

## **SIMPLEX CONTROL PANEL SINGLE PHASE**

### **3 FLOATS – CAPACITORS IN PANEL TECHNICAL SPECIFICATIONS**

A NEMA 4X poly control panel shall be furnished with each pumping unit / basin package.

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-0. Heat distortion temperature shall be 350 degrees Fahrenheit.

The enclosure shall be of one piece, NEMA 4X poly, 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 gasket cover. The enclosure shall have back panel mounting provisions.

The cover shall be hinged with a heavy-duty corrosion resistant 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.

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

The panel shall include a double pole, main disconnect circuit breaker, control circuit breaker, I.E.C. rated motor contactor, start and run capacitors, plug-in control relay, pump hand-off-auto switch, red alarm light, audible alarm, alarm silence switch, enclosed wire way, terminal blocks, ground lug and all necessary wiring. Terminal strips must have a minimum 3" clearance to the bottom of the enclosure for ease of wiring.

The control panel shall be fitted with a red lexan alarm light. The light shall remain solidly illuminated, indicating a high water alarm condition in the basin. The light shall be approximately 3" high by 2" diameter, mounted on the top surface of the enclosure, visible from all 360-degree direction. The bulb or lens shall be easily replaced. The lens shall be mounted on top of the enclosure with a neoprene gasket.

The alarm condition will produce a bright glowing alarm light and audible buzzer. The audible buzzer can be silenced by means of the silence switch inside the front panel. The red indicator light will remain illuminated as long as the alarm condition persists. Both flashing alarm light and audible buzzer will stop when the water level drops to normal operating conditions.

All internal wiring shall be neatly assembled within an enclosed wire way. Each wire shall be a different color or stripe (except for ground), and all incoming wires shall terminate in the terminal block. All wires shall be rated for 105 degrees Celsius.

A schematic diagram shall be permanently fastened to the inside of the enclosure. The control panel shall be U.L. listable as an assembly.



## **SIMPLEX CONTROL PANEL SPECIFICATION – MODEL KCG2-21S-LC** (SINGLE PHASE - 3 FLOATS – CAPACITORS IN PANEL)

A NEMA 4X polycarbonate (optional fiberglass) control panel shall be furnished with each pumping unit / basin package.

The control panel enclosure shall be molded of polyester resins, which are weather and 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-0. Heat distortion temperature shall be 350 degrees Fahrenheit.

The enclosure shall be of one piece, NEMA 4X polycarbonate, 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 gasket cover. The enclosure shall have back panel mounting provisions.

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

The enclosure shall be provided with external mounting feet on the top and bottom of the enclosure.

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

The panel shall include a double pole, main disconnect circuit breaker, control circuit breaker, I.E.C. rated motor contactor, start and run capacitors, plug-in control relay, pump hand-off-auto switch, red alarm light, audible alarm, alarm silence switch, enclosed wire way, terminal blocks, ground lug and all necessary wiring. Terminal strips must have a minimum 3" clearance to the inside wall of the enclosure for ease of wiring.

The control panel shall be fitted with a red lexan alarm light. The light shall remain solidly illuminated, indicating a high water alarm condition in the basin. The light shall be mounted on the top surface of the enclosure, visible from all 360-degree direction. The bulb or lens shall be easily replaced. The lens shall be mounted on top of the enclosure with a neoprene gasket.

The alarm condition will produce a bright glowing alarm light and audible buzzer. The audible buzzer can be silenced by means of the silence switch inside the front panel. The red indicator light will remain illuminated as long as the alarm condition persists. Both flashing alarm light and audible buzzer will stop when the water level drops to normal operating conditions.

All internal wiring shall be neatly assembled. Each wire shall be a different color or stripe (except for ground), and all incoming wires shall terminate in the terminal block. All wires shall be rated for 105 degrees Celsius.

A schematic diagram shall be permanently fastened to the inside of the enclosure.

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