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# ORION FANS

## PRODUCT CATALOG

AC Fans | DC Fans | Fan Trays  
Accessories | Blowers



We'll make you a fan.

[orionfans.com](http://orionfans.com)



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Note 1: The drawings and photos featured in this catalog may not reflect the newest frames and designs that are currently available. Design changes and improvements may be made without prior notification.

Note 2: Data tolerance is +/-10%.

Note 3: ORION FANS meet UL/cUL, TUV, VDE and CE Standards. Most ORION FANS are UL/cUL approved and most carry European approvals as well. Models not currently registered with European approval agencies will be submitted (at our discretion) upon customer request.

Note 4: Additional AC and DC voltages not covered in this catalog are available by special order. Ultra High and Ultra Low speeds are also available by special order. (Minimums may apply.)

Note 5: We make additions to our product line frequently. If you cannot find what you are looking for please give us a call at 800-323-2439 or 214-340-0265 or visit our website at [www.orionfans.com](http://www.orionfans.com).

Note 6: Product is warranted against defects in workmanship and materials for 1 year from date of purchase.

## FAN FACTS...

### LIFE EXPECTANCY

Dual Ball bearing fans will run continuously and reliably for up to 60,000+ hours based on L10 calculations. L10 life for sleeve bearing fans is up to 30,000 hours and sealed sleeve over 50,000 hours. Life will vary depending on the fan size and operating conditions and temperature.

### FRAMES

AC Fans - Diecast aluminum  
 DC Fans - UL94V-0 glass fiber reinforced plastic is standard for frame sizes 120mm and smaller. Aluminum frames are standard for 127mm and larger. 120mm frames are available in both plastic and aluminum.

### IMPELLERS

Glass reinforced thermoplastic - UL94V-0. Optional metal impellers are available for a number of models.

ISO 9001:2008 Certified 951001232-A  
 UL E170149



# Orion Fans Part Number Configurator Tables - AC Fans



**OA 109 AP - 22 - 1 T B - 18**

**Special Function:**

**R** = Reverse Airflow      **03** = Temperature Control      **XC** = High Performance  
**18** = Metal Impeller      **55 or IP55** = IP55 Rated      **56** = IP56 Rated  
**SF** = Salt Fog Rated

**Bearing Type:** **B** = Ball bearing      **S** = Sleeve Bearing

**Termination:** **T** = Quick connect terminals      **W** = 12" wire leads

**Speed Version:** **1** = High Speed      **2** = Medium Speed      **3** = Low Speed

**Voltage:** **11** = 115VAC      **12, 115** = 120VAC      **22, 23, 230** = 230VAC  
**11/22 or 1/2** = Dual Voltage (115VAC or 230VAC depending on wire connections)

**Frame Type:** **AP** = Aluminum painted      **APL** = Aluminum painted, low profile  
**AN** = Aluminum natural finish      **ANL** = Aluminum natural finish, low profile  
**SAP** = Stackable aluminum painted      **SAPL** = Stackable aluminum painted, low profile

<b>Model:</b> (case size in mm)	<b>60</b> = 60 x 60 x 30	<b>825</b> = 80 x 80 x 25	<b>80</b> = 80 x 80 x 38
	<b>92</b> = 92 x 92 x 25	<b>938</b> = 92 x 92 x 38	<b>125</b> = 120 x 120 x 25
	<b>109</b> = 120 x 120 x 38	<b>4715</b> = 120 x 120 x 38 (low cost)	<b>119</b> = 127 x 127 x 38
	<b>5920 or 172 (SAP)</b> = 172 x 150 x 51	<b>162</b> = 172 x 172 x 55 (metal)	<b>162-5E</b> = 172 x 172 x 55
	<b>172 (SAPL)</b> = 172 x 150 x 38	<b>172</b> = 172 x 172 x 51	<b>172 (SAP/ X C)</b> = 172 x 150 x 55
	<b>180</b> = 176 x 176 x 89	<b>180 (ANL/APL)</b> = 180 x 180 x 65	<b>200</b> = 200 x 220 x 70
	<b>200EC</b> = 250 x 76	<b>205</b> = 205 x 72	<b>225</b> = 225 x 225 x 80
	<b>254</b> = 254 x 89	<b>2543</b> = 254 x 89 (3 blade)	<b>2547</b> = 254 x 89 (7 blade)
<b>280</b> = 280 x 280 x 80			

**Base Model**  
**OA** = AC fan

Special function codes may not appear on the fan label unless specified by the customer

# Orion Fans Part Number Configurator Tables - DC Fans



**OD 12 38 AP-12 H T B - 01**

**Special Function:**

- |  |   |   |
|--|---|---|
| <b>01</b> =Tachometer Output 5VTTL*        | <b>02</b> =Alarm Output 5VTTL*            | <b>03</b> =Thermistor Speed Control (hub) |
| <b>04</b> =Thermistor Speed Control (wire) | <b>05</b> =PWM Input                      | <b>06</b> =Dual Speed                     |
| <b>07</b> =Temperature Sensor              | <b>08</b> =Tachometer*+Alarm*             | <b>09</b> =Tachometer*+Thermistor         |
| <b>10</b> =Tachometer*+PWM                 | <b>11</b> =Tachometer*+Temperature Sensor | <b>12</b> =Alarm*+Thermistor              |
| <b>13</b> =Alarm*+PWM                      | <b>14</b> =Alarm*+Temperature Sensor      | <b>15</b> =Tachometer*+Alarm*+PWM         |
| <b>16</b> =Tachometer*+Alarm*+Thermistor   | <b>17</b> =Extra Long Lead Wires          | <b>18</b> =Metal Impeller                 |
| <b>19</b> =High Temperature                | <b>20</b> =Conformal Coating              | <b>21</b> =Customized                     |
| <b>55 or IP55</b> =IP55 Rated              | <b>SF</b> =Salt Fog Rated                 |   |

\* To specify "open collector" instead of 5VTTL, add the letter "a" after the special functions code

**High Static Pressure:** **XC**=High Performance    **VXC**=Vane Axial    **XC,XE,XJ**=Super High Performance

**Bearing Type:** **B** = Ball bearing    **S** = Sleeve Bearing    **SS** = Sealed Sleeve Bearing

**Termination:** **T** = Quick connect terminals    **{blank}** = 12" wire leads

**Speed Version:** **HH**=Extra High Speed    **H**=High Speed    **M**=Medium Speed  
**L**=Low Speed    **LL**=Extra Low Speed

**Voltage:** **05** = 5VDC    **12** = 12VDC    **24** = 24VDC    **48** = 48VDC    **60** = 60VDC    Other voltages available

**Frame Type:** **{blank}** = Thermoplastic Construction    **AP** = Diecast Aluminum Black  
**SAPL** = Stackable Diecast Aluminum Black, Low Profile    **APL** = Diecast Aluminum Black, Low Profile  
**SAP** = Stackable Diecast Aluminum Black    **SPOT** = Spot Cooling w/ AC Adapter  
**SPOT / DIN** = Spot Cooling w/ AC Adapter & DIN mounting package

**Thickness:** **06** = 6mm    **10** = 10mm    **15** = 15mm    **20** = 20mm    **25** = 25mm    **28** = 28mm  
**32** = 32mm    **35** = 35mm    **38** = 38mm    **45** = 45mm    **56** = 56mm

**Frame Size (in mm):** **25** = 25 x 25    **30** = 30 x 30    **40** = 40 x 40    **50** = 50 x 50    **52** = 52 x 52    **60** = 60 x 60  
**70** = 70 x 70    **80** = 80 x 80    **92** = 92 x 92    **12** = 120 x 120    **127** = 127 x 38    **172(SAPL)** = 172 x 38  
**172** = 172 x 150    **180** = 180 x 65    **254** = 254 x 89    **280** = 280 x 89

Thickness dimensions are not included in part numbers for these frame sizes: 127, 172, 180, 254, 280

**Base Model:** **OD** = DC fan

Additional suffixes consisting of both numbers and letters may be applied for multiple fan modifications

Special function codes may not appear on the fan label unless specified by the customer

# Orion Fans Part Number Configurator Tables - AC Blowers & Motorized Impellers



**OAB 800 AN - 22 - 3 B**

**Bearing Type:** B or Blank = Dual Ball Bearing Sealed

**Speed Options:** 1 = High Speed  
2 = Medium Speed  
3 = Low Speed  
1/2 = Dual Speed

**Voltage:** 11 = 115 or 120VAC  
22 = 220 or 230VAC

**Frame Type:** AN = Aluminum natural finish  
Blank = Diecast Aluminum

**Model:** 800 = 125 x 126 x 39  
(size in mm) 908 = 183 x 190 x 70  
190 = 190 x 70  
220 = 220 x 71  
22599 = 225 x 99  
400 = 404 x 162

**Base Model:** OAB = AC Blower  
OAB = AC Motorized Impeller

Other models and frame sizes available  
All AC motorized impellers ship with required capacitor

# Orion Fans Part Number Configurator Tables - DC Blowers



**ODB 1232 - 24 HH B**

**Bearing Type:** B = Dual Ball Bearing Sealed

**Speed Options:** HH = Extra High Speed  
 H = High Speed  
 M = Medium Speed  
 L = Low Speed

**Voltage:** 5 = 5VDC  
 12 = 12VDC  
 24 = 24VDC  
 48 = 48VDC

**Frame Type:** PT or Blank = Thermoplastic AN = Aluminum natural finish

**Model:**  
 (size in mm)

- 182 = 182 x 171 x 82
- 600 = 120 x 31
- 1232 = 120 x 32
- 5009 = 50 x 50 x 09
- 5115 = 51 x 15
- 6015 = 60 x 15
- 7530 = 75 x 30
- 9733 = 96 x 33

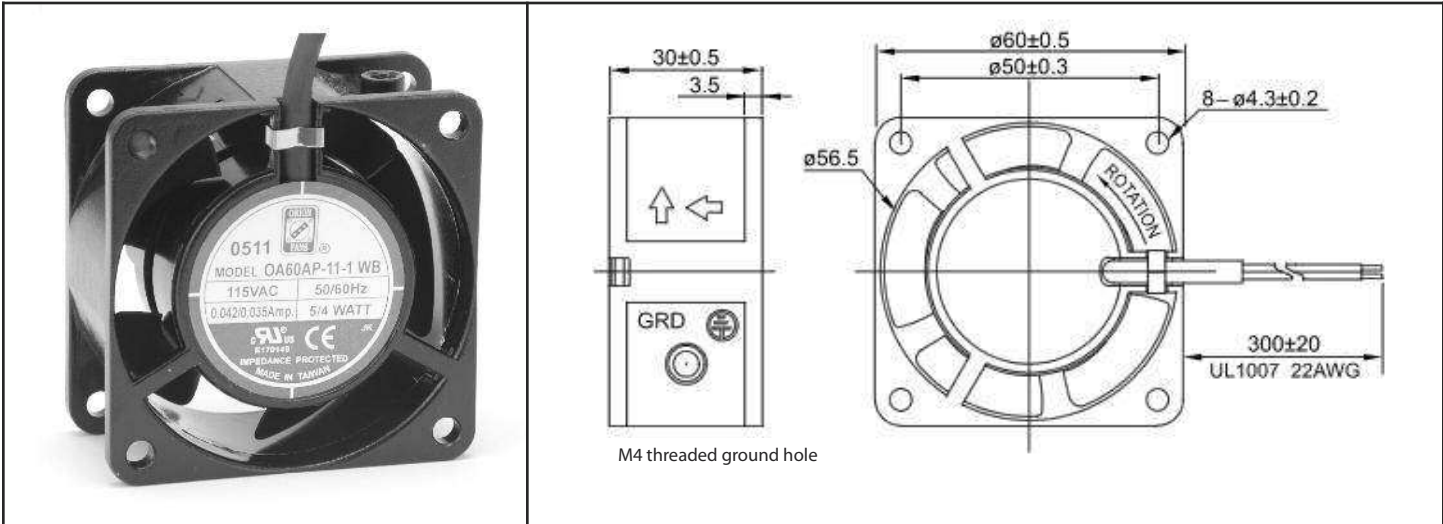
**Base Model:** ODB = DC Blower

Other models and frame sizes available

# OA60 Series



AC Fan - 115V, 230V  
60 x 30mm (2.36" x 1.18")



Frame	Diecast Aluminum	<p><u>Operating Temperature</u> Ball Bearing -20C ~ +80C Storage Temp -40C ~ +80C</p> <p><u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)</p> <p>Weight: ~ 0.31 lbs</p>	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 22 AWG		
Motor	Shaded pole, impedance protected		
Bearing System	Dual ball		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

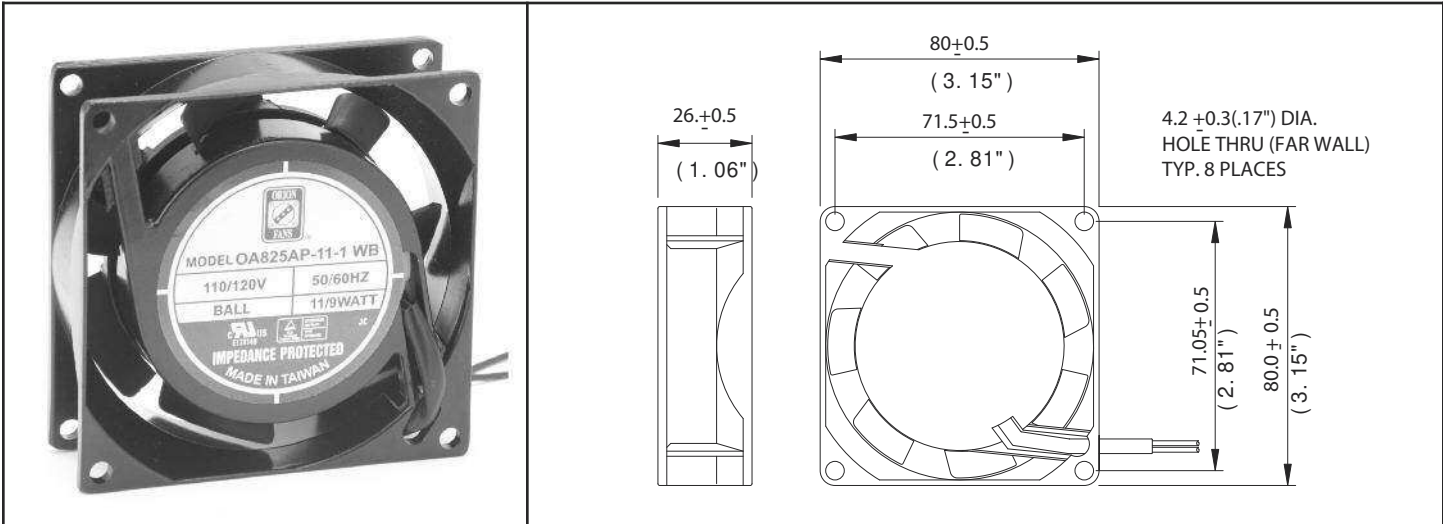
Part Number	OA60AP-11-1WB	OA60AP-22-1WB
Nominal Voltage	115VAC	230VAC
Voltage Range	80 ~ 130VAC	160 ~ 260VAC
Rated Power	4 W	4 W
Rated Speed (RPM)	3,100	3,100
Airflow (CFM)	11	11
Noise Level (dB)	28	28
Max. Static Pressure	0.11" H <sub>2</sub> O	0.11" H <sub>2</sub> O



# OA825 Series



AC Fan - 115V, 230V  
80 x 25mm (3.15" x 1.0")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)  Weight: ~ 0.57 lbs.  m0	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 22 AWG or terminals		
Motor	Shaded pole, impedance protected		
Bearing System	Dual ball or Sleeve		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

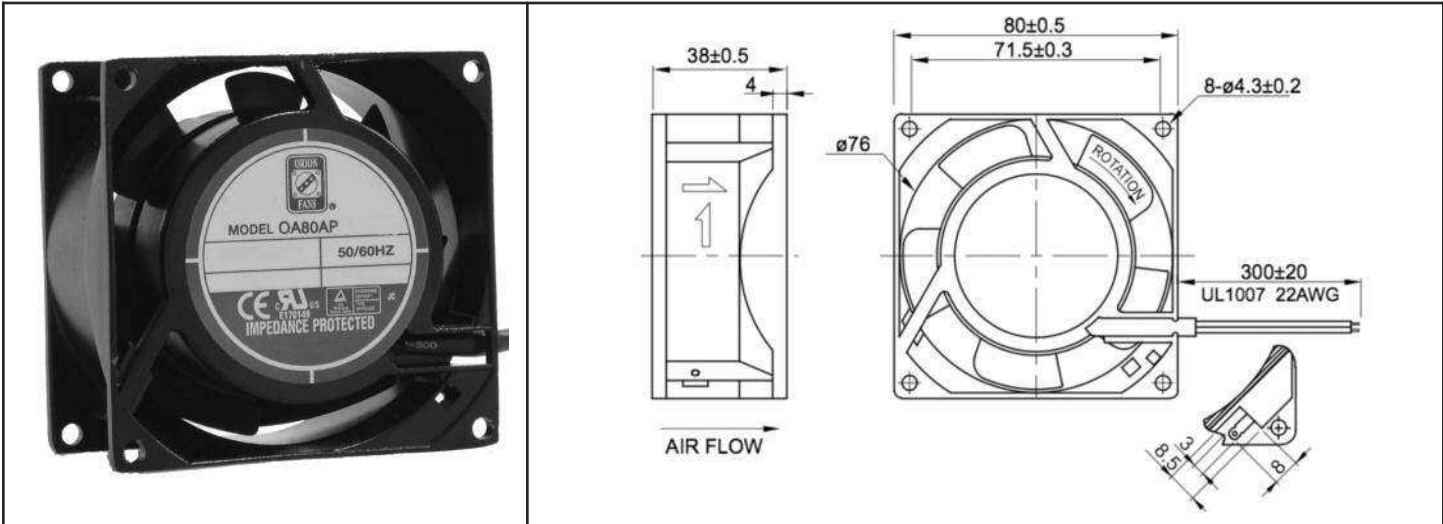
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA825AP-11-1 *	3,000	25	28	115	80~130	9	.21
OA825AP-11-2 *	2,300	18	24	115	80~130	6	.14
OA825AP-11-3 *	1,900	16	19	115	80~130	4	.11
OA825AP-22-1 *	3,000	25	28	230	160~260	9	.21
OA825AP-22-2 *	2,300	18	24	230	160~260	6	.14
OA825AP-22-3 *	1,900	16	19	230	160~260	4	.11

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

# OA80 Series



AC Fan - 115V, 230V  
80 x 38mm (3.15" x 1.5")



Frame	Diecast Aluminum	<p><u>Operating Temperature</u> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C</p> <p><u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)</p> <p>Weight: ~ 0.62 lbs</p>	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 22 AWG or terminals		
Motor	Shaded pole, impedance protected		
Bearing System	Dual ball or Sleeve		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

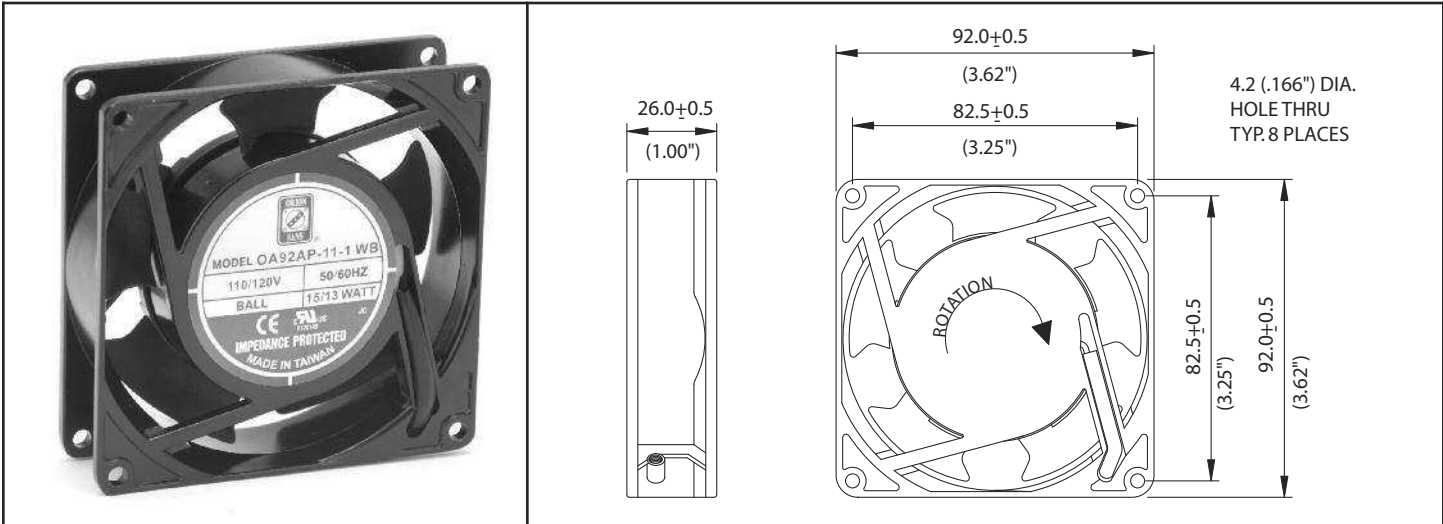
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA80AP-11-1 *	3,000	30	36	115	103~126	9	0.22
OA80AP-11-2 *	2,300	25	32	115	103~126	9	0.16
OA80AP-11-3 *	1,950	17	28	115	103~126	9	0.07
OA80AP-22-1 *	3,000	30	36	230	160~253	12	0.22
OA80AP-22-2 *	2,300	25	32	230	160~253	12	0.16
OA80AP-22-3 *	1,950	17	28	230	160~253	12	0.07

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

# OA92 Series



AC Fan - 115V, 230V  
92 x 25mm (3.62" x 1.0")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)  Weight: ~ 0.64 lbs.  m0	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 22 AWG (~300mm) or terminals		
Motor	Shaded pole, impedance protected		
Bearing System	Dual ball or Sleeve		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

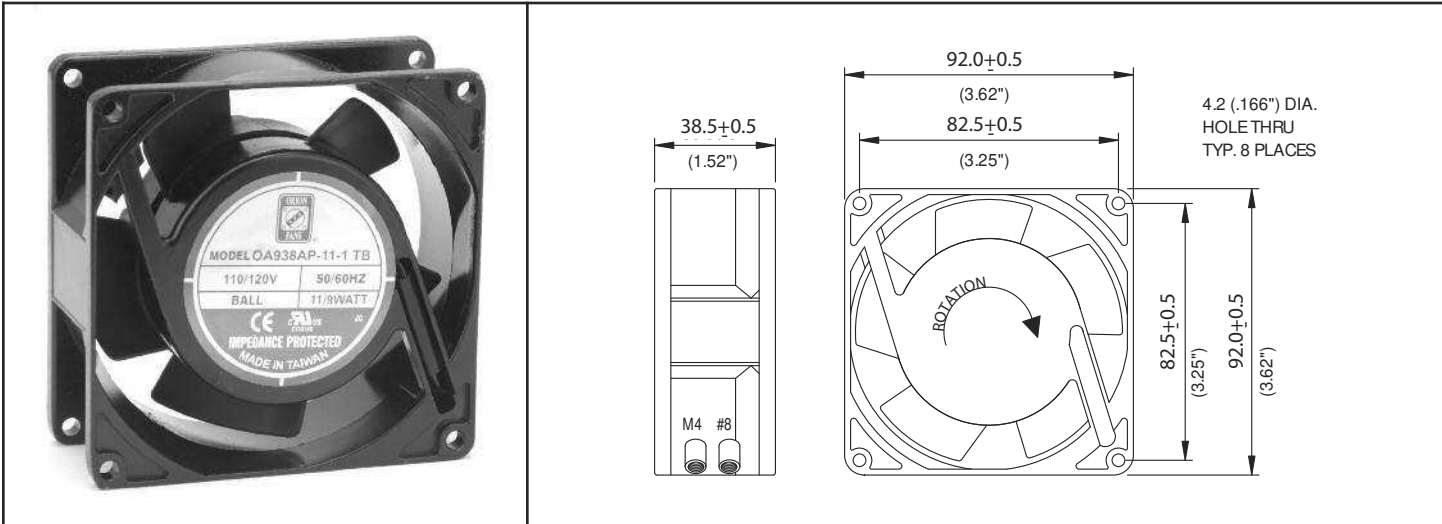
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure ("H <sub>2</sub> O)
OA92AP-11-1 *	3,000	35	30	115	80~130	13	.20
OA92AP-11-2 *	2,300	27	22	115	80~130	10	.14
OA92AP-11-3 *	1,900	22	19	115	80~130	6	.09
OA92AP-22-1 *	3,000	35	30	230	160~260	13	.20
OA92AP-22-2 *	2,300	27	22	230	160~260	10	.14
OA92AP-22-3 *	1,900	22	19	230	160~260	6	.09

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

# OA938 Series



AC Fan - 115V, 230V  
92 x 38mm(3.62" x 1.5")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)  Weight: ~ 0.98 lbs.  m0	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 22 AWG or terminals		
Motor	Shaded pole, impedance protected		
Bearing System	Dual ball or Sleeve		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

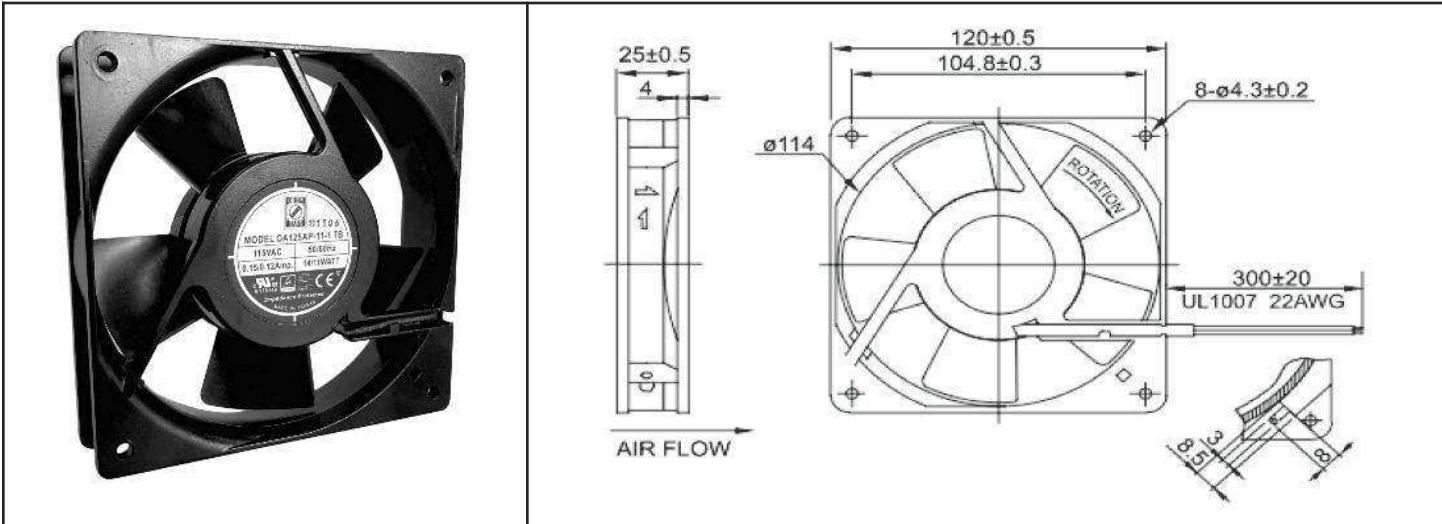
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H2O)
OA938AP-11-1 *	3,100	50	32	115	80~130	9	.22
OA938AP-11-2 *	2,400	39	23	115	80~130	5	.17
OA938AP-11-3 *	1,800	26	19	115	80~130	3	.10
OA938AP-22-1 *	3,100	50	32	230	160~260	9	.22
OA938AP-22-2 *	2,400	39	23	230	160~260	5	.17
OA938AP-22-3 *	1,800	26	19	230	160~260	3	.10

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

# OA125 Series



AC Fan - 115V, 230V  
120 x 25mm (4.7" x 1.0")



<b>Frame</b>	Diecast Aluminum	<b>Operating Temperature</b> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C  <b>Life Expectancy</b> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)  Weight: ~ 0.73 lbs.  m2	
<b>Impeller</b>	PBT, UL94V-0 plastic		
<b>Connection</b>	2x Lead Wires 22 AWG or terminals		
<b>Motor</b>	Shaded pole, impedance protected		
<b>Bearing System</b>	Dual ball or Sleeve		
<b>Insulation Resistance</b>	>100M ohm between lead-wire and frame (500VDC)		
<b>Dielectric Strength</b>	1 minute at 1,500 VAC, 50/60Hz		

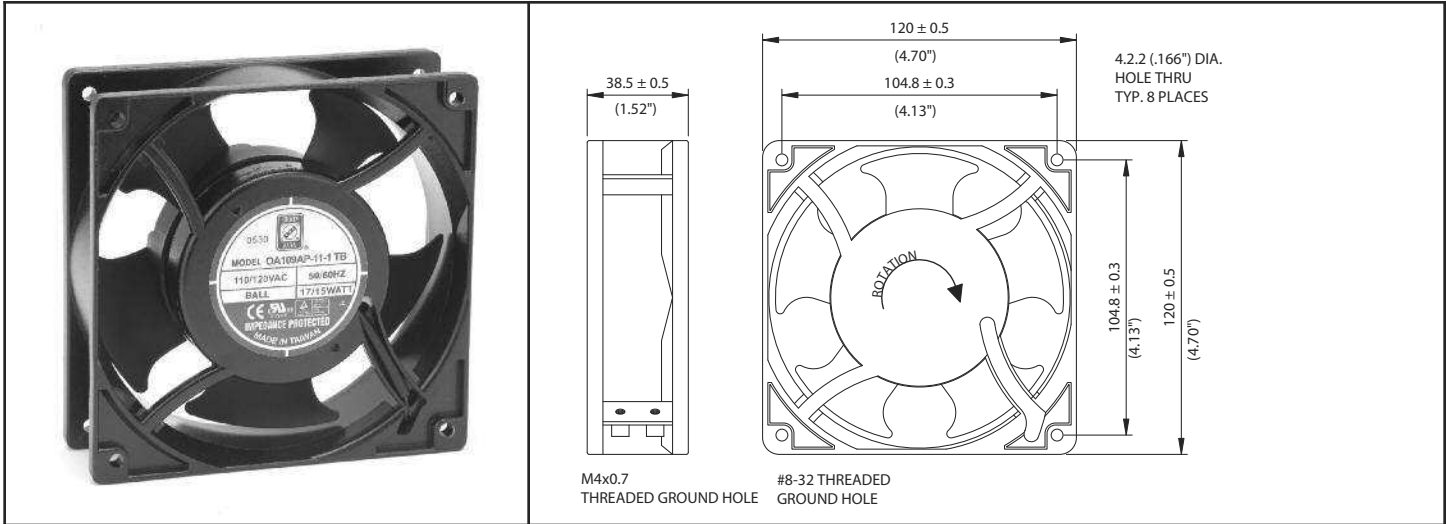
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range AC	Watts	Max. Static Pressure ("H <sub>2</sub> O)
OA125AP-11-1 *	2,900	75	42	115	80 ~ 130	11	0.21
OA125AP-11-2 *	2,500	60	37	115	80 ~ 130	11	0.16
OA125AP-11-3 *	2,000	53	33	115	80 ~ 130	11	0.11
OA125AP-22-1 *	2,900	75	42	230	160 ~ 260	14	0.21
OA125AP-22-2 *	2,500	60	37	230	160 ~ 260	14	0.16
OA125AP-22-3 *	2,000	53	33	230	160 ~ 260	14	0.11

\* Indicate "TB" (Terminal Ball Bearing) "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (Wire Leads, Sleeve Bearing)

# OA109 Series



AC Fan - 115V, 230V  
120x38mm (4.7"x 1.5")



Frame	Diecast Aluminum	<p><u>Operating Temperature</u> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +100C</p> <p><u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)</p> <p>Weight: ~ 1.12 lbs.</p> <p>m0</p>	
Impeller	PBT, UL94V-0 plastic		
Connection	2x 300mm Lead wires (22AWG) or terminals		
Motor	AC shaded pole, impedance protected		
Bearing System	Dual ball or Sleeve		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

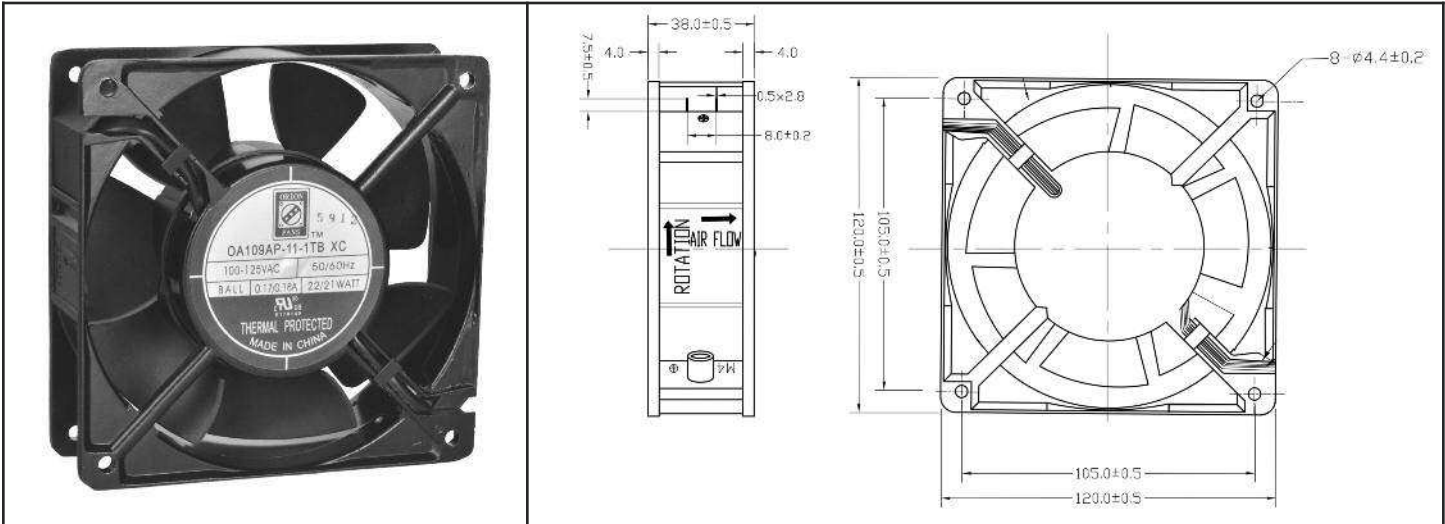
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA109AP-11-1 *	3,000	110	42	115	80~130	15	.28
OA109AP-11-2 *	2,300	71	35	115	80~130	11	.24
OA109AP-11-3 *	1,600	51	25	115	80~130	8	.15
OA109AP-22-1 *	3,000	110	42	230	160~260	15	.28
OA109AP-22-2 *	2,300	71	35	230	160~260	11	.24
OA109AP-22-3 *	1,600	51	25	230	160~260	8	.15

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

# OA109 'XC Series'



AC Fan - 115V, 230V  
120 x 38mm (4.7" x 1.5")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -10C ~ +65C Storage Temp -20C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)  (* Wires ~300mm)  Weight: ~1.12 lbs.  m4	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead wires (24AWG*) or Terminals		
Motor	AC capacitor drive, thermally protected		
Bearing System	Dual ball		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

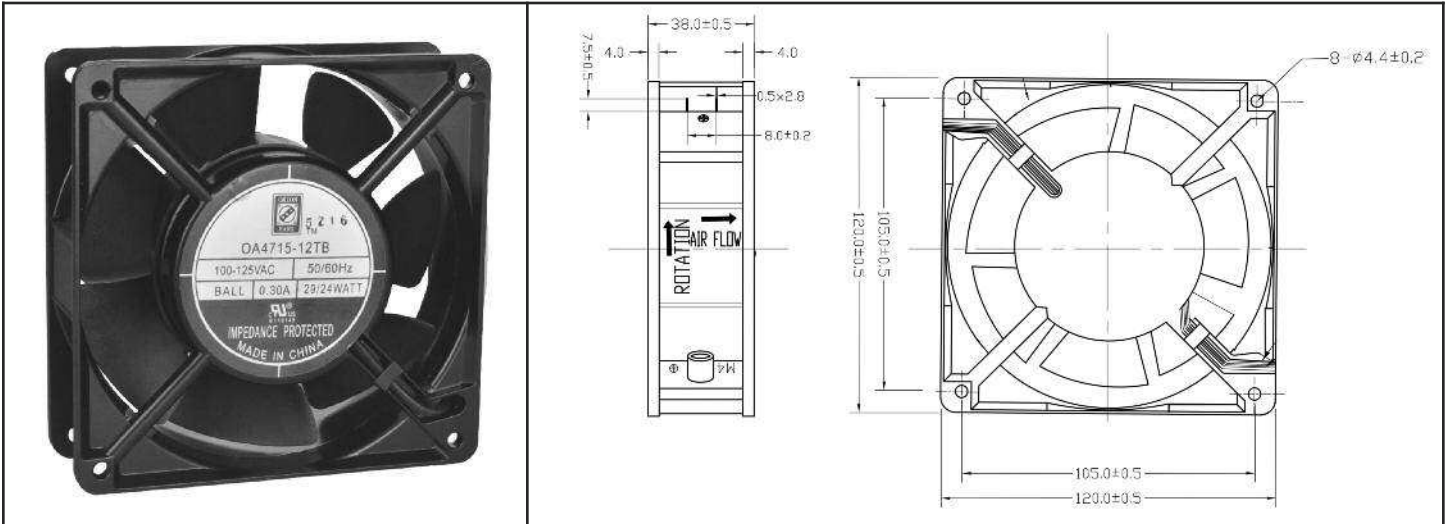
Part Number	OA109AP-11-1 * B XC	OA109AP-22-1 * B XC
Nominal Voltage	115 VAC	230 VAC
Rated Power (50/60 Hz)	21 / 22 W	21 / 22 W
Nominal Current	0.17 / 0.18 A	0.10 / 0.11 A
Frequency (Hz)	50 / 60	50 / 60
Rated Speed (RPM)	2,800 / 3,300	2,800 / 3,300
Airflow (CFM)	110 / 131	110 / 131
Noise Level (dB)	43 / 47	43 / 47
Max. Static Pressure	0.38" / 0.49" H <sub>2</sub> O	0.38" / 0.49" H <sub>2</sub> O

\* Insert "T" to specify Terminal or "W" to specify Wire leads

# OA4715 'Challenger Series'



AC Fan - 115V, 230V  
120 x 38mm (4.7" x 1.5")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -10C ~ +70C Storage Temp -20C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)  Weight: ~1.2 lbs.	
Impeller	PBT, UL94V-0 plastic		
Connection	Terminals		
Motor	AC shaded pole, impedance protected		
Bearing System	Dual ball		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

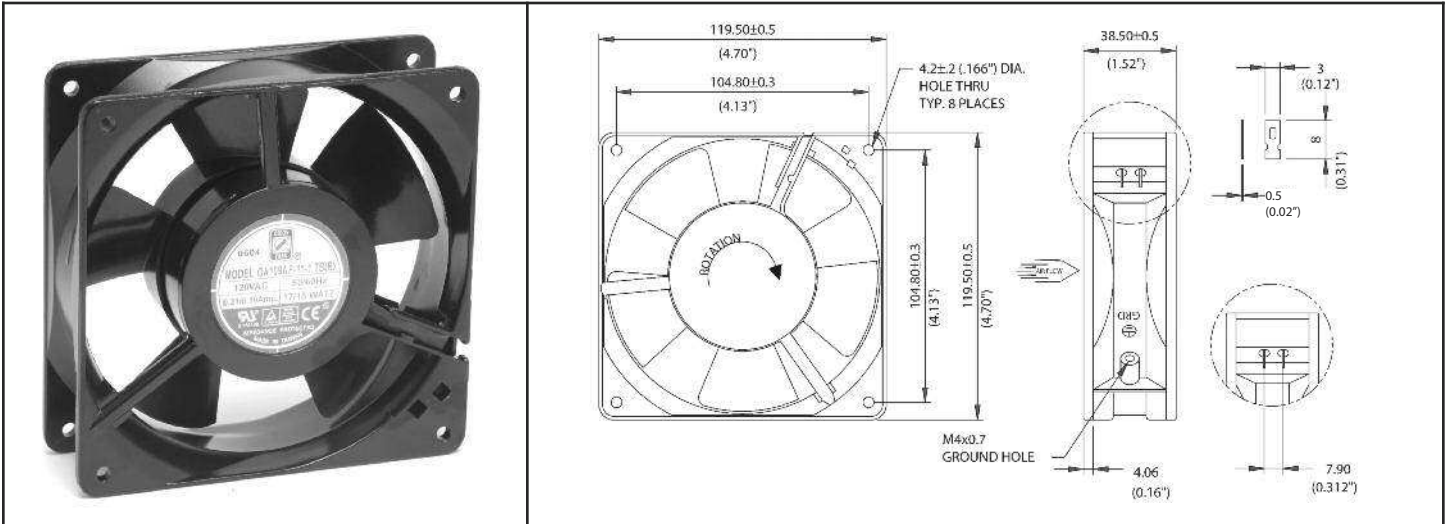
Part Number	OA4715-12TB	OA4715-23TB
Nominal Voltage	115 VAC	230 VAC
Nominal Current	0.30 A	0.23 A
Rated Power	24 W (60Hz)	24 W (60Hz)
Rated Speed (RPM)	3,000	3,000
Airflow (CFM)	110	110
Noise Level (dB)	44	44
Max. Static Pressure	0.37" H <sub>2</sub> O	0.37" H <sub>2</sub> O



# OA109 (AIOS)



## AC Fan - 115V, 230V, Reverse Airflow 120 x 38mm (4.7" x 1.5")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C	
Impeller	PBT, UL94V-0 plastic		
Connection	2x 300mm Lead wires (22AWG) or terminals		
Motor	AC shaded pole, impedance protected	<u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)	
Bearing System	Dual ball or Sleeve	AIOS Air Input Over Struts	
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)	Weight: ~1.2 lbs.	
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz	m2	

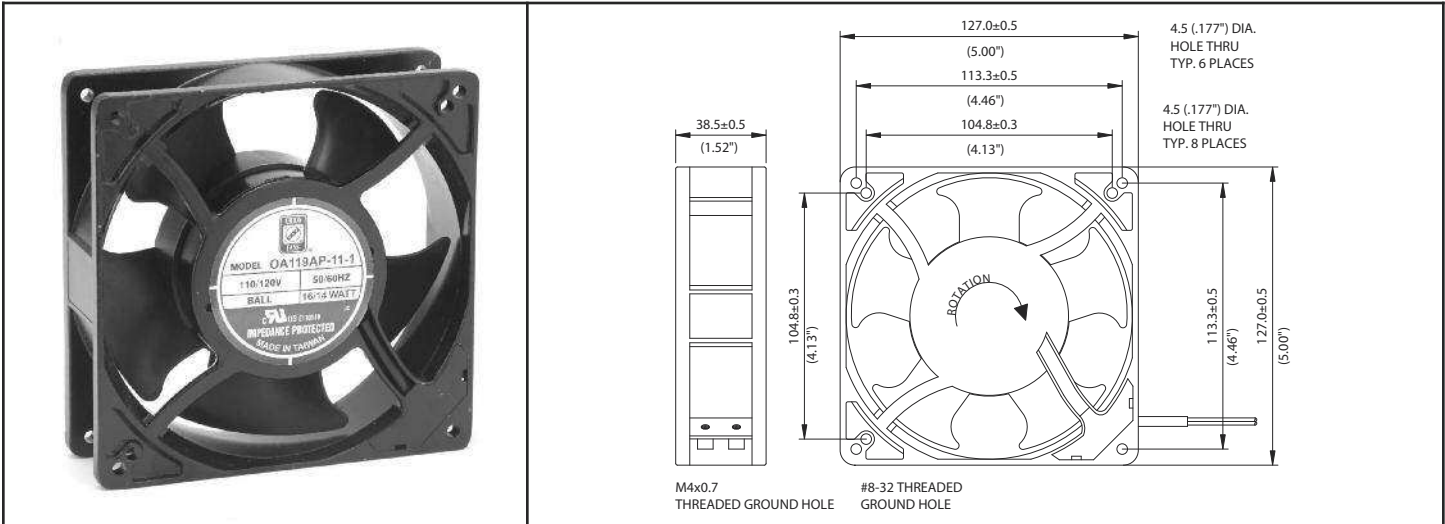
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA109AP-11-1 * R	3,100	99	47	115	80~130	15	.33
OA109AP-11-2 * R	2,750	85	45	115	80~130	13	.25
OA109AP-11-3 * R	2,300	75	38	115	80~130	12	.16
OA109AP-22-1 * R	3,100	99	47	230	160~260	15	.33
OA109AP-22-2 * R	2,750	85	45	230	160~260	13	.25
OA109AP-22-3 * R	2,300	75	38	230	160~260	12	.16

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

# OA119 Series



AC Fan - 115V, 230V  
127 x 38mm (5.0" x 1.5")



Frame	Diecast Aluminum	<b>Operating Temperature</b> Ball Bearing -20C ~ +80C Sleeve Bearing -10C ~ +50C Storage Temp -40C ~ +80C  <b>Life Expectancy</b> Ball Bearing 60,000 hours (L10 at 40C) Sleeve Bearing 30,000 hours (L10 at 40C)  Weight: ~ 1.3 lbs.	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 22 AWG or terminals		
Motor	Shaded pole, impedance protected Tachometer available (5VTTL), input 5 ~24V		
Bearing System	Dual ball or Sleeve		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

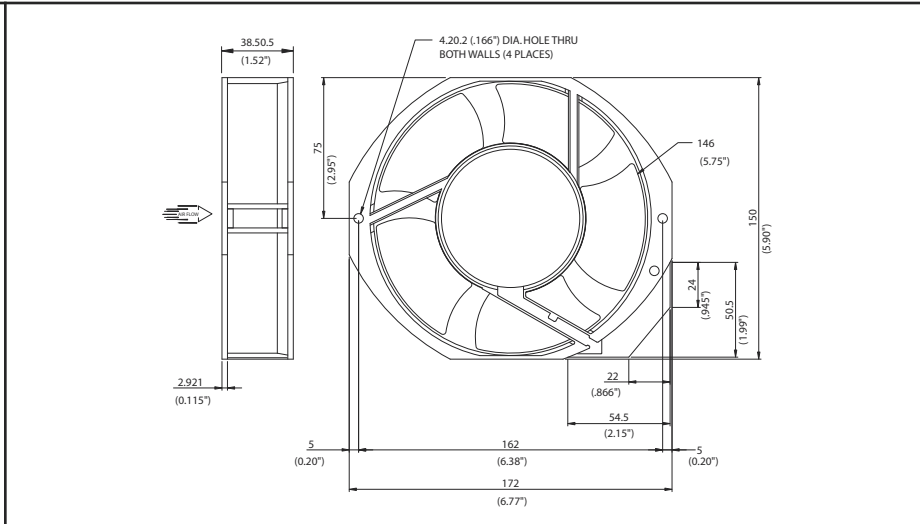
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA119AP-11-1 *	2,750	130	46	115	80~130	14	.24
OA119AP-11-2 *	2,300	95	37	115	80~130	10	.15
OA119AP-11-3 *	1,400	74	28	115	80~130	7	.10
OA119AP-22-1 *	2,750	130	46	230	160~260	14	.24
OA119AP-22-2 *	2,300	95	37	230	160~260	10	.15
OA119AP-22-3 *	1,400	74	28	230	160~260	7	.10

\* Indicate "TB" (Terminal Ball Bearing), "WB" (12" Wire Leads, Ball Bearing), "TS" (Terminal, Sleeve Bearing), "WS" (12" Wire Leads, Sleeve Bearing)

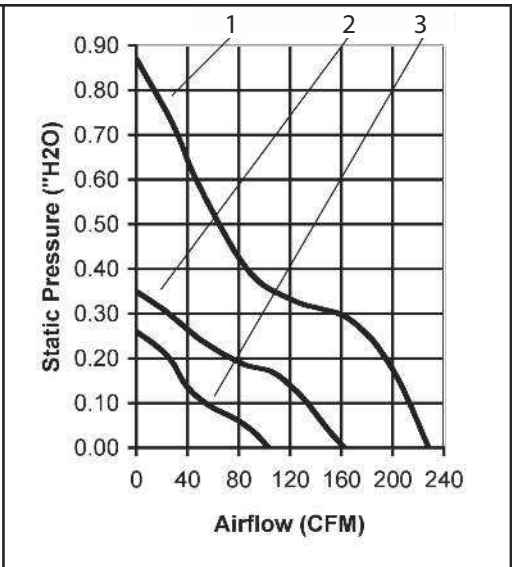
# OA172SAPL Series



AC Fan - 115V, 230V  
172 x 150 x 38mm (6.7"x 5.9"x 1.5")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +80C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)  Weight: ~ 1.6 lbs.
Impeller	PBT, UL94V-0 plastic	
Connection	2x Lead Wires or Terminals	
Motor	Capacitor drive, thermally protected	
Bearing System	Dual ball	
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)	
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz	



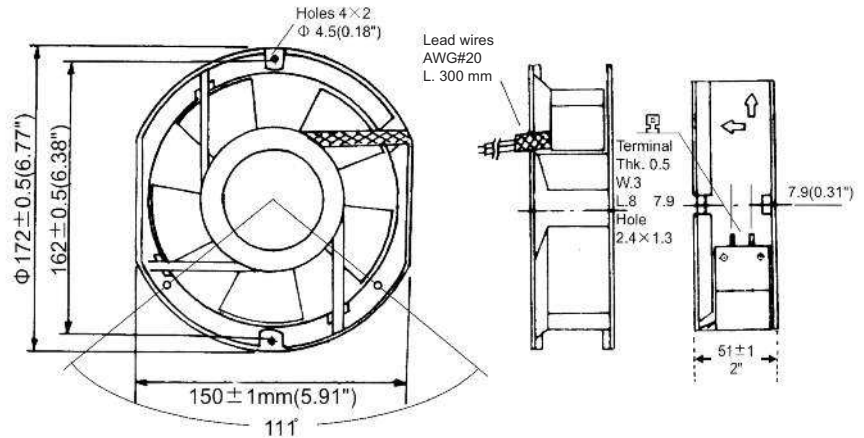
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA172SAPL-11-1 *	3,400	228	58	115	103~126	28	0.87
OA172SAPL-11-2 *	2,750	162	50	115	103~126	27	0.35
OA172SAPL-11-3 *	1,700	103	44	115	103~126	26	0.26
OA172SAPL-22-1 *	3,400	228	58	230	160~260	28	0.87
OA172SAPL-22-3 *	1,700	103	44	230	160~260	26	0.26

\* Indicate "TB" for Terminal type or "WB" for Wire Leads

# OA172S Series



AC Fan - 115V, 230V  
172 x 150 x 51mm (6.7"x 5.9" x 2.0")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +70C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)  Weight: ~ 2.6 lbs.	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires or Terminals		
Motor	Capacitor drive, impedance protected		
Bearing System	Dual ball		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

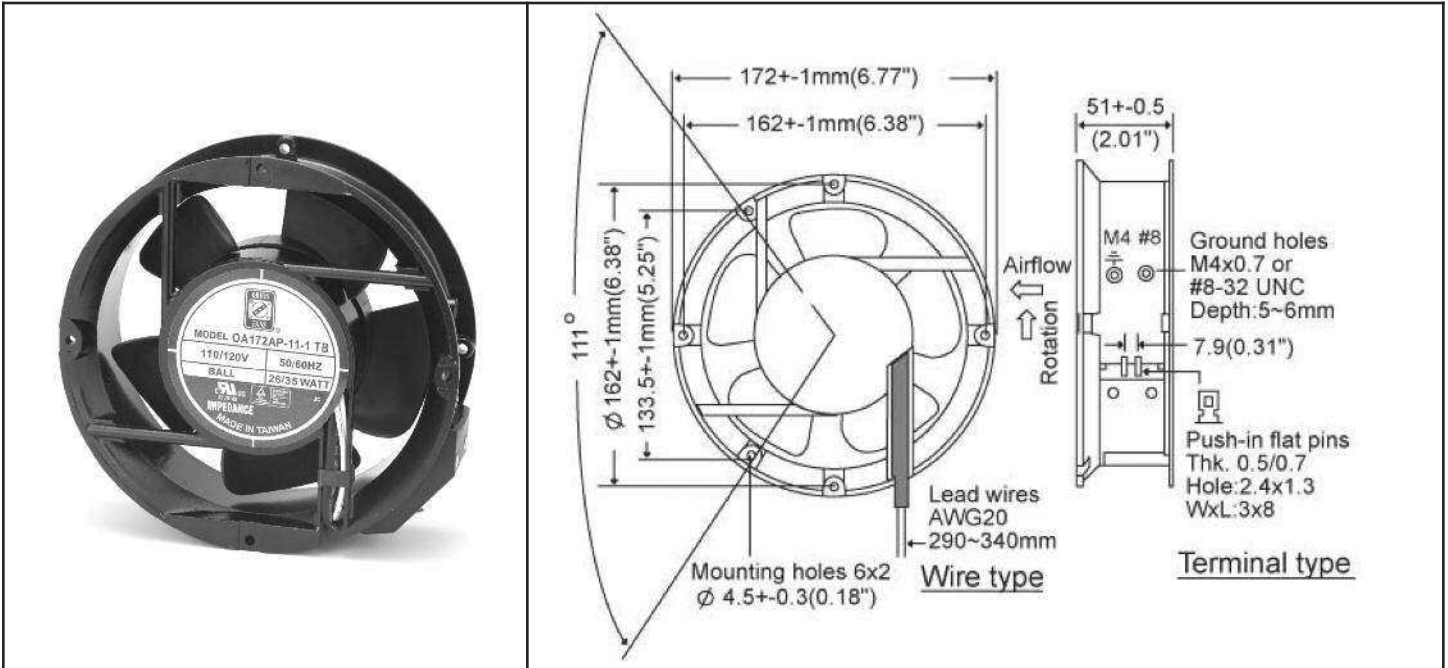
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure ("H <sub>2</sub> O)
OA172SAP-11-1 *	3,200	235	52	115	80~130	35	0.70
OA172SAP-11-2 *	2,400	170	42	115	80~130	20	0.49
OA172SAP-11-3 *	1,800	135	33	115	80~130	16	0.43
OA172SAP-22-1 *	3,200	235	52	230	160~260	35	0.70
OA172SAP-22-2 *	2,400	170	42	230	160~260	20	0.49
OA172SAP-22-3 *	1,800	135	33	230	160~260	16	0.43

\* Indicate "TB" for Terminal type or "WB" for Wire Leads

# OA172 Series



AC Fan - 115V, 230V  
172 x 51mm (6.7" x 2.0")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -40C ~ +70C Storage Temp -40C ~ +80C	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires or Terminals		
Motor	Capacitor drive, impedance protected	<u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)	
Bearing System	Dual ball	Weight: ~ 2.7 lbs.	
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz	m0	

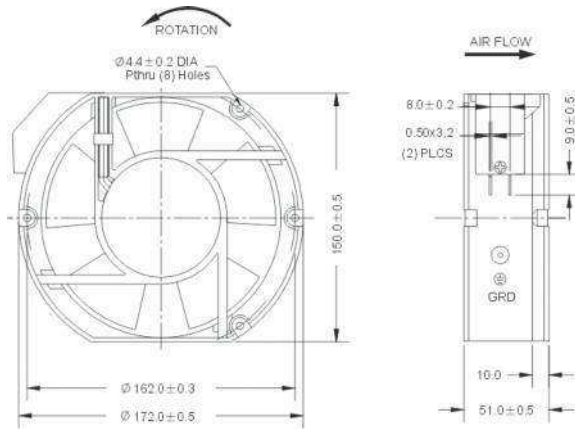
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (H <sub>2</sub> O)
OA172AP-11-1 *	3,200	235	52	115	80~130	35	0.70
OA172AP-11-2 *	2,400	170	42	115	80~130	20	0.49
OA172AP-11-3 *	1,800	135	33	115	80~130	16	0.43
OA172AP-22-1 *	3,200	235	52	230	160~260	35	0.70
OA172AP-22-2 *	2,400	170	42	230	160~260	20	0.49
OA172AP-22-3 *	1,800	135	33	230	160~260	16	0.43

\* Indicate "TB" for Terminal type or "WB" for Wire Leads

# OA172 'XC Series'



AC Fan - 115V, 230V  
172x150x51mm (6.7"x 5.9"x 2.0")



Frame	Diecast Aluminum	<b>Operating Temperature</b> Ball Bearing -40C ~ +70C Storage Temp -40C ~ +80C  <b>Life Expectancy</b> Ball Bearing 60,000 hours (L10 at 40C)  Weight: ~ 2.2 lbs.	
Impeller	PBT, UL94V-O plastic		
Connection	2x Lead Wires or Terminals		
Motor	Capacitor drive, thermally protected		
Bearing System	Dual ball (Sleeve available)		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

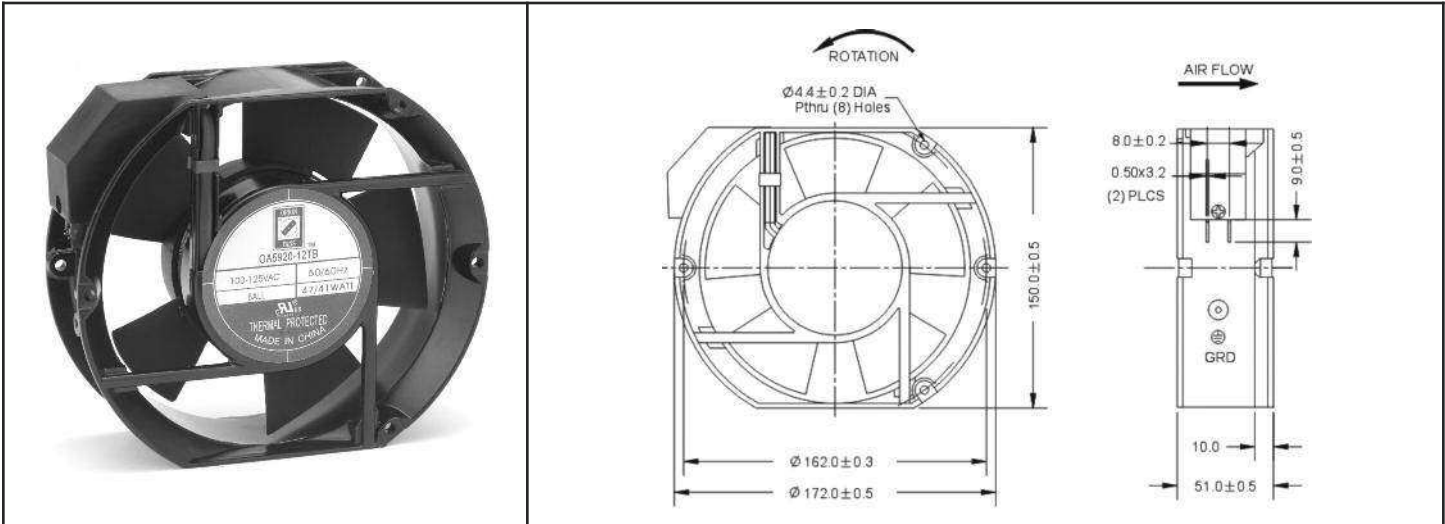
Part Number	OA172SAP-11-1 ( )B XC	OA172SAP-22-1 ( )B XC
Nominal Voltage	115 VAC	230 VAC
Voltage Range	100 ~ 125 VAC	200 ~ 240 VAC
Rated Power	50 W (60 Hz)	50 W (60 Hz)
Rated Speed (RPM)	3,300	3,300
Airflow - CFM	300	300
Noise Level - (dB)	61	61
Max. Static Pressure	0.78" H <sub>2</sub> O	0.78" H <sub>2</sub> O

( ) Indicate "T" for terminal or "W" for wire leads

# OA5920 'Challenger Series'



AC Fan - 115V, 230V  
172 x 150 x 51mm (6.7"x 5.9" x 2.0")



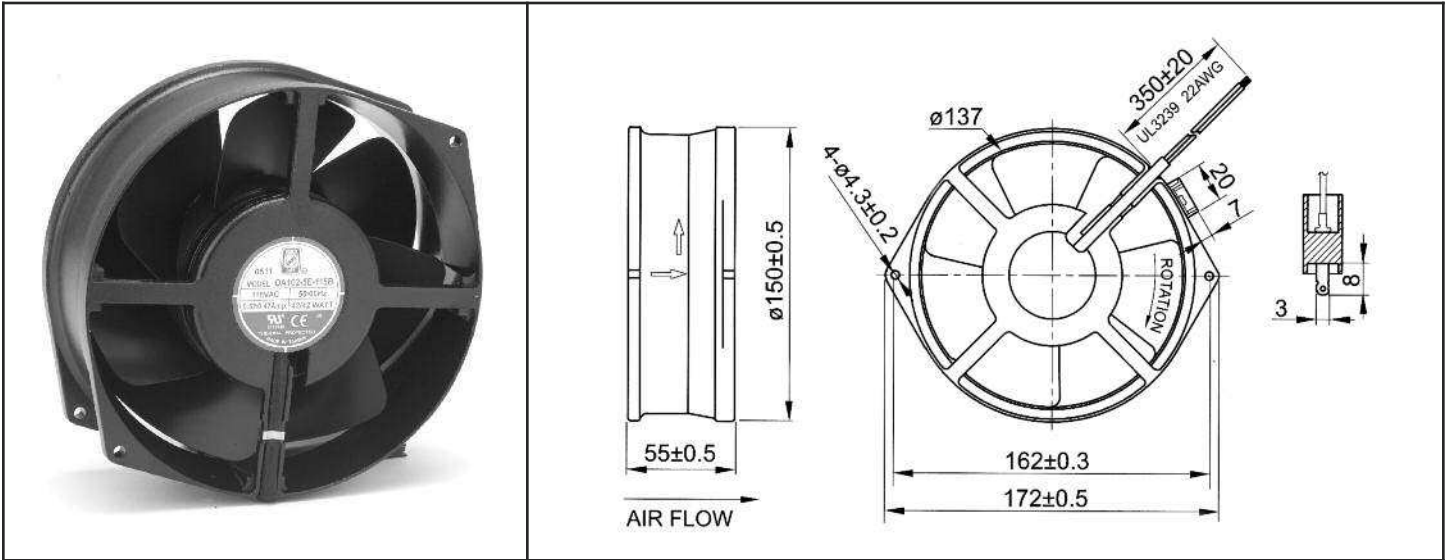
Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -10C ~ +70C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)  Weight: 2.0 lbs.	
Impeller	PBT, UL94V-0 plastic		
Connection	Terminals		
Motor	Shaded pole, thermally protected		
Bearing System	Dual ball (Sleeve available)		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

Part Number	OA5920-12TB	OA5920-23TB
Nominal Voltage	115 VAC	230 VAC
Voltage Range	80 ~ 130 VAC	160 ~ 260 VAC
Rated Power	41 W (60Hz)	41 W (60Hz)
Rated Speed (RPM)	3,000	3,000
Airflow (CFM)	180	180
Noise Level (dB)	55	55
Max. Static Pressure	0.51" H <sub>2</sub> O	0.51" H <sub>2</sub> O

# OA162 Series



AC Fan - 115V, 230V  
172 x 55mm (6.7" x 2.2")



Frame & Impeller	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -40C ~ +70C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)  Weight: ~ 2.4 lbs.  m2	
Connection	Terminals or Lead Wires		
Motor	Shaded Pole, thermally protected		
Bearing System	Dual ball (Sleeve available)		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

Part Number	OA162-5E-115 * B	OA162-5E-230 * B
Nominal Voltage	115 VAC	230 VAC
Voltage Range	80 ~ 130 VAC	160 ~ 260 VAC
Rated Power	31 W (60Hz)	31 W (60Hz)
Rated Speed (RPM)	3,400	3,400
Airflow (CFM)	241	241
Noise Level (dB)	66	66
Max. Static Pressure	0.73" H <sub>2</sub> O	0.73" H <sub>2</sub> O

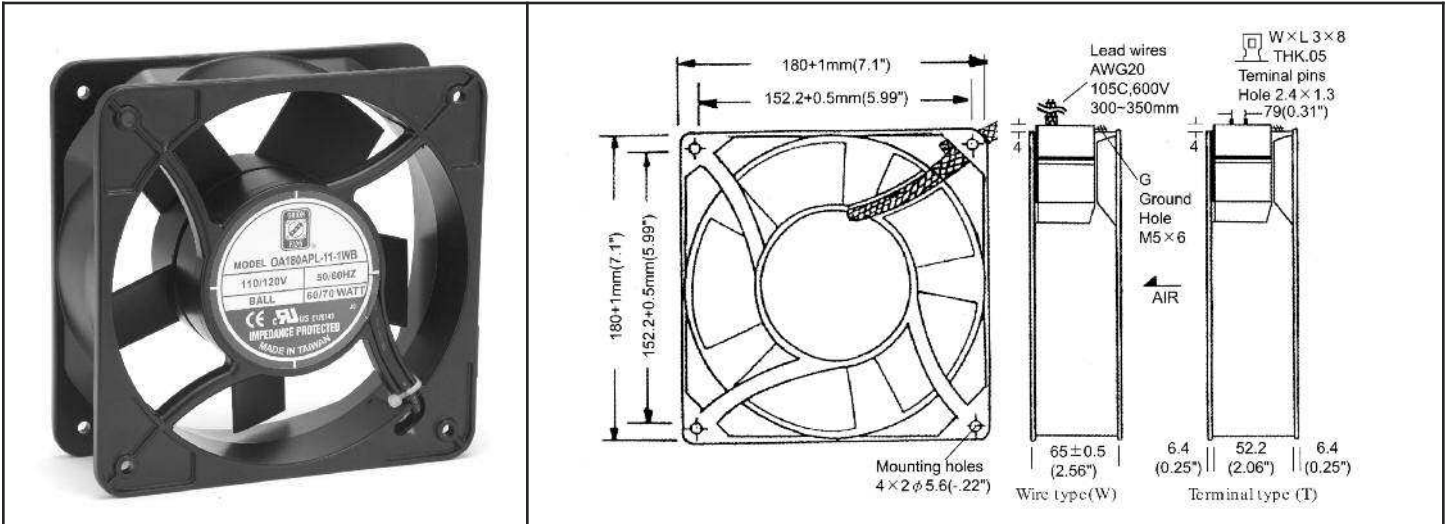
\* Indicate "T" for Terminal or "W" for Wire leads



# OA180APL Series



AC Fan - 115V, 230V  
180 x 65mm (7.1" x 2.6")



Frame	Diecast Aluminum	<p><u>Operating Temperature</u> Ball Bearing -20C ~ +80C Storage Temp -40C ~ +80C</p> <p><u>Life Expectancy</u> Ball Bearing 60,000 hours (L10 at 40C)</p> <p>Available as dual speed or dual voltage</p> <p>Weight: ~ 4.0 lbs.</p>	
Impeller	PBT, UL94V-0 plastic		
Connection	2x Lead Wires 20 AWG or terminals		
Motor	Single phase Capacitor induction, 2/4 pole, inner rotor, thermal protection		
Bearing System	Dual ball		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

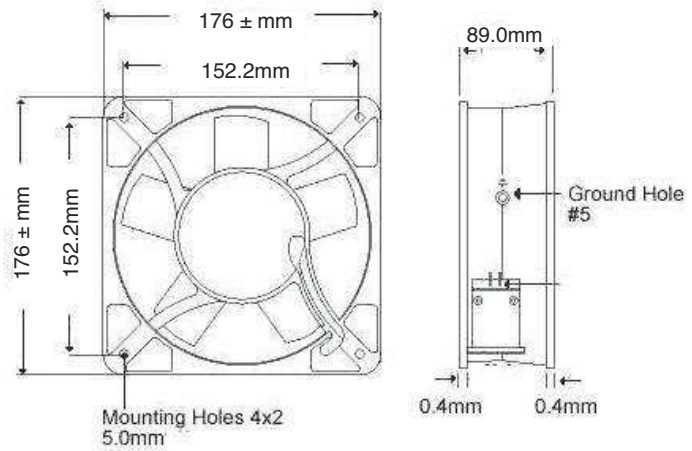
Model Number	Speed (RPM)	Airflow (CFM)	Noise (dB)	Volts AC	Voltage Range	Watts	Max. Static Pressure (\"H <sub>2</sub> O)
OA180APL-11-1 *	3,300	405	60	115	60~130	70	0.83
OA180APL-11-2 *	2,200	280	47	115	60~130	50	0.58
OA180APL-11-3 *	1,650	210	40	115	60~130	38	0.43
OA180APL-22-1 *	3,300	405	60	230	120~260	70	0.83
OA180APL-22-2 *	2,200	280	47	230	120~260	50	0.58
OA180APL-22-3 *	1,650	210	40	230	120~260	38	0.43

\* Indicate "TB" for terminal or "WB" for wire leads

# OA180AP Series



AC Fan - 115V, 230V  
176 x 89mm (6.9" x 3.5")



Frame	Diecast Aluminum	<u>Operating Temperature</u> Ball Bearing -20C ~ +80C Storage Temp -40C ~ +80C  <u>Life Expectancy</u> Ball Bearing 60,000 hours (L10, 40C)  Weight: 4.0 lbs.	
Impeller	PBT, UL94V-O plastic		
Connection	2x Lead Wires 20 AWG or terminals		
Motor	Capacitor drive, thermally protected		
Bearing System	Dual ball		
Insulation Resistance	>100M ohm between lead-wire and frame (500VDC)		
Dielectric Strength	1 min at 1,500 VAC, 50/60Hz		

Part Number	OA180AP-11-1 *	OA180AP-22-1 *
Nominal AC Voltage	115	230
Voltage Range	60 ~ 130 VAC	120 ~ 260 VAC
Rated Power (50/60 Hz)	70 W	70 W
RPM (50/60 Hz)	3350	3350
Airflow - CFM (50/60 Hz)	375	375
Noise Level - dB (50/60 Hz)	62	62
Max. Static Pressure	0.86" H <sub>2</sub> O	00.86" H <sub>2</sub> O

\* Indicate "TB" for terminal or "WB" for wire leads