



Air-O-Lator
Aquarian Aquaculture
Floating Aerator
Specifications

MODEL:

The model shall be an AQA-___ Air-O-Lator .Aquarian Aquaculture floating aerator.

Performance Data:

The AQA-___ Aquarian Aquaculture floating aerator shall produce a spray height of ___ feet/___ meters and a diameter of ___ feet/___ meters.

The AQA-___ shall produce a pumping volume of ___ gallons/___ liters per minute.

The AQA-___ shall produce a standard oxygen transfer rate (SOTR) of ___pounds/___ kg of oxygen per hour.

The AQA-___ has a minimum operating depth of ___ inches/___ centimeters.

MODEL	HP	VOLTS	PH	HZ	MTR/S.F. AMPS	SPRAY HT.	SPRAY DIA.	GPM/LPM	SOTR (lbs./kg.)	MIN. OP. DEPTH
AQA-5	1/2	115	1	60	10.0/12.0	16"/.40M	4'/1.6M	500/1893	2.3/1.04	18"/.46M
AQA-5	1/2	230	1	60	5.0/6.0	16"/.40M	4'/1.6M	500/1893	2.3/1.04	18"/.46M
AQA-75	3/4	230	3	60	3.2/3.8	16"/.40M	4'/1.6M	500/1893	2.3/1.04	18"/.46M
AQA-75	3/4	460	3	60	1.6/1.9	16"/.40M	4'/1.6M	500/1893	2.3/1.04	18"/.46M
AQA-1	1	230	1	60	8.2/9.8	2'/.61M	6'/1.8M	1475/5583	3.2/1.5	24"/.61M
AQA-15	1.5	230	3	60	4.9/5.9	2'/.61M	6'/1.8M	1475/5583	3.2/1.5	24"/.61M
AQA-15	1.5	460	3	60	2.5/3.0	2'/.61M	6'/1.8M	1475/5583	3.2/1.5	24"/.61M

Motor:

The motor shall be a ___ horsepower, ___ volt, ___ phase, 60 Hz, 3450 RPM 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.

Diffuser/Motor Mount:

The diffuser/motor mount shall be constructed of a polycarbonate reinforced plastic material. The design shall be such that the liquid spray shall be discharged at a 45 degree angle to the motor shaft and over a 360 degree omni directional pattern in a horizontal plane. 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 specifically designed for the application intended. The propeller shall be injection molded of a blend of high density glass filled polycarbonate plastic. 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.

Electrical Service Cable (service from the water's edge to the fountain)

The aerator shall be supplied with a minimum of 50 feet/15.2 meters of AWG#12 gauge four (4) conductor stranded copper wire. The service cable shall be type SJEOW, SEOOW, 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. One end of the service cable shall be installed and sealed into the motor. Additional cable lengths and gauges can be provided in 50 foot/15.2 meters increments.

Operating Controls:

Operating controls are not provided for the AQA5 Aquarian Aquaculture aerator, nor are they needed. The standard operating controls supplied with the AQA-1 Aquarian Aquaculture aerator is a Franklin Electric 1 horsepower, 230 volt, 1 phase, 60Hz, CRC control box with start and run capacitors mounted in a NEMA 3R enclosure. The Franklin CRC control box is UL and CSA listed.

The 3/4 horsepower and 1.5 horsepower, 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.

Testing:

The AQA-__ Aquarian Aquaculture aerator will be tested under load prior to shipping to certify correct operation and performance. Test results are provided.

Warranty:

The AQA-__ Aquarian Aquaculture aerator has a 1 year limited warranty to be free of defects in material and workmanship.