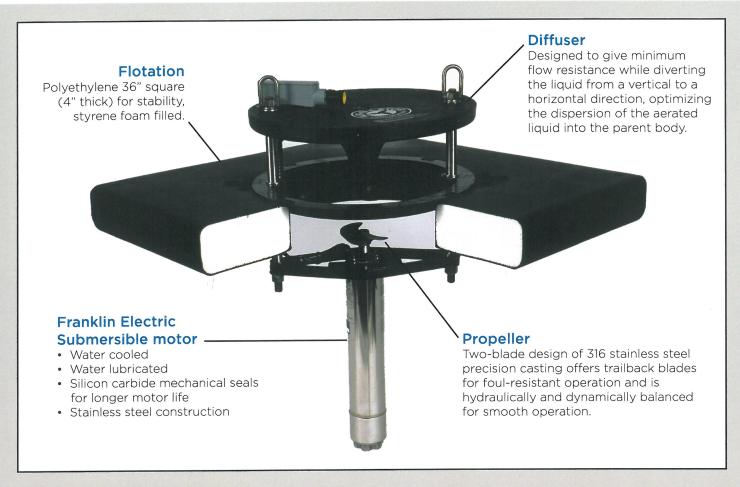


AQUARIAN® COMMERCIAL



FLOATING 2 AND 3 HP AERATORS

## COMMERCIAL AT A GLANCE

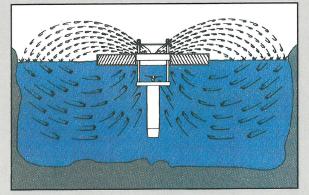


### **HOW IT WORKS**

The **Aquarian Commercial** was originally designed and engineered for the tough wastewater lagoon environment as a cost saving solution for municipalities both large and small. The Commercial is also a formidable solution for industrial point source applications. Additional uses are cattle, hog, and chicken retention applications.

The Aquarian Commercial produces a large volume of water as a column from 1700 gpm for a two horsepower aerator up to 2700 gpm for a three horsepower aerator. The Commercial's exclusive diffuser deflects the water column in an omni-directional pattern at right angles to the water surface and outward from the unit. As the redirected water flow from the diffuser is propelled through the air at a tremendous velocity, oxygen is being added at a substantial rate providing Standard Oxygen Transfer Rates from five to six pounds per horsepower hour, depending on the horsepower selected.

At the same time the water is being propelled through the atmosphere, evaporative cooling is occurring, which allows the water being pumped into the atmosphere to cool therefore permitting the water to retain oxygen for a greater period of time. A sizeable induced flow creates maximum directional flow as well as maximum dispersion of aerated water within the basin being treated.



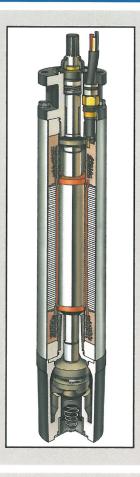
**Aquarian Commercial** floating aerators are designed to perform two basic functions:

- Create a large continuous air/water interface to transfer atmospheric oxygen to the liquid being aerated.
- Mix the liquid contents and keep degradable solids in suspension.

## **ADVANTAGES**

- Rugged, stainless steel Franklin Electric submersible motor, UL 778 recognized, water cooled, water lubricated.
- Eco-friendly motor.
- No long shafts to bend or become out of balance. 5/8" diameter, 1-1/2" long motor shaft.
- Low trajectory spray pattern permits minimal ice build up.
- Single phase and three phase equipment available.
- High speed, foul resistant propeller. High shear water spraying action. No lazy spray or bubbles.
- Computer designed diffuser engineered to break up the water column for the best oxygen transfer rate.
- 100' water resistant power cord. Longer power cord available in 50' increments.
- Propeller guard.
- Single phase provided with start/run control box. Three phase provided with contactor and overload relay in a 3R enclosure.

# **LOOK INSIDE**



- Silicone carbide seal for longevity.
- Motor leads are flexible for easy handling.
- Removable water-block lead connector for easy replacement of damaged leads.
- Up-thrust bearing.
- Hermetically sealed stators with welded stainless steel liners and outer shell, prevents fluid contact with windings.
- Grooved radial carbon bearings with material specifications selected for prefilled water lubrication.
- Kingsbury type thrust bearing is self aligning and carries thrust and rotor weight.



### **All-Season Performance**

With over 95% of the weight of the aerator beneath the liquid surface, the **Aquarian Commercial** is unconditionally guaranteed not to capsize due to ice or turbulence.

## **PERFORMANCE DATA**

Part#	НР	Volts	Ph.	Max* Amps	GPM/LPM Rate	SOTR**
985AQ22301	2	230	1	13.2	1700	5.5#
985AQ22303	2	230	3	8.1	1700	5.5#
985AQ24603	2	460	3	4.1	1700	5.5#
985AQ32301	3	230	1	17.0	2700	6.0#
985AQ32303	3	230	3	10.9	2700	6.0#
985AQ34603	3	460	3	5.5	2700	6.0#

- \* Max Amps: Maximum allowable service factor amperage
- \*\* SOTR: Standard Oxygen Transfer Rate
- # Based on tests performed by GSEE Environmental Consultants, Lavergne, TN

Minimum Operating Depth - 36"

# **CABLE SELECTION GUIDE**

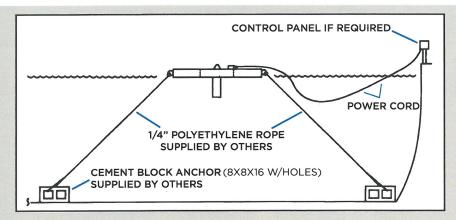
Motor Rating		Copper Wire Size			
Volts	HP	12	10	8	
230	2	250	400	*	
230	3	200	300	100	

Single phase, three-wire w/ground cable, 60 HZ (Maximum length in feet - service entrance to motor)

Motor Rating		Copper Wire Size			
Volts	HP	12	10	8	
230	2 & 3	400	600	1000	
460	2 & 3	1600	2500	4000	

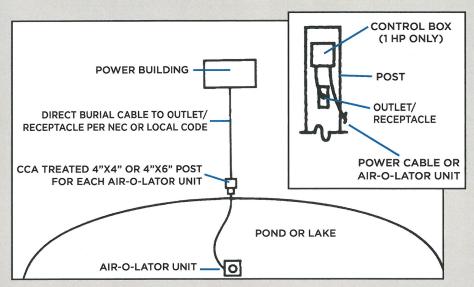
Three phase, three-wire w/ground cable, 60 HZ (maximum length in feet - service entrance to motor)

Lengths meet National Electric Code.
\*Lengths over 400 ft., consult factory.



### SUGGESTED MOORING

Use approximately three feet of mooring rope per foot of water depth to allow for water level fluctuation. Tying unit to the shore is also acceptable if visible mooring ropes are not objectionable.



Recommended electrical power supply layout for easy installation and removal of equipment.

## SUGGESTED ELECTRICAL

Our equipment is manufactured either to UL, CSA, or NEMA standards.

All wiring shall be per NEC, CEC, or local electric codes.

#### ABOUT AIR-O-LATOR

For over 40 years, Air-O-Lator has been manufacturing De-Icers, Aerators, Fountains, Mixers, and Aspirators for water treatment. Our high performance and dependable products are engineered to improve water quality bringing about a healthy water eco-system along with aesthetic beautification.

Today, more than ever, in our environmentally challenged world, protecting and managing water (one of our most important natural resources) is our goal. The Air-O-Lator product line is designed to provide the most natural, energy efficient way to treat water quality problems while being easy to use and maintain. Each unit is made in the USA and constructed from the highest grade components.

Our products are backed by our outstanding customer service guarantee. When customers call, they speak to an experienced, knowledgeable, and personable employee who can answer questions or handle any product issues.