

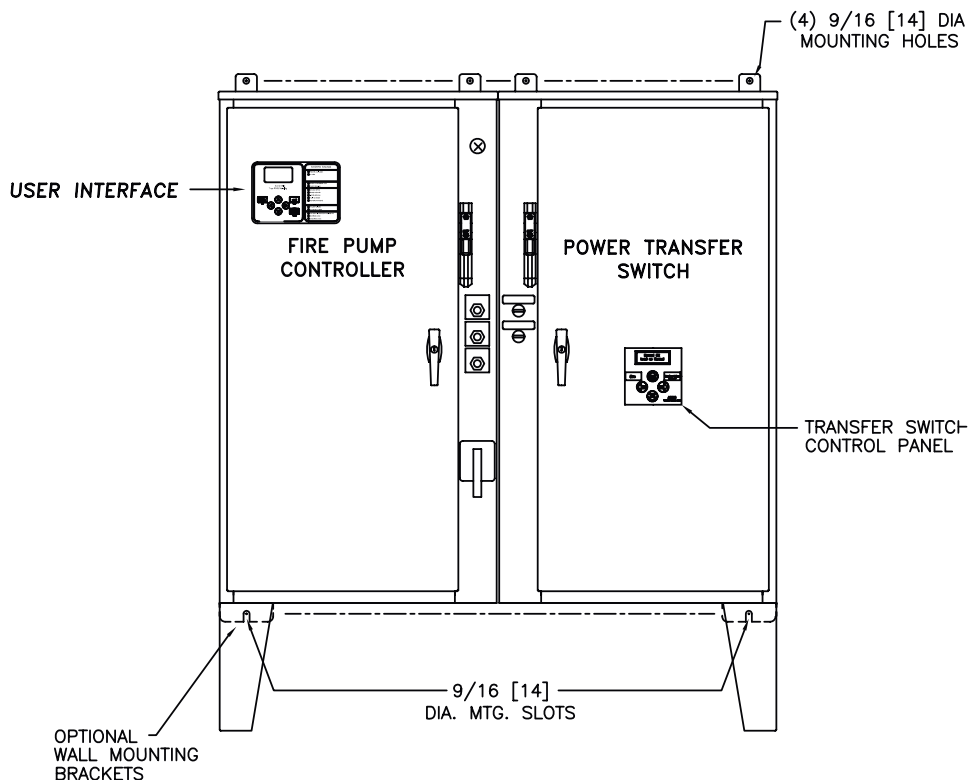


Mark IIx6 Electric Fire Pump Controller

## Standard Drawing Package

FTA1300 / FTA950

Wye-Delta Open Transition Starting  
With Power Transfer Switch



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

### **Firetrol, Inc.**

3412 Apex Peakway  
Apex, North Carolina 27502

P 919 460-5200

F 919 460 5250

[www.firetrol.com](http://www.firetrol.com)

While every precaution has been taken to ensure accuracy and completeness herein, Firetrol, Inc. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications and drawings are subject to change without notice. ©2019 Firetrol, Inc., All Rights Reserved.

Publication IM1300TSA Rev. K



Mark IIx6 Electric Fire Pump Controllers

# Dimensional Drawing Lookup Table

FTA1300

Wye-Delta Open Transition Starting


## UNITS WITHOUT POWER TRANSFER SWITCH

SHORT-CIRCUIT (WITHSTAND) CURRENT RATING					
	42,000 Amps RMS Sym. Maximum	65,000 Amps RMS Sym. Maximum	200,000 Amps RMS Sym. Maximum		
DRG. NO.	DD1300-59	DD1300-59	DD1300-51	DD1300-55	DD1300-59
LINE VOLTAGE	H.P. RANGE	H.P. RANGE	H.P. RANGE	H.P. RANGE	H.P. RANGE
200	---	250	3 - 60	75 - 100	125 - 200
208	---	250	3 - 60	75 - 125	150 - 200
220 - 240	---	300	3 - 60	75 - 125	150 - 250
380 - 415	---	400 - 500	3 - 100	125 - 200	250 - 350
440 - 480	---	600	3 - 150	200 - 250	300 - 500
550 - 600	---	---	3 - 150	200 - 300	350 - 500

## UNITS WITH POWER TRANSFER SWITCH

SHORT-CIRCUIT (WITHSTAND) CURRENT RATING					
	42,000 Amps RMS Sym. Maximum	65,000 Amps RMS Sym. Maximum	200,000 Amps RMS Sym. Maximum		
DRG. NO.	DD1300-65	DD1300-65	DD1300-61	DD1300-63	DD1300-65
LINE VOLTAGE	H.P. RANGE	H.P. RANGE	H.P. RANGE	H.P. RANGE	H.P. RANGE
200	---	250	3 - 60	75 - 100	125 - 200
208	---	250	3 - 60	75 - 125	150 - 200
220 - 240	---	300	3 - 60	75 - 125	150 - 250
380 - 415	---	400 - 500	3 - 100	125 - 200	250 - 350
440 - 480	---	600	3 - 150	200 - 250	300 - 500
550 - 600	---	---	3 - 150	200 - 300	350 - 500

CONSULT FACTORY FOR VOLTAGES OR HORSEPOWERS NOT SHOWN

THIRD ANGLE PROJECTION				SIZE <b>A</b>		BY	DATE	 © Firetrol, Inc. Not for construction. Subject to change without notice.		DRAWN BY		JLB	07-12-02	FINAL APPROVAL		TEF	07-12-02	DIMENSIONAL DRAWING LOOKUP TABLE OPEN TRANSITION WYE-DELTA FIRE PUMP CONTROLLERS WITH HP/VOLTAGE/WITHSTAND RATING		DWG REV		C	ECN NO	280820	SHEET 1 OF 1	

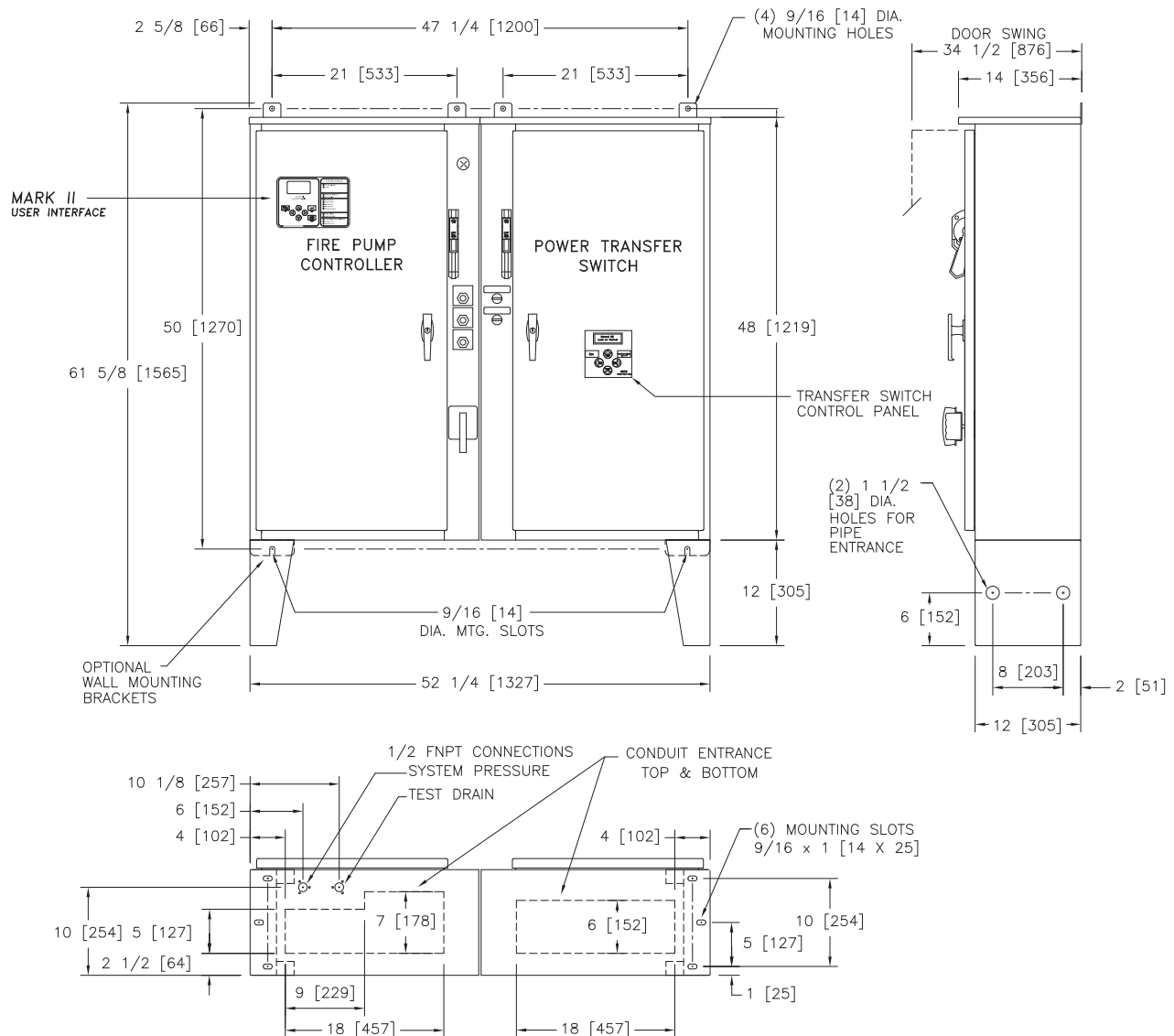


# Dimensions and Shipping Weight

## FTA1300 / FTA950

### Mark IIxG Electric Fire Pump Controllers

### Wye-Delta Open Transition Starting With Power Transfer Switch



STANDARD WITHSTAND RATINGS	
200-600V - 100,000 Amps RMS Sym.	
INTERMEDIATE WITHSTAND RATINGS	
200-600V - 150,000 Amps RMS Sym.	
HIGH WITHSTAND RATINGS	
200-600V - 200,000 Amps RMS Sym.	
LINE VOLTAGE	MOTOR HORSEPOWER
200	□ 3-60
208	□ 3-60
220-240	□ 3-60
380-415	□ 3-100
440-480	□ 3-150
550-600	□ 3-150

APPROXIMATE SHIPPING WEIGHT
525 [238]

DO NOT INSTALL IN AMBIENT TEMPERATURES BELOW 41°F [5°C].

ALL DIMENSIONS - INCHES [MM]  
SHIPPING WEIGHT - POUNDS [KG]

THIS DIMENSION DRAWING COVERS FTA1300 CONTROLLERS AT THE HORSEPOWER, VOLTAGE AND WITHSTAND RATINGS AS LISTED IN THE TABLE. FOR OTHER HORSEPOWER OR WITHSTAND RATINGS, REFER TO ED1300-02

SPECIFICATIONS AND DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. DO NOT USE FOR CONSTRUCTION. REQUEST CONSTRUCTION DRAWINGS FROM FIRETROL OR YOUR LOCAL FIRETROL REPRESENTATIVE.

SIZE	A	BY	DATE
DRAWN BY	TEF	07-08-02	
FINAL APPROVAL	TEF	07-08-02	



© Firetrol, Inc. Not for construction. Subject to change without notice.

UPDATED TITLE BLOCK		C	280820	JMW	TEF	09-13-19
ADDED COMPONENTS TO MEET FM REQUIREMENTS		B	228550	JC	TEF	08-10-10
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
DIMENSIONS & SHIPPING WEIGHT		FTA1300 WITH FTA950				
OPEN TRANSITION WYE-DELTA FIRE PUMP CONTROLLER WITH POWER TRANSFER SWITCH		DRAWING NUMBER DD1300-61				
DWG REV C		ECN NO 280820		SHEET 1 OF 1		

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.

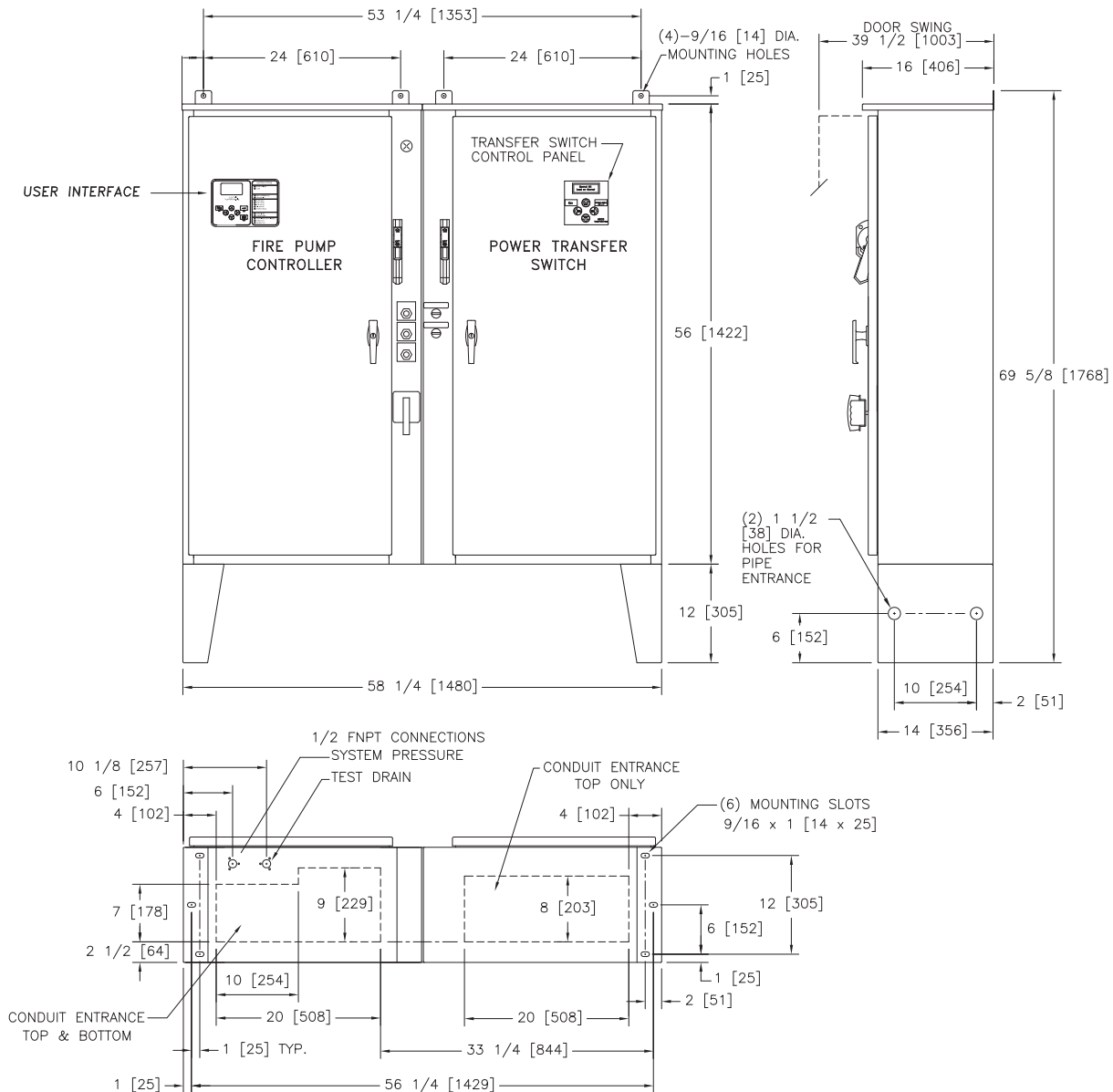


# Dimensions and Shipping Weight

## FTA1300 / FTA950

### Mark IIxG Electric Fire Pump Controllers

### Wye-Delta Open Transition Starting With Power Transfer Switch



STANDARD WITHSTAND RATINGS	
200-600V - 100,000 Amps RMS Sym.	
INTERMEDIATE WITHSTAND RATINGS	
200-600V - 150,000 Amps RMS Sym.	
HIGH WITHSTAND RATINGS	
200-600V - 200,000 Amps RMS Sym.	
LINE VOLTAGE	MOTOR HORSEPOWER
200	□ 75-100
208	□ 75-125
220-240	□ 75-125
380-415	□ 125-200
440-480	□ 200-250
550-600	□ 200-300

APPROXIMATE SHIPPING WEIGHT
585 [265]

DO NOT INSTALL IN AMBIENT TEMPERATURES BELOW 41°F [5°C].

ALL DIMENSIONS - INCHES [MM]  
SHIPPING WEIGHT - POUNDS [KG]

THIS DIMENSION DRAWING COVERS FTA1300 CONTROLLERS AT THE HORSEPOWER, VOLTAGE AND WITHSTAND RATINGS AS LISTED IN THE TABLE. FOR OTHER HORSEPOWER OR WITHSTAND RATINGS, REFER TO ED1300-02

SPECIFICATIONS AND DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. DO NOT USE FOR CONSTRUCTION. REQUEST CONSTRUCTION DRAWINGS FROM FIRETROL OR YOUR LOCAL FIRETROL REPRESENTATIVE.

SIZE	A	BY	DATE
DRAWN BY	TEF	07-24-02	
FINAL APPROVAL	TEF	07-24-02	



© Firetrol, Inc. Not for construction. Subject to change without notice.

UPDATED TITLE BLOCK		D	280820	JMW	TEF	09-13-19
REVISED MOTOR HORSEPOWER CHART		C	237364	JMW	TEF	05-31-12
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
DIMENSIONS & SHIPPING WEIGHT		FTA1300 WITH FTA950				
OPEN TRANSITION WYE-DELTA FIRE PUMP CONTROLLER WITH POWER TRANSFER SWITCH		DRAWING NUMBER DD1300-63				
		DWG REV	D	ECN NO	280820	SHEET 1 OF 1

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, without the express prior written consent of Firetrol, Inc.



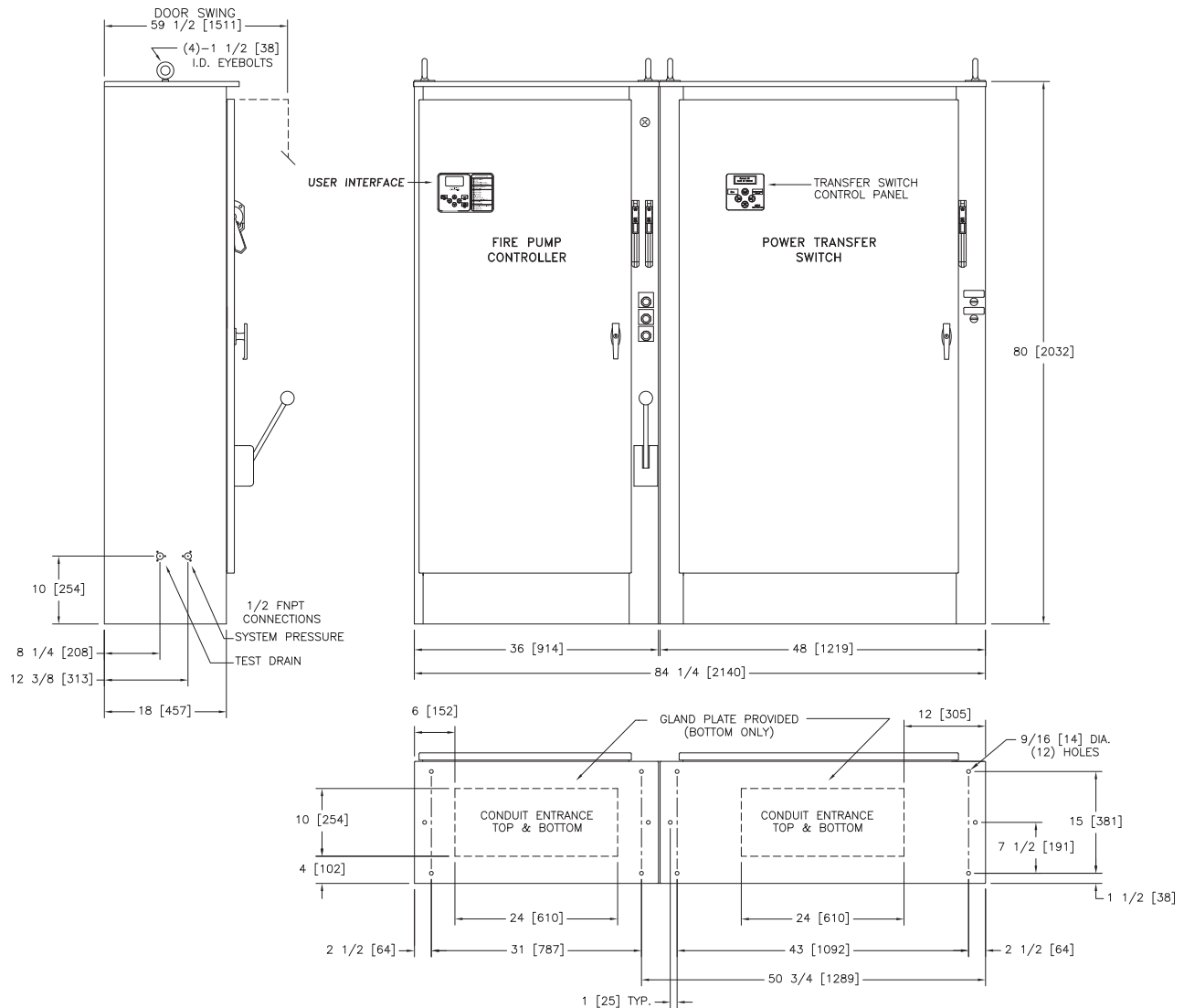


## Mark IIxG Electric Fire Pump Controllers

# Dimensions and Shipping Weight

## FTA1300 / FTA950

Wye-Delta Open Transition Starting  
With Power Transfer Switch



<b>STANDARD WITHSTAND RATINGS</b> 200-600V 100,000 Amps RMS Sym.	<b>STANDARD INTERMEDIATE WITHSTAND RATINGS</b> 200-480V 65,000 Amps RMS Sym.
<b>INTERMEDIATE WITHSTAND RATINGS</b> 200-600V 150,000 Amps RMS Sym.	<b>STANDARD LOW WITHSTAND RATINGS</b> 550-600V 42,000 Amps RMS Sym.
<b>HIGH WITHSTAND RATINGS</b> 200-600V 200,000 Amps RMS Sym.	

LINE VOLTAGE	MOTOR HORSEPOWER	MOTOR HORSEPOWER
200	□ 125-200	□ 250
208	□ 150-200	□ 250
220-240	□ 150-250	□ 300
380-415	□ 250-350	□ 400-500
440-480	□ 300-500	□ 600
550-600	□ 350-500	□ ---

APPROXIMATE SHIPPING WEIGHT
1575 [714]

DO NOT INSTALL IN AMBIENT TEMPERATURES BELOW 41°F [5°C].

ALL DIMENSIONS - INCHES [MM]  
SHIPPING WEIGHT - POUNDS [KG]

THIS DIMENSION DRAWING COVERS FTA1300 CONTROLLERS AT THE HORSEPOWER, VOLTAGE AND WITHSTAND RATINGS AS LISTED IN THE TABLE. FOR OTHER HORSEPOWER OR WITHSTAND RATINGS, REFER TO ED1300-02

SPECIFICATIONS AND DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. DO NOT USE FOR CONSTRUCTION. REQUEST CONSTRUCTION DRAWINGS FROM FIRETROL OR YOUR LOCAL FIRETROL REPRESENTATIVE.

	SIZE <b>A</b>	BY	DATE
	DRAWN BY	TEF	07-24-02
	FINAL APPROVAL	TEF	07-24-02



© Firetrol, Inc. Not for construction.  
Subject to change without notice.

UPDATED TITLE BLOCK	E	280620	JMW	TEF	09-13-19
REVISED MOTOR HORSEPOWER CHART	D	237364	JMW	TEF	05-31-12
REVISION DESCRIPTION	REV	ECN NO	BY	APP	DATE
DIMENSIONS & SHIPPING WEIGHT	FTA1300 WITH FTA950				
OPEN TRANSITION WYE-DELTA FIRE PUMP CONTROLLER WITH POWER TRANSFER SWITCH	DRAWING NUMBER <b>DD1300-65</b>				
DWG REV <b>E</b>	ECN NO <b>280820</b>	SHEET 1 OF 1			

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.

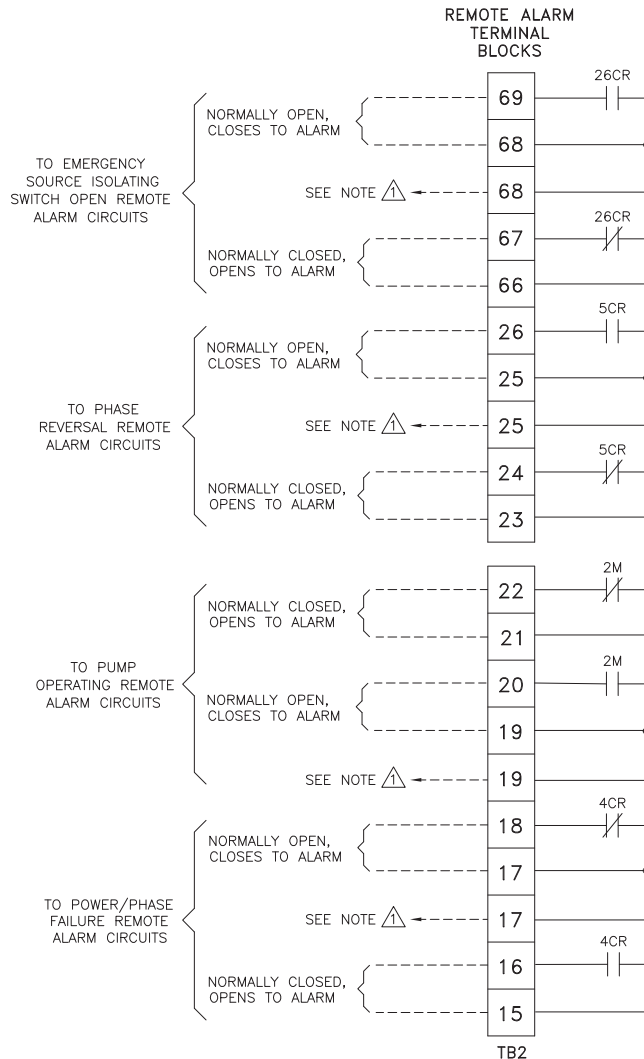


## Mark IIxG Electric Fire Pump Controllers

# Field Connections

## FTA1300 / FTA950

### Wye-Delta Open Transition Starting With Power Transfer Switch

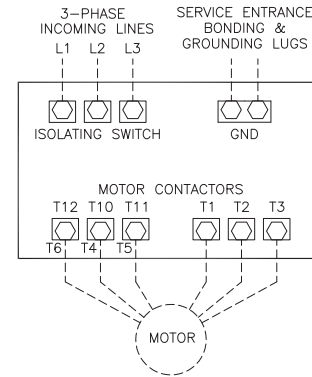


△ SPARE TERMINALS PROVIDED FOR PARALLEL  
CONNECTION OF REMOTE ALARMS (IF REQUIRED)

NOTE: TERMINALS FOR CUSTOMER CONNECTIONS REQUIRE  
3.5MM SLOTTED SCREW DRIVER

TERMINAL TIGHTENING TORQUE		
TERMINAL TYPE	WIRE SIZE	TIGHTENING TORQUE
CONTROL AND ALARM TERMINALS	#14-12 AWG [2.5-4 MM <sup>2</sup> ]	5.6 lb-in [.6 Nm]

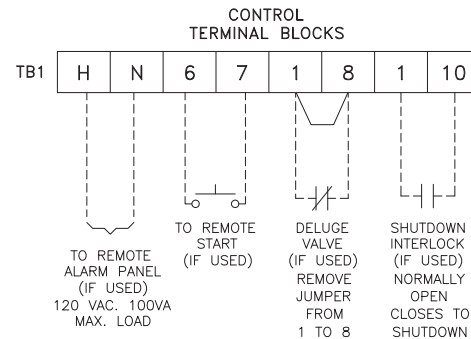
~NOTE~  
ALARM CONTACT  
RATING PILOT DUTY  
250 VAC, 30 VDC  
10 A. MAX. LOAD



#### NOTES

- 1- Incoming line terminals are provided to accommodate wire sizes at 125% of motor full load current per NFPA 70-2008, *National Electrical Code*, Table 430-250, Section 695.6(c), and Table 310-16, 75° rated Copper conductors.
- 2- Controller is phase rotation sensitive. Incoming lines L1, L2 and L3 must be in ABC, right hand rotation sequence for proper operation of the phase monitor.
- 3- Motor connections shown are typical. Since motor connections vary widely, refer to the motor connection diagram for specific wiring arrangement.
- 4- For Incoming line terminals and motor terminals field wire capacity refer to drawing FC1300-51

NOTE: USE COPPER CONDUCTORS ONLY FOR ALL CONNECTIONS



PRESSURE SYSTEM  
CONNECTION  
1/2" FNPT

	SIZE	A	BY	DATE
	DRAWN BY	TEF	05-06-02	
	FINAL APPROVAL	TEF	05-06-02	



© Firetrol, Inc. Not for construction.  
Subject to change without notice.

UPDATED TITLE BLOCK		B	280620	JMW	TEF	09-13-09
ADD NOTE FOR COPPER CONDUCTORS ONLY; UPDATED LOGO & TITLE BLOCK		A	226253	JC	TEF	12-09-09
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
FIELD CONNECTIONS		FTA1300 WITH FTA900, FTA950				
WYE-DELTA OPEN TRANSITION FIRE PUMP CONTROLLER WITH POWER TRANSFER SWITCH		DRAWING NUMBER FC1300-55				
DWG REV B		ECN NO 280820		SHEET 1 OF 2		

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.

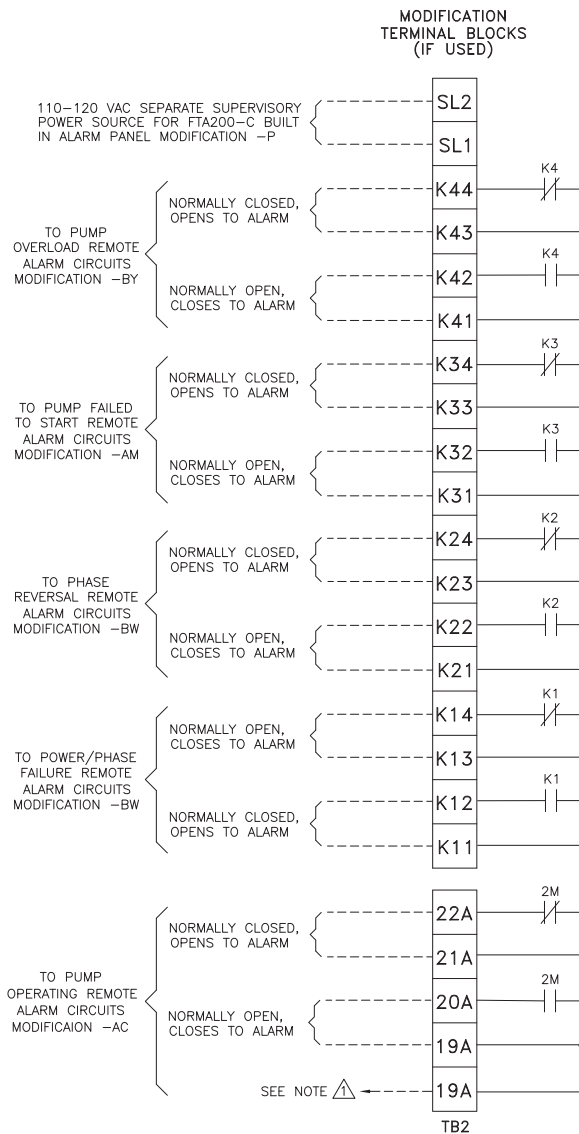


## Mark IIxG Electric Fire Pump Controllers

## Field Connections

### FTA1300 / FTA950

### Wye-Delta Open Transition Starting With Power Transfer Switch



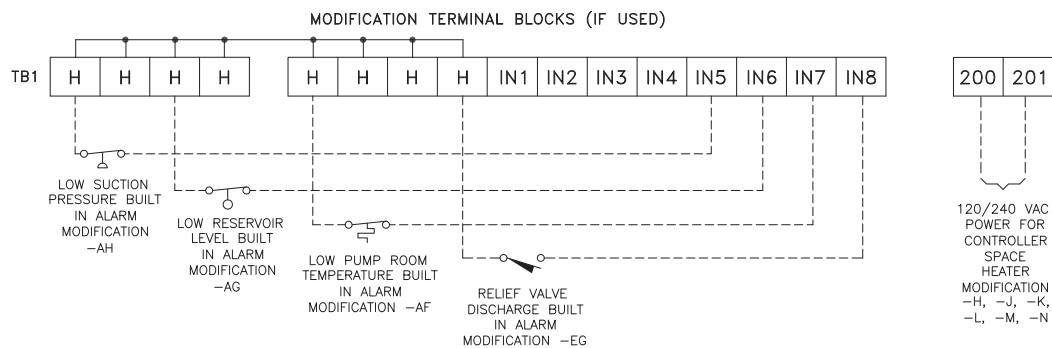
SPARE TERMINALS PROVIDED FOR PARALLEL  
CONNECTION OF REMOTE ALARMS (IF REQUIRED)

NOTE: TERMINALS FOR CUSTOMER CONNECTIONS REQUIRE  
3.5MM SLOTTED SCREW DRIVER

TERMINAL TIGHTENING TORQUE		
TERMINAL TYPE	WIRE SIZE	TIGHTENING TORQUE
CONTROL AND ALARM TERMINALS	#14-12 AWG [2.5-4 MM <sup>2</sup> ]	5.6 lb-in [.6 Nm]

-NOTE-  
ALARM CONTACT  
RATING PILOT DUTY  
250 VAC, 30 VDC  
10 A. MAX. LOAD

NOTE: USE COPPER CONDUCTORS ONLY FOR ALL CONNECTIONS



	SIZE	A	BY	DATE
	DRAWN BY	TEF	05-06-02	
	FINAL APPROVAL	TEF	05-06-02	



© Firetrol, Inc. Not for construction.  
Subject to change without notice.

UPDATED TITLE BLOCK		B	280620	JMW	TEF	09-13-09
ADD NOTE FOR COPPER CONDUCTORS ONLY; UPDATED LOGO & TITLE BLOCK		A	226253	JC	TEF	12-09-09
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
FIELD CONNECTIONS		FTA1300 WITH FTA900, FTA950				
WYE-DELTA OPEN TRANSITION FIRE PUMP CONTROLLER WITH POWER TRANSFER SWITCH		DRAWING NUMBER <b>FC1300-55</b>				
DWG REV B		ECN NO 280820		SHEET 2 OF 2		

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.



Mark IIx6 Electric Fire Pump Controllers

## Field Connections

FTA1300

Wye-Delta Open Transition Starting  
Line & Motor Wire Terminal Capacity

### LINE TERMINALS—WIRE CAPACITY AND QUANTITY (CU) <sup>1</sup>



MAXIMUM MOTOR HORSEPOWER						WIRE SIZE (CU) PER PHASE	WIRE SIZE SERVICE ENTRANCE GROUND LUG (CU) <sup>2</sup>
200V	208V	220–240V	380–415V	440–480V	550–600V		
20	20	25	40	50	60	(1) #14 AWG—#1/0 AWG (1) 2.5 MM <sup>2</sup> —50 MM <sup>2</sup>	(2) #14 AWG—#2/0 AWG (2) 2.5 MM <sup>2</sup> —70 MM <sup>2</sup>
40	40	40	75	100	125	(1) #4 AWG—300 kcmil (1) 25 MM <sup>2</sup> —150 MM <sup>2</sup>	(2) #14 AWG—#2/0 AWG (2) 2.5 MM <sup>2</sup> —70 MM <sup>2</sup>
60	60	60	100	150	150	(1) #4 AWG—300 kcmil (1) 25 MM <sup>2</sup> —150 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
100	100	100	150	250	300	(1) 250 kcmil—500 kcmil (1) 120 MM <sup>2</sup> —240 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
---	125	125	200	---	---	(2) #3/0 AWG—250 kcmil (2) 95 MM <sup>2</sup> —120 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
200	200	250	350	500	---	(3) #2/0 AWG—400 kcmil (3) 70 MM <sup>2</sup> —200 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
250	250	300	500	600	---	(4) #4/0 AWG—500 kcmil (4) 100 MM <sup>2</sup> —240 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>

### MOTOR TERMINALS—WIRE CAPACITY AND QUANTITY (CU) <sup>1</sup>

MAXIMUM MOTOR HORSEPOWER						WIRE SIZE (CU) PER PHASE
200V	208V	220–240V	380–415V	440–480V	550–600V	
60	60	60	100	150	150	(1) #6 AWG—#2/0 AWG (1) 16 MM <sup>2</sup> —70 MM <sup>2</sup>
75	75	100	150	200	250	(1) #6 AWG—250 kcmil (1) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
150	150	150	250	350	450	(1) #4 AWG—400 kcmil (1) 25 MM <sup>2</sup> —200 MM <sup>2</sup>
---	---	200	300	450	500	(2) #4 AWG—500 kcmil (2) 25 MM <sup>2</sup> —240 MM <sup>2</sup>
250	250	300	500	600	---	(2) 250 kcmil—500 kcmil (2) 120 MM <sup>2</sup> —240 MM <sup>2</sup>

<sup>1</sup> FOR CORRECT WIRE SIZING, REFER TO  
*NATIONAL ELECTRICAL CODE*, NFPA 70.

<sup>2</sup> WHEN REQUIRED BY AUTHORITY HAVING  
JURISDICTION.

<div> THIRD ANGLE PROJECTION</div>	SIZE	A	BY	DATE	<div> <b>Firetrol, Inc.</b> © Firetrol, Inc. Not for construction. Subject to change without notice.</div>	UPDATED TITLE BLOCK				E	280820	JMW	TEF	09-13-19				
	DRAWN BY	JC	02-13-12	UPDATED LINE TERMINAL HP/VOLTAGE CHART, CHANGED TO XT4 BREAKERS				D	270091	TEF	TEF	11-30-17						
	FINAL APPROVAL	TEF	02-13-12	REVISION DESCRIPTION				REV	ECN NO	BY	APP	DATE						
						FIELD CONNECTIONS		FTA1300		DRAWING NUMBER <b>FC1300-51</b>								
						WYE-DELTA OPEN TRANSITION FIRE PUMP CONTROLLER LINE AND MOTOR FIELD WIRE TERMINAL CAPACITY								DWG REV <b>E</b>			ECN NO <b>280820</b>	SHEET 1 OF 1

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.

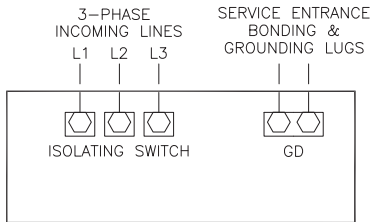


Power Transfer Switches

# Field Connections

## FTA950

Assembled With Electric  
Fire Pump Controllers



### NOTE

Incoming line terminals are provided to accommodate wire sizes at 125% of motor full load current per NFPA 70, *National Electrical Code*, Table 430-250, Section 695.6(c), and Table 310-16, 75° rated Copper conductors.

—USE COPPER CONDUCTORS ONLY—

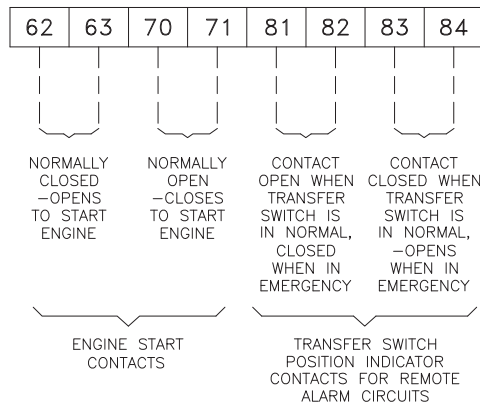
### LINE TERMINALS—WIRE CAPACITY AND QUANTITY (CU) <sup>1</sup>

MAXIMUM MOTOR HORSEPOWER						WIRE SIZE (CU) PER PHASE	WIRE SIZE SERVICE ENTRANCE GROUND LUG (CU) <sup>2</sup>
200V	208V	220-240V	380-415V	440-480V	550-600V		
20	20	25	40	50	60	(1) #14 AWG—#1/0 AWG (1) 2.5 MM <sup>2</sup> —50 MM <sup>2</sup>	(2) #14 AWG—#2/0 AWG (2) 2.5 MM <sup>2</sup> —70 MM <sup>2</sup>
40	40	40	75	100	125	(1) #4 AWG—300 kcmil (1) 25 MM <sup>2</sup> —150 MM <sup>2</sup>	(2) #14 AWG—#2/0 AWG (2) 2.5 MM <sup>2</sup> —70 MM <sup>2</sup>
60	60	60	100	150	150	(1) #4 AWG—300 kcmil (1) 25 MM <sup>2</sup> —150 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
100	100	100	150	250	300	(1) 250 kcmil—500 kcmil (1) 120 MM <sup>2</sup> —240 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
---	125	125	200	---	---	(2) #3/0 AWG—250 kcmil (2) 95 MM <sup>2</sup> —120 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
200	200	250	350	500	---	(3) #2/0 AWG—400 kcmil (3) 70 MM <sup>2</sup> —200 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>
250	250	300	500	600	---	(4) #4/0 AWG—500 kcmil (4) 100 MM <sup>2</sup> —240 MM <sup>2</sup>	(2) #6 AWG—250 kcmil (2) 16 MM <sup>2</sup> —120 MM <sup>2</sup>

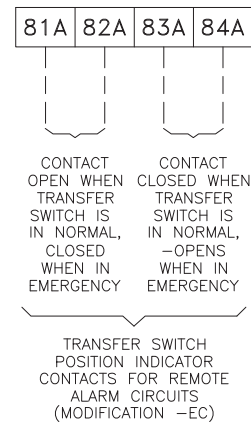
<sup>1</sup> FOR CORRECT WIRE SIZING, REFER TO  
*NATIONAL ELECTRICAL CODE*, NFPA 70.

<sup>2</sup> WHEN REQUIRED BY AUTHORITY HAVING  
JURISDICTION.

### CONTROL AND ALARM TERMINAL BLOCKS



### MODIFICATION ALARM TERMINAL BLOCKS





NOTE: CONTROL AND ALARM TERMINALS FOR CUSTOMER  
CONNECTIONS REQUIRE 3.5MM SLOTTED SCREW DRIVER

—NOTE—  
ENGINE START  
CONTACT RATING  
1/2 AMP, 30VDC

TERMINAL WIRE CAPACITY	
TERMINAL TYPE	WIRE SIZE
CONTROL AND ALARM TERMINALS	#14-12 AWG [2.5-4 MM <sup>2</sup> ]

—NOTE—  
ALARM CONTACT  
RATING  
PILOT DUTY  
240 VAC, 28 VDC  
5 AMP MAX. LOAD

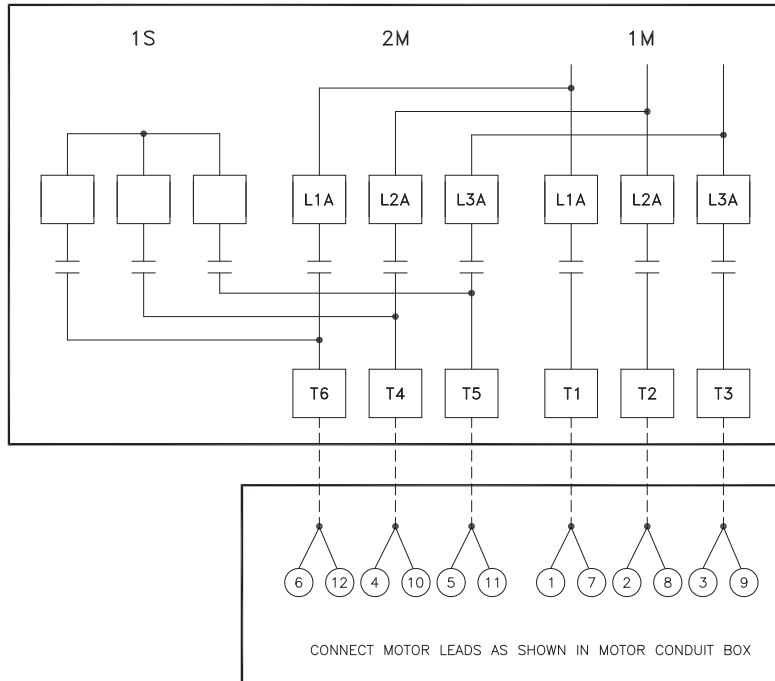
<div> THIRD ANGLE PROJECTION</div>				SIZE <b>A</b>	BY	DATE	UPDATED TITLE BLOCK				D	281357	JMW	TEF	10-16-19
				DRAWN BY	TEF	05-06-10	REVISED LINE TERMINAL CHART, CHANGED TO XT4 BREAKERS				C	270091	TEF	TEF	11-29-17
				FINAL APPROVAL	TEF	05-06-10	REVISION DESCRIPTION				REV	ECN NO	BY	APP	DATE
				 © Firetrol, Inc. Not for construction. Subject to change without notice.		FIELD CONNECTIONS		FTA950		DRAWING NUMBER <b>FC950-55</b>					
POWER TRANSFER SWITCH FOR GENERATOR OR SECOND UTILITY POWER SOURCE						DWG REV <b>D</b>		ECN NO 281357		SHEET 1 OF 1					

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.



Mark IIxG Electric Fire Pump Controllers

# Typical Motor Connection Diagram FTA1300 / FTA1350 Wye-Delta Starting (12-Lead Motors)



FOR SINGLE VOLTAGE 12-LEAD  
WYE-DELTA MOTORS

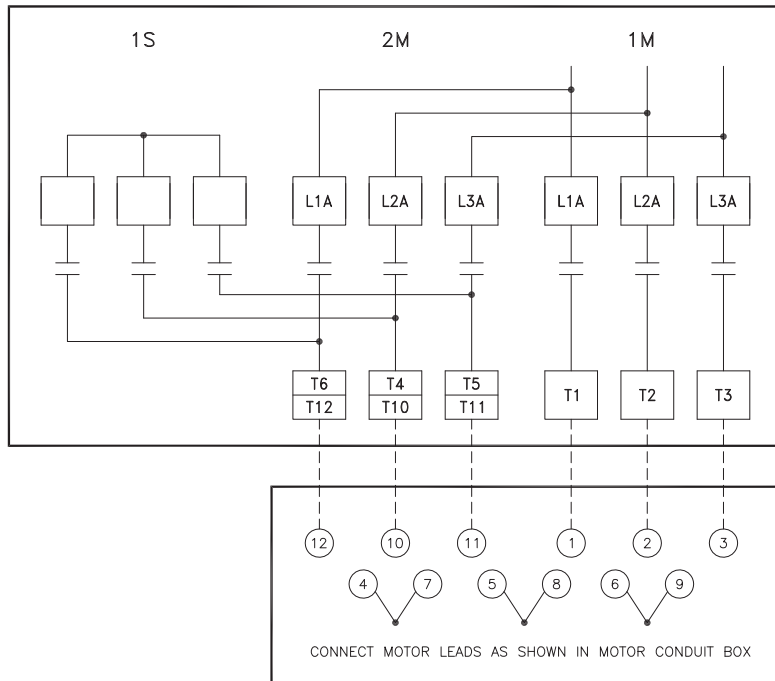
- OR -

FOR DUAL VOLTAGE WYE-DELTA  
MOTORS CONNECTED TO OPERATE  
ON THE **LOWER** OF THE TWO VOLTAGES  
200-208 FOR 200/400V RATED MOTORS  
OR 220-240 FOR 230/460V RATED  
MOTORS.

SIX (6) WIRES REQUIRED BETWEEN  
MOTOR AND CONTROLLER.

## IMPORTANT:

THIS DRAWING IS FOR GENERAL  
INFORMATION ONLY. REFER TO  
MOTOR CONNECTION DIAGRAM  
FOR SPECIFIC WIRING  
ARRANGEMENT.



FOR DUAL VOLTAGE WYE-DELTA  
MOTORS CONNECTED TO OPERATE  
ON THE **HIGHER** OF THE TWO VOLTAGES  
440-480 FOR 230/460V RATED MOTORS  
OR 380-415 FOR 200/400V RATED  
MOTORS.

SIX (6) WIRES REQUIRED BETWEEN  
MOTOR AND CONTROLLER.

## NOTES:

- THREE (3) LEAD AND NINE (9)  
LEAD MOTORS **CANNOT** BE USED  
FOR WYE-DELTA STARTING.
- TWELVE (12) LEAD PART  
WINDING MOTORS **CANNOT** BE  
USED FOR WYE-DELTA STARTING  
AT 240/230V.

THIRD ANGLE PROJECTION	SIZE <b>A</b>	BY	DATE
DRAWN BY	JMW	09-12-95	
FINAL APPROVAL	TEF	09-12-95	



© Firetrol, Inc. Not for construction.  
Subject to change without notice.

UPDATED TITLE BLOCK		B	280820	JMW	TEF	09-12-19
ADDED SINGLE VOLTAGE, 12 LEAD, Y-D MOTORS		A	-	TEF	TEF	11-22-00
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
MOTOR CONNECTIONS		FTA1300 / FTA1350				
OPEN/CLOSED TRANSITION WYE-DELTA FIRE PUMP CONTROLLERS		DRAWING NUMBER <b>NS1300-01</b>				
DWG REV <b>B</b>		ECN NO <b>280820</b>		SHEET 1 OF 1		

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.

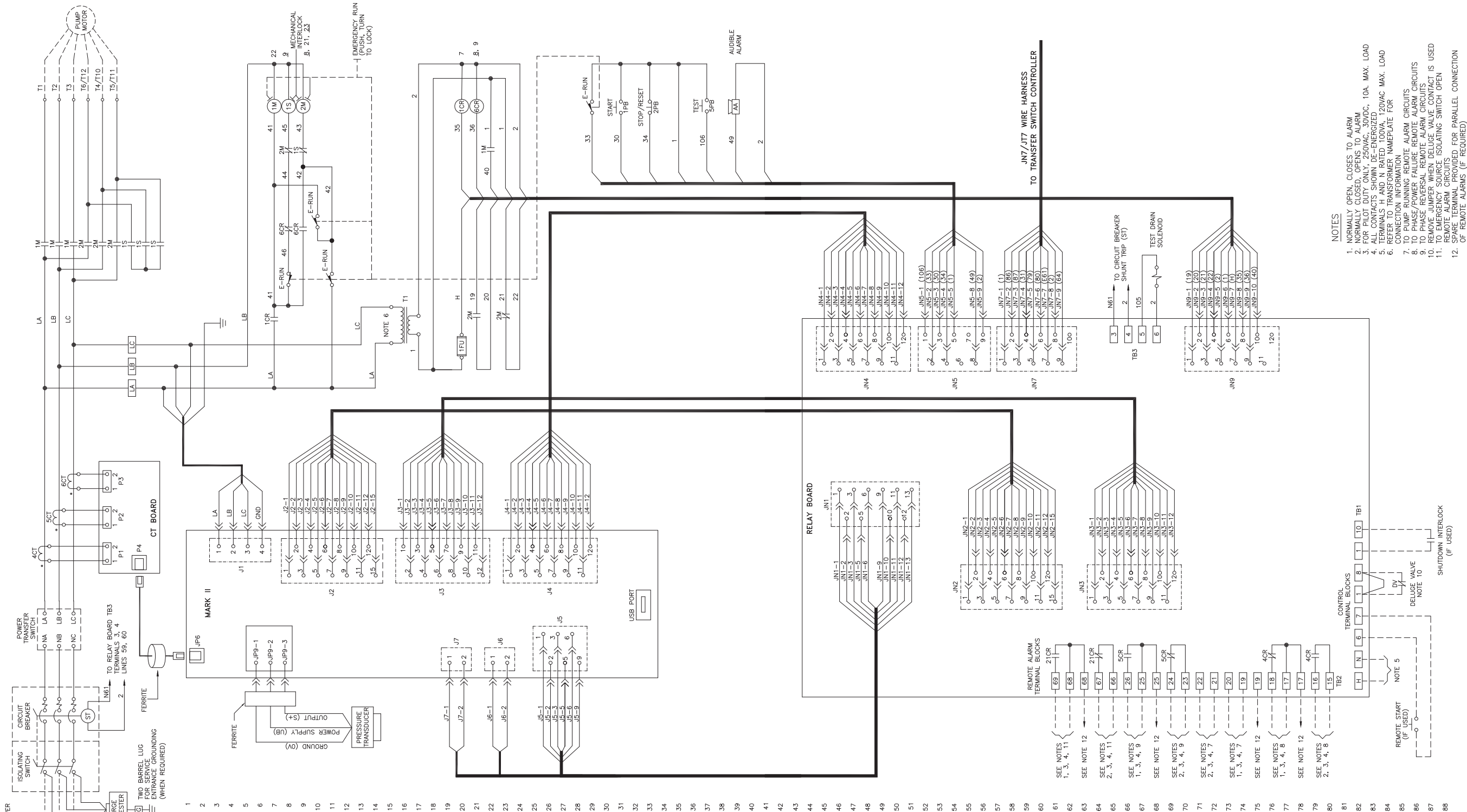


Mark IIx6 Electric Fire Pump Controllers

# Wiring Schematic

## FTA1300 / FTA950

Wye-Delta Open Transition Starting  
With Power Transfer Switch



- NOTES
1. NORMALLY OPEN, CLOSURES TO ALARM
  2. NORMALLY CLOSED, OPENS TO ALARM
  3. 120VAC, 150VA, 250VA, 500VA, 100A, MAX. LOAD
  4. ALARM CONTACTS SHOWN DEENERGIZED
  5. TERMINALS H AND N, RATED 100VA, 120VAC MAX. LOAD
  6. REFER TO TRANSFORMER NAMEPLATE FOR CONNECTION INFORMATION
  7. TO PUMP RUNNING REMOTE ALARM CIRCUITS
  8. TO PHASE/POWER FAILURE REMOTE ALARM CIRCUITS
  9. TO PHASE REVERSAL REMOTE ALARM CIRCUITS
  10. REMOVE JUMPER WHEN DELUGE VALVE CONTACT IS USED
  11. RELAY CIRCUITS
  12. SPARE TERMINAL PROVIDED FOR PARALLEL CONNECTION OF REMOTE ALARMS (IF REQUIRED)

	SIZE	B	BY	DATE
	DRAWN BY	TEF	05-04-02	
	FINAL APPROVAL	TEF	05-04-02	

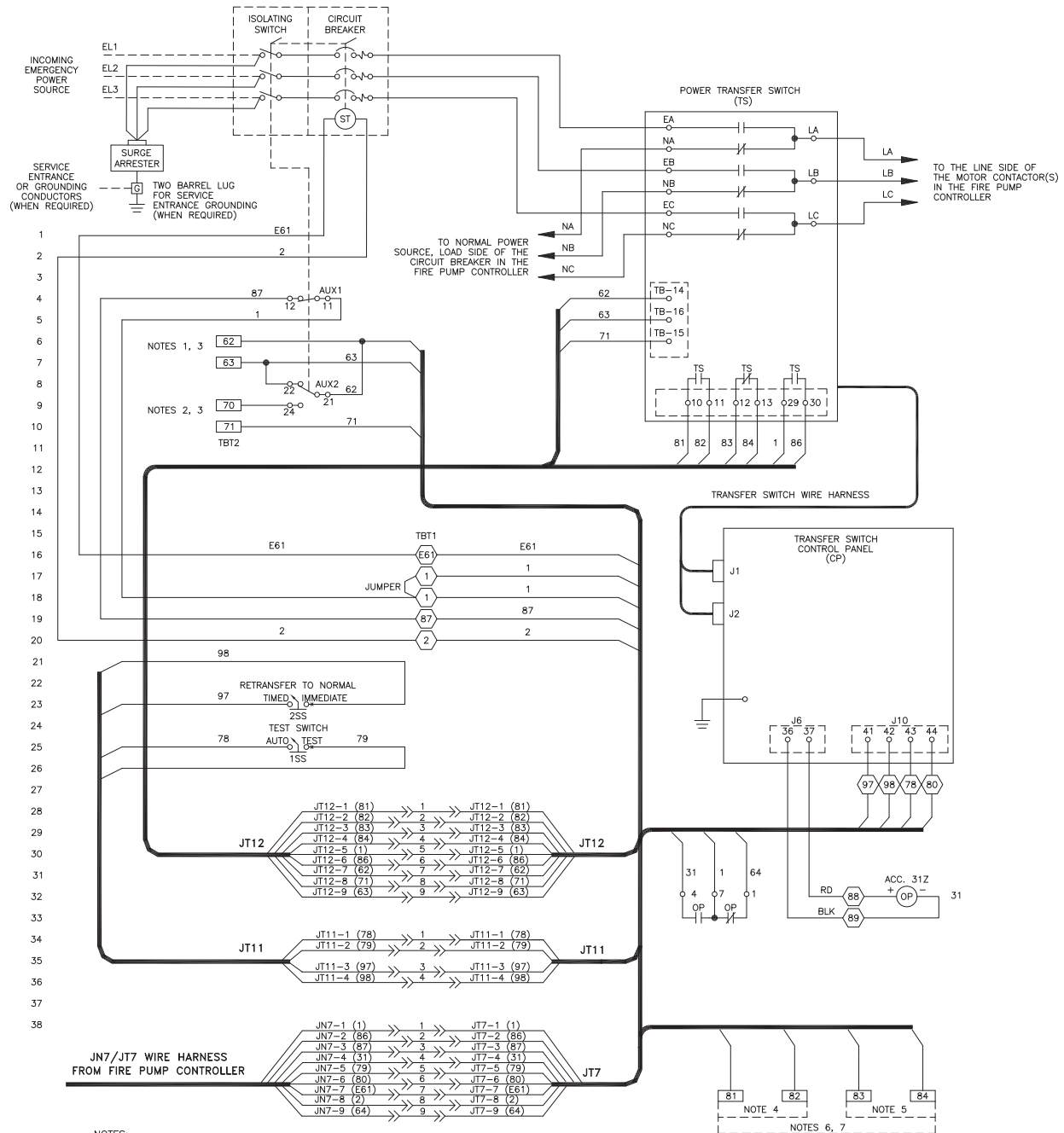


© Firetrol, Inc. Not for construction.  
Subject to change without notice.

UPDATED TITLE BLOCK		E	280820	JMW	TEF	09-12-19
ADDED TEST SOLENOID & AUDIBLE ALARM TO COMPLY WITH NEW FM STD		D	228528	JC	TEF	08-31-10
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
WIRING SCHEMATIC		FTA1300 WITH FTA950		DRAWING NUMBER		
OPEN TRANSITION WYE-DELTA FIRE PUMP CONTROLLER WITH POWER TRANSFER SWITCH				WS1300-55		
DWG REV		E	ECN NO 280820	SHEET 1 OF 1		

All rights reserved. The drawing and the information contained or depicted herein are the sole property of Firetrol, Inc. Copies are communicated to the recipient in strict confidence and may not be retransmitted, published, reproduced, copied or used in any manner, including as the basis for the manufacture or sale of any products, without the express prior written consent of Firetrol, Inc.





SIZE	A	BY	DATE
DRAWN BY	TEF	05-25-10	
FINAL APPROVAL	TEF	05-25-10	



© Firetrol, Inc. Not for construction.  
Subject to change without notice.

UPDATED TITLE BLOCK		B	281357	JMW	TEF	10-16-19
UPDATED TO COMPLY WITH NEW FM STANDARD		A	228528	JC	TEF	08-31-10
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
WIRING SCHEMATIC		FTA950				
FIRE PUMP POWER TRANSFER SWITCH FOR GEN-SET AND SECOND UTILITY POWER SOURCE		DRAWING NUMBER WS950-55				
DWG REV B		ECN NO 281357		SHEET 1 OF 1		