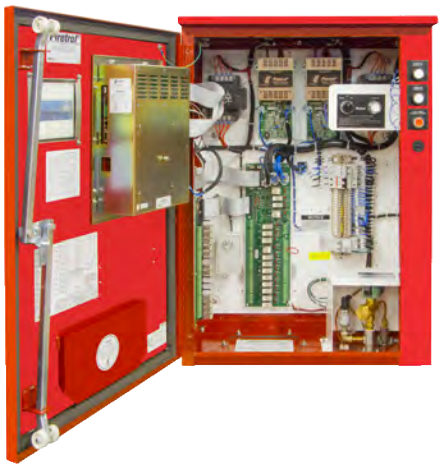
Product Description
FTA1100J

Mark IIxg Diesel Engine Fire Pump Controller



Description – Firetrol® combined automatic and manual Mark IIXG based diesel engine fire pump controllers are intended for starting and monitoring fire pump diesel engines. They are suitable for use with both mechanical and electronic type engines. The controller is available for 12 or 24 volt negative ground systems, using lead acid or Nickel-Cadmium batteries. The controller monitors, displays and records fire pump system information.

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* (cUL), 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:

- AC Line & Battery circuit breakers
- Manual-Off-Auto selector switch
- Manual test push-button
- Two manual crank push-buttons
- Two 10 Amp battery chargers with 4 stage charging cycle, selectable AC voltage (110 / 220), selectable DC voltage (12 / 24), and selectable battery type (Lead Acid, Ni-Cad 9/18 Cell, Ni-Cad 10/20 Cell)
- 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:
  - AC POWER AVAILABLE
  - ALARM
  - MAIN SWITCH IN AUTO
  - MAIN SWITCH IN MANUAL
  - SYSTEM PRESSURE LOW
  - ENGINE RUNNING
  - ENGINE FAIL TO START
  - ENGINE TEMPERATURE HIGH
  - ENGINE OIL PRESSURE LOW
  - ENGINE OVERSPEED
  - ENGINE ALTERNATE ECM
  - ENGINE FUEL INJECTOR MALFUNCTION
  - FUEL LEVEL LOW
  - AUTOMATIC SHUTDOWN DISABLED
  - CHARGER MALFUNCTION
  - BATTERY #1 TROUBLE
  - BATTERY #2 TROUBLE
- Minimum Run Timer / Off Delay Timer
- Programmable Daylight Saving Time Option
- Weekly Test Timer
- Engine Run Time Meter
- Digital Pressure Display
- USB Host Controller and Port
- Solid State Pressure Transducer
- Data Log
- Event Log (3000 events)
- Simultaneous Display of Battery Voltages, Charging Rates, AC Volts, Pressure and Alarm Messages
- Disk Error Message
- Disk Near Full Message
- Pressure Error Message
- Fail to Start Message
- Low Suction Pressure Message
- Crank Cycle Status Indication (Displays Cranking Battery, Number of Starting Attempts and Crank/Rest Time Remaining)
- 300 psi (20.7 bar) wet parts (solid state pressure transducer, solenoid valve, plumbing) for fresh water applications
- NEMA Type 2 enclosure (IEC IP22)
- Each standard controller comes with user set options for:
  - AC Power Loss Start
  - Interlock Alarm
  - Low Pressure Aud.
  - Low Suction
  - Main Sw. Mis-Set
  - Manual Test
  - Pump Run Alarm
  - Remote Start
  - User Defined Input
  - Weekly Test Setup
  - Low Pump Rm Temp
  - Low Reservoir
  - Relief Valve Open
  - High Fuel Level
  - High Reservoir
- Also included (as required) are Audible/Visible alarm notifications for:
  - Electronic Engine Control Module (ECM) Warning
  - Electronic Engine Control Module (ECM) Failure
  - Low Engine Temperature
  - High Raw Cooling Water Temperature
  - Low Raw Water Flow (Clogged Stainer)
  - Fuel Spill (Interstitial Space Liquid Intrusion)
  - Low Suction Pressure (At Variable Speed Suction Limiting Engine Controls)

Special Enclosures
-E Enclosuer, NEMA Type 4 (IEC IP 66), Painted Steel
-F Enclosure, NEMA Type 4X (IP66), #304 Stainless Steel, Brushed Finish
-FD Enclosure, NEMA Type 4X (IP66), #316 Stainless Steel, Brushed Finish
-FDB Enclosure, NEMA Type 4X (IP66), #316 Stainless Steel, 12 Gauge, Seam Welded, Brushed Finish
-FDP Enclosure, NEMA Type 4X, #316 Stainless Steel, Painted Finish
-FXP Enclosure, NEMA Type 4X (IP66), #304 Stainless Steel Painted Finish
-G Enclosure, NEMA Type 12 (IP54), Painted Steel
-T Enclosure, NEMA Type 3R (IP24), Painted Steel

Mounting Legs
-N31 Mounting Legs, Standard 12 Inch, Painted Steel
-N31S Mounting Legs, Standard 12 Inch, Stainless Steel

Anti-Condensation Space Heaters
-H Space Heater, 120V Externally Powered with Circuit Breaker
-J Space Heater, 120V Externally Powered with Circuit Breaker and Thermostat
-K Space Heater, 120V Externally Powered with Circuit Breaker and Humidistat
-L Space Heater, 240V Externally Powered with Circuit Breaker
-M Space Heater, 240V Externally Powered with Circuit Breaker and Thermostat
-N Space Heater, 240V Externally Powered with Citcuit Breaker and Humidistat

Pressure Transducers, Solenoid Valves, Plumbing
-B Wetted Parts Including Pressure Sensor, 600 PSI (42 Bar), Fresh Water
-C Wetted Parts Including Pressure Sensor, 300 PSI (21 Bar), Sea Water
-D Wetted Parts Including Pressure Sensor, 600 PSI (42 Bar), Sea Water

Alarms
-AC Alarm Output Contacts, Extra, Engine Running (3 Sets)
-AJ Alarm Output Contacts, Engine Overspeed
-AK Alarm Output Contacts, Low Oil Pressure
-AL Alarm Output Contacts, High Water Temperature
-AM Alarm Output Contacts, Fail To Start
-AN Alarm Output Contacts, Battery / Charger Failure
-AP Alarm Output Contacts, Main Switch In Manual
-AR Alarm Output Contacts, Main Switch In Off
-AS Alarm Output Contacts, Main Switch In Auto
-AT Alarm Output Contacts, Pump Room Trouble[1]
-AV Alarm Output Contacts, Low Pump Room Temperature[1]
-AW Alarm Output Contacts, Reservoir Low[1]
-AY Alarm Output Contacts, Low Suction Pressure[1]
-COM Alarm, Audible/Visible/Output Contacts, Low Suction Pressure with Manual Reset Option. Pressure Switch Not Included[1]
-CPL Alarm Output Contacts, Overpressure(for use with PLD engines only)
-CTS Alarm, Audible/Visible/Output Contacts, Low Suction Pressure with Manual Reset Option and Pressure Switch
-ECMFR Alarm Output Contacts, Electronic Engine ECM Failure
-ECMWR Alarm Output Contacts, Electronic Engine ECM Warning
-EE Alarm Output Contacts, Extra, Engine Trouble (1 Set)
-EF Alarm Output Contacts, Extra, Main Switch Not In Auto (1 Set)
-EH Alarm Output Contacts, Relief Valve Discharge[1]
-EJ Alarm, Audible/Visible, Flow Meter On[1]
-HRTR Alarm Output Contacts, High Raw Water Temperature
-EK Alarm Output Contacts, Flow Meter On[1] (Requires option -EJ)
-LETR Alarm Output Contacts, Low Engine Temperature
-LRFR Alarm Output Contacts, Low Raw Water Flow (Clogged Strainer)
-JR Visible Indicator, Jockey Pump Operating (Requires Jockey Pump To Be Ordered With Option -AC)
-LSPR Alarm Output Contacts, Low Suction Pressure (at Variable Speed Suction Limiting Engine Controls)
-JT Alarm, Audible/Visible, Jockey Pump Trouble (Requires Jockey Pump To Be Ordered With Option -KH)
-LC Alarm Output Contacts, High Fuel Level[1]
-LE Alarm Output Contacts, Fuel Spill
-LG Alarm Output Contacts, Reservoir High[1]
-PE Alarm Output Contacts, Low System Pressure (Pump On Demand)

Miscellaneous
-AZ Thermostat, Low Pump Room Temperature, Mounted and Wired
-BA AC Input, 220-240V
-EL Series Pumping Operation, High Zone Controller
-EM Series Pumping Operation, Mid Zone Controller
-EN Series Pumping Operation, Low Zone Controller
-IEC Marking, CE With External Wet Parts (Requires NEMA Type 12/IP54 enclosure as minimum)
-IECI Marking, CE With Internal Wet Parts (Requires NEMA Type 12/IP54 enclosure as minimum)
-OSP Marking, OSHPD Seismic Cerrtification, State of California (Requires Option -SEI)
-S Tropicalization
-SEI Marking, Seismic Certified (in accordance with IBC)
-USBX Data Port, External USB
-ZPA Scheduled Service Message
-ZPM Data Port, Serial Modbus RTU Over 2-Wire or 4-Wire RS485
-ZPN Data Port, Serial Modbus RTU Over Ethernet TCP/IP

FTA1100-K1 Low fuel level switch, 16" max insertion length[2]
FTA1100-K1-X High/Low fuel level switch - specify levels/tank dimensions
FTA1100-K2 Low fuel level switch, 25" max. insertion length[2]
FTAK21 380-480 volt operation (transformer)[2]
Export packaging (Wooden crating to conform to IPPC Standards)

[1] - Initiating switches by others
[2] - Shipped loose for installation by the customer

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