

---

**MARK<sup>III+</sup> Electric Fire Pump Controllers – Across The Line Starting with Power Transfer Switch**


---



**Description** – Firetrol® FTA1000 Full Voltage Fire Pump Controllers are intended for use with electric motor driven fire pumps where the capacity of the power source permits full voltage starting. Full voltage is applied to the motor as soon as the controller is actuated. The controller monitors, displays and records fire pump system information.

Full voltage starting is simple and low cost and is preferred whenever the utility or emergency generator set will permit this type of starting.

Power Transfer Switches are completely assembled with Firetrol Electric Fire Pump Controllers; full or reduced voltage types. 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*, 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*.

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*.

**Controller 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
- Single Handle 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
- Daylight Savings Time Option
- Elapsed Time Meter
- 7.0" LCD capacitive type color touch screen (HMI technology) software upgradeable operator interface powered by an embedded microcomputer with software PLC logic.
- 500 PSI Pressure Transducer (calibrated for 300 PSI (20.7 Bar)) and Test Solenoid for fresh water applications, externally mounted with protective cover
- Audible alarm buzzer embedded in the MarkIII+
- Pump Room Ambient Temperature Switch, Display and Alarms

- Pressure and Event Recording with Date Stamp to System Memory Accessible VIA The User Interface and Downloadable to a USB Flash Drive
- Modbus Communications with TCP/IP frame format and a shielded female RJ45 connector
- NEMA Type 2 (IEC IP22) enclosure with bottom entry gland plate and lifting lugs
- Suitable for use as Service Equipment
- The controller supplies visual indication of the following: Power Available
  - Motor Run • Periodic Test • Manual Start • Deluge Valve Start • Remote Automatic Start • Remote Manual Start • Emergency Start • Pump On Demand (Automatic Start) • Pump Room Temp. • Lockout
- The controller displays visual indication for the following alarm conditions: Control Voltage Not Healthy • Invalid Cut-In • Lock Rotor Current • Loss of Power • Low Ambient Temp. • Low Water Level • Motor Trouble • Phase Reversal • Overcurrent • Overvoltage • Phase Loss L1 / L2 / L3 • Phase Unbalanced • Pressure Transducer Fault Detected • Pump On Demand • Pump Room Alarm • Service Required • Undercurrent • Undervoltage • Check Test Solenoid • Weekly Test Cut-In Reached
- Audible and Visible Indication for Fail To Start.
- DPDT 8A, 250VAC remote alarm contacts are provided for: Power Available
  - Phase Reversal • Motor Run
  - Common Pump Room Alarm (Overvoltage / Undervoltage / Phase Unbalance / Low Pump Room Temp. / High Pump Room Temp)
  - Common Motor Trouble (Overcurrent / Fail To Start / Undercurrent / Ground Fault)

- Field Adjustable Timers with Visual Countdown for Minimum Run (Off Delay), Sequential Start (On Delay) and Weekly Test
- Seismic Certification per IBC 2015, CBC 2016  
(Consult Factory for Verification)

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

- Visual indication of the following: Alternate Power Lock Rotor Current • Alternate Power Phase Reversal • Automatic Transfer Switch Trouble
- Audible and Visible indication of: Alternate Power Circuit Breaker OFF or Tripped • Alternate Power Isolating Switch Tripped/Open
- Transfer Switch test push-button
- Bypass for re-transfer and generator shutdown
- The following adjustable time delays are provided:
  - Momentary Normal Power Outage Override • Emergency Power Available Delay • Transfer Trouble Delay • Retransfer to Normal • Generator Cooldown
- Remote Alarm Contacts For: Emergency Isolating Switch Off • Transfer Switch in Normal Position • Transfer Switch in Emergency Position

**FOR MODEL # INFORMATION  
SEE PUBLICATION SD1000-61**

**FOR OPTIONS AND MODIFICATIONS SEE  
PUBLICATION OP1000-72**

## **Firetrol, Inc.**

3412 Apex Peakway  
Apex, North Carolina 27502  
P +1 919 460 5200  
F +1 919 460 5250  
www.firetrol.com

While every precaution has been taken to ensure accuracy and completeness herein, Firetrol, Inc. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications and drawings are subject to change without notice. ©2021 Firetrol, Inc., All Rights Reserved.

**Publication PD1000-61 Rev. B**