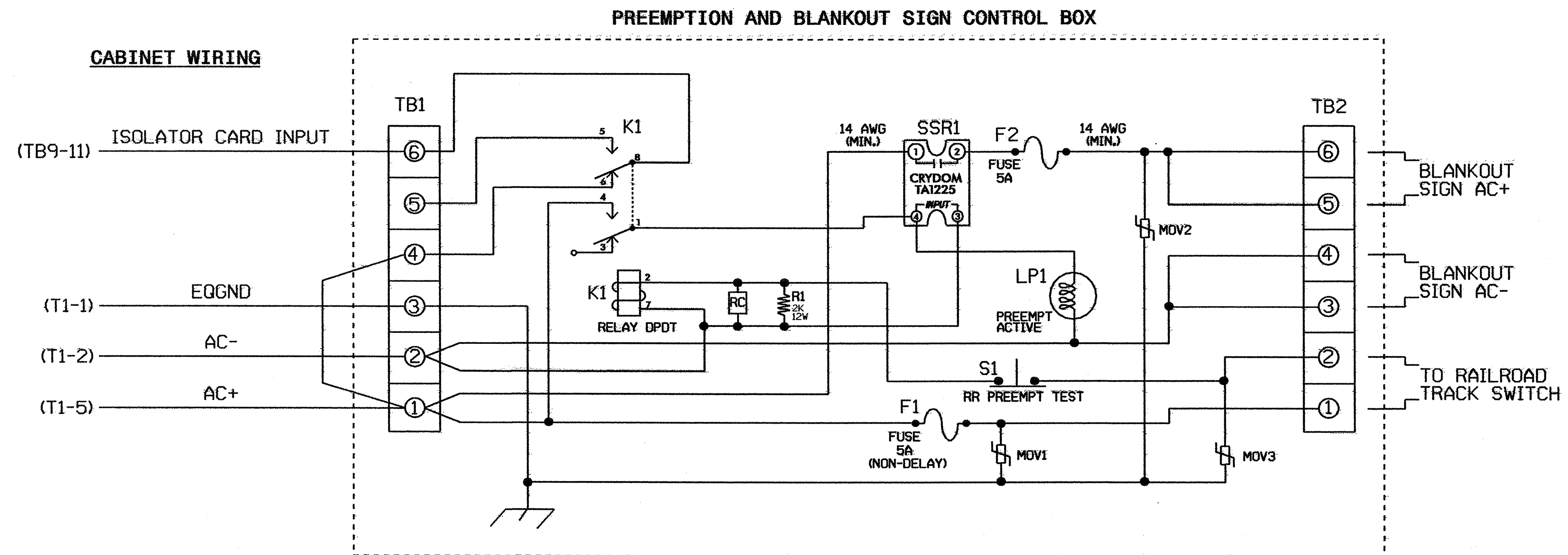


RAILROAD PREEMPTION WIRING DETAIL

(wire as shown below)



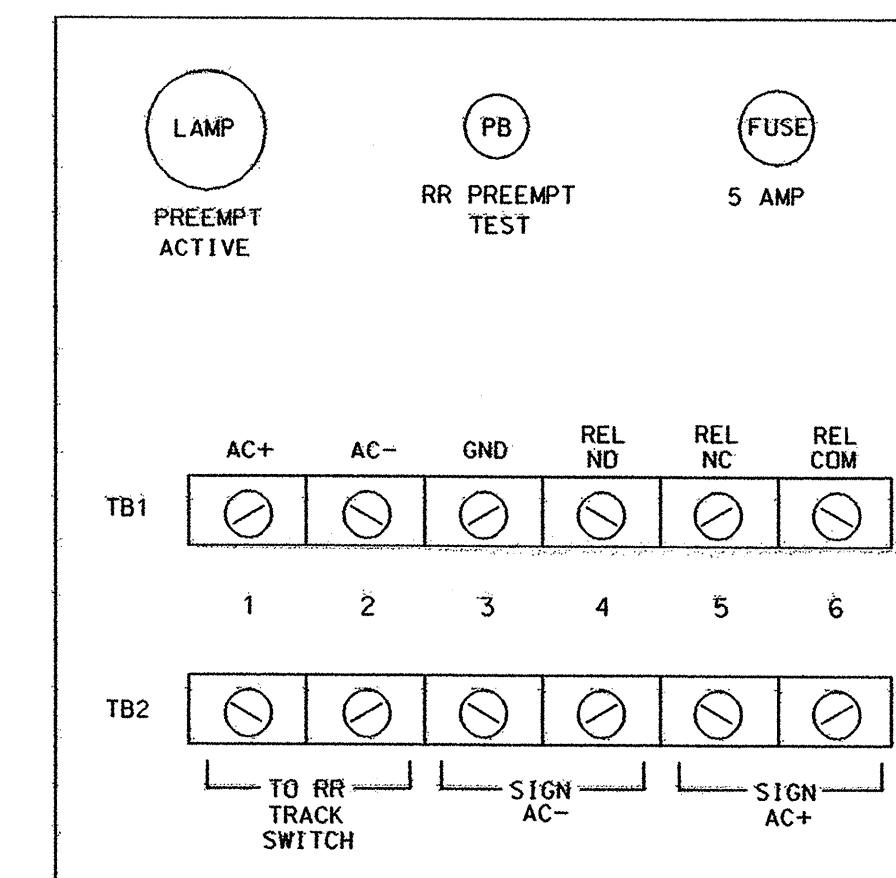
170E CONTROLLER RAILROAD PREEMPTION PROGRAMMING

1. PROGRAM 'RR2' INPUT PIN NO. AT E/126+F+6=52 (THIS IS DEFAULT PARAMETER)
2. PROGRAM TRACK CLEARANCE PHASES AT E/125+E+2=ϕ2, 5
3. PROGRAM 'LIMITED SERVICE' PHASES AT E/125+E+3=ϕ3
4. PROGRAM RR PREEMPT DELAY TIME AT F/1+E+A= 0 (SEC.)
5. PROGRAM TRACK CLEARANCE TIME AT F/1+E+B= 13 (SEC.)
6. ENABLE 'NON-LOCK' FEATURE AT E/125+F+4=6 (RR2)

NOTES

1. RELAY K1 IS SHOWN IN THE ENERGIZED (PREEMPT NOT ACTIVE) NORMAL OPERATION STATE.
2. RELAY K1 IS A DPDT WITH 120VAC COIL. POTTER & BRUMFIELD KRP11AG WITH OCTAL BASE OR APPROVED EQUIVALENT.
3. RELAY SSR1 IS A SPST (NORMALLY OPEN) SOLID STATE RELAY WITH AC INPUT AND AC (25 AMP) OUTPUT. CRYDOM TA1225 OR APPROVED EQUIVALENT.
4. AC ISOLATOR CARD SHALL ACTIVATE PREEMPTION UPON REMOVAL OF AC+ FROM THE INPUT (AS SHOWN ABOVE).
5. RESISTOR IS VALUED AT 2K OHM, 12 WATT. CLAROSTAT PART NO. VPR10F-2K OR APPROVED EQUIVALENT.
6. RC NETWORK IS VALUED AT .1 MICROFARAD, 100 OHM.
7. IF REPLACEMENT MOV'S ARE NEEDED, GE PART NO. V150LA20A MAY BE USED.
8. PREEMPTION AND BLANKOUT SIGN CONTROL BOX IS A CONTROL TECHNOLOGIES PART NO. 2299-101 OR APPROVED EQUIVALENT.
9. ENSURE TERMINAL TB9-12 (ON INPUT PANEL) IS CONNECTED TO AC NEUTRAL (A JUMPER MAY HAVE TO BE ADDED).

FRONT VIEW



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-0138
 DESIGNED: JANUARY 2004
 SEALED: 02-17-04
 REVISED:

SIGNAL UPGRADE - FINAL DESIGN

	ELECTRICAL AND PROGRAMMING DETAILS FOR: NC 98 (HOLLOWAY STREET) AT SR 1838 (JUNCTION ROAD)	
	DIVISION 05 PLAN DATE: MARCH 2004	DURHAM COUNTY DURHAM REVIEWED BY:
	PREPARED BY: JAMES PETERSON	REVIEWED BY:
	REVISIONS:	INIT. DATE
122 N. McDowell St., Raleigh, NC 27603		SIGNATURE: <i>James C. Brown</i> 4/21/04 DATE:
		SIG. INVENTORY NO. 05-0138