

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

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Mark IIx6 Electric Fire Pump Controllers

Dimensional Drawing
Lookup Table
FTA1000
Across The Line 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.	DD1000-59	DD1000-59	DD1000-51	DD1000-55	DD1000-59
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	---

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.	DD1000-65	DD1000-65	DD1000-61	DD1000-63	DD1000-65
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	---

CONSULT FACTORY FOR VOLTAGES OR HORSEPOWERS NOT SHOWN

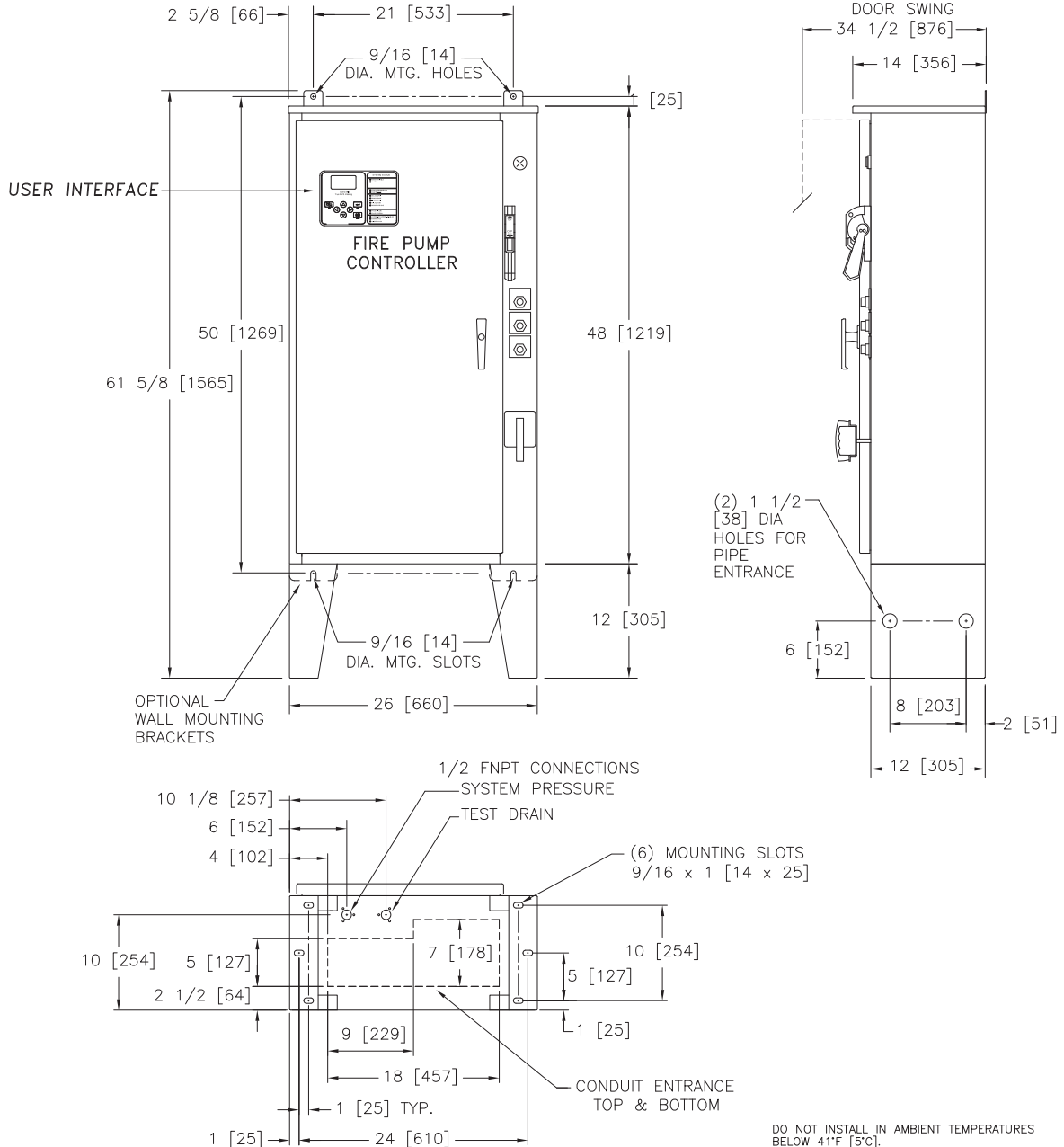
	SIZE	A	BY	DATE	<p>© Firetrol, Inc. Not for construction. Subject to change without notice.</p>	UPDATED TITLE BLOCK				C	280404	JMW	TEF	10-21-19
	DRAWN BY	JLB	07-12-02	REV		ECN NO	BY	APP	DATE	B	237286	TEF	TEF	05-24-12
	FINAL APPROVAL	TEF	07-12-02	REVISION DESCRIPTION		LOOKUP TABLE		FTA1000		DRAWING NUMBER				
	DIMENSIONAL DRAWING LOOKUP TABLE FULL VOLTAGE FIRE PUMP CONTROLLERS WITH HP/VOLTAGE/WITHSTAND RATING					ED1000-02				DWG REV	C	ECN NO	280404	SHEET 1 OF 1

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Mark IIxG Electric Fire Pump Controllers

Dimensions and Shipping Weight FTA1000 Across The Line Starting



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

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

THIS DIMENSION DRAWING COVERS FTA1000 CONTROLLERS AT THE HORSEPOWER, VOLTAGE AND WITHSTAND RATINGS AS LISTED IN THE TABLE. FOR OTHER HORSEPOWER OR WITHSTAND RATINGS, REFER TO ED1000-02

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

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
235 [107]

UPDATED TITLE BLOCK		C	280404	JMW	TEF	08-19-19
ADDED COMPONENTS TO MEET FM REQUIREMENTS		B	228499	JC	TEF	08-04-10
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
DIMENSIONS & SHIPPING WEIGHT		FTA1000		DRAWING NUMBER		
FULL VOLTAGE FIRE PUMP CONTROLLER		DD1000-51				
DWG REV C		ECN NO 280404		SHEET 1 OF 1		

THIRD ANGLE PROJECTION	SIZE A	BY	DATE
		TEF	06-11-02
		TEF	06-11-02



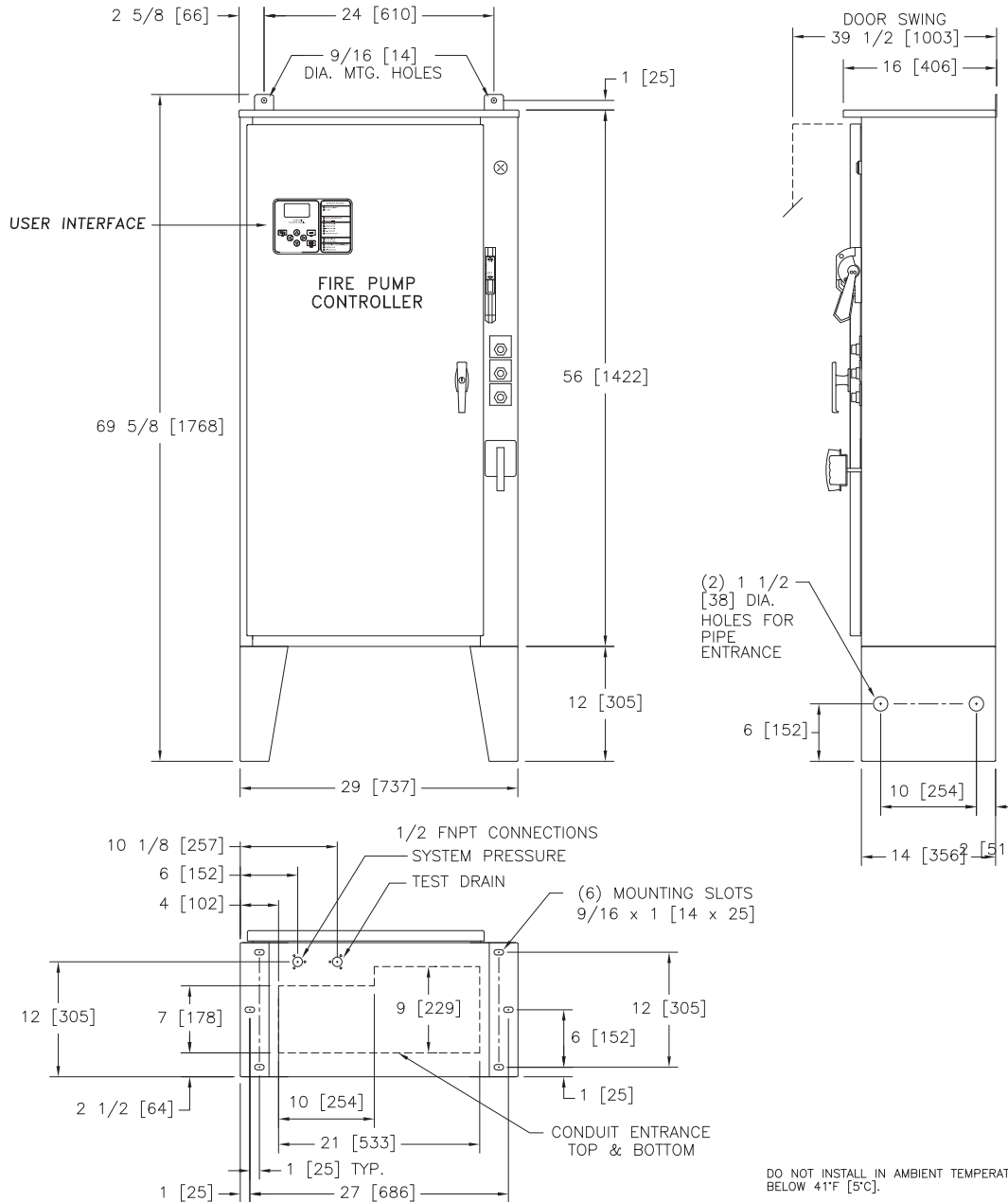
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Mark IIx6 Electric Fire Pump Controllers

Dimensions and Shipping Weight FTA1000 Across The Line Starting



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

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

THIS DIMENSION DRAWING COVERS FTA1000 CONTROLLERS AT THE HORSEPOWER, VOLTAGE AND WITHSTAND RATINGS AS LISTED IN THE TABLE. FOR OTHER HORSEPOWER OR WITHSTAND RATINGS, REFER TO ED1000-02

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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
235 [107]

UPDATED TITLE BLOCK		D	280404	JMW	TEF	08-19-19
REVISED MOTOR HORSEPOWER CHART		C	237364	JMW	TEF	05-31-12
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
DIMENSIONS & SHIPPING WEIGHT		FTA1000		DRAWING NUMBER		
FULL VOLTAGE FIRE PUMP CONTROLLER		DD1000-55				
DWG REV	D	ECN NO	280404	SHEET 1 OF 1		

THIRD ANGLE PROJECTION	SIZE	A	BY	DATE
	DRAWN BY	TEF	07-23-02	
	FINAL APPROVAL	TEF	07-23-02	

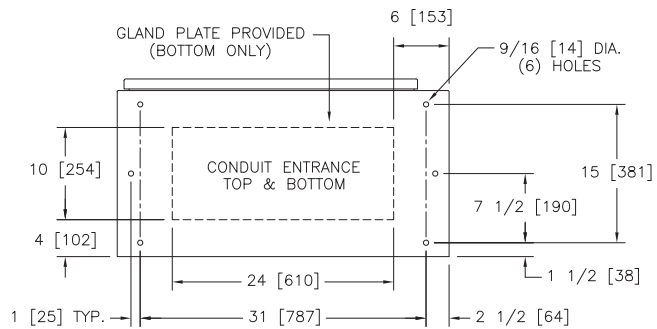
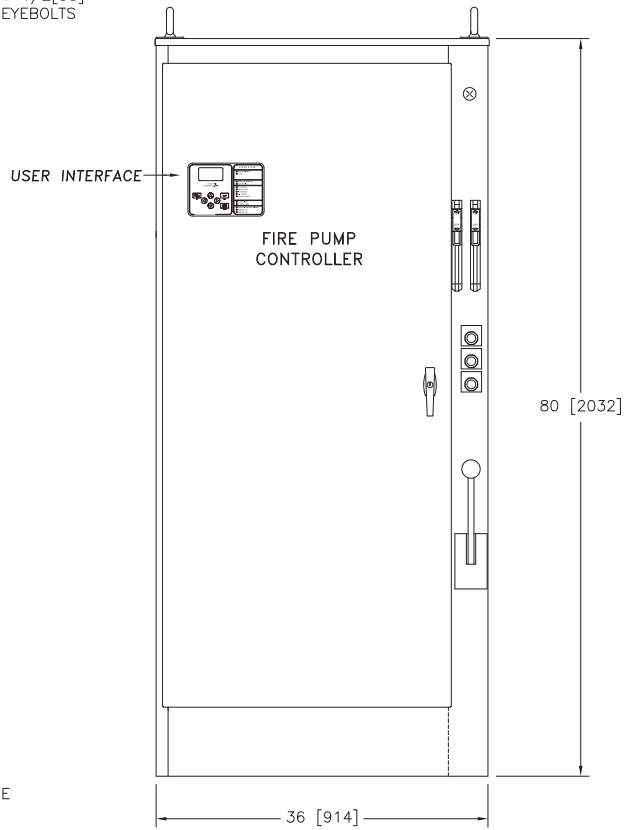
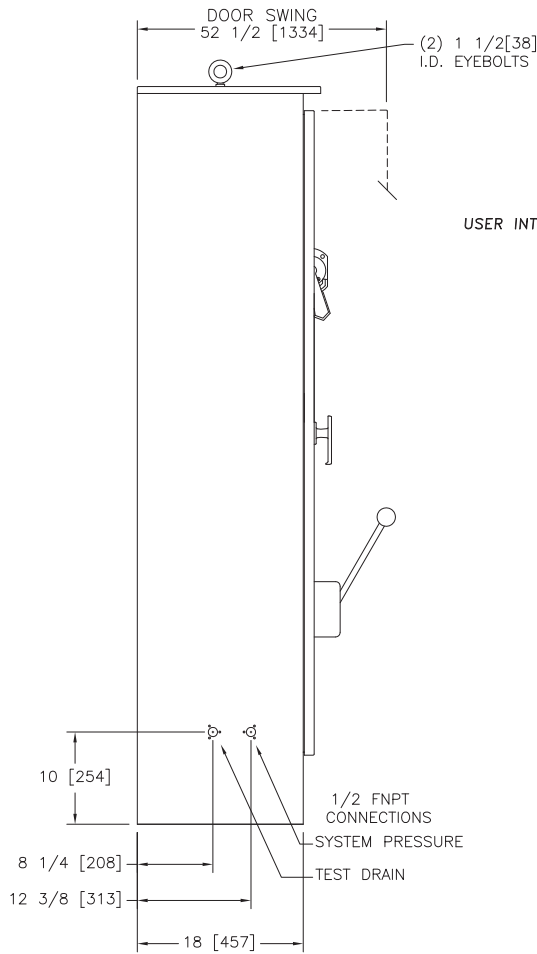


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Mark II_{GE} Electric Fire Pump Controllers

Dimensions and Shipping Weight FTA1000 Across The Line Starting



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

APPROXIMATE SHIPPING WEIGHT

575 [260]

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

THIS DIMENSION DRAWING COVERS FTA1000 CONTROLLERS AT THE HORSEPOWER, VOLTAGE AND WITHSTAND RATINGS AS LISTED IN THE TABLE. FOR OTHER HORSEPOWER OR WITHSTAND RATINGS, REFER TO ED1000-02

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

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

UPDATED TITLE BLOCK		D	280404	JMW	TEF	08-19-19
REVISED MOTOR HORSEPOWER CHART		C	237364	JMW	TEF	05-31-12
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
DIMENSIONS & SHIPPING WEIGHT		FTA1000		DRAWING NUMBER		
FULL VOLTAGE FIRE PUMP CONTROLLER				DD1000-59		
		DWG REV	D	ECN NO	280404	SHEET 1 OF 1

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



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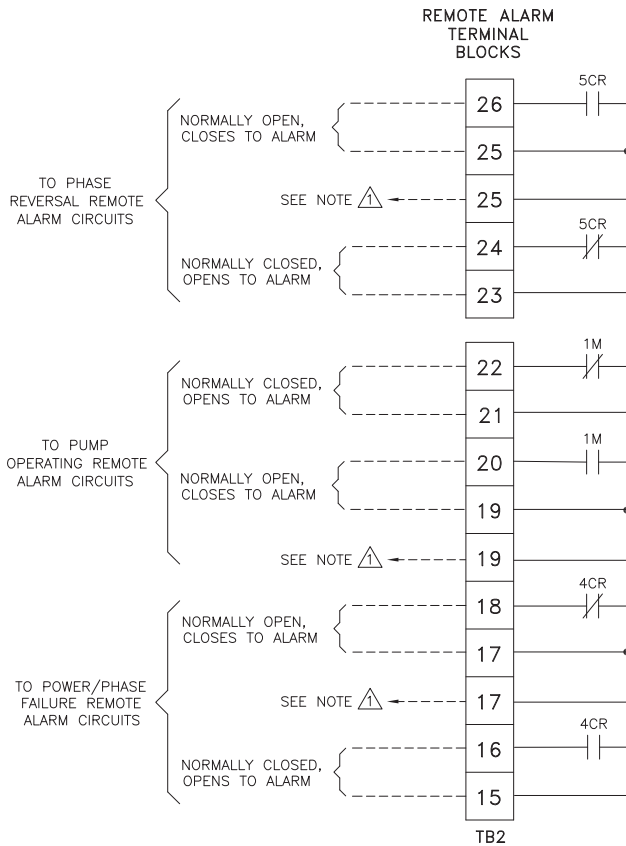
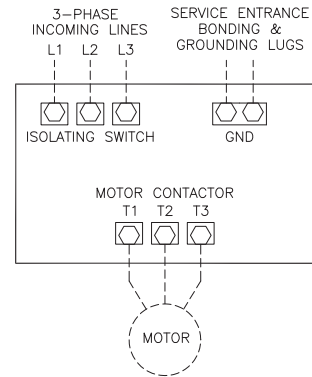


Mark IIx6 Electric Fire Pump Controllers

Field Connections

FTA1000

Across The Line Starting



- 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 FC1000-51

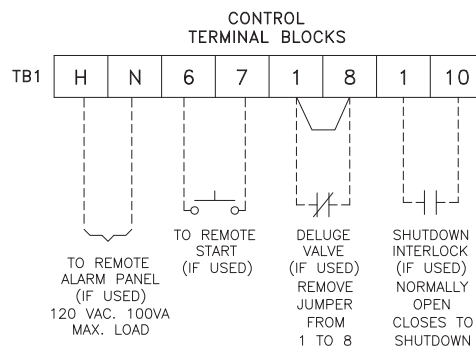
NOTE: USE COPPER CONDUCTORS ONLY FOR ALL CONNECTIONS

△ 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 ²]	5.6 lb-in [.6 Nm]

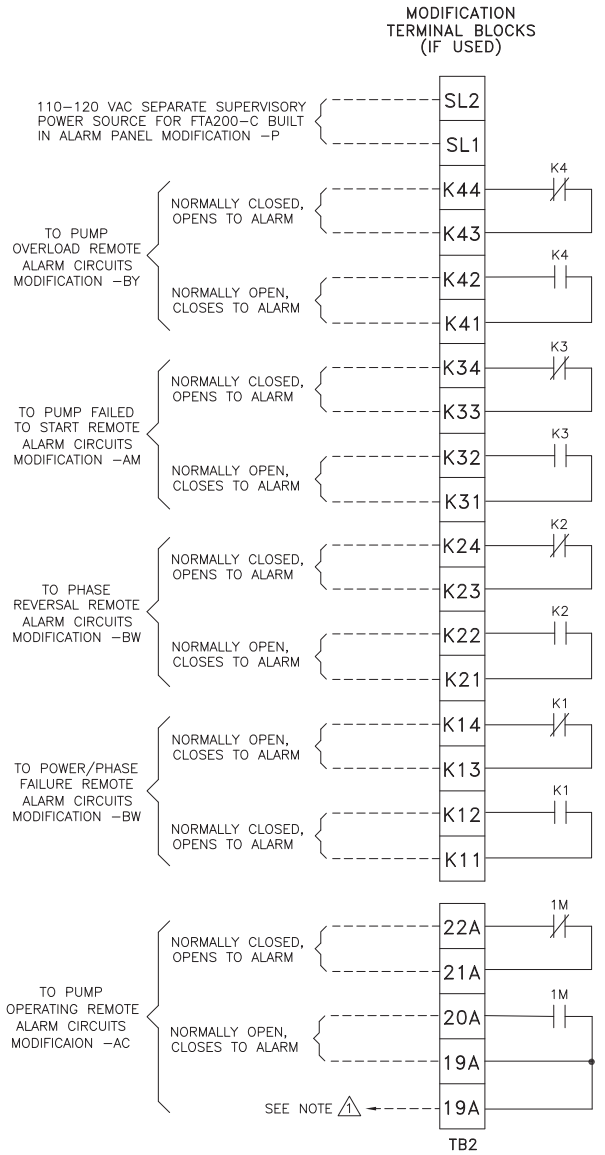
-NOTE-
ALARM CONTACT
RATING: PILOT DUTY
250 VAC, 30 VDC
10 A. MAX. LOAD



PRESSURE SYSTEM
CONNECTION
1/2" FNPT

THIRD ANGLE PROJECTION				UPDATED TITLE BLOCK									
SIZE	A	BY	DATE	B	280404	JMW	TEF	09-09-19					
DRAWN BY	TEF	04-26-02		ADD NOTE FOR COPPER CONDUCTORS ONLY, UPDATED LOGO AND TITLE BLOCK				A	226253	JC	TEF	12-08-09	
FINAL APPROVAL	TEF	04-26-02		REVISION DESCRIPTION				REV	ECN NO	BY	APP	DATE	
<p>© Firetrol, Inc. Not for construction. Subject to change without notice.</p>				FIELD CONNECTIONS				FTA1000					
				FULL VOLTAGE FIRE PUMP CONTROLLER				DRAWING NUMBER					
								FC1000-50					
								DWG REV		B		ECN NO 280404	
								SHEET 1 OF 2					

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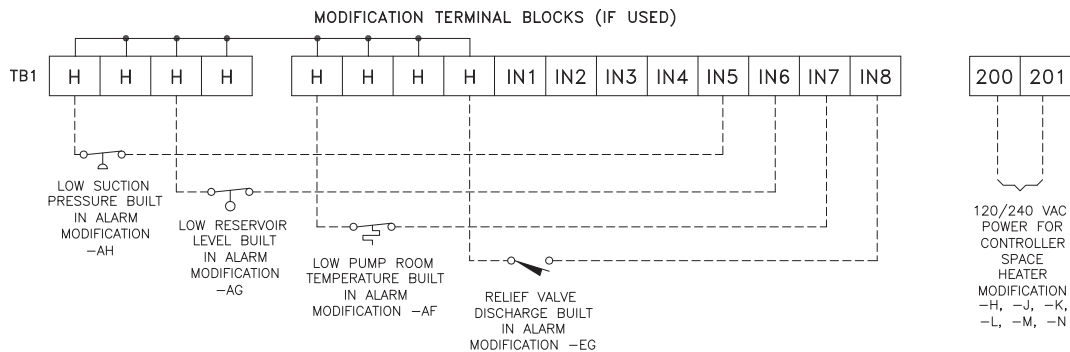
SPARE TERMINALS PROVIDED FOR PARALLEL CONNECTION OF REMOTE ALARMS (IF REQUIRED)

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 ²]	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	04-26-02	
	FINAL APPROVAL	TEF	04-26-02	



UPDATED TITLE BLOCK		B	280404	JMW	TEF	09-09-19
ADD NOTE FOR COPPER CONDUCTORS ONLY, UPDATED LOGO AND TITLE BLOCK		A	226253	JC	TEF	12-08-09
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
FIELD CONNECTIONS		FTA1000		DRAWING NUMBER		
FULL VOLTAGE FIRE PUMP CONTROLLER		FC1000-50				
DWG REV	B	ECN NO	280404	SHEET 2 OF 2		



Mark IIx6 Electric FirePump Controllers

Field Connections

FTA1000

Across The Line Starting
Line & Motor Wire Terminal Capacity

LINE TERMINALS—WIRE CAPACITY AND QUANTITY (CU) 1

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

MOTOR TERMINALS—WIRE CAPACITY AND QUANTITY (CU) 1

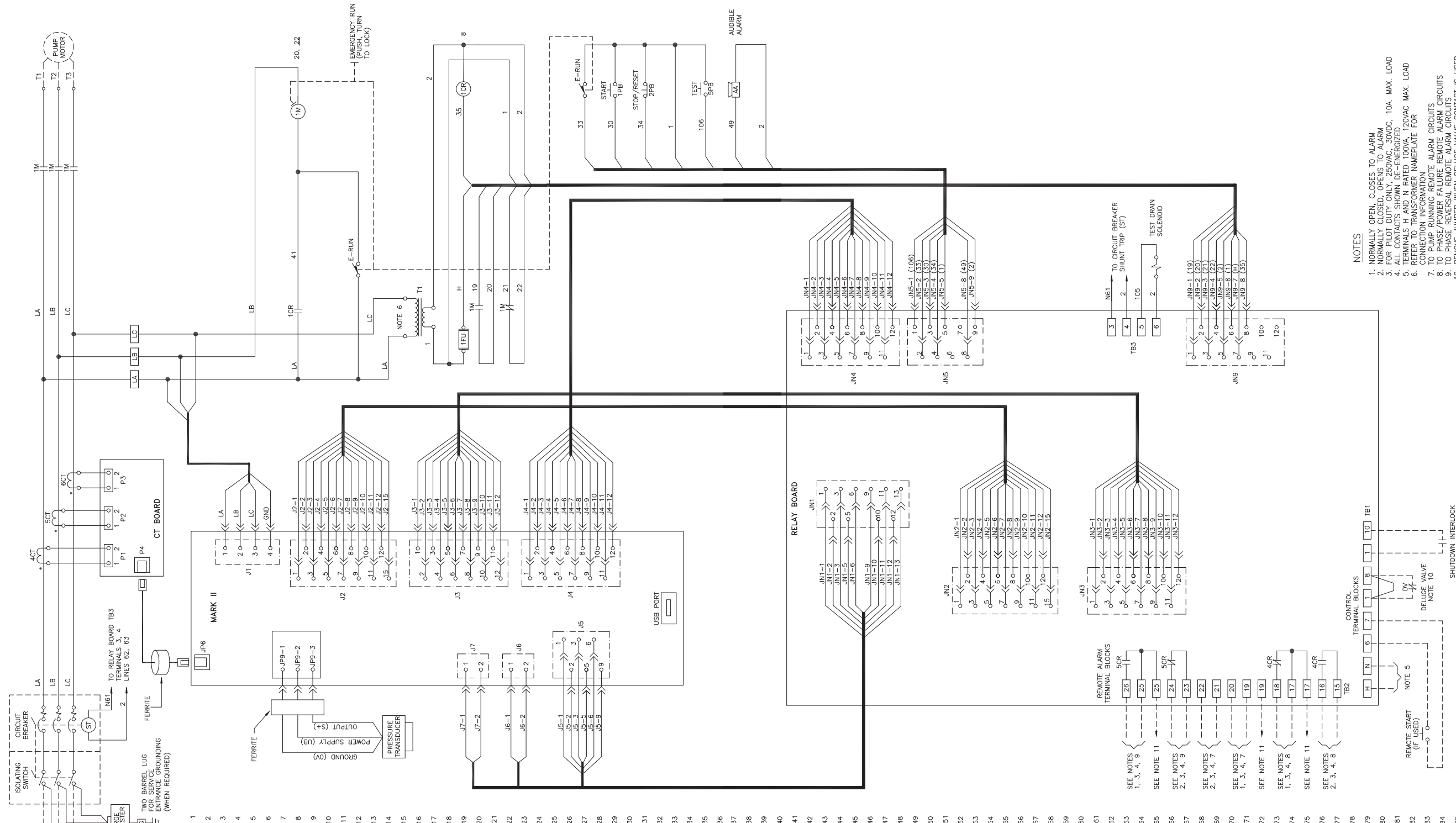
MAXIMUM MOTOR HORSEPOWER						WIRE SIZE (CU) PER PHASE
200V	208V	220–240V	380–415V	440–480V	550–600V	
30	30	40	60	75	100	(1) #6 AWG—#2/0 AWG (1) 16 MM ² —70 MM ²
50	50	60	75	125	150	(1) #6 AWG—250 kcmil (1) 16 MM ² —120 MM ²
75	75	100	150	200	250	(1) #4 AWG—400 kcmil (1) 25 MM ² —200 MM ²
100	100	---	---	250	300	(2) #4 AWG—500 kcmil (2) 25 MM ² —240 MM ²
200	200	200	350	500	---	(2) 250 kcmil—500 kcmil (2) 120 MM ² —240 MM ²
250	250	300	500	600	---	(3) #2/0 AWG—500 kcmil (3) 70 MM ² —240 MM ²

1 FOR CORRECT WIRE SIZING, REFER TO *NATIONAL ELECTRICAL CODE*, NFPA 70.

2 WHEN REQUIRED BY AUTHORITY HAVING JURISDICTION.

 THIRD ANGLE PROJECTION	SIZE A	BY	DATE	 Firetrol, Inc. © Firetrol, Inc. Not for construction. Subject to change without notice.	UPDATED LINE TERMINAL HP / VOLTAGE CHART CHANGED TO XT4 BREAKERS				D	270091	TEF	TEF	11/19/17
	DRAWN BY	JC	02-13-12		REVISION DESCRIPTION				REV	ECN NO	BY	APP	DATE
	FINAL APPROVAL	TEF	02-13-12		FIELD CONNECTIONS				FTA1000		DRAWING NUMBER		
					FULL VOLTAGE FIRE PUMP CONTROLLER				FC1000-51				
				LINE AND MOTOR FIELD WIRE TERMINAL CAPACITY				DWG REV	E	ECN NO	280404	SHEET 1 OF 1	

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- NOTES**
1. NORMALLY OPEN, CLOSURES TO ALARM
 2. NORMALLY CLOSED, OPENS TO ALARM
 3. FOR PILOT DUTY ONLY, 250VAC, 30VDC, 10A. MAX. LOAD
 4. ALL CONTACTS SHOWN DE-ENERGIZED
 5. TERMINALS H AND N RATED 100VA, 120VAC MAX. LOAD
 6. REFER TO TRANSFORMER NAMEPLATE FOR CONNECTIONS
 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. SPARE TERMINAL PROVIDED FOR PARALLEL CONNECTION OF REMOTE ALARMS (IF REQUIRED)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85

UPDATED TITLE BLOCK		E	280404	JMW	TEF	08-26-19
ADDED TEST SOLENOID AND AUDIBLE ALARM TO COMPLY WITH NEW FM STD		D	228528	JC	TEF	08-06-10
REVISION DESCRIPTION		REV	ECN NO	BY	APP	DATE
WIRING SCHEMATIC		FTA1000		DRAWING NUMBER		
FULL VOLTAGE FIRE PUMP CONTROLLER				WS1000-50		
DWG REV	E	ECN NO	280404	SHEET 1 OF 1		

THIRD ANGLE PROJECTION

SIZE	B	BY	DATE
DRAWN BY	TEF	05-10-02	
FINAL APPROVAL	TEF	05-10-02	

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