

POWER CONTROL CENTER (10HP-25HP) SPECIFICATIONS

TESTING: Power Control Center (PCC) components are U.L. listed and CSA certified. PCC and all components are ETL and ETL-C listed and approved as a complete package.

The following is a description of the electrical components used by Otterbine in our Power Control Center for all 10HP - 25HP Aeration/Fountain Systems.

A. CONSTRUCTION: The power control center utilizes a durable fiberglass, NEMA 4X rated enclosure.

The dimensions of the standard control center are: height = 18in (45.7 cm), width = 16in (40.6cm), depth= 8in (20.3cm). Exception: The dimensions of the standard control center for Giant Fountain single phase systems are: 24in (60.9cm) x 24in (60.9cm) x 10in (25.4cm); with Giant Fountain Sub-Monitor option they are: 20in (50.8cm) x 16in (40.6cm) x 8in (20.3cm)



B. DISCONNECT: The Otterbine Power Control Center has a surface mounted power disconnect switch to quickly remove power to all equipment in the water. The PCC shall be mounted where visible from the location of the aeration equipment, but not accessible from the water.

C. MOTOR CONTROLLER: Each Power Control Center is equipped with a Manual Motor Protector (MMP) providing short circuit and motor overload protection. The aerator/fountain is controlled by an across-the-line magnetic contactor.

D. CONTROL CIRCUIT: On 208-230 volt installations a neutral wire must be present to supply 115 volts to operate the internal control circuit components. A manual-off-auto switch is used to select the operating mode. In automatic, a 24-hour time clock operates the control circuitry while manual allows constant operation of the aerator. The control system will include a 7 day timer.

E. GROUND FAULT PROTECTION: The electrical system for units operating on 230 volt single or three phase with the exception of 15HP 230V single phase and 25HP, 230V three phase, shall include a circuit breaker and a 5 milliamp GFCI (Ground Fault Circuit Interrupter). To operate the GFCI on 230 volt systems a properly bonded neutral must be present or an optional control transformer may be supplied. The electrical system for units operating on 380 (50Hz), 415V (50Hz) and 460 volt shall have circuit breakers.

F. SURGE PROTECTION: Each Power Control Center is equipped with a three-pole surge arrester, rated for a maximum of 60,000 amperes discharge.

G. GROUND LUGS: Grounding lugs are present for connection of the aerator/fountains power cable ground wire to insure the unit is properly grounded.

H. SUB-PANEL: All of the power control center components are mounted upon a removable sub-panel.

I. MOUNTING OF ENCLOSURE: The Otterbine Power Control Center is mounted by means of four external mounting holes on the enclosure.

TYPICAL SPECIFICATIONS:

POWER CONTROL CENTER: The electrical control components shall be mounted in a NEMA 4X rated enclosure with an externally mounted disconnect switch and a MANUAL - OFF - AUTO selector switch. The electrical system for units operating on 230 volt single or three phase with the exception of 15HP 230V single phase and 25HP, 230V three phase, shall include a circuit breaker and a 5 milliamp GFCI (Ground Fault Circuit Interrupter). To operate the GFCI on 230 volt systems a grounded neutral must be present or an optional control transformer may be supplied. The electrical system for units operating on 380 (50Hz), 415V (50Hz) and 460 volt shall have circuit breakers. For all units the motor starter shall be a combination magnetic full-voltage non-reversing type, 600 volts maximum, with magnetic and adjustable thermal trip overload relays and auxiliary contact for lighting. The electrical system shall include a three-pole surge arrester, rated for a maximum of 60,000 amperes discharge. The control system will include a 7 day timer.

INSTALLATION: Otterbine Power Control Centers come with all required elements. The only additional requirements are the connections to the Power Control Center of the external power from a properly sized branch circuit short circuit device and the aerator power cable. **Any and all electrical work should be done by a qualified and licensed electrician and conform to all local and national electrical codes.**

OPTIONS: Although the fiberglass enclosure will withstand the harshest environments Stainless Steel enclosures are available when required. Multiple Motor Controllers in one enclosure; Phase Monitor; EPD or GFCI Devices for 460V; Step Down Transformers; Remote Satellite Control; Water Level Shut Off; Sub-Monitor Controls; Fountain Glo™ Light Controls.

CUSTOM CONTROLS: Otterbine can build controls to your specifications for an additional cost. Power Control Centers for operating multiple aerator systems are available.

COMPUTER CONTROL: We can supply the relays necessary to allow common 24 volt irrigation computer control systems to allow the operation of the aerator.

WARRANTY: Power Control Center warranty shall coincide with the warranty parameters of the aerator/fountain it controls. Refer to aerator/fountain product warranty for details

ACCEPTABLE MANUFACTURER: The Power Control Center shall be manufactured by OTTERBINE/BAREBO, INC., 3840 MAIN ROAD EAST, EMMAUS, PA U.S.A. 18049 PH: (610) 965-6018. www.otterbine.com