

# WaterGard™ LLC Controls

INTEGRATED CONTROL PANEL

### Overview

WaterGard ready LLC water level control systems provide an advanced method to control and monitor the water level in cooling tower collection basins. These controls are available with either Marley LLC (liquid level control) hanging probe or LLC+u ultrasonic water level sensing systems. These controls may also be integrated into a Marley AlO (All In One) and other selected multi-function control panels. WaterGard ready LLC control panels are pre-configured to easily connect to a multitude of various WaterGard and LLC combinations. Additionally, dry contacts are available for signals going to a BMS or to actuate a makeup water solenoid valve.

WaterGard ready LLC controls communicate two separate signals to the WaterGard unit, one for makeup and one for WaterGard bypass in times of extreme water supply demand, which ensures collection basin water levels are always maintained.

A single WaterGard ready LLC control panel is capable of signaling makeup water to as many as five separate WaterGard units. An expansion panel is available to signal an additional four WaterGard units if required.

Both the WaterGard ready LLC version with the hanging probe sensors and the LLC+u ultrasonic level sensor are provided with stilling chambers to provide a calm environment for accurate water level detection.

A Hand-Off-Auto selector switch mounted on the side of the control panel provides an easy means of manually filling the collection basin on startup or initiating the desired mode of operation.





Marley LLC+u ultrasonic water level sensor



Marley LLC hanging probe water level sensor

# WaterGard LLC control panel



#### WaterGard LLC Control Panel

- NEMA 4X fiberglass enclosure
- Mounting flanges located top and bottom
- Outdoor rated
- Stainless steel continuous hinge
- Swing out lid with stainless steel clamps
- Lock-out capabilities
- 18" H x 16" W enclosure

## **Electrical Components:**

- Main breaker disconnect
- 120VAC dedicated supply required, other voltages available
- HAND-OFF-AUTO selector switch for manual basin fill control
- Output terminals for makeup are internally powered with 120VAC when needed for makeup water solenoid valves
- User terminal points for connecting field devices e.g., solenoid valves, water level and alarms
- Raised terminal strip for easy access
- Enclosed wiring diagram and User Manual
- Built to UL and CUL standards
- Single enclosure for entire control system
- Configurations available:
  - Hanging probe system with makeup and low water level alarm
  - Hanging probe system with high cutoff, high alarm, makeup, low alarm, and low water cutoff
  - Ultrasonic systems with high cutoff, high alarm, makeup, low alarm and low water cutoff
  - External expansion box for signaling an additional group of up to four WaterGard units



7401 WEST 129 STREET

OVERLAND PARK, KS 66213 USA
913 664 7400 | spxcooling@spx.com

