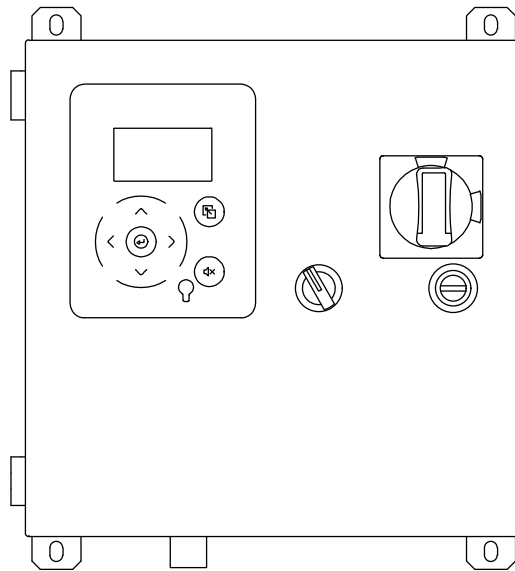


Limited Option Jockey Pump Controller

Project Information



(DRAWINGS INCLUDED IN THIS PACKAGE ARE FOR STANDARD CONTROLLERS. ACTUAL "AS BUILT" DRAWINGS MAY DIFFER FROM THOSE SEEN HERE).

# Firetrol Limited Option Jockey Pump Controller

## FTA570F – Full Voltage Starting

### Specifications

#### 1.0 Main Fire Pump Controller

The auxiliary jockey pump controller, if required and specified on the plans and specifications, shall be factory assembled, wired, and tested and specifically designed for this type of service. This controller shall be of the same manufacturer as the main fire pump controller.

#### 1.1 Standards, Listings & Approvals

The controller shall conform to all the requirements of the latest editions of: NFPA 70, *National Electrical Code*.

The controller shall be listed by:

Underwriters Laboratories, Inc., in accordance with UL508A, *Standard for Industrial Controls*  
Canadian Standards Association CSA-C22.2, *Standard for Industrial Control Equipment* (cUL)

#### 1.2 Enclosure

The controller components shall be housed in a NEMA Type 2 (IEC IP22), painted wall mountable enclosure.

#### 1.3 Withstand Ratings (Short Circuit Current Ratings)

The jockey pump controller shall have standard short circuit current ratings as follows:

VOLTAGE 3-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-H	200 - 208V	7.5	1/4-3 HP - 65kA 4-7 1/2 HP - 42kA
-A	220 - 240V	10	1/4-3 HP - 65kA 4-10 HP - 42kA
-F	380 - 415V - WYE	15	1/4-5 1/2 HP - 65kA 7 1/2-15 HP - 42kA
-B	440 - 480V - WYE	20	1/4-7 1/2 HP - 65kA 10-20 HP - 42kA
-C	550 - 600V - WYE	25	1/4-10HP - 10kA 15-25 HP - 5kA

VOLTAGE 1-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-D	110 - 120V	2	1/4 -1/2 HP- 65kA 3/4-2 HP - 42kA
-T	200 -208V	5	1/4-2 HP - 65kA 3-5 HP - 42kA
-E	220 - 240V	5	1/4-2 HP - 65kA 3-5 HP - 42kA

#### 1.4 Construction

The jockey pump controller shall be full voltage starting, rated for wye-connected power systems above 240V. The controller shall incorporate a horsepower rated manual circuit protector and starting contactor, control circuit transformer with 24VAC secondary, main disconnect switch, and a 0-600 psi (0-42 bar) solid state pressure transducer.

#### 1.5 Operator Interface

The jockey pump controller shall feature an operator interface with user keypad. The interface shall feature a digital display. The controller shall feature a Hand-Off-Auto Selector Switch and provide indication of motor run (manual start and automatic start). User settings such as start/stop pressure settings, timer settings and units of measure shall be programmable from the user interface without opening the enclosure door.

The interface shall provide visual indication of the Start Pressure setting, Stop Pressure setting, current System Pressure and if a Motor Overload occurred.

#### **1.6 Solid State Pressure Transducer**

The controller shall be supplied with a solid state pressure transducer with a range of 0-600 psi (0-42 bar)  $\pm 1$  psi. The solid state pressure switch shall be used for both display of the system pressure and control of the fire pump controller. Systems using analog pressure devices or mercury switches for operational control will not be accepted.

The START, STOP and SYSTEM PRESSURE shall be visually indicated and adjustable through the user interface. The pressure transducer shall be mounted inside the controller to prevent accidental damage. The pressure transducer shall be directly pipe mounted to a bulkhead pipe coupling without any other supporting members. Field connections shall be made externally at the controller coupling to prevent distortion of the pressure switch element and mechanism.

#### **1.7 Controller Operation**

A digitally set On Delay (Sequential Start) timer shall be provided as standard. The controller shall include a Minimum Run Timer to allow the motor to run for a set period of timer after starting. The timer shall be programmable through the user interface.

The disconnect switch shall be mechanically interlocked so that the enclosure door cannot be opened with the handle in the ON position except by a hidden tool operated defeater mechanism. The disconnect switch shall be capable of being padlocked in the OFF position for installation and maintenance safety.

#### **1.8 Manufacturer**

The controller shall be a Firetrol brand.

Limited Option Jockey Pump Controllers



- Door mounted pressure display/user interface.
- Rotary style door mounted disconnect handle with door interlock

**NOTE:** FTA570F Jockey Pump Controllers are only available in the voltage/horsepower combinations shown below. For other combinations and options, see documentation for FTA570E series Jockey Pump Controllers.

**Description**—Firetrol® FTA570F Jockey Pump Controllers are intended for use with fire pump systems. They are used for pressure maintenance in fire pump installations to prevent unnecessary operation of the main fire pump.

**Approvals**—Firetrol jockey pump controllers are listed by Underwriters’ Laboratories, Inc., in accordance with UL508A, *Standard for Industrial Controls*, and CSA, *Standard for Industrial Control Equipment*. They are built to meet or exceed the requirements of the approving authorities as well as NEMA and the latest edition NFPA 70, *National Electrical Code*.

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

- NEMA Type 2 (IEC IP22) Painted Steel Enclosure
- Type F fuseless motor starter and protector
- Suitable for use as service equipment
- Hand-Off-Auto Selector Switch
- Minimum run timer
- On-Delay timer
- Control circuit transformer with 24VAC secondary
- 0-600 psi (0-42 bar) solid state pressure transducer
- Visual Indication, Start/Stop pressure settings
  - System pressure - Motor overload occurred

VOLTAGE 3-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-H	200 - 208V	7.5	1/4-3 HP - 65kA 4-7 1/2 HP - 42kA
-A	220 - 240V	10	1/4-3 HP - 65kA 4-10 HP - 42kA
-F	380 - 415V - WYE	15	1/4-5 1/2 HP - 65kA 7 1/2-15 HP - 42kA
-B	440 - 480V - WYE	20	1/4-7 1/2 HP - 65kA 10-20 HP - 42kA
-C	550 - 600V - WYE	25	1/4-10HP - 10kA 15-25 HP - 5kA
VOLTAGE 1-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-D	110 - 120V	2	1/4 -1/2 HP- 65kA 3/4-2 HP - 42kA
-T	200 -208V	5	1/4-2 HP - 65kA 3-5 HP - 42kA
-E	220 - 240V	5	1/4-2 HP - 65kA 3-5 HP - 42kA

**NOTE:** Firetrol Brand Jockey Pump controllers DO NOT CONTAIN MERCURY filled pressure switches.

For Model # Information and Options & Modifications see Publication SD570F-01

Limited Option Jockey Pump Controllers

FTA570F JOCKEY PUMP CONTROLLERS

FTA570F-A G

(Example: FTA570F-AG015B-T-BY)

**FTA NUMBER**  
FTA570F

**TIMER OPTION**

-A With Programmable  
Running Period Timer

**MOTOR CURRENT PROTECTION**

-G Manual Motor Protector  
\*Suitable for Use as Service Equipment\*  
Short Circuit Current Rating  
See Chart

**HORSEPOWER (KW)**

014 - 1/4 HP (.18)	004 - 4 HP (3)
013 - 1/3 HP (.23)	005 - 5 HP (3.7)
012 - 1/2 HP (.37)	006 - 5 1/2 HP (4)
034 - 3/4 HP (.56)	007 - 7 1/2 HP (5.5)
001 - 1 HP (.75)	010 - 10 HP (7.5)
011 - 1 1/2 HP (1.1)	015 - 15 HP (11)
002 - 2 HP (1.5)	020 - 20 HP (15)
003 - 3 HP (2.2)	025 - 25 HP (18.5)

(See Voltage Selection for Maximum  
HP/Voltage Combinations)

**OPTIONS & MODIFICATIONS**  
(See other side)

**VOLTAGE 3-PHASE**  
(50/60 Hertz)

**MAX HP**

-H 200-208 Volts	7.5
-A 220-240 Volts	10
-F 380-415V - WYE	15
-B 440-480V - WYE	20
-C 550-600V - WYE	20

**VOLTAGE 1-PHASE**  
(50/60 Hertz)

**MAX HP**

-D 110-120 Volts	2
-T 200-208 Volts	3
-E 220-240 Volts	3

VOLTAGE 3-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-H	200 - 208V	7.5	1/4-3 HP - 65kA 4-7 1/2 HP - 42kA
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VOLTAGE 1-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
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-E	220 - 240V	5	1/4-2 HP - 65kA 3-5 HP - 42kA

**NOTE:** For requirements not listed here  
(higher short circuit ratings, larger  
horsepowers, options not listed...  
etc) please refer to documentation  
for FTA570E series Jockey Pump  
Controllers.

## Model Number Selection Guide – Options & Modifications

SPECIAL ENCLOSURES	
Option	Description
---	Enclosure, NEMA Type 2 (IEC IP22), Painted Steel
-E	Enclosure, NEMA Type 4 (IEC IP65), Painted Steel
-F	Enclosure, NEMA Type 4X (IEC IP66), #304 Stainless Steel, Brushed Finish
-G	Enclosure, NEMA Type 12 (IEC IP54), Painted Steel
-T	Enclosure, NEMA Type 3R (IEC IP24), Painted Steel

ANTI-CONDENSATION SPACE HEATERS <small>(power source by others)</small>	
Option	Description
None	
-J	Space Heater, 120V Externally Powered with Circuit Breaker & Thermostat
-JKPX	Space Heater, 120V Internally Powered with Thermostat & Humidistat in Parallel
-JX	Space Heater, 120V Internally Powered with Thermostat
-K	Space Heater, 120V Externally Powered with Circuit Breaker & Humidistat
-KX	Space Heater, 120V Internally Powered with Humidistat

PRESSURE TRANSDUCERS	
Option	Description
---	Wetted Parts Including Pressure Sensor, 600 PSI (42 bar), Fresh Water
-D	Wetted Parts Including Pressure Sensor, 600 PSI (42 bar), Sea Water

ALARMS	
Option	Description
-AC	Alarm Output Contacts, Pump Operating (2 Sets)
-AM	Alarm Output Contacts, Fail To Start
-BWI	Alarm Output Contacts/Visible Indication, Phase Failure/Phase Reversal
-BY	Alarm Output Contacts, Pump Overload
-CPL	Alarm Output Contacts, Overpressure
-EFI	Alarm Output Contacts, Controller Not In Auto (1 set)
-HV	Alarm, Audible
-KH	Alarm Output Contacts, Common Alarm
-PE	Alarm Output Contacts, Low System Pressure

MISCELLANEOUS	
Option	Description
-AST	Input Terminals, Automatic Start
-NZ	Input Terminals, Shutdown Interlock
-S	Tropicalization

\*Export Packaging available for additional cost

NOTE: For requirements not listed here (higher short circuit ratings, larger horsepower, options not listed...etc) please refer to documentation for FTA570E series Jockey Pump Controllers.