

## 1.01 JOCKEY PUMP CONTROLLER

### A. Jockey Pump Controller:

1. The controller shall be NEMA Type 2 drip tight rated for 460 volts, 3 phase
  - a. Firetrol # FTA 500-AF03B-BN-AC-BY-BJ.
2. The auxiliary jockey pump controller, if required and specified on the plans and specifications, shall be factory assembled, wired, and tested and specifically designed for this type of service. This controller shall be UL listed, and shall be of the same manufacturer as the main fire pump controller.
3. Starting Method
  - a. The controller shall incorporate a full voltage magnetic starter, main disconnect switch, motor fuse block with fuses, HAND-OFF-AUTOMATIC selector switch and a pressure switch.
4. Pressure Controls
  - a. The pressure switch shall have a range of 20-675 psi and have an adjustable differential range of 15-40 psi.
  - b. The pressure switch shall be of the diaphragm type utilizing snap-action type contacts. The pressure switch shall be mounted inside the controller to prevent any unauthorized adjustment and/or accidental damage.
  - c. Field connections shall be made externally at the controller coupling to prevent distortion of the pressure switch element and mechanism.
5. Running Period Timer
  - a. The controller shall have a running period timer to prevent too frequent automatic starting of the jockey pump motor. The timer shall be set to keep the motor in operation for at least one minute and interwired with the pressure switch.
6. Disconnect Switch
  - a. The disconnect switch shall be mechanically interlocked so that the enclosure door cannot be opened with the handle in the ON position except by a hidden tool operated defeater mechanism. The disconnect switch shall be capable of being padlocked in the OFF position with up to three padlocks for installation and maintenance safety.
7. Enclosure
  - a. The minimum enclosure rating shall be NEMA Type 2 (IEC IP11), drip-proof.

8. Controls

- a. All pushbuttons, selector switches, pilot lights shall be NEMA Type 12, oiltight. Pilot lights (when specified) shall be transformer type. No pushbuttons or pilot lights shall be mounted on the enclosure door. Visual indication of Pump Run and Power ON will be supplied.
- b. The control circuit transformer shall be of the molded winding construction type with built-in molded terminals and shall be fuse protected. The fuse shall be built into the transformer.
- c. The manufacturer shall perform a high potential test of the controller power circuits at not less than two times the rated voltage plus 1000 Volts.

9. Alarm Output Contacts

- a. The Jockey Pump Controller shall provide 3 sets of dry contacts for each of the following alarm conditions
  - 1) Pump Running
  - 1) Pump Overload
- b. The installing contractor shall be responsible for wiring the jockey pump alarm contacts to the main fire pump controller for recording in the fire pump's event log as well as any remote alarm panels.

B. Start Up:

1. The controller manufacturer, prior to shipment, shall hook up and test the jockey pump controller as a completed assembly. This test shall include, but not be restricted to, each function the controller may be required to perform including manual start-stop, automatic start-stop and minimum run timing.
2. The Controller manufacturer shall provide the services and local representation of a factory trained representative to the initial start up and to the final acceptance tests.
3. Coordination of final acceptance test with underwriting authorities shall be made by the installing contractor.

C. Warranty:

1. The manufacturer shall warranty all components against defects in workmanship and material for a period of one (1) year from date of start-up.