

WATER LEVEL CONTROLLER



USER'S MANUAL & INSTALLATION GUIDE



FEATURES

- Overhead tank control prevents spillover, maintains water level above the reserve level.
- Dry run protection of pump.
- Auto-adjusting dry run detection timeout.
- Sump control allows pumping on the adequate water level, and prevents below the minimal level.
- The run timer prevents motor overrun.
- Auto-adjusting standby timer rechecks the water level in the sump and acts accordingly.
- Automatic/Manual/Off switch
- Micro-computer based sensing algorithm prevents corrosion of sensor probes.
- Sleek ABS enclosure.

RELATED PRODUCTS DWLC-WKMxx Pre-wired sensor kit for main tank DWLC-WKSxx Pre-wired sensor kit for sump

SPECIAL FUNCTIONS

Restricted Continuous run of motor: When the motor starts, run timer will also start. If motor is not stopping even after the fixed run time (15 minutes) the run timer will stop the motor and start the idle timer. This allows cooling down of motor. After the fixed idle timeout (30 minutes) the idle timer will start the motor.

Dry-run detection: As the motor starts, both run timer and dry run timer will start. If water is not delivered within the dry-run timeout (automatically adjusts on each retrials) the dry-run timer will stop the motor. The Idle timer starts with the auto adjusted idle time out, and will start motor on elapsing the idle timeout. This function is attempted for 15 more times for a successful pumping. A successful pumping will reset all the timers. If failed DWLC-777 will turn to manual operation mode. User intervention is required further. Dry-run timeout auto adjusts from 8 seconds to 3 minutes and Idle timer from 5 minutes to 4 hours.

Sump low detection: After motor starts, if water is delivered at least for 10 seconds, the dry-run timeout is adjusted to 8 seconds. The next dry-run will be interpreted as low water level. Motor will stop and will initiate Idle timer for 30 minutes. The idle timer then restarts pumping. This is useful with submersible pumps installed where sump wiring is difficult. See wiring guide to bypass sump control using sensors. This method cannot be used with surface mounted mono block pumps as the removal of air trapped inside suction pipe requires user intervention.

SWITCH, CONNECTORS & INDICATORS





LED-Y	Flashing for short duration in one second intervals	Water level in main tank is above reserve level
LED-R	Blinking in very slow speed	Cooling down of motor after an overrun
	Blinking in slow speed	Water level in sump tank below minimal level
	Blinking in very slow speed	Water level in sump is below the adequate level but above the minimal level
	Blinking alternatively in very fast & slow speeds	Dry-run of pump detected. Retrials are pending. Still in automatic mode. User intervention may not be required
LED-G	Blinking very fast	Dry-run of pump detected. Manual mode. User intervention is required.
	Blinking in very slow speed	Motor is running. Water level in main tank is below reserve level. Water is still not delivered.
	Blinking fast	Motor is running. Water level in main tank is below reserve level. Water is delivering.
	Blinking in slow speed	Motor is running. Water level in main tank reached above reserve level. Water is delivering.
LED-G1	LED on	Motor is running. (On manual mode only this LED will glow)
LED-Y	LED-R LED-G Blinking together	Faulty wiring either to main tank or sump

INSTALLATION GUIDE DWLC-WKMxx Pre-wired sensor kit **Dry-Run Sensor Probes** Set the sensor probes at the end of delivery pipe as shown in picture to sense water output and prevent dry-running of OL the pump. Prolonged running of the pump without water will reduce its life span. **DWLC-777** Maximum Level Sensor Probes Water Level Controller Set the sensor probes at the maximum capacity level of the main tank, below over-flow pipe. The motor will stop at water reaching this level and prevent overspilling Reserve Level Sensor Probes Set the sensor probes at a level where you want to keep the water reserve. Line Out The pumping will initiate at water level falling below this level. MAIN TANK 10Amp Adequate Level Sensor Probes Circuit Breaker **230V AC IN** PHASE IN Set the sensor probes at a level where NEUTRAL IN adequate water is normally available for pumping. On regaining the water level DWLC-WKSxx Pre-wired sensor kit in emptied sump will Initiate pumping. SL Minimal Level Sensor Probes Set the sensor probes just above the foot valve at a level where air entry inside

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the suction pipe will not happen.

The hassle of removing trapped air inside the suction pipe is avoided.



If sump control using sensors is not required for submersible pump users. connect SH, SL & COM Terminals together using a wire.

This is not recommended as frequent dry run may reduce lifespan of pump.

