

SHIPPENSBURG PUMP CO. INC.

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Quality

Craftsmanship



BULLETIN 187
Revised 5/2021

CONTROL PANELS



SHIPCO®
PUMPS FOR MADE IN THE USA QUALITY YOU CAN COUNT ON!

SHIPCO® Control Panels UL/ CUL 508 Approved and Labeled

Panels comply with NEMA and JIC specifications. Panels may be factory mounted or wall mounted. If factory mounted then Liquid Tight Conduit is typically used.

NEMA Enclosures

NEMA 250 Type 1, 2, 3R, 4, 4X, 12 enclosures are used. Other enclosures can be provided. Maximum temperature is 140°F (60°C).

Starters

Magnetic starters are used on all three-phase motors because the motors do not have built-in thermal overload protection. A starter is required on single-phase boiler feed units where the amp rating of the motor(s) exceeds what the boiler level controller can handle. Generally, starters are only required on condensate units with 3HP and larger single-phase motors.

Completely Independent Circuits

Independent circuits allow turning off the power to a single pump while the control circuit is still active; useful for changing a mechanical seal or repairing the pump. Independent circuits are also used with a make-up solenoid valve or for alarms. Every non-simplex boiler feed tank has a control circuit disconnect and every duplex condensate has duplicate (or same) components for each pump. In some cases, a Control Circuit or a Power Switching Relay is used on condensate return units.

Selector Switches

Selector switches provide a method of shutting off the pumps and also testing the pumps with a push button. On duplex condensate units where two (2) float switches are supplied, the switches are known as Lead-Off-Lag so as to provide manual alternation.

Control Circuit Transformers

Control circuit transformers are required by the National Electric Code to reduce the control voltage when the power supply exceeds 250 volts. Shipco® goes one step beyond by providing a Primary and Secondary Fused Transformer when the supply voltage is greater than 115/1/60 on all panels.

Additional Features

Panels come standard with a removable mounting plate and a numbered terminal strip.

Optional Features or Components Fused Disconnects and Circuit Breakers

A standard, through-the-door, lockable handle meets lockout/tag-out to protect against short circuit. Either Fused or Breaker types are placed ahead of the starter and are required as a means of shutting off the power for servicing the unit.

Main Power Disconnect

A main power disconnect must be supplied with or near the panel to allow power to be shut off to the entire unit.

Electrical Alternator or Run Cycle Timer

When supplied on units with more than one pump, an electrical alternator provides rotation or sequencing of the lead pump. On feed water units with constant-running pumps an adjustable run cycle timer is used to ensure equal wear on the pumps. For condensate units where two (2) float switches are specified, this is used to alternate the pumps. Note: On Condensate Units, If a Mechanical Alternator is used or specified it performs the same function as the Electrical Alternator with two (2) float switches.

LED Pilot Lights

When supplied, LED lights show when power is on and pump operation.

Alarms

When supplied, alarms indicate high or low water level in the unit. Individual level controls need to be supplied with the tank to activate this function. An alarm has a bell with a silencing relay (push to silence) but the light remains on until issue is resolved.

Elapsed time Meters

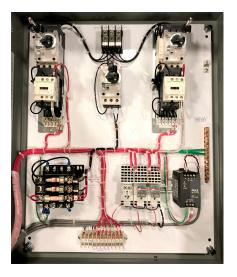
When supplied, meters record the amount of time that each pump has run.

Single Point Power Connection

When supplied, single point power allows the contractor to run one power feed into the control panel.

Programmable Logic Controller

A programmable logic controller monitors and controls various aspects of the unit. The Shipco® Type PLC controller provides a simple user interface for unit level, temperature, pressure, entering set points and triggering alarms. It also allows the equipment to communicate information via protocols such as Modbus and BACnet. Various color touchscreen sizes are available.



Inside panel

FORM BULL 187 Revised 5/2021

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