

*DIESEL DRIVEN FIRE PUMPS
WIRING CONNECTIONS AND
OTHER ITEMS TO BE COMPLETED BY OTHERS*

1. Diesel fire pump controllers operate on 120/1/60 volt power (20 amps). The fire pump controller cannot be used as a junction box to power any other equipment.
2. Eleven (11) wires #10 AWG (upto 20 feet), #8 AWG (upto 50 feet) are required between the controller terminal block numbered 1 - 11 and the engine terminal block numbered 1 - 11. The wiring must be of the stranded type.
3. The engine jacket water heater requires a separate 120/1/60 volt dedicated circuit, 1500 watts (20 amps).
4. The jockey pump controller voltage depends upon what voltage is available at the jobsite. This circuit may be either 120/1/60, 208/1/60, 208/3/60, 230/3/60, or 460/3/60 volts. A 25 amp circuit will more than suffice in most cases but is dependent upon the jockey pump motor's horsepower and the voltage which will be used at the jobsite.
5. Wiring between the jockey pump controller and the jockey pump motor is also required. The number of wires and wire size is dependent upon the voltage to be used to power the jockey pump unit and the length of wiring between the jockey pump controller and the jockey pump motor.
6. If a low fuel level switch is being furnished for the fuel tank, two (2) wires must be run between the fuel tank's fuel level switch and the fire pump controller. An alarm contact will be furnished inside the fire pump controller for landing and annunciation purposes.
7. If required by the authority having jurisdiction and/or the project owner additional wiring for remote alarm annunciation purposes may be required. These remote alarms may consist of some of the following: [1] Pump running, [2] main selector switch mis-set, [3] system trouble (energized when any of the following occurs: high engine water temperature, low engine oil pressure, engine overspeed, engine failure to start or battery trouble). 2 sets of SPDT contacts are furnished for remote annunciation of [1], [2] & [3] inside the controller.
8. Engine exhaust piping to outside of the pump room.
9. Diesel engine combustion air. The engine requires a certain amount of fresh air entering the room for combustion purposes. Louvers in the doors of sufficient size or a fan to draw air into the room may be required.
10. Fuel supply and return lines between the engine and the fuel tank.
11. Fuel tank legs tall enough to elevate the fuel tank so that the fuel supply outlet from the tank is at least as high as the fuel supply inlet on the engine.
12. Fuel for the fuel tank.
13. Fuel tank vent pipe - 120" above height of tank.
14. Engine cooling water discharge piping to a drain.
15. Oil for the engine.
16. Radiator coolant for the engine.
17. Installation of a main relief valve and waste cone is required per NFPA-20 2-13 and is to be installed between the pump's discharge flange and the discharge check valve.