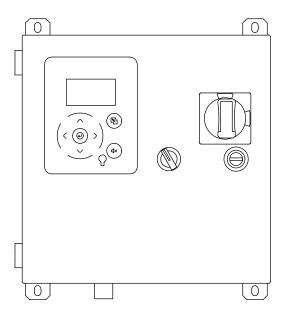


Limited Option Jockey Pump Controller

Project Information



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

Firetrol, Inc.

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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:

	AGE 3-PHASE (50/60 Z) RATING	MAX HP	SHORT CIRCUIT CURRENT
-н	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
-В	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
	AGE 1-PHASE 60 HERTZ) RATING	MAX HP	SHORT CIRCUIT CURRENT
-D	110 - 120V	2	1/4 -1/2 HP- 65kA 3/4-2 HP - 42kA
-Т	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) ±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



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

- 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.

VOLTAGE 3-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-н	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
-В	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

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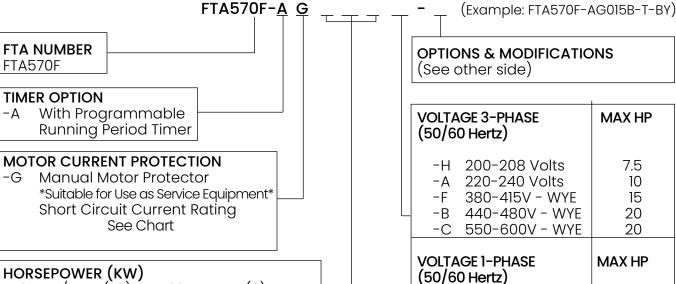
2

3



Limited Option Jockey Pump Controllers

FTA570F JOCKEY PUMP CONTROLLERS



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)

VOLTAGE 3-PHASE (50/60 HERTZ) RATING		MAX HP	SHORT CIRCUIT CURRENT
-н	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
-В	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: 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.

-D 110-120 Volts

-T 200-208 Volts

220-240 Volts

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
Option None	ANTI-CONDENSATION SPACE HEATERS (power source by others) Description
-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
Option 	PRESSURE TRANSDUCERS Description Wetted Parts Including Pressure Sensor, 600 PSI (42 bar), Fresh Water
-D	Wetted Parts Including Pressure Sensor, 600 PSI (42 bar), Sea Water
Option	ALARMS Description
-AC	Alarm Output Contacts, Pump Operating (2 Sets)
-AM	Alarm Output Contacts, Fail To Start
-BW1	Alarm Output Contacts/Visible Indication, Phase Failure/Phase Reversal
-BY	Alarm Output Contacts, Pump Overload
-CPL	Alarm Output Contacts, Overpressure
-EF1	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
Option -AST	MISCELLANEOUS Description 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 horsepowers, options not listed...etc) please refer to documentation for FTA570E series Jockey Pump Controllers.

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FINAL APPROVAL	FC	15/05/23	

JOCKEY PUMP CONTROLLER

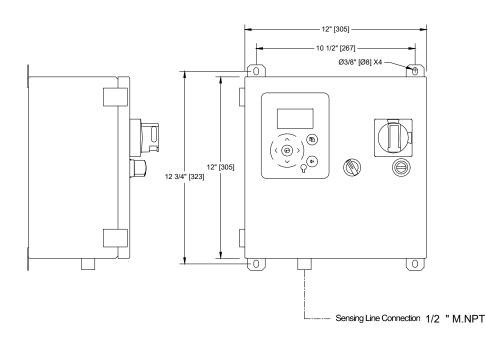
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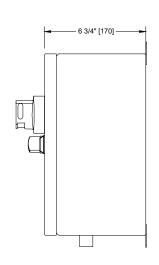
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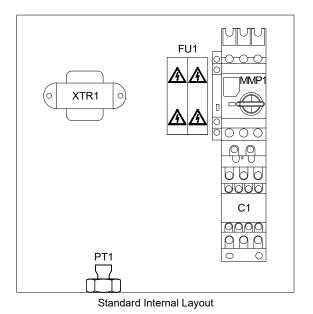


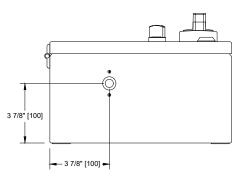


DRAWING NUMBER
DD570F-001/E
DWG REV. 0
SHEET 1 OF 1









Voltage / Power Table						
Voltage Max HP						
1 Pha	ase					
110 - 120 2						
200 - 208	5					
220 - 240	5					
3 Phases						
200 - 208	7.5					
220 - 240	10					
380 - 400 - 415	15					
440 - 480	20					
600	25					

Notes:

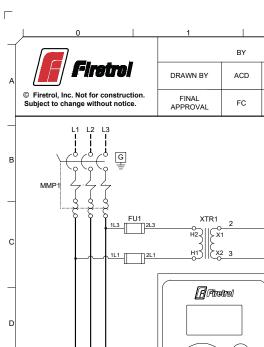
- Standard NEMA: NEMA 2
- Standard Paint: Textured Red RAL 3002.
- All Dimensions are in Inches [Millimeters]
- Use Watertight Conduit and Connector Only.
- Protect Equipment Against Drilling Chips.
- Door Swing Equal to Door Width

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

Contact manufacturer for "As Built" drawing.

*Dimensions may change depending on option required. Consult Factory for exact dimensions.



JOCKEY PUMP CONTROLLER 15/05/23 **ACROSS THE LINE / 3 PHASES**

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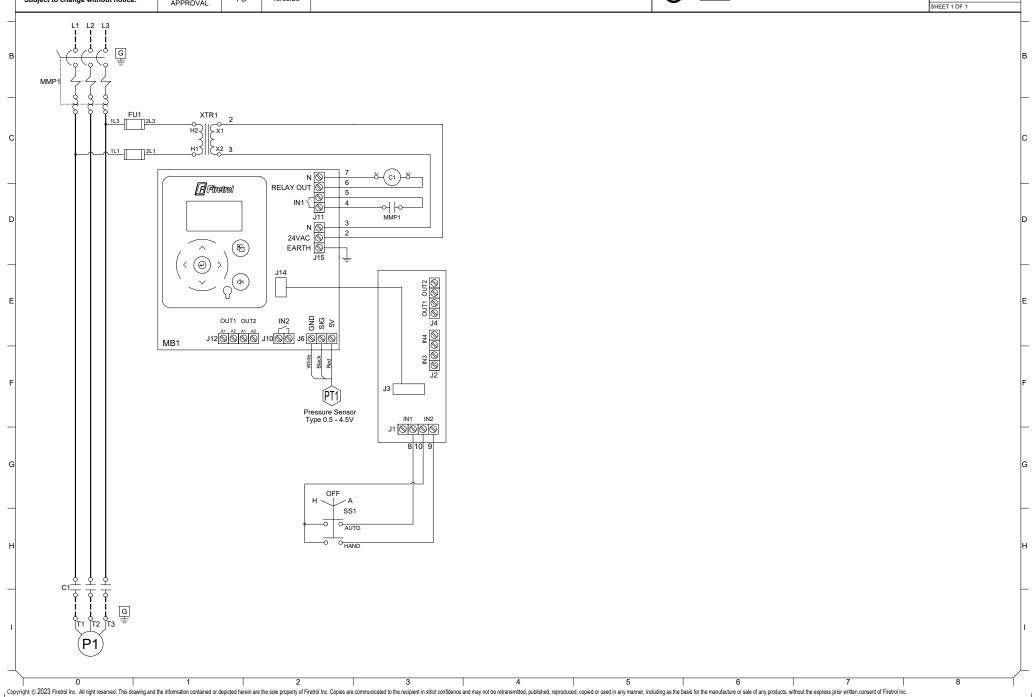
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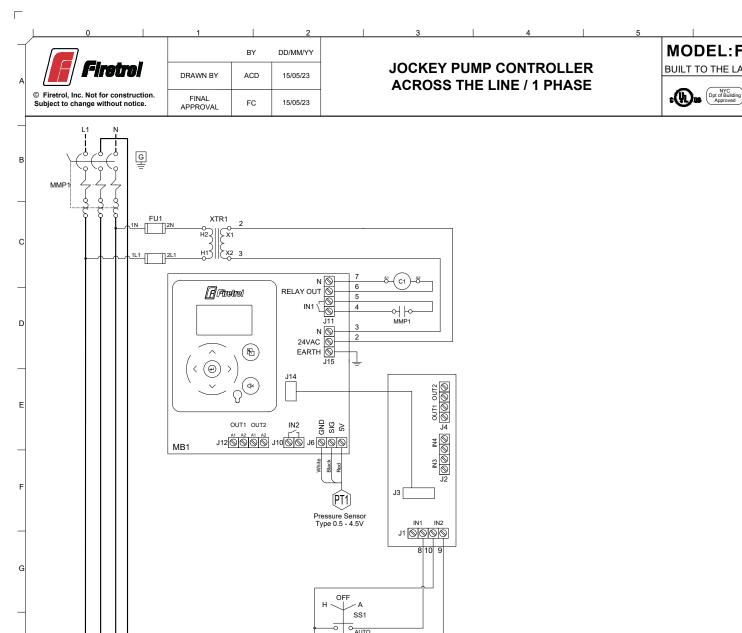
MODEL: FTA570F

BUILT TO THE LATEST EDITION OF THE UL 508A



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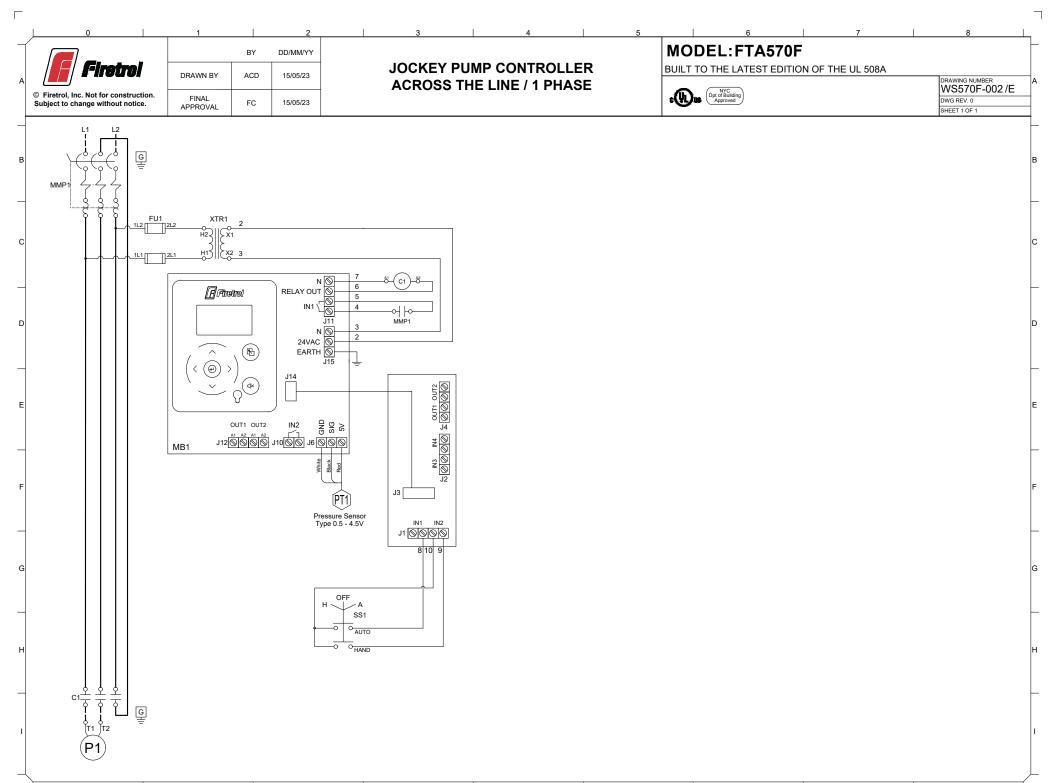


MODEL: FTA570F

BUILT TO THE LATEST EDITION OF THE UL 508A



DRAWING NUMBER WS570F-001/E DWG REV. 0 SHEET 1 OF 1





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JOCKEY PUMP CONTROLLER ACROSS THE LINE / 3 PHASES

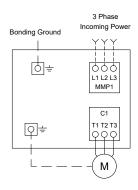
MODEL: FTA570F

BUILT TO THE LATEST EDITION OF THE UL 508A



DRAWING NUMBER
FC570F-003/E
DWG REV. 0
SHEET 1 OF 1

Power Connections and Motor Connections



Line Terminals (L1,L2,L3,GND)							
Maximum Motor Horsepower					Wire Size Copper Only		
200-208V	220-240V	380-416V	440-480V	575-600V	VVIIC OIZC Supper Offiny	Torque	Wire Size Ground Copper Only
7.5HP	10HP	15HP	20HP	25HP	#14 AWG - #8 AWG	2.5 Nm	#14 AWG - #2 AWG

	Motor Terminals (T1,T2,T3,GND)							
	Maximum Motor Horsepower						Wire Size Ground Copper Only	
200-208V	220-240V	380-416V	440-480V	575-600V	Wire Size Copper Only	Torque	Wife Size Ground Copper Only	
3HP	4HP	5.5HP	7.5HP	10HP	#14 AWG - #10 AWG	1.7 Nm	#14 AWG - #2 AWG	
7.5HP	10HP	15HP	20HP	25HP	#14 AWG - #8 AWG	2.5 Nm	#12 AWG - #2 AWG	



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JOCKEY PUMP CONTROLLER ACROSS THE LINE / 1 PHASE

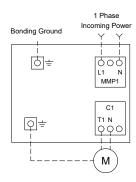
MODEL: FTA570F

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DRAWING NUMBER FC570F-001/E DWG REV. 0 SHEET 1 OF 1

Power Connections and Motor Connections



Line Terminals (L1,N,GND)			
Maximum Motor Horsepower	Wire Size Copper Only		
120V	wile olze copper only	Torque	Wire Size Ground Copper Only
2HP	#14 AWG - #8 AWG	2.5 Nm	#14 AWG - #2 AWG

Motor Terminals (T1,N,GND)			
Maximum Motor Horsepower 120V	Wire Size Copper Only	Torque	Wire Size Ground Copper Only
0.5HP	#14 AWG - #10 AWG	1.7 Nm	#14 AWG - #2 AWG
2HP	#14 AWG - #8 AWG	2.5 Nm	#12 AWG - #2 AWG



	BY	DD/MM/YY	
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FINAL APPROVAL	FC	15/05/23	

JOCKEY PUMP CONTROLLER ACROSS THE LINE / 1 PHASE

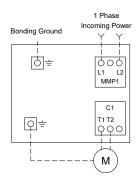
MODEL: FTA570F

BUILT TO THE LATEST EDITION OF THE UL 508A



DRAWING NUMBER
FC570F-002/E
DWG REV. 0
SHEET 1 OF 1

Power Connections and Motor Connections



Line Terminals (L1,L2,GND)				
Maximum Mot	tor Horsepower	- Wire Size Copper Only		
200-208V	220-240V	Wife Size Copper Only	Torque	Wire Size Ground Copper Only
5HP	5HP	#14 AWG - #8 AWG	2.5 Nm	#14 AWG - #2 AWG

		Motor Terminals (T1,T2	2,GND)	
Maximum Motor Horsepower				Wire Size Cround Conner Only
200-208V	220-240V	Wire Size Copper Only	Torque	Wire Size Ground Copper Only
1.5HP	1.5HP	#14 AWG - #10 AWG	1.7 Nm	#14 AWG - #2 AWG
5HP	5HP	#14 AWG - #8 AWG	2.5 Nm	#12 AWG - #2 AWG