POWER CONTROL CENTER (1HP-5HP)
SPECIFICATIONS

TESTING: Power Control Centers (PCC) are UL508A compliant and are built in Otterbine's UL508A certified panel shop.

The following is a description of the electrical components used by Otterbine in our Power Control Center for all1HP - 5HP Aeration Systems.

A. CONSTRUCTION: The power control center utilizes a durable fiberglass, NEMA 4X rated enclosure. Standard single phase panel dimensions are trade size 16in x 14in x 6in (41cm x 36cm x 15cm) overall 18in x 16in x 6in (45cm x 41cm x 16cm). Standard three phase panel dimensions are trade size 18in x 16in x 8in (46cm x 41cm x 20cm) overall 20in x 18in x 9in (50cm x 47cm x 23cm).

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.

Single Phase PCC

Three Phase PCC

(Inside) Single Phase PCC with cover panel


(Inside) Single Phase PCC with cover panel removed

OVERALL DIMENSIONS:
Single Phase Panel: 18in x 16in x 6in (45cm x 41cm x 16cm)
Three Phase Panel: 20in x 18in x 9in (50cm x 47cm x 23cm)

C. MOTOR CONTROLLER: The electrical system for all units (115, 208-230, 380-415 & 460V) shall include a non-reversing 600V rated contactor, thermal overload relay, short circuit protection, and 24hr timer. The aerator/fountain is controlled by the across-the-line magnetic contactor.

D. CONTROL CIRCUIT: On single phase installations a neutral wire must be present to supply 115 volts to operate the internal control circuit components. A hand-off-auto switch is used to select the operating mode. In automatic, a 24-hour timer operates the control circuitry while hand allows constant operation of the aerator.

E. GROUND FAULT PROTECTION: All Power Control Centers are equipped with 5mA trip ground fault protection as standard equipment.

F. SURGE PROTECTION: Each Power Control Center is equipped with lightning and power surge protection in case of lightning strikes.

G. GROUND TERMINALS: Grounding terminals are present for connection of the aerators power cable ground wire to insure the unit is properly grounded.

H. MINI SWING PANEL: Components such as: Hand-Off-Auto (HOA) selector switch, timers, lighting and control circuit fuses and breakers that are required to be set or reset by the end user are safely and readily accessible just inside the main door of the enclosure on the mini swing panel.

I. COVER PANEL: An insulating fiberglass panel is included to protect the end user from exposure to live components while operating the PCC. Reset and test buttons are installed on the cover panel to allow an end user to test and reset PCC components without removing the cover panel. Viewing holes are also provided to allow and end user to view indicator lights on components mounted behine the cover panel.

J. 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 components shall be mounted in a NEMA 4X rated enclosure with an externally mounted disconnect switch and a HAND - OFF - AUTO selector switch. The electrical system for all units (115, 208-230, 380-415 & 460V) shall include a non-reversing 600V rated contactor, thermal overload relay, short circuit protection, and 24hr timer. All units shall include 5mA trip Ground Fault protection. To operate the control circuit on 208-230 volt systems a neutral must be present. The electrical system shall include a lightning arrester, rated for a maximum of 100,000 amperes discharge.

INSTALLATION: Aerator 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 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 if required. Multiple Motor Controllers in one enclosure; Phase Monitor; Step Down Transformers; Remote Satellite Control; High and Low Water Level Shut Off; 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 control the aerator (On and Off Control).

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