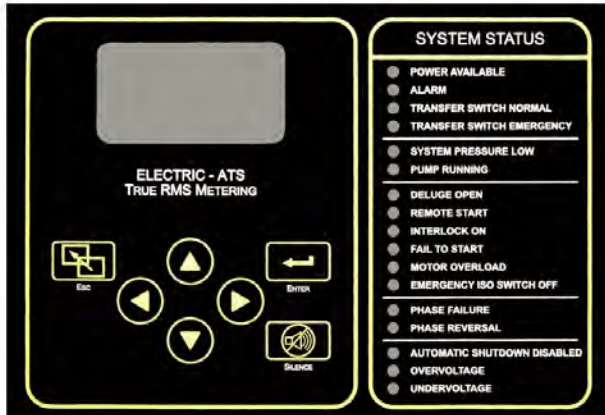


FTA3100 Variable Speed Electric Fire Pump Controllers Product Description



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:

- FTA3100 - VFD with Across-the-Line Bypass
- FTA3110 - VFD with Autotransformer Bypass
- FTA3130 - VFD with Digital Soft Start Bypass

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.

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 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:
 - 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)
 - SYSTEM PRESSURE LOW
 - PUMP RUNNING
 - DELUGE OPEN
 - REMOTE START
 - INTERLOCK ON
 - FAIL TO START
 - MOTOR OVERLOAD
 - EMERGENCY ISO SWITCH OFF (If unit ordered with 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 12 enclosure (IEC IP54)
- Suitable for use as Service Equipment
- Each standard controller comes with user configurable options for:
 - Interlock Alarm
 - Low Pressure Audible
 - Low Suction
 - Pump Run
 - User Defined Input
 - Weekly Test
- Drive Ready pilot light
- Bypass Active pilot light
- Normal / Bypass selector switch

SPECIAL ENCLOSURES

Consult factory for enclosure options.

CIRCUIT BREAKER OPTION

- N Intermediate withstand rating
150,000 Amps RMS Sym.
- P High withstand rating
200,000 Amps RMS Sym

Note: Intermediate and High withstand ratings may not be available for all horsepower and voltages. Consult factory for availability.

ANTI-CONDENSATION SPACE HEATERS

- H 120 Volt Space Heater
- J 120 Volt Space Heater With Thermostat
- K 120 Volt Space Heater With Humidistat
- L 240 Volt Space Heater
- M 240 Volt Space Heater With Thermostat
- N 240 Volt Space Heater With Humidistat

PRESSURE TRANSDUCERS

- B 0-600 psi (0-42.25 bar) Pressure Transducer for Fresh Water Service
- C 0-300 psi (0-21.1 bar) Pressure Transducer for Copper Corrosive Service
- D 0-600 psi (0-42.25 bar) Pressure Transducer for Corrosive Service

COMBINED AUTOMATIC POWER TRANSFER SWITCHES

- FTA950 - Generator/Utility emergency source
- FTA951 - Bypass Isolation for Generator/Utility emergency source

ALARMS

- AC Extra contacts (normally open & normally closed) for remote indication, pump operating
- AF Audible and Visible low pump room temperature alarm
- AG Audible and Visible reservoir low alarm
- AH Audible and Visible low suction pressure alarm
- AM Contacts for remote indication, pump fail to start
- AV Contacts for remote indication, low pump room temperature (Requires option -AF)
- AW Contacts for remote indication, reservoir low (Requires option -AG)
- AY Contacts for remote indication, low suction pressure (Requires option -AH)
- AZ Low pump room temperature switch, mounted and wired
- BW Extra contacts for remote indication, phase failure/phase reversal
- BY Contacts for remote indication, pump overload
- COM Low Suction Pressure Alarm, (Includes selectable auto/manual reset, audible, visible and remote alarms, initiating pressure switch NOT included)

- CTS Built-in Low Suction Pressure Alarm Panel (Includes selectable auto/manual reset, audible, visible and remote alarms and wired and mounted pressure switch)
- EG Audible and Visible relief valve discharge alarm
- EH Contacts for remote indication, relief valve discharge (Requires option -EG)
- EJ Audible and Visible flow meter on alarm
- EK Contacts for remote indication, flow meter on (Requires option -EJ)
- KH Contacts for remote indication, common output for any alarm
- JR Visible jockey pump running indication
- JT Audible and Visible jockey pump trouble indication
- P Built-in alarm system (Includes visible supervisory voltage normal indication and audible pump operating, phase failure and phase reversal indication)
- PE Contacts for remote indication, low system pressure (pump on demand)
- PT Built-in alarm system, 220 VAC supervisory power (Includes visible supervisory voltage normal indication and audible pump operating, phase failure and phase reversal indication)

MISCELLANEOUS

- ED Load shed circuits (Selectable power source and adjustable time delay to remove non-critical loads before starting)
- EL Series pumping, high zone controller
- EM Series pumping, mid zone controller(s)
- EN Series pumping, low zone controller
- FZX 400 VAC Operation (Controller labeled for operation at 380-400 VAC - Use with voltage code FZ)
- IEC CE Marking with Externally Mounted Wet Parts
- IECI CE Marking with Internally Mounted Wet Parts
- OSP OSHPD Seismic Certification (State of California) (Requires Option -SEI)
- PY Motor space heater output contacts
- S Tropicalization
- SEI Seismic Certification (in accordance with IBC) (Note: Not available on model FTA1500)
- USBX External USB Port
- ZPA Customized, annual service display message (when factory programmed or programmed by Firetrol representative during start-up)
- ZPN Serial Modbus RTU over Ethernet TCP/IP using 5150 Connectivity Module
- ZPM Serial Modbus RTU over 2-wire or 4-wire RS485

Export packaging (Wooden crating to conform to IPPC Standards)

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