

## HRO Coral Sea Specifications



### System Specifications:

#### Product Water Produced per hour of operation:

+/-15% 850 psi / 56 Bar, 77°F / 25°C & 35,000 ppm TDS typical sea water

Model	Production Per Hour	Production Per 24 Hours
	gallons / liters	gallons / liters
2800/3/V	117 / 442	2,800 / 10,599
3600/3/V	150 / 568	3,600 / 13,627
2800/3/H	117 / 442	2,800 / 10,599
3600/3/H	150 / 568	3,600 / 13,627
2800/3/M	117 / 442	2,800 / 10,599
3600/3/M	150 / 568	3,600 / 13,627
2800/4/H	117 / 442	2,800 / 10,599
3600/4/H	150 / 568	3,600 / 13,627
4200/4/H	175 / 662	4,200 / 15,899
5200/4/H	217 / 820	5,200 / 19,684
6200/4/H	258 / 978	6,200 / 23,469
6800/4/H	283 / 1,073	6,800 / 25,741

### Salt Rejection (Chloride Ion):

Minimum 99.2%, Average 99.4%

### Product Water Temperature:

Ambient to feed water temperature.

### Salinity Monitoring:

Automatic computer controlled electronic monitoring. Temperature compensated with the Water Quality Indicator. The salinity monitoring components of the system give a continuous

TDS readout in TDS ppm or EC (microsiemens), are temperature compensated, and of a fail safe design.

**Salinity Range:**

Seawater use up to 50,000 ppm TDS (NaCl) (typical seawater salinity is 35,000 ppm.)

**Temperature Range:**

Min. 33°F / .5°C Max. 122°F / 50°C

**Reverse Osmosis Membrane:**

**TYPE:** Specifically selected High Rejection / High Yield aromatic tri-polyamid, thin film composite, spiral wound, single pass reverse osmosis membrane element.

**Chlorine Tolerance:**

0.1 ppm

**pH Range:**

3-11 (typical seawater pH is 8)

**System Pressure:**

Feed Water:

Minimum: 6 psi / .41 bar / .42 Kg/cm<sup>2</sup>

Maximum: 35 psi / 2.41 bar / 2.11 Kg/cm<sup>2</sup>

System Operation:

Seawater @ 35,000 ppm & 77° F / 25° C

Nominal: 850 psi / 56.5 bar / 57.66 Kg/cm<sup>2</sup>. (Brackish varies w/ppm)

**Weight:**

Model Number	Weight
2800/3/V	435 lbs / 197 Kg
3600/3/V	473 lbs / 215 Kg
2800/3/H	435 lbs / 197 Kg
3600/3/M	473 lbs / 215 Kg
4200/4/H	750 lbs / 340 Kg
5200/4/H	800 lbs / 364 Kg
6200/4/H	850 lbs / 386 Kg
6800/4/H	900 lbs / 409 Kg

**External Installation Water Connections:**

Pipe sizes to be supplied by the installer for connection of the Horizon Reverse Osmosis supplied components.

### 3" Models

<b>Feed Inlet:</b>	3/4" ANSI Threaded Flange
<b>Cleaning Inlet:</b>	3/4" ANSI Threaded Flange
<b>Brine Discharge:</b>	3/4" ANSI Threaded Flange
<b>Cleaning Return:</b>	3/4" ANSI Threaded Flange
<b>Product:</b>	1/2" ANSI Threaded Flange

### 4" Models

<b>Feed Inlet:</b>	1" ANSI Threaded Flange
<b>Cleaning Inlet:</b>	1" ANSI Threaded Flange
<b>Brine Discharge:</b>	1" ANSI Threaded Flange
<b>Cleaning Return:</b>	1" ANSI Threaded Flange
<b>Product:</b>	3/4" ANSI Threaded Flange

### High Pressure Pump Electric Motor:

(HP = Horse Power; FLA = Full Load Amperes, LRA = Locked Rotor Amperes @ StartUp)

### Booster Pump Electric Motor:

Phase	Hz	RPM	VAC	HP	FLA	LRA
Single	50	2875	220	1	6	40
Single	60	3450	230	1	6	39
Three	50	2875	220	1	3	26
Three	50	2875	380	1	2	15
Three	60	3450	208	1	4	28
Three	60	3450	230	1	3	25
Three	60	3450	460	1	2	13

### High Pressure Pump Electric Motor:

Phase	Hz	RPM	VAC	HP	FLA	LRA
Single	50	1428	220	5	26	183
Single	60	1725	230	5	21	146
Three	50	1428	220	5	21	138
Three	50	1428	380	5	10	80
Three	60	1725	208	5	15	122
Three	60	1725	230	5	13	110
Three	60	1725	460	5	7	55

Phase	Hz	RPM	VAC	HP	FLA	LRA
Three	50	1428	220	10	33	276
Three	50	1428	380	10	19	160
Three	60	1725	208	10	29	243
Three	60	1725	230	10	26	220
Three	60	1725	460	10	13	110

**Recommended Circuit Breaker:**

The recommended Circuit Breaker Size assumes that the Horizon Coral Sea R.O. System is equipped with only two electric motors (Booster Pump Motor and High Pressure Pump Motor). If an optional Feed Pump is also used, the Circuit Breaker must be sized appropriately to handle all three motors.

Operating Voltage Hz & Phase	2800 - 3600 GPD Circuit Breaker Size	2800 - 3600 GPD Circuit Breaker Size
220 VAC, 50 Hz, Three Phase	50 Amperes	70 Amperes
380 VAC, 50 Hz, Three Phase	25 Amperes	40 Amperes
208 VAC, 60 Hz, Three Phase	35 Amperes	65 Amperes
230 VAC, 60 Hz, Three Phase	35 Amperes	60 Amperes
460 VAC, 60 Hz, Three Phase	15 Amperes	30 Amperes
220 VAC, 50 Hz, Single Phase	65 Amperes	NA
230 VAC, 60 Hz, Single Phase	55 Amperes	NA