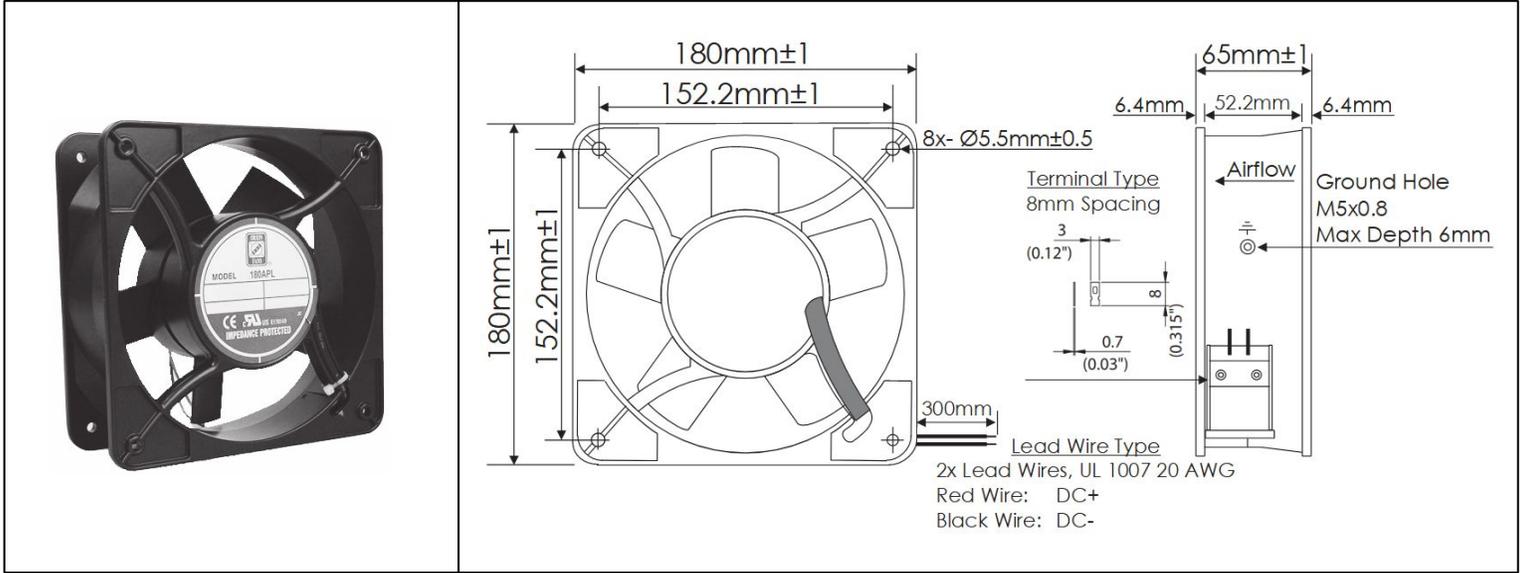


# OD180APL Series



DC Fans - 12, 24, 48V  
180mm x 180mm x 65mm (7" x 2.5")



|                              |   |   |
|------------------------------|---|---|
| <b>Frame</b>                 | Die Cast Aluminum, Black Finish   | <b>Operating Temperature</b><br>-20°C ~ +65°C<br><br><b>Storage Temperature</b><br>-20°C ~ +75°C<br><br><b>Life Expectancy</b><br>90,000 Hours (L10 at 35°C)<br><br><b>Available Options</b><br>PWM Speed Control Input<br>Thermal Speed Control<br>Tachometer Output<br>Alarm Output<br>IP Ratings<br><br>Weight: 3.2 lbs. |
| <b>Impeller</b>              | PBT, UL94 V-0 Plastic   |   |
| <b>Connection</b>            | 2x Wire Leads, 20 AWG, or Terminals   |   |
| <b>Motor</b>                 | Brushless DC, Auto Cutoff, Auto Restart, Electronically Protected, Polarity Protected |   |
| <b>Bearing System</b>        | Dual Ball Bearings  |   |
| <b>Dielectric Strength</b>   | 500VDC/min, <5mA  |   |
| <b>Insulation Resistance</b> | ≥10M Ohm @ 500 VDC  |   |
|                              |   |   |

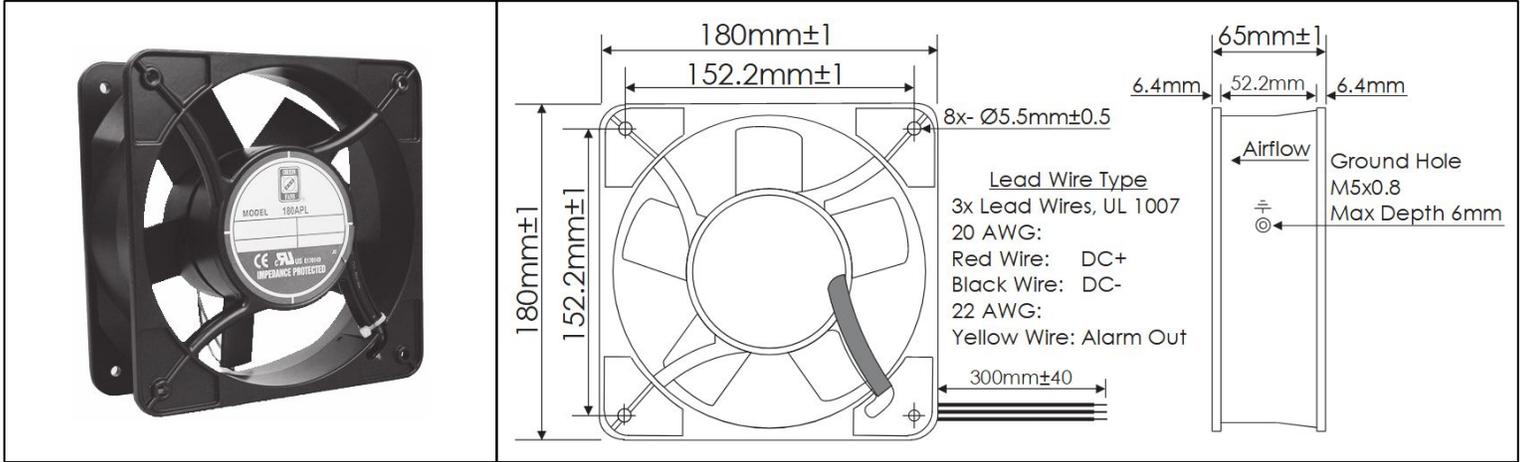
| Part Number    | Rated Voltage (Volts DC) | Voltage Range (Volts DC) | Rated Current (Amps)(Max) | Rated Power (Watts) | Rated Speed (RPM) | Max Airflow (CFM) | Noise Level (dBA) | Max Static Pressure ("H <sub>2</sub> O) |
|----------------|--------------------------|--------------------------|---------------------------|---------------------|-------------------|-------------------|-------------------|---|
| OD180APL-12H*B | 12                       | 9 ~ 13.8                 | 4.20                      | 50.4                | 3375              | 460               | 65.2              | 1.10                                    |
| OD180APL-12M*B | 12                       | 9 ~ 13.8                 | 1.90                      | 23.5                | 2800              | 375               | 53.4              | 0.70                                    |
| OD180APL-12L*B | 12                       | 9 ~ 13.8                 | 1.50                      | 19.0                | 2150              | 300               | 46.1              | 0.58                                    |
| OD180APL-24H*B | 24                       | 20 ~ 26.4                | 2.50                      | 60.2                | 3375              | 460               | 65.2              | 1.10                                    |
| OD180APL-24M*B | 24                       | 20 ~ 26.4                | 1.15                      | 27.6                | 2800              | 375               | 53.4              | 0.70                                    |
| OD180APL-24L*B | 24                       | 20 ~ 26.4                | 0.62                      | 15.6                | 2150              | 300               | 46.1              | 0.58                                    |
| OD180APL-48H*B | 48                       | 28 ~ 52.0                | 1.03                      | 49.4                | 3375              | 460               | 65.2              | 1.10                                    |
| OD180APL-48M*B | 48                       | 28 ~ 52.0                | 0.48                      | 24.2                | 2800              | 375               | 53.4              | 0.70                                    |
| OD180APL-48L*B | 48                       | 28 ~ 52.0                | 0.30                      | 14.4                | 2150              | 300               | 46.1              | 0.58                                    |

\* Insert letter "T" for Terminal power connection type/

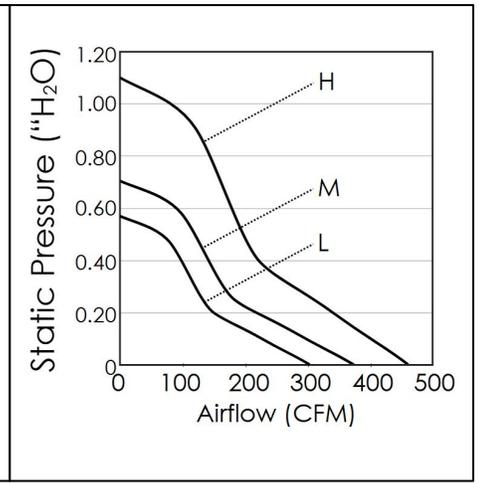
# OD180APL Series with Alarm



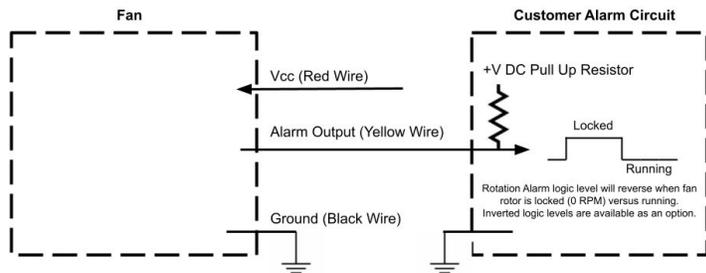
DC Fans - 12, 24, 48V  
180mm x 180mm x 65mm (7" x 2.5")



|                              |   |   |
|------------------------------|---|---|
| <b>Frame</b>                 | Die Cast Aluminum, Black Finish   | <b>Operating Temperature</b><br>-20°C ~ +65°C           |
| <b>Impeller</b>              | PBT, UL94 V-0 Plastic   | <b>Storage Temperature</b><br>-20°C ~ +75°C             |
| <b>Connection</b>            | 3x Wire Leads, 20/22 AWG  | <b>Life Expectancy</b><br>90,000 Hours (L10 at 35°C)    |
| <b>Motor</b>                 | Brushless DC, Auto Cutoff, Auto Restart, Electronically Protected, Polarity Protected | <b>Installed Options</b><br>Open Collector Alarm Output |
| <b>Bearing System</b>        | Dual Ball Bearings  | <b>Available Options</b><br>Inverted Alarm Type         |
| <b>Dielectric Strength</b>   | 500VDC/min, <5mA  | <b>Weight:</b> 3.2 lbs.                                 |
| <b>Insulation Resistance</b> | ≥10M Ohm @ 500 VDC  |   |



| Part Number      | Rated Voltage (Volts DC) | Voltage Range (Volts DC) | Rated Current (Amps)(Max) | Rated Power (Watts) | Rated Speed (RPM) | Max Airflow (CFM) | Noise Level (dBA) | Max Static Pressure (in H <sub>2</sub> O) |
|------------------|--------------------------|--------------------------|---------------------------|---------------------|-------------------|-------------------|-------------------|---|
| OD180APL-12HB02A | 12                       | 9 ~ 13.8                 | 4.20                      | 50.4                | 3375              | 460               | 65.2              | 1.10                                      |
| OD180APL-12MB02A | 12                       | 9 ~ 13.8                 | 1.90                      | 23.5                | 2800              | 375               | 53.4              | 0.70                                      |
| OD180APL-12LB02A | 12                       | 9 ~ 13.8                 | 1.50                      | 19.0                | 2150              | 300               | 46.1              | 0.58                                      |
| OD180APL-24HB02A | 24                       | 20 ~ 26.4                | 2.50                      | 60.2                | 3375              | 460               | 65.2              | 1.10                                      |
| OD180APL-24MB02A | 24                       | 20 ~ 26.4                | 1.15                      | 27.6                | 2800              | 375               | 53.4              | 0.70                                      |
| OD180APL-24LB02A | 24                       | 20 ~ 26.4                | 0.62                      | 15.6                | 2150              | 300               | 46.1              | 0.58                                      |
| OD180APL-48HB02A | 48                       | 28 ~ 52.0                | 1.03                      | 49.4                | 3375              | 460               | 65.2              | 1.10                                      |
| OD180APL-48MB02A | 48                       | 28 ~ 52.0                | 0.48                      | 24.2                | 2800              | 375               | 53.4              | 0.70                                      |
| OD180APL-48LB02A | 48                       | 28 ~ 52.0                | 0.30                      | 14.4                | 2150              | 300               | 46.1              | 0.58                                      |

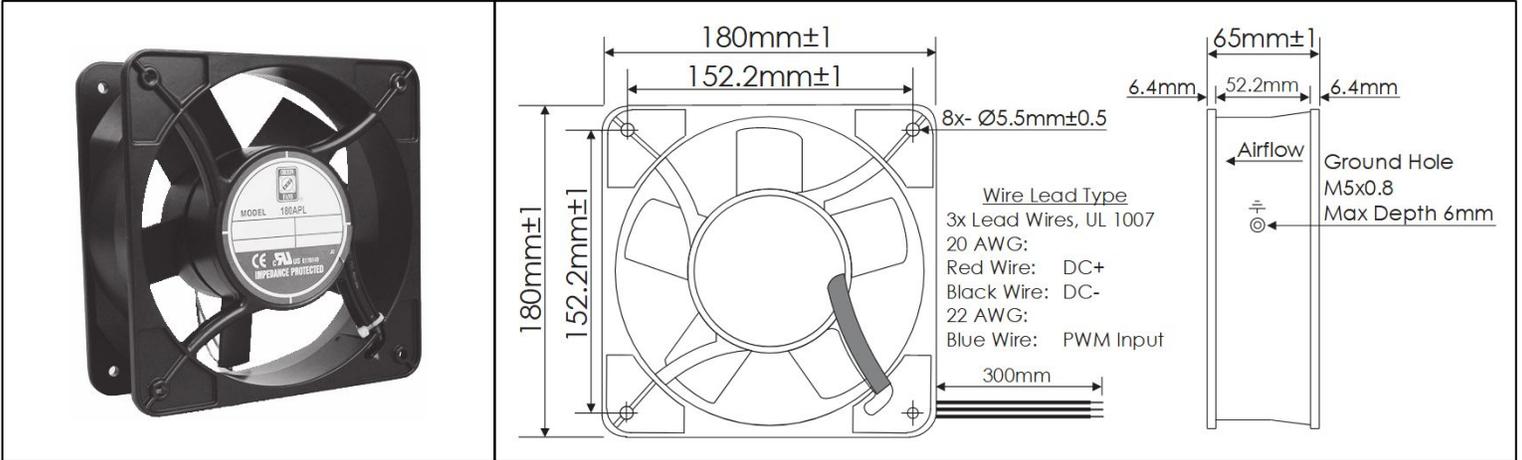


Alarm Max Pullup Voltage: Fan Vcc  
 Alarm Max Sink Current: 5mA  
 Alarm ACTIVE (0 RPM) State: HIGH

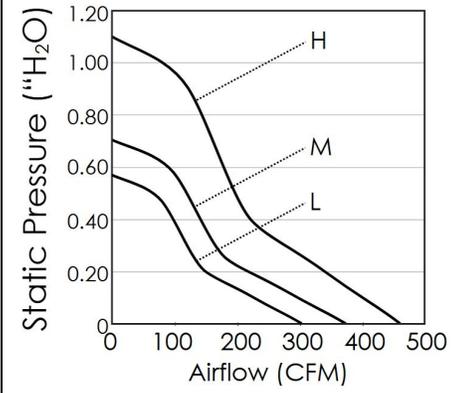
# OD180APL Series with PWM



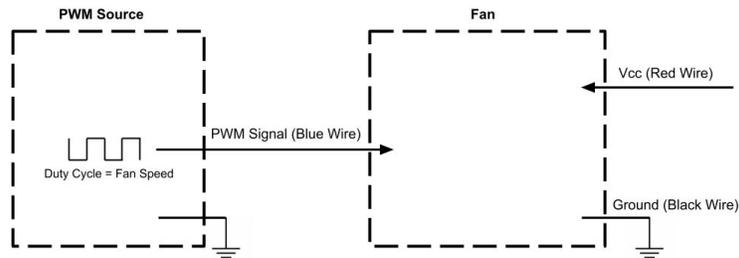
DC Fans - 12, 24, 48V  
180mm x 180mm x 65mm (7" x 2.5")



|                              |   |   |
|------------------------------|---|---|
| <b>Frame</b>                 | Die Cast Aluminum, Black Finish   | <b>Operating Temperature</b><br>-20°C ~ +65°C         |
| <b>Impeller</b>              | PBT, UL94 V-0 Plastic   |   |
| <b>Connection</b>            | 3x Wire Leads, 20/22 AWG  | <b>Storage Temperature</b><br>-20°C ~ +75°C           |
| <b>Motor</b>                 | Brushless DC, Auto Cutoff, Auto Restart, Electronically Protected, Polarity Protected |   |
| <b>Bearing System</b>        | Dual Ball Bearings  | <b>Life Expectancy</b><br>90,000 Hours (L10 at 35°C)  |
| <b>Dielectric Strength</b>   | 500VDC/min, <5mA  |   |
| <b>Insulation Resistance</b> | ≥10M Ohm @ 500 VDC  | <b>Installed Options</b><br>PWM Speed Control Input   |
|                              |   |   |
|                              |   | <b>Available Options</b><br>0-10V Speed Control Input |
|                              |   | <b>Weight:</b> 3.2 lbs.                               |



| Part Number     | Rated Voltage (Volts DC) | Voltage Range (Volts DC) | Rated Current (Amps)(Max) | Rated Power (Watts) | Rated Speed (RPM) | Max Airflow (CFM) | Noise Level (dBA) | Max Static Pressure (\"H <sub>2</sub> O) |
|-----------------|--------------------------|--------------------------|---------------------------|---------------------|-------------------|-------------------|-------------------|--|
| OD180APL-12HB05 | 12                       | 9 ~ 13.8                 | 4.20                      | 50.4                | 3375              | 460               | 65.2              | 1.10                                     |
| OD180APL-12MB05 | 12                       | 9 ~ 13.8                 | 1.90                      | 23.5                | 2800              | 375               | 53.4              | 0.70                                     |
| OD180APL-12LB05 | 12                       | 9 ~ 13.8                 | 1.50                      | 19.0                | 2150              | 300               | 46.1              | 0.58                                     |
| OD180APL-24HB05 | 24                       | 20 ~ 26.4                | 2.50                      | 60.2                | 3375              | 460               | 65.2              | 1.10                                     |
| OD180APL-24MB05 | 24                       | 20 ~ 26.4                | 1.15                      | 27.6                | 2800              | 375               | 53.4              | 0.70                                     |
| OD180APL-24LB05 | 24                       | 20 ~ 26.4                | 0.62                      | 15.6                | 2150              | 300               | 46.1              | 0.58                                     |
| OD180APL-48HB05 | 48                       | 28 ~ 52.0                | 1.03                      | 49.4                | 3375              | 460               | 65.2              | 1.10                                     |
| OD180APL-48MB05 | 48                       | 28 ~ 52.0                | 0.48                      | 24.2                | 2800              | 375               | 53.4              | 0.70                                     |
| OD180APL-48LB05 | 48                       | 28 ~ 52.0                | 0.30                      | 14.4                | 2150              | 300               | 46.1              | 0.58                                     |



PWM Max High Voltage: 5V  
 PWM Max Sink Current: 5mA  
 PWM Frequency Range: 1KHz-100KHz  
 PWM Typical Frequency: 25KHz  
 RPM at 0% Duty Cycle: 0 RPM  
 RPM will be full speed if PWM input is disconnected.