
AUTOMATIC TRANSFER SWITCH WIRING DIAGRAMS

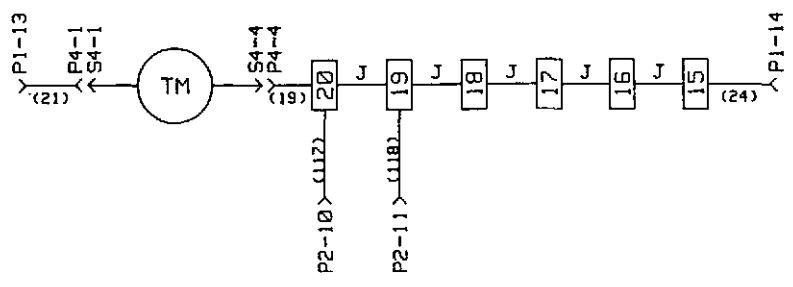
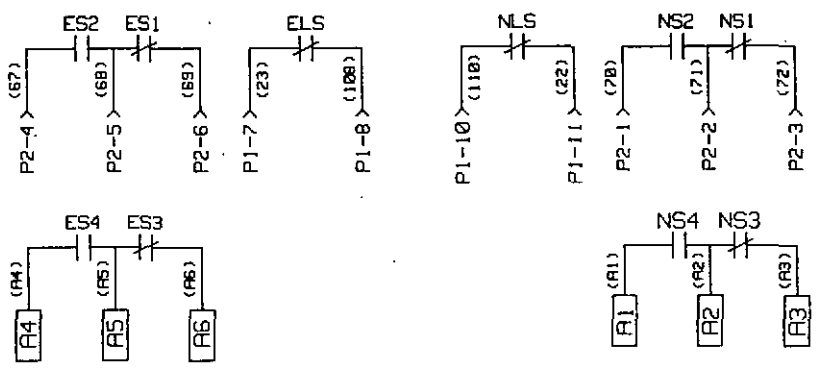
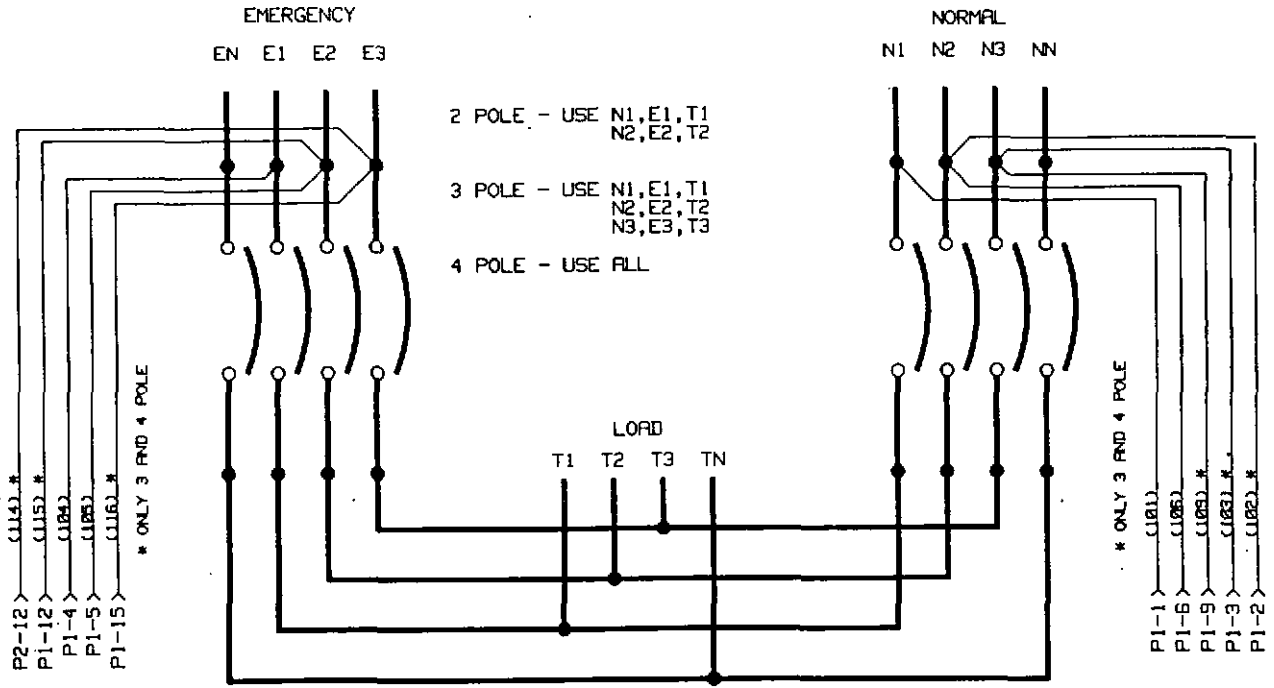
CATALOG NUMBER **ATSBP** ONLY

ELECTROMECHANICAL TYPE SWITCH

SHOP ORDER: _____

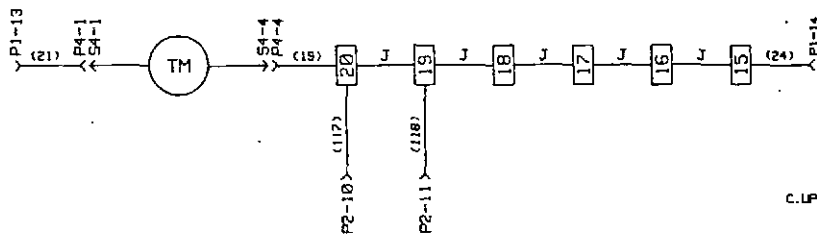
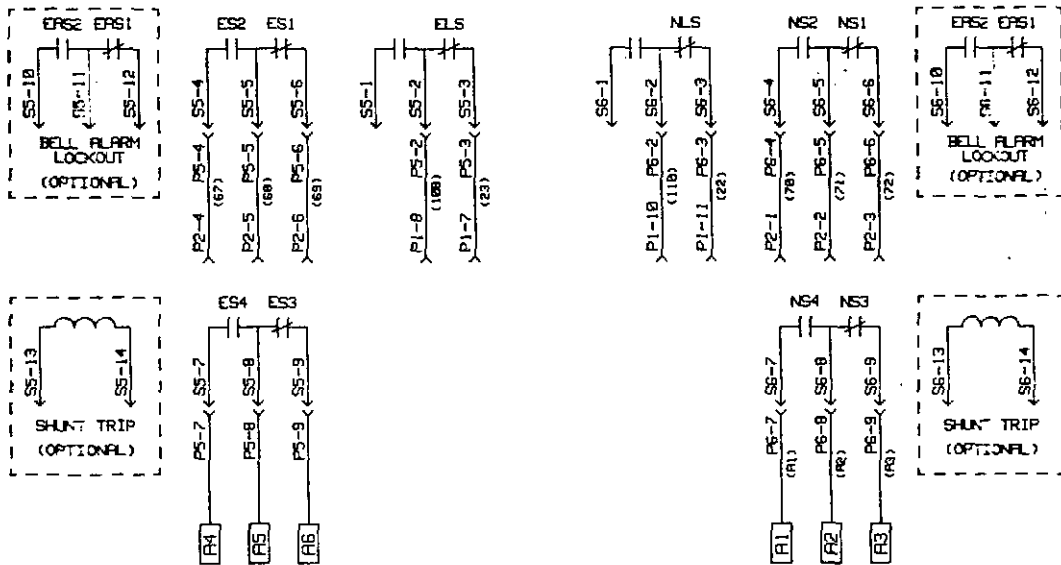
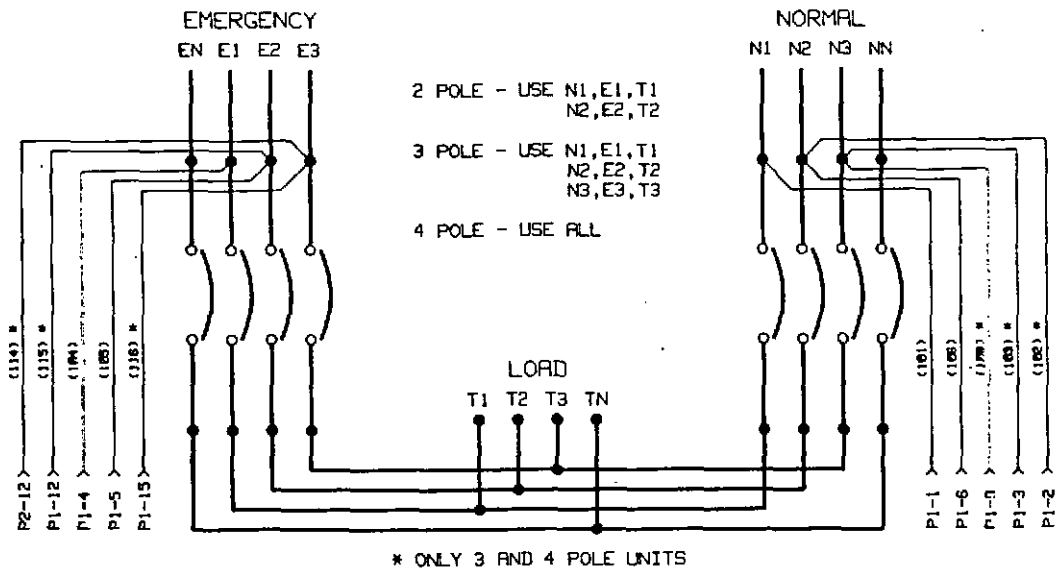
WESTINGHOUSE ELECTRIC CORPORATION
250 WESTINGHOUSE DRIVE
LONDON, KY 40741

SWITCHING PANEL ATSBM, MTSBM, OR ATSBP

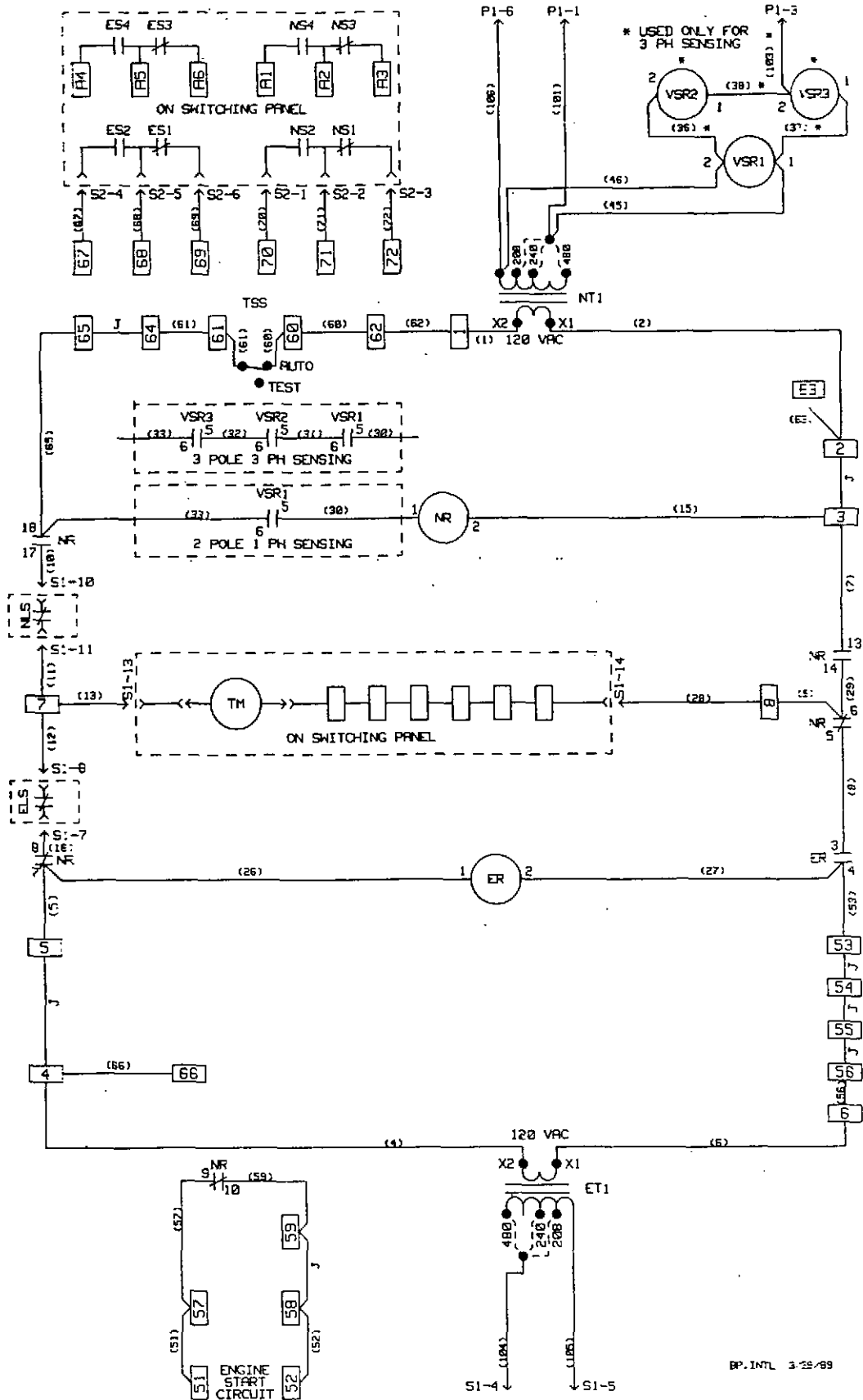


SWITCHING PANEL

SERIES C ONLY (150 AMP OR HIGHER)

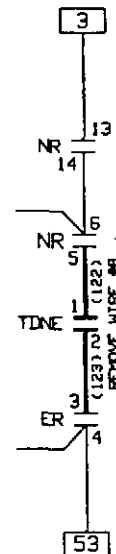
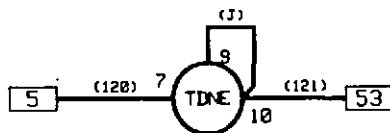


ELECTROMECHANICAL INTELLIGENCE PANEL

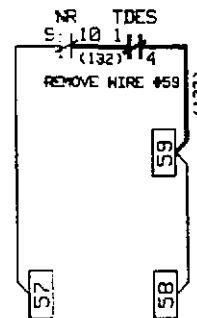
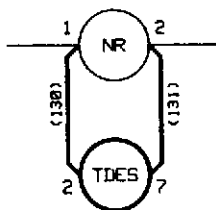




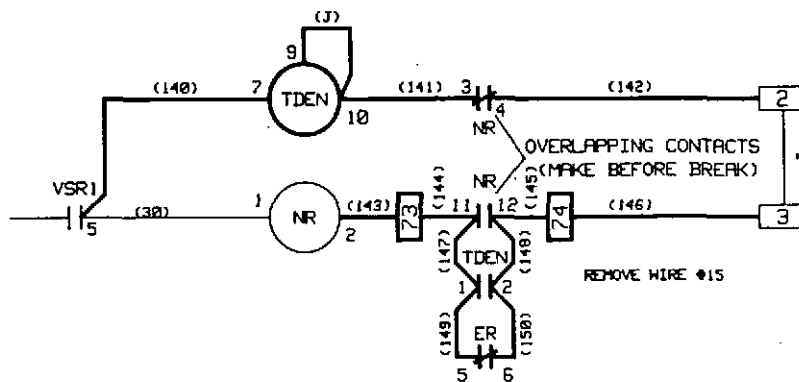
OPTION 1 - TIME DELAY NORMAL TO EMERGENCY (TDNE)
 DELAYS TRANSFER FROM NORMAL TO OVERRIDE
 MOMENTARY VOLTAGE FLUCTUATIONS



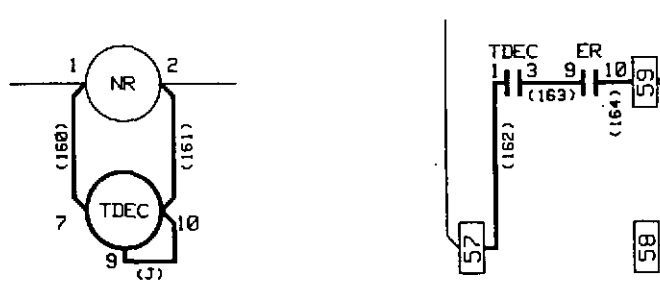
OPTION 2 . TIME DELAY ENGINE START (TDES)
 DELAYS ENGINE START DURING MOMENTARY OUTAGES
 OR VOLTAGE FLUCTUATIONS



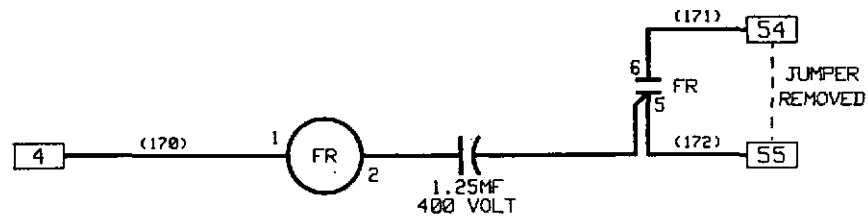
OPTION 3 TIME DELAY EMERGENCY TO NORMAL (TDEN)
 DELAYS TRANSFER FROM EMERGENCY TO PERMIT
 STABILIZATION OF THE NORMAL SUPPLY



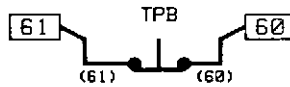
- OPTION 4 TIME DELAY ENGINE COOLDOWN (TDEC) PERMITS THE GENERATOR TO RUN UNDER A NO-LOAD CONDITION AFTER TRANSFER TO NORMAL



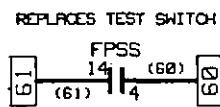
- OPTION 5B - EMERGENCY UV/UF SENSING (FR) PREVENTS TRANSFER TO EMERGENCY UNTIL PROPER VOLTAGE AND FREQUENCY ARE PRESENT



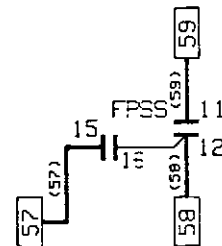
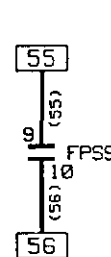
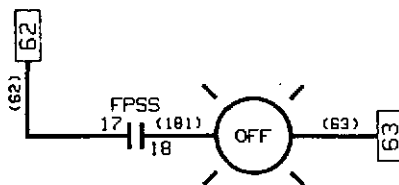
- OPTION 6B - TEST PUSHBUTTON



- OPTION 7 - FOUR POSITION SELECTOR SWITCH (FPSS) PERMIT FOUR MODES OF TRANSFER SWITCH OPERATION TEST - AUTO - OFF - ENGINE RUN

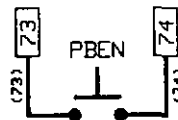


FPSS	9	11	4	15	17
TEST					
AUTO	X	X	X	X	X
OFF	X	X	X	X	X
ENG. RUN	X	X	X	X	X

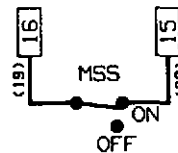


- OPTION 8 A/C - BYPASS TDEN TIMER (PBEN)
 PROVIDES A BYPASS OF TDEN TIMING TO EFFECT
 AN IMMEDIATE TRANSFER TO NORMAL

NOTE: THIS OPTION ONLY AVAILABLE
 WHEN OPTION 3 IS PROVIDED

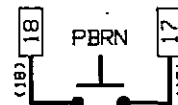


- OPTION 9 - MAINTENANCE SELECTOR SWITCH
 PROVIDES A MOTOR CIRCUIT DISCONNECT TO
 PREVENT TRANSFER DURING ATS MAINTENANCE



- OPTION 11B/D - PUSHBUTTON RESET NORMAL
 PROVIDES PUSHBUTTON RESET OF LOCKOUT

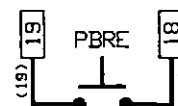
NOTE: ONLY AVAILABLE IF OPTION 11F
 IS PROVIDED



NOTE: NOT AVAILABLE ON 100 AMP

- OPTION 11C/E - PUSHBUTTON RESET EMERGENCY
 PROVIDES PUSHBUTTON RESET OF LOCKOUT

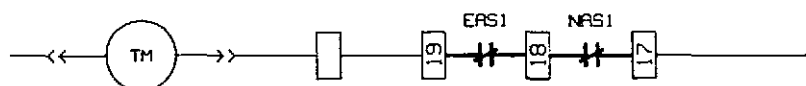
NOTE: ONLY AVAILABLE IF OPTION 11F
 IS PROVIDED



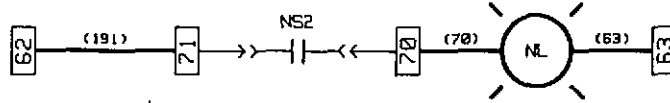
NOTE: NOT AVAILABLE ON 100 AMP

- OPTION 11F - TRIP LOCKOUT
 PREVENTS TRANSFER AFTER BREAKER TRIP
 DUE TO OVERLOAD CONDITION
 (PROVIDED AS STANDARD WITH THERMAL
 MAGNETIC TRIP UNITS)

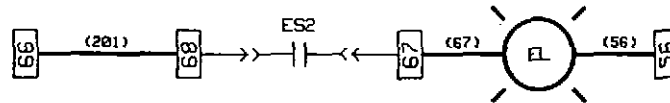
NOTE: NOT USED ON 100 AMP



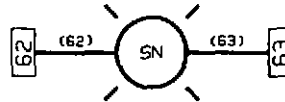
- OPTION 12A/C - NORMAL POSITION LIGHT
INDICATES LOAD IS CONNECTED TO NORMAL



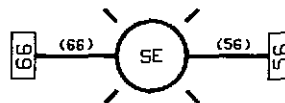
- OPTION 12B/D - EMERGENCY POSITION LIGHT
INDICATES LOAD IS CONNECTED TO EMERGENCY



- OPTION 12E/G - NORMAL SOURCE LIGHT
INDICATES NORMAL SOURCE AVAILABLE

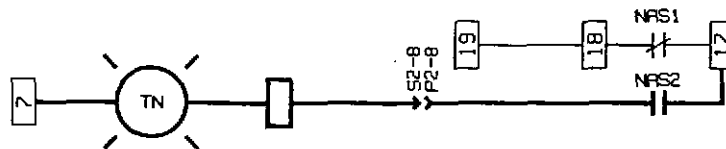


- OPTION 12F/H - EMERGENCY SOURCE LIGHT
INDICATES EMERGENCY SOURCE AVAILABLE



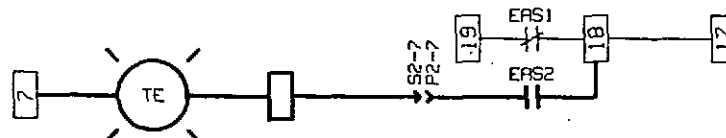
- OPTION 12J/L - NORMAL TRIPPED INDICATOR
INDICATES OVERLOAD TRIP ON NORMAL

NOTE: ONLY AVAILABLE WHEN
OPTION 11F IS SUPPLIED



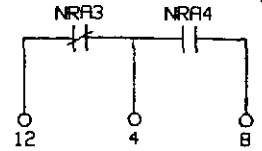
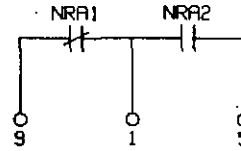
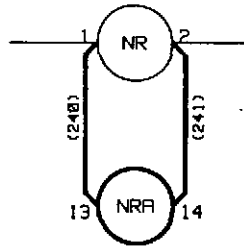
- OPTION 12K/M - EMERGENCY TRIPPED INDICATOR
INDICATES OVERLOAD TRIP ON EMERGENCY

NOTE: ONLY AVAILABLE WHEN
OPTION 11F IS SUPPLIED

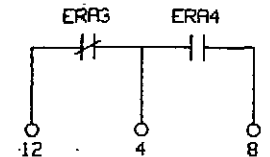
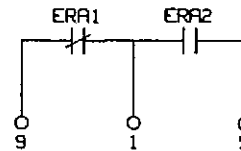
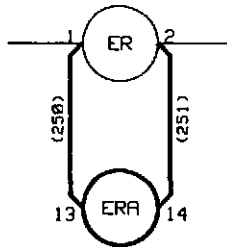




OPTION 14A - NORMAL AUXILIARY RELAY (NRA)
PROVIDES ADDITIONAL RELAY
CONTACTS ON NORMAL

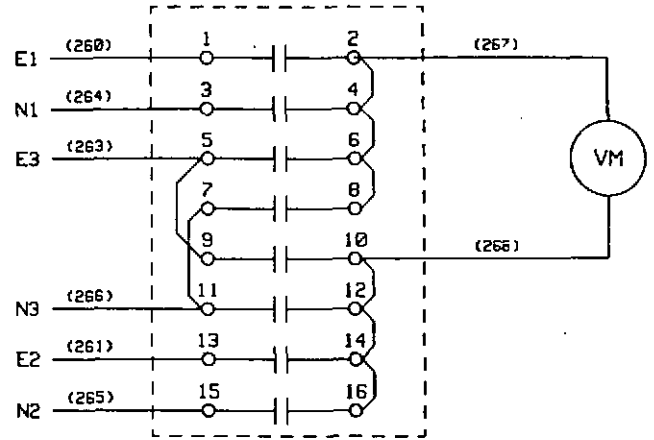


OPTION 14B - EMERGENCY AUXILIARY RELAY (ERA)
PROVIDES ADDITIONAL RELAY
CONTACTS ON EMERGENCY



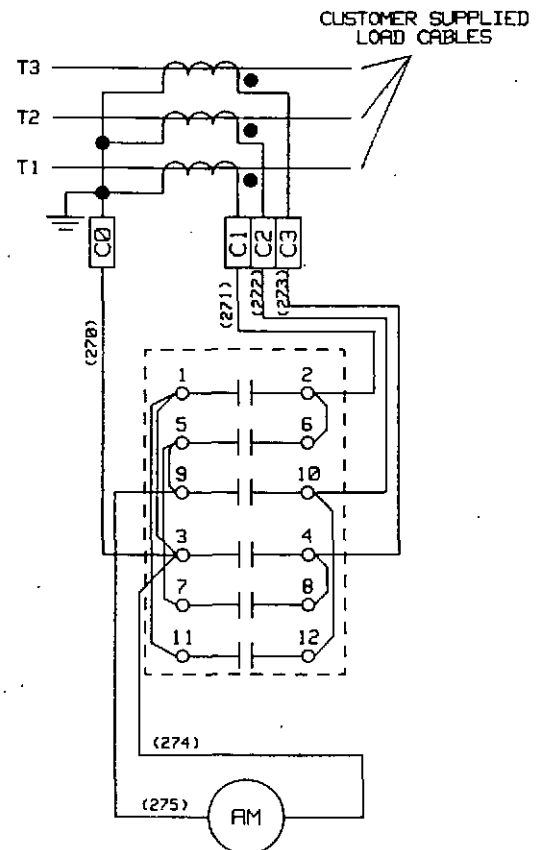
OPTION 18E - VOLTMETER

	HANDLE POSITION					
	NORMAL			EMERGENCY		
	1-3	2-3	1-2	1-2	2-3	1-3
1 - - 2				X		X
3 - - 4	X		X			
5 - - 6					X	
7 - - 8		X				
9 - - 10						X
11 - - 12	X					
13 - - 14				X	X	
15 - - 16		X	X			

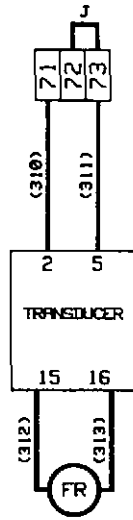


OPTION 18F - AMMETER

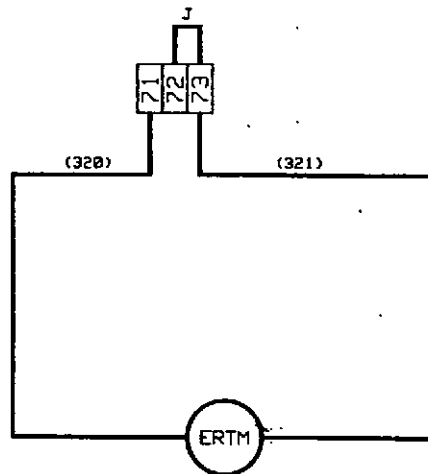
	HANDLE POSITION					
	OFF	- 1	- 2	- 3	-	-
1 - - 2	X	X	X	X	X	X
3 - - 4	X	X	X	X	X	X
5 - - 6		X	X	X	X	X
7 - - 8			X	X	X	X
9 - - 10				X	X	X
11 - - 12	X	X	X	X	X	X



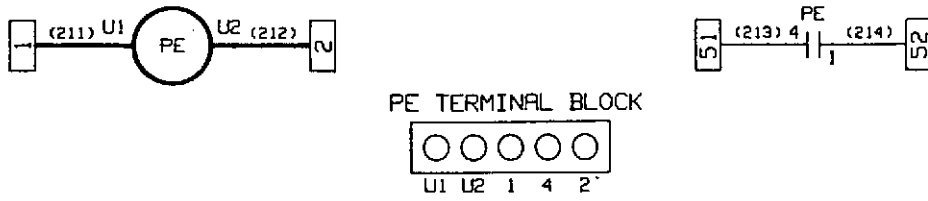
OPTION 18G - FREQUENCY METER



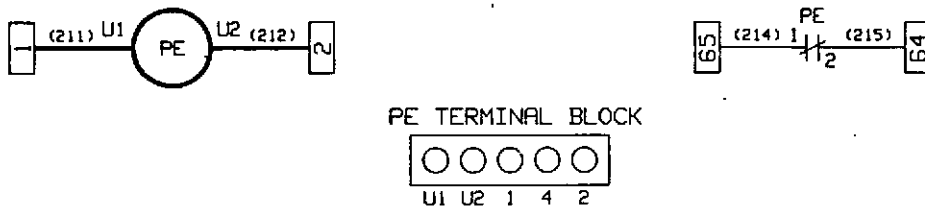
OPTION 18H - RUNNING TIME METER



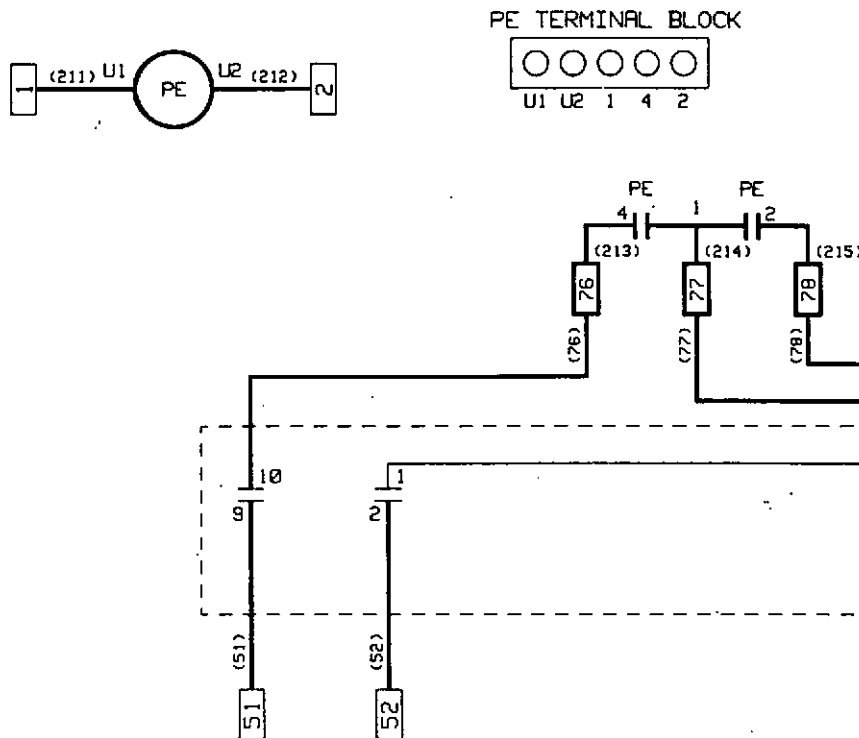
- OPTION 23C - PLANT EXERCISER
RUN ENGINE AT SPECIFIED TIME - NO LOAD



- OPTION 23D - PLANT EXERCISER
RUN ENGINE AT SPECIFIED TIME - LOAD



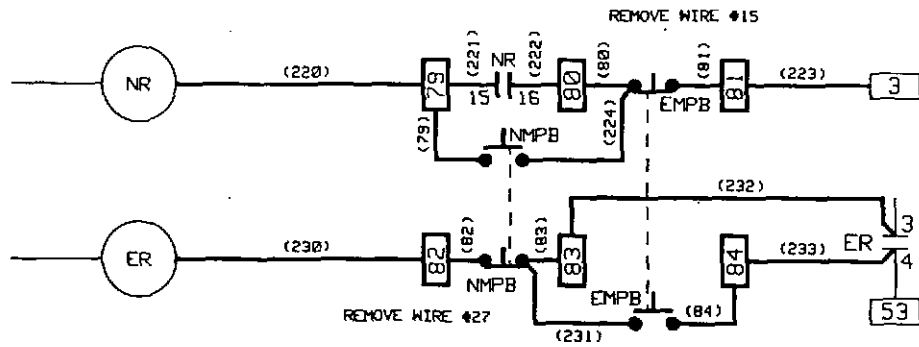
- OPTION 23G - PLANT EXERCISER
RUN ENGINE AT SPECIFIED TIME - LOAD OR NO LOAD
(SWITCH SELECTABLE)



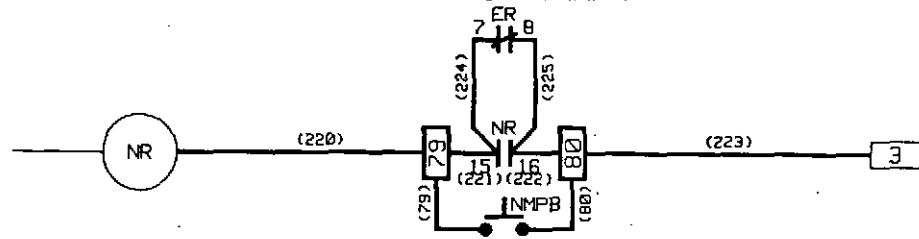
		ENGINE RUN	BYPASS	LOAD TEST
1	2	X		
5	6			X
7	8	X	X	
9	10	X		
11	12			X

REMOVE JUMPER 64-65

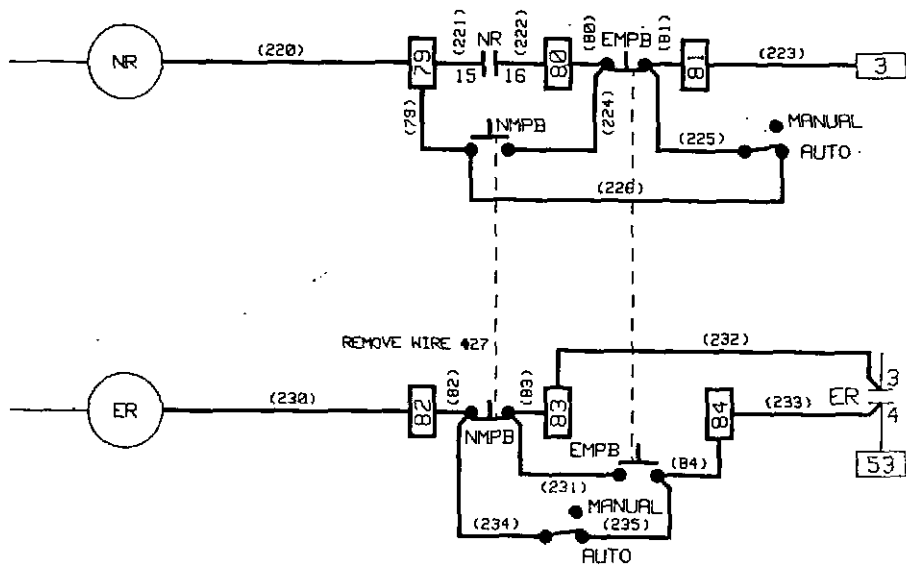
OPTION 29 B/D - PUSHBUTTON (MANUAL) OPERATION



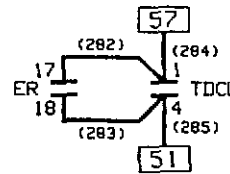
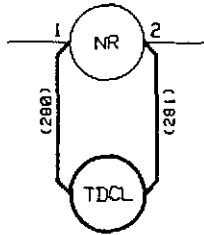
OPTION 29 C/E - MANUAL RETURN TO NORMAL



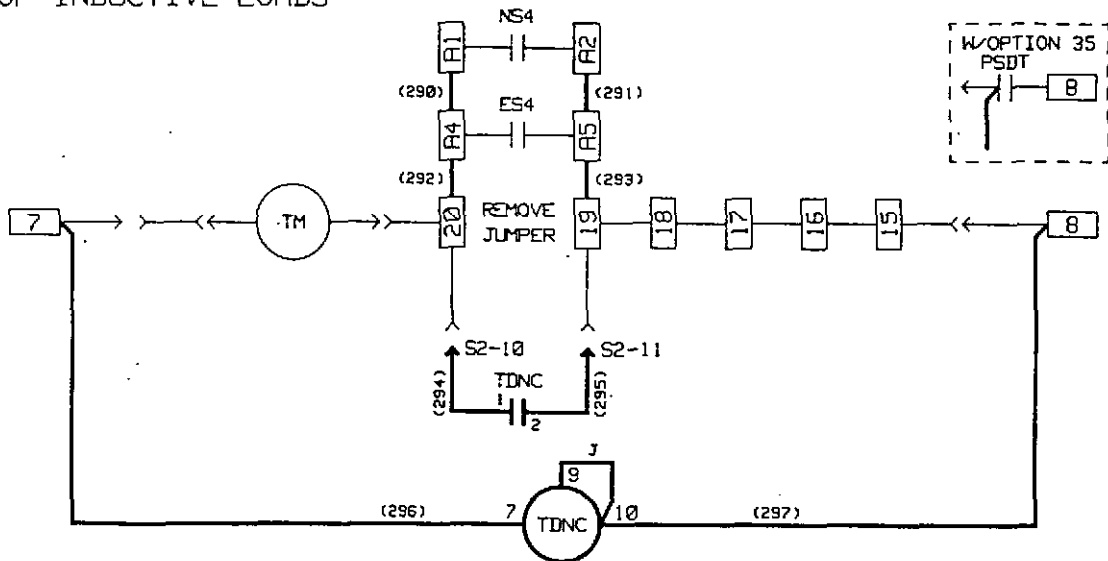
OPTION 29 F/G - AUTO/MANUAL OPERATION



OPTION 30 - TIME DELAY CRANK LIMITER (TDCL)
 INTERRUPTS ENGINE START CIRCUIT IF VOLTAGE DOES
 NOT APPEAR WITHIN A PRESELECTED TIME



OPTION 32 - TIME DELAY NEUTRAL (TDN)
 PROVIDES A TIME DELAY IN THE NEUTRAL POSITION WHEN THE
 LOAD IS TRANSFERRED IN EITHER DIRECTION TO PREVENT EXCESSIVE
 INRUSH CURRENTS DUE TO OUT-OF-PHASE SWITCHING
 OF INDUCTIVE LOADS



OPTION 35 - PRETRANSFER SIGNAL DEVICE
 RELAY CONTACTS CHANGE STATE PRIOR TO TRANSFER
 WITH PRESET TIME DELAY

