



MarkIII+ Electric Fire Pump Controllers

Product Description FTA3100S, 3130S with FTA950 (opt. -TSA)

Variable Speed Starting with Power
Transfer Switch



Description – Firetrol® Variable Speed Electric Fire Pump Controllers provide a variable frequency drive (VFD) in a PID process control loop to control the speed of a centrifugal pump for the purpose of limiting system pressure in a fire sprinkler system. These controllers are available in the following configurations:
FTA3100S – VFD with Across-the-Line Bypass
FTA3130S – VFD with Digital Soft Start Bypass

Power Transfer Switches are completely assembled with Firetrol Electric Fire Pump Controllers. The power transfer switches are built for use with generator set or 2nd utility use. The entire package of power transfer switch and controller is completely factory assembled, wired, tested and shipped as a complete unit for easy field connection to the power sources and the fire pump motor.

Approvals – Firetrol fire pump controllers are listed by Underwriters' Laboratories, Inc., in accordance with UL218, *Standard for Fire Pump Controllers*, CSA, *Standard for Industrial Control Equipment*. They are built to meet or exceed the requirements of the approving authorities as well as NEMA, the latest editions of NFPA 20, *Installation of Centrifugal Fire Pumps*, NFPA 70, *National Electrical Code* and are approved by Factory Mutual.

The power transfer switches are listed by Underwriters' Laboratories, Inc., in accordance with UL218, *Standard for Fire Pump Controllers*; UL1008, *Automatic Transfer Switches*; UL508, *Industrial Control Equipment*; CSA, *Standard for Industrial Control Equipment*, and approved by Factory Mutual. They are built to meet or exceed the requirements of the approving authorities as well as NEMA and the latest editions of NFPA 20, *Installation of Centrifugal Fire Pumps*, and NFPA 70, *National Electrical Code*.

Standard Features—The following are included as standard with each controller:

- Voltage surge protector
- Main Disconnect Switch sized for connected motor horsepower and voltage
- Fire pump Circuit Breaker
- Single handle Isolating Disconnect Switch/Circuit Breaker mechanism
- Motor contactor
- Emergency Manual Run Mechanism to mechanically close motor contactor contacts in an emergency condition
- Built-in Start and Stop push-buttons to bypass automatic start circuits
- Minimum Run Timer / Off Delay Timer
- Daylight Savings Time Option
- Weekly Test Option
- Elapsed Time Meter
- 7" LCD color touch screen with Embedded microcomputer with software PLC Logic. Keypad type push-buttons for Start/Stop/Test/Transfer switch test
- The screen shall display:
 - Normal and alternate voltage and amperage using true RMS technology
 - Transfer Switch Status
 - Motor Frequency (Hz)
 - Pump Running

- Starting Cause
- Time and Date
- Shutdown Method
- Pump Room Temperature
- Pressure gauge showing start/stop/
current pressure reading

Visual Indication for:

- VFD Fault
- VFD Bypass
- Locked Rotor Current
- Failed to Start
- Under/Over Current
- Under/Over Voltage
- Phase Imbalance
- Transducer Fault
- Motor Trouble
- Pump Room Alarm
- Phase Reversal
- Power/Phase Loss
- Low Water Level
- Pump on Demand
- Low Pump Room Temp.
- Service Required

Pressure and Event Recording

- Logs Pressure Data and Operational Events with time and date stamp.
- Data can be retrieved via USB port or via Wi-Fi using the M3Sync App.

Wet Parts

- Controller supplied with 2 pressure transducers and a test solenoid rated for 500 psi working pressure. Part shall be externally mounted with have a protective cover. Pressure sensing line to be 1/2" FNPT.

Transfer Switch Standard Features — The following are included as standard with each controller:

- Visual indication of the following:
 - Transfer Switch Trouble
 - Alternate Power Phase Reversal
 - Alternate isolating switch-circuit breaker open/tripped
 - Alternate side Locked Rotor Current

Remote alarm contacts provided for:

- Alternate power Isolating Switch in the off position
- Transfer Switch in Normal position
- Transfer Switch in Alternate position

FOR MODEL # INFORMATION SEE
PUBLICATON SD3100S-11

FOR OPTIONS AND MODIFICATIONS SEE
PUBLICATION OP3100S-11

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