



**Specification
D- Series
Transfer Switch**

COMBINATION FIRE PUMP CONTROLLER AND POWER TRANSFER SWITCH

The Fire Pump Controller shall meet the requirements of the latest edition of NFPA-20 standard, Chapter 7, and shall be listed by UL (Underwriters Laboratories), and approved by FM (Factory Mutual) for fire pump service.

The power transfer switch shall be installed in a barriered compartment of the fire pump controller and suitable for the available short-circuit currents at the normal and alternate input terminals. The power transfer switch shall be electrically operated and mechanically held, with the capabilities of being manually operated.

The transfer switch shall be electrically and mechanically interlocked so that the

An Operator Interface, Microprocessor based, LCD Screen/Alarm Module, shall be accessible, without opening the Transfer Switch door. The Interface shall display the source conditions: line to line voltage and frequency values, visual indication of position of transfer switch, and power source. The Interface shall also provide a lamp test, number of transfers to emergency, as well as a running total of hours the unit has provided Emergency to the load.

The power transfer switch shall be provided with under voltage-sensing devices to monitor all ungrounded lines of the normal power source. Where the voltage on any phase at the load terminals of the circuit breaker within the fire pump controller falls below 85 percent of motor-rated voltage, the power transfer switch shall automatically initiate transfer to the alternate source. When the voltage on all phases of the normal source returns to within acceptable limits, the fire pump controller shall be permitted to be retransferred to the normal source. Phase reversal of the normal source power shall cause a simulated normal source power failure upon sensing phase reversal. Transfer to the alternate source shall be inhibited until there is adequate voltage and frequency to serve the fire pump load.

Means shall be provided to delay the retransfer from the alternate power source to the normal source until the normal source is stabilized. Means shall be provided to prevent higher-than normal inrush currents when transferring the fire pump motor from one source to the other.