

# COMPACT FIRE PUMP SYSTEM SPECIFICATIONS

## SYSTEM DESCRIPTION

The Contractor shall provide and install an Aurora Model 383 packaged fire pump system designed in accordance with NFPA 20. The system shall be rated for a flow of ( flow ) GPM @ ( pressure ) PSIG. The system shall be mounted on a common baseplate and include all necessary components such that the customer only needs to run piping to and from the system and connect incoming power. The packaged fire pump system shall include the following equipment:

### Fire Pump

The pump shall be an Aurora Model 383 vertical in-line centrifugal pump. The pump shall be rated for ( flow ) GPM @ ( pressure ) PSI. The pump shall be listed by Underwriters Laboratories (UL) and approved by Factory Mutual (FM). The pump shall have a bronze impeller, bronze case wear ring, packing gland and shaft sleeve. The pump shall deliver no less than 65% of rated pressure at 150% of rated flow. The shut-off pressure shall not exceed 140% of rated pressure.

### Electric Driver

The motor shall be listed for fire pump service by Underwriters Laboratories and have a maximum of ( horsepower ) HP, 3-phase, ( cycles ) Hz, ( voltage ) volts. It shall be open drip proof with a 1.15 service factor and shall comply with the provisions of NFPA 70, National Electric Code and NEMA MG-1, as described by NFPA 20.

### Controller

The motor controller shall be a ( manufacturer ) model ( model number ), listed by Underwriters Laboratories and approved by Factory Mutual for electric motor-driven fire pump service and shall comply with the provisions of NFPA 70, National Electric Code, Article 695 as described by NFPA 20. It shall be compatible with the motor horsepower and voltage. It shall be of the ( starting method ) type with a withstand rating of ( rating ) 42 AIC RMS symmetrical. The controller enclosure shall be of ( enclosure ) type. The controller shall be completely assembled, wired and tested prior to shipment.

### Jockey Pump

The jockey pump shall be an Aurora Model PVM, size ( ). The pump shall be rated for ( flow ) GPM @ ( pressure ) PSI. The jockey pump will be close-coupled to an ODP motor. The motor will operate at (horsepower) HP, ( speed ) RPM, ( cycles ) Hz, ( voltage ) volts.

### Jockey Pump Controller

A ( manufacturer ) Model ( model number ) UL-listed jockey pump controller shall be supplied. The jockey pump controller shall come complete with a fusible disconnect, pre-piped pressure switch, front-mounted hand-off auto selector switch and overload relays. The controller enclosure shall be of ( enclosure ) type.

### Accessories

Systems shall include:

- Suction and discharge pressure gauges on fire pump.
- Isolating gate valve at suction for both fire and jockey pump.
- Isolation valve at discharge for both fire pump and jockey pump.
- Discharge check valve for fire pump and jockey pump.

### Factory Prefabrication and Testing

All of the above equipment (except the test header and hose valves) shall be mounted on a common base. All pipes, piping components, and the pressure sensing lines shall be firmly anchored to the steel base by means of structural steel supports. All electrical wiring between controllers and motors shall be completed and tested at the factory. The entire packaged system will be hydrostatically tested at the factory prior to shipment. Additionally, all equipment will be tested in accordance with the requirements of NFPA 20, UL, and FM.