

THREE-PHASE (3 PH) DUPLEX CONTROL PANEL SPECIFICATIONS

**(For Sewage Pump Models MW, WHR and WHRH)
(For Effluent Pump Models ME)**

A NEMA 4X fiberglass control panel shall be furnished with each pumping unit to be installed, as shown on the plans.

The control panel enclosure shall be molded of glass reinforced polyester resins which are chemically resistant to corrosive atmospheres. The resin system shall be pigmented to impart a gray color to the enclosure and be resistant to ultraviolet light.

The resin system also shall include a flame retardant to obtain a flammability rating which meets U.L. 94V-O. Heat distortion temperature shall be 350 degrees Fahrenheit.

The enclosure shall be of one piece, weatherproof construction with smooth, rounded corners and shall be constructed to have a smooth exterior and interior. The enclosure shall be fitted with a closed cell neoprene gasketed cover. The enclosure shall be provided with back panel mounting provisions.

The cover shall be hinged with a heavy duty corrosion resistant stainless steel piano hinge. The cover shall be lockable by means of two (2) high quality combination stainless steel latches and padlock hasps.

The enclosure shall be provided with external mounting feet on the top and bottom of the enclosure. These mounting feet shall be of fiberglass and molded as an integral part of the enclosure.

The back panel shall be a minimum of .080" aluminum and held in place by four (4) #10 screws, which will mate to four (4) threaded standoffs, which are molded into the enclosure.

The panel shall include main disconnect breakers, alarm circuit fuse, control circuit fuse, I.E.C. rated motor starter with 3-pole ambient compensated bimetal overload relays, pump hand-off-auto switches (momentary in the hand position), pump run lights, control transformer with primary fusing, alarm test switch, alternator relay (solid state), override relay, terminal blocks, two (2) ground lugs, and all necessary wiring and brackets. A seal leak light shall be provided for systems utilizing double-seal pumps with seal leak detector.

The control panel shall be equipped with a red alarm light. The lens shall be mounted on the front of the enclosure. The light shall have an engraved aluminum nameplate stating "High Water". The light shall have a bright glow during high water conditions. The alarm light will go out when the water level drops.

All internal wiring shall be neat and color coded. Each wire shall be a different color or stripe (except for ground), and all incoming wires shall terminate into a box clamp type terminal block (except incoming power). All wires shall be 14GA. type TEW rated for 105 degrees Celsius.

A schematic diagram (showing wire color) shall be permanently fastened to the inside of the enclosure. An Installation and Service Manual shall also be included with each control panel.

The control panel shall be U.L. listed as an assembly.