Electric Fire Pump Controllers







Side-by-side disconnect/ circuit breaker provides single handle sequencing



Combined automatic and manual fire pump controllers for starting electric motor driven fire pumps.

Firetrol® combined automatic and manual fire pump controllers are intended for starting electric motor driven fire pumps and are available in the following configurations:

FTA1000 - Full Voltage Starting

FTA1250 – Part Winding Reduced Current Starting (Closed Circuit Transition)

FTA1300 – Wye-Delta Reduced Voltage Starting (Open Circuit Transition)

FTA1350 – Wye-Delta Reduced Voltage Starting (Closed Circuit Transition)

FTA1500 – Primary Resistance Reduced Voltage Starting (Closed Circuit Transition)

FTA1800 – Autotransformer Reduced Voltage Starting (Closed Circuit Transition)

FTA1930 – Digital Solid State Reduced Voltage Starting (Closed Circuit Transition)

These Controllers are available assembled with power transfer switches for use with an emergency generator set or second power source.





Operator Interface

The fire pump controllers feature an operator interface with user keypad. The interface monitors and displays motor operating conditions, including all alarms, events, and pressure conditions. All alarms, events, and pressure conditions are displayed with a time and date stamp. The display is a 128x64 Backlit LCD capable of customized graphics and cryllic type character display. The display and interface are NEMA rated for Type 2, 3R, 4, 4X, and 12 protection and is fully accessible without opening the controller door. The user interface utilizes multiple levels of password protection for system security. A minimum of 3 password levels are provided.

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.





Digital Status/Alarm Messages

The digital display indicates text messages for the stats and alarm conditions of:

- Motor On
- Sequential Start Time
- Minimum Run Time
 Local Start / Off Delay Time
 - Remote Start
- Fail to Start
- System Battery Low
- Under Voltage
- Över Voltage
- Locked Rotor Trip
- Over Frequency
- **Emergency Start**

Disk Near Full

- Motor Over 320%
- Drive Not Installed Motor Overload Printer Error
- Disk Error
- Pressure Error

The Sequential Start Timer and Minimum Run Timer/Off Delay Times are displayed as numeric values reflecting the value of the remaining

LED Visual Indicators

LED indicators, visible with the door closed, indicate:

- Power Available
- Alarm
- Pump Running
- System Pressure Low
- Remote Start
- Transfer Switch Normal
- Deluge Open Transfer Switch Emergency
- Phase Failure
- Phase Reversal
- Interlock On
- Fail To Start
- Motor Overload
- Emerg. Iso. Switch Off
- Automatic Shutdown Disabled
- Overvoltage
- Undervoltage

Standard features include:

- 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 condi-
- Built-in Start and Stop push-buttons to bypass auto-
- matic start circuits Minimum Run Timer / Off Delay Timer

- Daylight Savings Time Option
 Weekly Test Timer
 Elapsed Time Meter
 Door mounted display/interface panel featuring a 128 x
 64 pixel backlit LCD Graphical Display, Membrane Type
 User Control Push-buttons and easy to read LED Indicators for:

 - tors for:

 POWER AVAILABLE

 ALARM

 TRANSFER SWITCH NORMAL (If unit ordered with Automatic Power Transfer Switch)

 TRANSFER SWITCH EMERGENCY (If unit ordered with Automatic Power Transfer Switch)
 - Automatic Power Transfer Switch) SYSTEM PRESSURE LOW PUMP RUNNING DELUGE OPEN

 - REMOTE START

 INTERLOCK ON
 FAIL TO START

 MOTOR OVERLOAD

 EMERGENCY ISO SWITCH OFF (If unit ordered with EMERGENCY ISO SWITCH OFF (IT III Automatic Power Transfer Switch)
 PHASE FAILURE
 PHASE REVERSAL
 AUTOMATIC SHUTDOWN DISABLED
 OVERVOLTAGE
 UNDERVOLTAGE

- Digital Pressure Display USB Host Controller and Port Solid State Pressure Transducer
- Data Log
- Event Log (3000 Events)
 True RMS Metering with simultaneous 3 Phase Display of Amps, Volts, Frequency, Pressure and Alarm Messages Disk Error message
 Disk Near Full message

- Pressure Error message Motor Over 320% message
- Local Start message
- Remote Start message
- Emergency Start message Fail To Start message
- Undervoltage message Overvoltage message

- NEMA Type 2 enclosure
 Suitable for use as Service Equipment
 Each standard controller comes with user configurable options for:
 - Interlock Alarm
- Low Pressure Audible
- Low Suction
- Low SuctionPump RunUser Defined InputWeekly Test

Data Logging

The user interface monitors the system and logs the following data:

- Motor Calls/Starts
 Pump Total Run Time
- Pump Last Run Time Total Controller Pwr On Time
- Last Pump Start
 Min/Max System Pressure
- Last Phase Fail/Reversal Last Locked Rotor Trip
- Last Locked Rotor Current
 Min/Max Frequency
- Max Starting Currents
 Max Run Currents
- Min/Max Voltage per Phase while idle (not running)
- Min Voltage per Phase during Start
- Min/Max Voltage per Phase during Run

Event Recording

Memory - The controller records all operational and alarm events to system memory. All events are time and date stamped and include an index number. The system memory has the capability of storing 3000 events and allows the user access to the event log via the user interface. The user can scroll through the stored messages in groups of 1 or 10.

USB Host Controller

The controller is equipped with a built-in USB Host Controller. A USB port capable of accepting a USB Flash Memory Disk is provided. The controller saves all operational and alarm events to the flash memory on a daily basis. Each saved event is time and date stamped. The total amount of historical data saved depends on the size of the flash disk utilized. The operator can save settings and values to the flash disk on demand via the user interface.



USB Host Port and Flash Disk

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