



**Air-O-Lator  
Aquarian Quantum  
Floating Aerator  
Specifications**

**MODEL:**

The model shall be an AQQ-\_\_\_ Air-O-Lator Aquarian Quantum floating aerator.

**Performance Data:**

The AQQ-\_\_\_ Aquarian Quantum floating aerator shall produce a spray height of \_\_\_ inches/\_\_\_ centimeters and a diameter of \_\_\_ feet/\_\_\_ meters.

The AQQ-\_\_\_ shall produce a pumping volume of \_\_\_ gallons/\_\_\_ liters per minute.

The AQQ-\_\_\_ shall produce a standard oxygen transfer rate (SOTR) of \_\_\_pounds/\_\_\_ kg of oxygen per hour.

The AQQ-\_\_\_ has a minimum operating depth of \_\_\_ inches/\_\_\_ meters.

| MODEL   | HP  | VOLTS | PH | HZ | MTR/S.F.<br>AMPS | MIN. HT.   | MIN. DIA. | GPM/LPM      | SOTR/HR<br>(lbs./kg.) | MIN. OP.<br>DEPTH |
|---------|-----|-------|----|----|------------------|------------|-----------|--------------|-----------------------|-------------------|
| AQQ-50  | 5   | 230   | 1  | 60 | 23.0/27.5        | 10"/25.4CM | 8'/2.4M   | 3,400/12,870 | 15/6.5                | 39"/.99M          |
| AQQ-50  | 5   | 230   | 3  | 60 | 15.0/16.6        | 10"/25.4CM | 8'/2.4M   | 3,400/12,870 | 15/6.5                | 39"/.99M          |
| AQQ-50  | 5   | 460   | 3  | 60 | 7.5/8.3          | 10"/25.4CM | 8'/2.4M   | 3,400/12,870 | 15/6.5                | 39"/.99M          |
| AQC-750 | 7.5 | 230   | 1  | 60 | 36.5/42.0        | 10"/25.4CM | 8'/2.4M   | 3,800/14,384 | 23/10.4               | 42"/1.1M          |
| AQC-750 | 7.5 | 230   | 3  | 60 | 21.8/24.6        | 10"/25.4CM | 8'/2.4M   | 3,800/14,384 | 23/10.4               | 42"/1.1M          |
| AQC-750 | 7.5 | 460   | 3  | 60 | 10.9/12.3        | 10"/25.4CM | 8'/2.4M   | 3,800/14,384 | 23/10.4               | 42"/1.1M          |
| AQQ-100 | 10  | 230   | 1  | 60 | 45.0/51.0        | 12"/30.4CM | 10'/3.0M  | 5,000/18,927 | 30/13.6               | 43"/1.2M          |
| AQQ-100 | 10  | 230   | 3  | 60 | 28.4/32.2        | 12"/30.4CM | 10'/3.0M  | 5,000/18,927 | 30/13.6               | 43"/1.2M          |
| AQQ-100 | 10  | 460   | 3  | 60 | 14.2/16.1        | 12"/30.4CM | 10'/3.0M  | 5,000/18,927 | 30/13.6               | 43"/1.2M          |
| AQQ-150 | 15  | 230   | 3  | 60 | 41.6/47.4        | 12"/30.4CM | 10'/3.0M  | 6,200/23,469 | 45/20.4               | 46"/1.3M          |
| AQQ-150 | 15  | 460   | 3  | 60 | 20.8/23.7        | 12"/30.4CM | 10'/3.0M  | 6,200/23,469 | 45/20.4               | 46"/1.3M          |

**Motor:**

The motor shall be a \_\_\_ horsepower, \_\_\_ volt, \_\_\_ phase, 60 Hz, 3450 RPM 6 inch Franklin Electric submersible motor. Motor amperage is \_\_\_ with service factor max amperage of \_\_\_\_. The motor shall be rated for continuous duty. The motor shall be totally enclosed, water-cooled, water-lubricated and corrosion resistant. The motor shall equal or exceed standard NEMA specifications. The motor shall be non-hygroscopic and hermetically sealed. Motor insulation shall equal or exceed standard NEMA Class H. The motor shall be UL recognized and CSA certified.

**Drive Structure:**

The motor mount shall be constructed of corrosion resistant material and the diffuser shall be constructed of a polycarbonate reinforced plastic material. The motor mount and mounting collar will be coated with two coats of Tnemec Series 66 epoxy paint for a 6-mil thickness. The design shall be such that the liquid spray shall be discharged at a 90 degree angle to the motor shaft and over a 360 degree omni directional pattern in a horizontal plane. There shall be a junction box made of corrosion resistant materials in LB configuration, with splice connectors, all of which are UL recognized and CSA certified. The design shall allow ease of installation and removal of the aerator from the float without the need of fasteners securing the aerator to the float. The frame shall provide maximum rigidity and stability with minimum flow resistance. All fasteners shall be a minimum of 316 stainless steel alloy.

**Propeller:**

The propeller shall be precision molded non-corrosive material and shall be specifically designed for the application intended. The propeller shall not lose its pitch or shape during usage. The propeller shall be streamlined to prevent cavitation, reduce drag and shall have trailback blades to reduce fouling. The propeller shall be dynamically and hydraulically balanced to assure equalization of load and reduce vibration while in operation.

**Flotation:**

The flotation unit shall be square in shape for stability with a hole in the center for mounting the aerating unit. The float shall be rotationally molded of polyethylene with UV inhibitors and shall not be less than 1/8"(.125) sectional thickness. The float shall be filled with closed cell, non-hygroscopic, pressure molded polystyrene. The flotation shall be capable of supporting no less than two (2) times the weight of the unit. The float shall be unconditionally guaranteed not to sink or capsize due to high winds or ice.

**Operating Controls:**

Single phase Aquarian Quantum aerators shall be supplied with a Franklin Electric Deluxe capacitor start, capacitor run control box with a magnetic contactor, start and run overloads mounted in a NEMA 3R enclosure. The Franklin control box is UL and CSA listed.

The 3 phase equipment is provided with the appropriately sized combination manual I.E.C. type motor starter protector with a built in heater element to provide overload protection. The motor starter protector is UL recognized and CSA certified and will be housed in a UL CSA certified NEMA 3R enclosure with off/on switch.

**Testing:**

The AQQ-\_\_ Aquarian Quantum aerator will be tested under load prior to shipping to certify correct operation and performance. Test results are provided.

**Warranty:**

The AQQ-\_\_ Aquarian Quantum aerator has a 1 year limited warranty to be free of defects in material and workmanship.

**OPTIONAL EQUIPMENT****Electrical Service Cable (service from the water's edge to the aerator)**

The aerator shall be supplied with \_\_\_ feet/\_\_\_\_\_ meters of AWG#\_\_\_ gauge four (4) conductor stranded copper wire. The service cable shall be type SJEOW, SEOW, SJOW or SOOW insulated to resist moisture, wicking and cracking. The service cable shall be black. The service cable shall be one continuous length.

**Mooring Cable and Mooring Hardware**

The aerator shall be supplied with \_\_\_\_\_ feet/ \_\_\_\_\_ meters of 3/16" diameter 316 stainless steel cable. The aerator shall be supplied with one (1) set of mooring hardware, consisting of sixteen (16) 1/4" clips and eight (8) 1/4" thimbles manufactured of 316 stainless steel.