225-69T, BA225-85T BA225-99T, BA225-107T	Ø 225	223 (8.78)	149 (5.87)	28 (1.1)
BA250-89T, BA250-99T BA250-112T	Ø 250	255 (10.04)	168 (6.61)	31 (1.22)

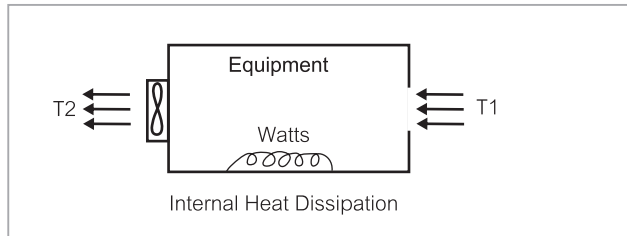
# How to Choose a Fan

In Thermal management, fans are classified as objects that forces air at a volumetric rate to cool certain devices, like a CPU microprocessor. There are numerous types of air moving products including axial, propeller, and tubeaxial fans. Other air movers consist of impellers and blowers (centrifugal & crossflow). Fans, impellers, and blowers could be distinguished by their size, shape, but more importantly, the flow of air (measured in CFM) given the static air pressure.

## How To Choose The Right One For Your Application?

### Measuring Heat

The main purpose of a fan is to cool other components; therefore, the most important factor to consider before choosing a fan is exactly how much heat dissipation is necessary. The amount of heat transferred could be derived using the following equation:



$$Q = m C_p \Delta T$$

Where,

Q = the amount of heat transferred to system, Watts  $C_p$  = the specific heat of air, J/kg x K

m = the mass flow rate of air, kg/s

$\Delta T$  = the desired air temperature differential (cabinet to ambient outside air), K

Yet, there still a relationship between mass flow rate and volumetric flow rate:

$$m = \rho G$$

Where,

G = the volumetric flow rate, m<sup>3</sup>/s

$\rho$  = the air density, kg/m<sup>3</sup>

Therefore, the required volumetric flow rate is then calculated as:

$$G = Q / (\rho C_p \Delta T)$$

By utilizing this formula, a rough estimate of the airflow to obtain the desired overall air temperature rise in  $\Delta T$ , but it does not specify actual airflow. Actual operating airflow is determined by the intersection of the fan curve and the system resistance curve. This point of intersection can be calculated using one of three approaches.

### 1) Airflow network methods:

For this approach to be effective requires certain criteria to be true. First, the flow path to the cabinet must be known or roughly estimated. Secondly, the geometry must remain simple, meaning the three-dimensional flow path cannot be complex.

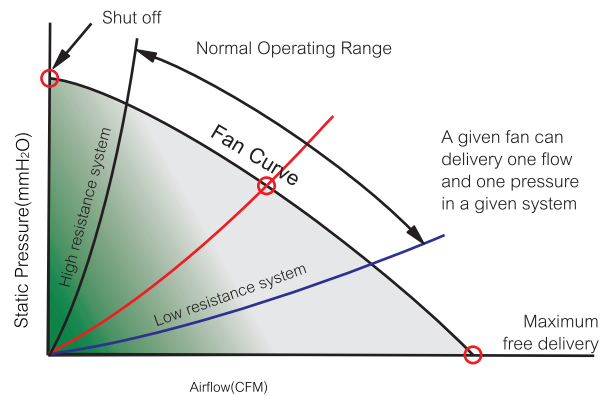
### 2) Computational commercial software:

When the flow path is more complicated, the use of computational fluid dynamics (CFD) may simplify things greatly. A fan's performance curve is used as reference input to the CFD software where the operating point and system resistance is determined. While even taking into account the effects of turbulence and gravity, CFD assesses the flow of air and heat transfer in a three dimensional view, as in a real life application. Even more complex calculations, like fans in series or in parallel formation, can be easier analyzed using CFD software.

### 3) Experimental evaluation mockup of the system:

The total airflow or the system resistance curve can be measured using the experimental method. In this method, the operating airflow is obtained when the engineer superimpose the airflow and system resistance curve.

Regardless of how the operating airflow within a system is derived, all systems are depicted by a system resistance curve as the one shown below.



This non-linear expression of airflow versus static pressure can be stated as:

$$DP = KrGN$$

Where,

DP = system pressure loss

K = the load factor specific to the system

r = density of air

G = rate of airflow

N = a constant which varies between 1 and 2. If N=1, then airflow is completely laminar. If N=2, then completely turbulent.

Once actual airflow is determined, a comparison between actual and required airflow need to be evaluated. If the actual value is considerably less than the required value, the packaging system must be reexamined so the diminishment of airflow resistance can be asserted and renovated.

In summary, the first and foremost important factor to choosing your fan is determining the airflow and the required pressure to move the volumetric rate flow to dissipate heat within your system. Before first making this analysis, to determine other factors like fan dimension, bearing, and the need for special functions might be meaningless or irrelevant. This is an introduction to understand the main purpose of a fan and equations necessary to determine basis of fan selection.

# IP Ratings (Ingress protection)

## IP-Ingress Protection Ratings

IP Ratings are developed by the European Committee for Electro Technical Standardization (CENELEC) (described IEC/EN 60529), specify the environmental protection an enclosure provides.

The IP rating normally has two (or three) digits:

1. Protection from solid objects or materials
2. Protection from liquids
3. Protection against mechanical impacts (commonly omitted)

### The IP Rating system(see the table below)

Example - IP Rating: IP 55

The first digit "5" : the fan is protected from the total touch protection and no harmful ingress of dust.

the second digit "5": the fan is protected from the water jets from any direction and no harmful ingress of water.

IP Rating: IP 55=IP Letter Code _____ IP			
First digit _____ <b>5</b>			
Second digit _____ <b>5</b>			
First digit	Protection from solid objects	Second digit	Protection from solid objects
0	NonProtection	0	NonProtection
1	Touching by finger or 50mm dia. objects	1	Vertical water droplets No harmful ingress
2	Touching by finger or 12mm dia. objects	2	Showering at 15° No harmful ingress
3	Touching by tools or wire 2.5mm dia. or 2.5mm dia. objects	3	Showering at 60° No harmful ingress
4	Touching by tools or wire 1.0mm dia. or 1.0mm dia. objects	4	Splashing from any directions No harmful ingress
<b>5</b>	Total touch protection or no harmful ingress of dust	<b>5</b>	Water jets from any directions No harmful ingress
6	Total touch protection or no ingress of dust	6	Large volumes of water No ingress
Note: EN 60529 does not specify sealing effectiveness against the following : Mechanical damage of the equipment; The risk of explosions; Certain types of moisture conditions: e.g. those that are produced by condensation; corrosive vapours; fungus; vermin		7	Immersion up to 1 meter No ingress
		8	Submersion at specified depths exceeding 1 meter No ingress

# Units of Measure and Conversions

## Air Flow

1 CFM=0.0283 m <sup>3</sup> /min (CMM)	1 CFM=1.699 m <sup>3</sup> /hr
1 m <sup>3</sup> /min=35.31 CFM	1 m <sup>3</sup> /min=60 m <sup>3</sup> /hr
1 m <sup>3</sup> /min= 16.67 Liter/sec	1 Liter/sec=0.06 m <sup>3</sup> / min
1 m <sup>3</sup> /hr=0.589 CFM	1 m <sup>3</sup> / hr=0.0167 m <sup>3</sup> /min

CFM	m <sup>3</sup> /min(CMM)	m <sup>3</sup> /hr
1	0.0283	1.699
35.31	1	60
0.589	0.0167	1

## Static Pressure

1 Pa=0.102 mmH <sub>2</sub> O	1 Pa=0.004 inchH <sub>2</sub> O
1 mmH <sub>2</sub> O=0.0394 inchH <sub>2</sub> O	1 mmH <sub>2</sub> O=9.81 Pa
1 inchH <sub>2</sub> O=249 Pa	1 inchH <sub>2</sub> O=25.4 mmH <sub>2</sub> O

InchH <sub>2</sub> O	mmH <sub>2</sub> O	Pa
1	25.4	249
0.0394	1	9.81
0.004	0.102	1

- *The basic theory of acoustic*

Sound pressure level: SPL (dBA)

$$L_p = 20 \log \frac{P}{P_0} \text{ (dBA)} \dots\dots\dots (a) \quad P_0 = 20 \mu\text{Pa}$$

$P_0$  the reference sound pressure of human hearing system

$L_p$  sound pressure level

Similarity algorithm of fan noise

$$N_2 = 50 \log \frac{rpm_2}{rpm_1} - N_1 \dots\dots\dots (b)$$

$N_1$  noise level measured at rpm 1

$N_2$  noise level calculated by equation (b) at rpm 2

The equations for the relationship between distance and noise level measured at anechoic room.

$$L_p = L_w - 20 \log(r) - 11 \text{ [dBA]} \dots\dots\dots (c)$$

$$L_w = 10 \log \left( \frac{P^2}{P_0^2} \right) + 10 \log(4 \pi r^2) \dots\dots\dots (d)$$

$L_p$  sound pressure level

$L_w$  sound intensity level

$r$  distance in meter

According to equations (c) and (d), it's very clear the noise level will reduce 6 dBA when the distance doubled.

Comparatively, the noise level will also increase 6 dBA when distance shorten by half.

TAIWAN

No.118-1, Houzhuang Ln.,  
Renwu Dist.,Kaohsiung City 814,  
Taiwan (R.O.C.)  
Tel: +886-7-375-1221  
Fax: +886-7-374-5240



[www.coolingfanmanufacturers.com](http://www.coolingfanmanufacturers.com)

