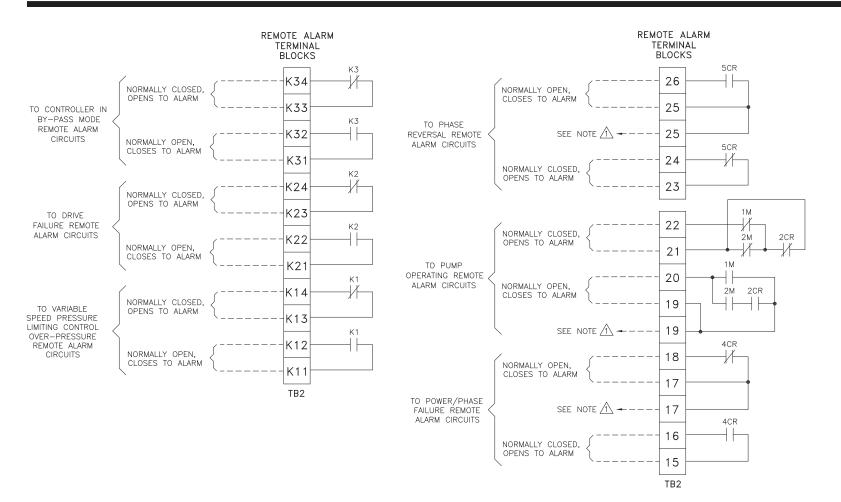


Marklixe Electric Fire Pump Controllers - Variable Speed Starting with Across The Line Bypass



LINE TERMINALS-WIRE CAPACITY AND QUANTITY (CU) (1) WIRE SIZE (CU) PER PHASE WIRE SIZE SERVICE ENTRANCE GROUND LUG (CU) MAXIMUM MOTOR HORSEPOWER $\langle 2 \rangle$ 220-240V 380-415V 440-480V 550-600V 200V 208V (1) #14 AWG-#1/0 AWG (1) 2.5 MM²-50 MM² (2) #14 AWG-#2/0 AWG (2) 2.5 MM²-70 MM² (2) #14 AWG-#2/0 AWG (1) #4 AWG-300 kcmi 40 40 40 75 100 125 (1) 25 $MM^2 - 150$ MM^2 (2) 2.5 $MM^2 - 70 MM^2$ (2) #6 AWG-250 kcmil (2) 16 MM²-120 MM² (1) #4 AWG-300 kcmil (1) 25 MM²-150 MM² 60 60 60 100 150 (1) 250 kcmil-500 kcmil (2) #6 AWG-250 kcmil 100 100 100 150 250 300 (1) 120 MM² -240 MM² (2) 16 MM² – 120 MM² (2) #3/0 AWG-250 kcmil (2) #6 AWG-250 kcmil 125 125 200 (2) 95 MM² - 120 MM² (2) $16 \text{ MM}^2 - 120 \text{ MM}^2$ (3) #2/0 AWG-400 kcmil (3) 70 MM² -200 MM² (2) #6 AWG-250 kcmil 200 200 250 350 500 (2) 16 $MM^2 - 120$ MM^2 (2) #6 AWG-250 kcmil (4) #4/0 AWG-500 kcmil 300 250 250 500 600 (2) $16 \text{ MM}^2 - 120 \text{ MM}^2$

MOTOR TERMINALS-WIRE CAPACITY AND QUANTITY (CU) (1)

	MAX	WIRE SIZE (CU)						
200V	208V	220-240V	380-415V	440-480V	550-600V	PER PHASE		
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 kemil (3) 70 MM ² -240 MM ²		

3-PHASE INCOMING LINES SERVICE ENTRANCE BONDING & GROUNDING LUGS L1 L2 L3 CONTACTOR T1 T2 T3 MOTOR

- NATIONAL ELECTRICAL CODE, NFPA 70.
- WHEN REQUIRED BY AUTHORITY HAVING JURISDICTION.

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

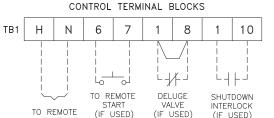
NOTE: TERMINALS FOR CUSTOMER CONNECTIONS REQUIRE 3.5MM SLOTTED SCREW DRIVER

TERMINAL TIGHTENING TORQUE								
TERMINAL TYPE	WIRE SIZE	TIGHTENING TORQUE						
CONTROL AND ALARM TERMINALS TB1, TB2	#14-12 AWG [2.5-4 MM ²]	5.6 lb-in [.6 Nm]						

-USE COPPER CONDUCTORS ONLY-



PRESSURE SYSTEM CONNECTION 1/2" FNPT



(IF USED)

REMOVE

FROM

1 TO 8

DATE *Firetrol, Inc* 05/14/21

ALARM PANEL

(IF USED)

120 VAC. 100VA MAX. LOAD

SIZE B

DRAWN BY TEF

 $\Rightarrow \oplus$

THIRD ANGLE

BY

TEF

05/14/21

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

(IF USED)

NORMALLY

OPEN

CLOSES TO

	REVISION DESCRIPTION	REV	ECN NO	BY	APP	DATE	
C.	FIELD CONNECTIONS	DRAWING NUMBER FC3100M-50 DWG REV - RO - SHEET 1 OF 1					
٦.	VFD ELECTRIC FIRE PUMP CONTROLLI						

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- 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.
- 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.
- Motor connections shown are typical. Since motor connections vary widely, refer to the motor connection diagram for specific wiring arrangement.