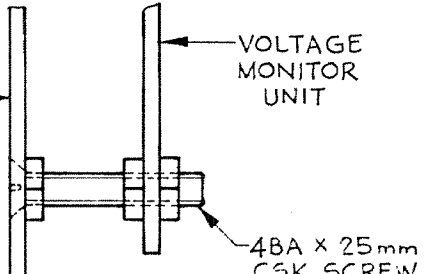
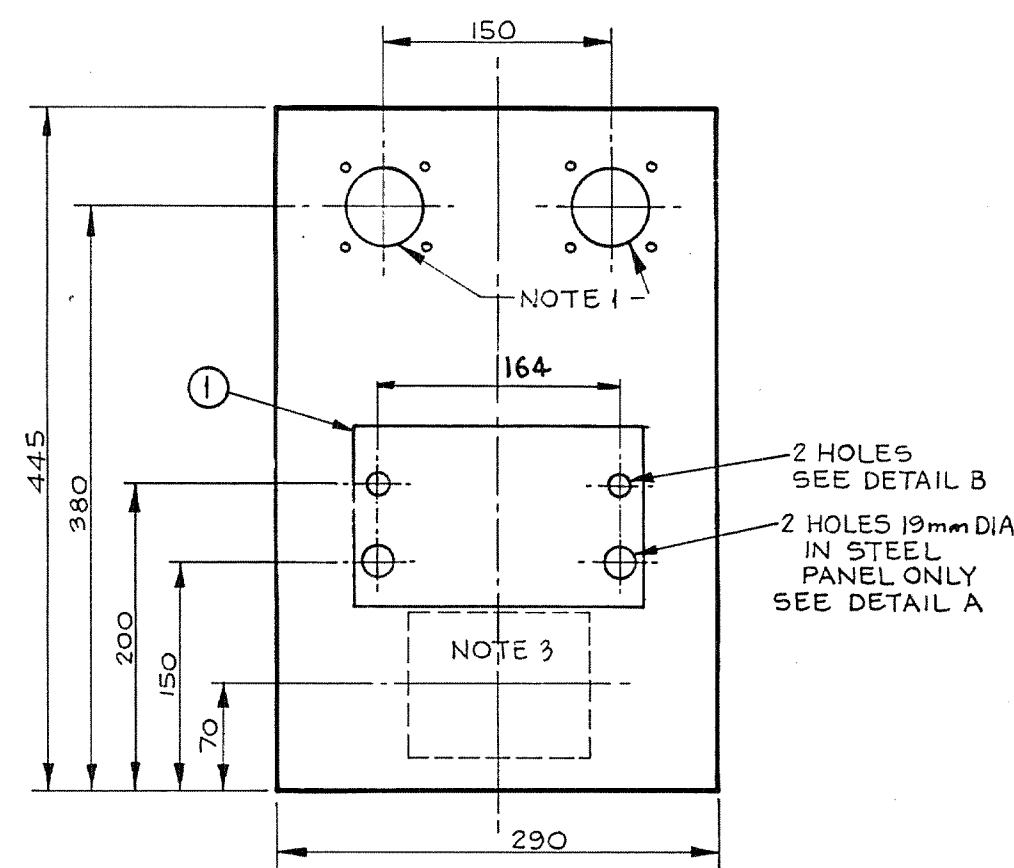


DETAIL B

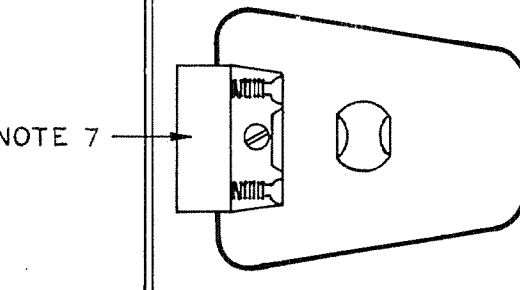


DETAIL C

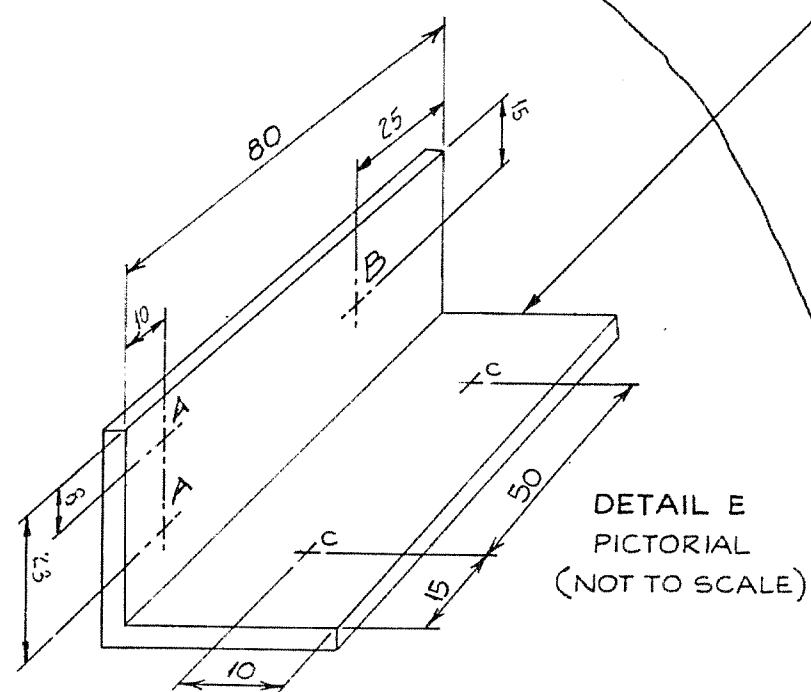


DETAIL D

DETAIL 'E' (SEE BELOW)
CABLE TERMINATION
 (MOUNT TO PANEL WITH M8 SET SCREWS)
 MATERIAL: 38 x 38 x 4.7 BRASS ANGLE.
 FINISH: FREE FROM BURRS, CLEAN AND BRIGHT.
 QUANTITY: THREE PER CABINET.
 DRILLINGS: A - TO CLEAR M5 x 20mm SET SCREW.
 B - TO CLEAR M10 x 40mm SET SCREW.
 C - TO CLEAR M8 x 25mm SET SCREW

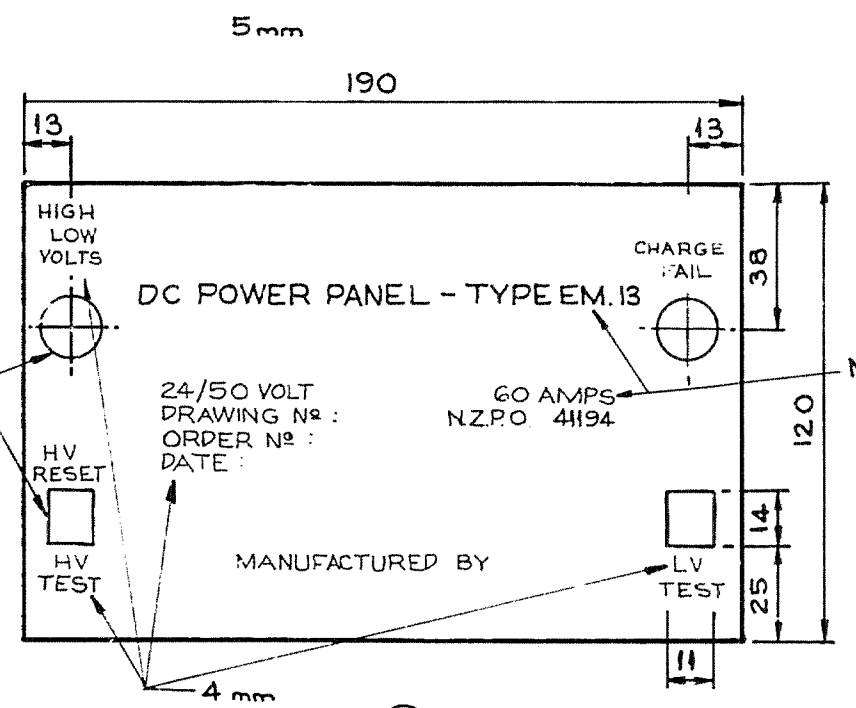


NOTE 7

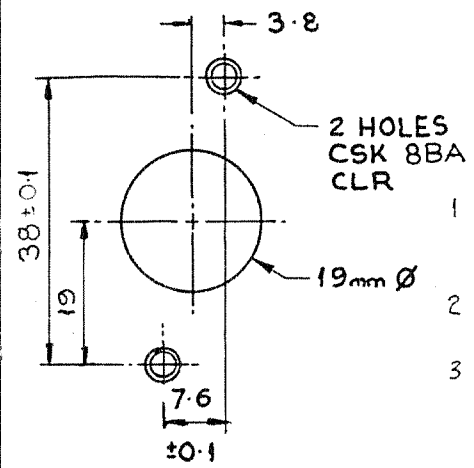


DETAIL E PICTORIAL (NOT TO SCALE)

BASIC PANEL LAYOUT



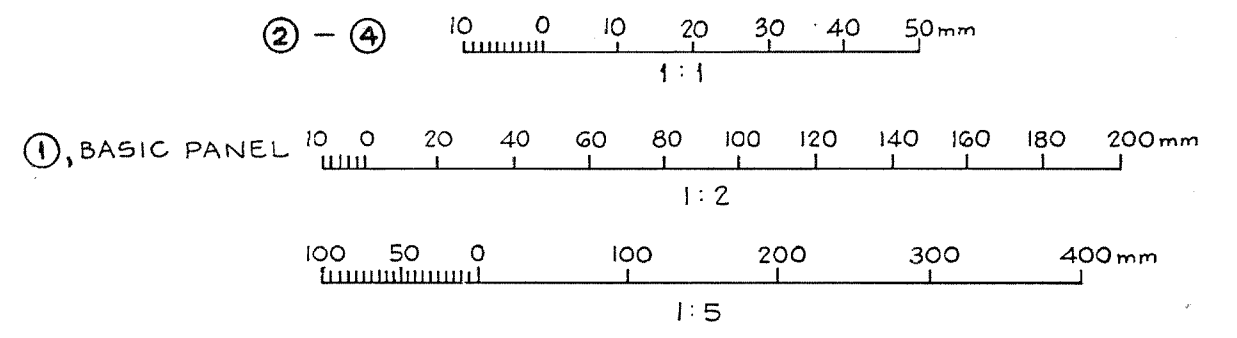
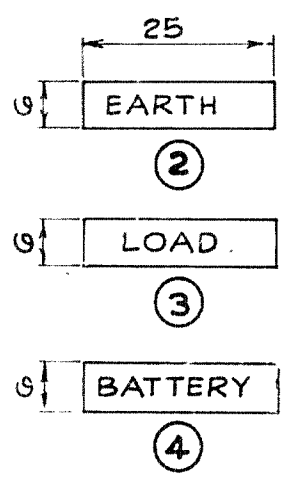
NOTE 10



DETAIL A DIMENSIONS FOR DRILLING STEEL PANEL

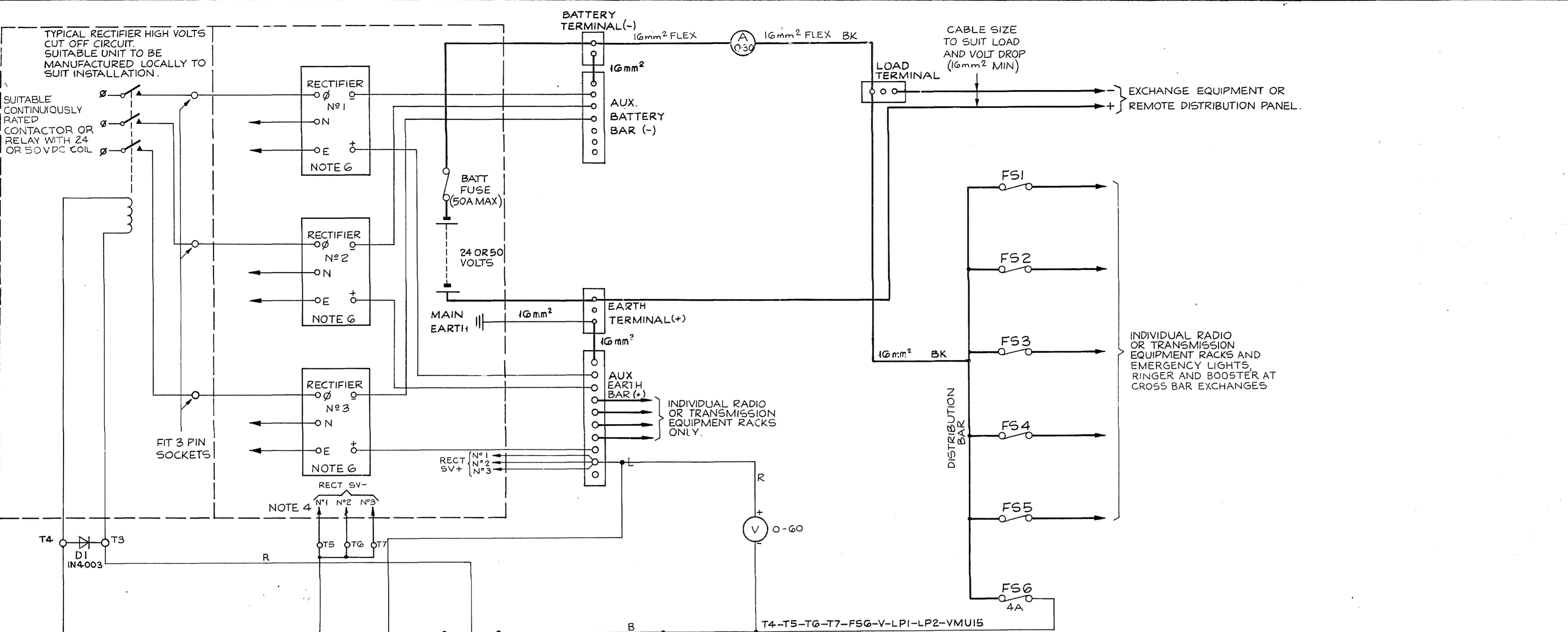
NOTES

- CUT METER HOLES TO SUIT MATCHED PAIR VOLTMETER AND AMMETER. SUPPLIED BY NZPO. 30A PANELS HAVE 30A METERS. 60A PANELS HAVE 60A METERS.
- AMMETER IS EQUIPPED WITH AN EXTERNAL SHUNT, MOUNT SHUNT ON CENTRE LINE SHOWN USING PORCELAIN BUSBAR INSULATORS AS REQUIRED
- MOUNTING CENTRE FOR VOLTAGE MONITOR UNIT WHICH MOUNTS ON INSIDE OF DOOR IN ACCORDANCE WITH DETAIL C. FOR FURTHER DETAILS REFER TO DRG NZPO 39742 AND NOTES PR2103
- MOUNTING POSITION FOR INSULATED TERMINAL BLOCK FOR EXTERNAL ALARM AND CONTROL WIRING. A SINGLE 8 WAY BLOCK IS TO BE USED
- MANUFACTURER TO PROVIDE SET SCREWS (REF DETAIL 'E' DRILLINGS) AND NUTS. M10 TO BE HIGH TENSILE WITH FOUR BELLEVILLE WASHERS PER PANEL
- FOR FURTHER MANUFACTURING DETAILS SEE SPECIFICATION EM85.
- 'GAEL' TYPE CATCH SHOWN. OTHER TYPES MAY BE USED
- CABLE SOCKETS SHOWN FOR EXPLANATORY PURPOSES ONLY. THESE ITEMS WILL BE SUPPLIED BY THE POST OFFICE.
- PREVIOUS PANELS WERE MADE TO DRG 39741
- FOR TYPE EM 12, LABEL READS "24/50V 30A TYPE EM 12"



① TO ④ MATERIAL: 1.6mm TRAFFOLITE OR 0.5mm MIN. ETCHED ALUMINIUM. FINISH: BLACK WITH WHITE CHARACTERS
 QUANTITY: ONE OFF EACH
 NOTES: 1. ALL CHARACTERS 2.4mm UNLESS OTHERWISE STATED.

DC POWER PANEL						TYPE EM 12 (30A) AND EM 13 (60A) 24/50 VOLT CONSTRUCTION DETAILS		
DEL	CKD	APD	ORDER	DATE	ISS	CHANGE		
ACO	LRB	GBC	112153	20.9.77	A	NO CHANGE SHOWN		
ACO	LRB	GBC	117291	7.4.78	B	PANEL LAYOUT CHANGE		
ACO	LRB	GBC	18290	28.2.79	D	TITLE & DETAIL 'E' MATERIAL CHANGED ETH STRAP DELETED		
DDP	LRB	GBC	09947	23.11.79	E	LABEL CHANGED		
						N Z P O		ENGINEER-IN-CHIEF WELLINGTON
						COY NO	ORIGIN:EM(POW)	
						1 OF 4	DRAWN E-M	TRACED
						A2	41194	



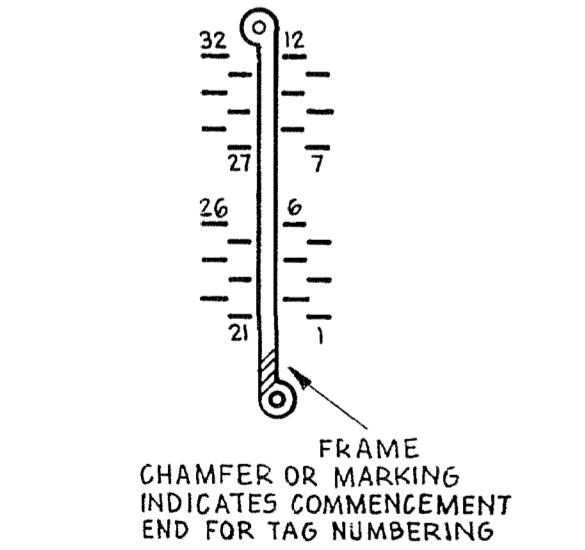
TYPICAL RECTIFIER HIGH VOLTS CUT OFF CIRCUIT. SUITABLE UNIT TO BE MANUFACTURED LOCALLY TO SUIT INSTALLATION.

SUITABLE CONTINUOUSLY RATED CONTACTOR OR RELAY WITH 24 OR 50V DC COIL

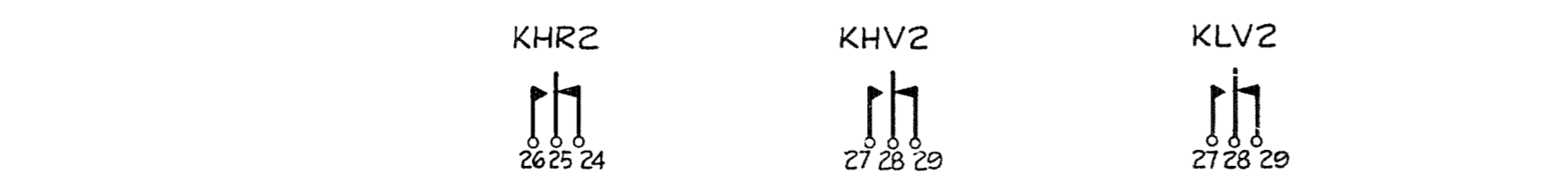
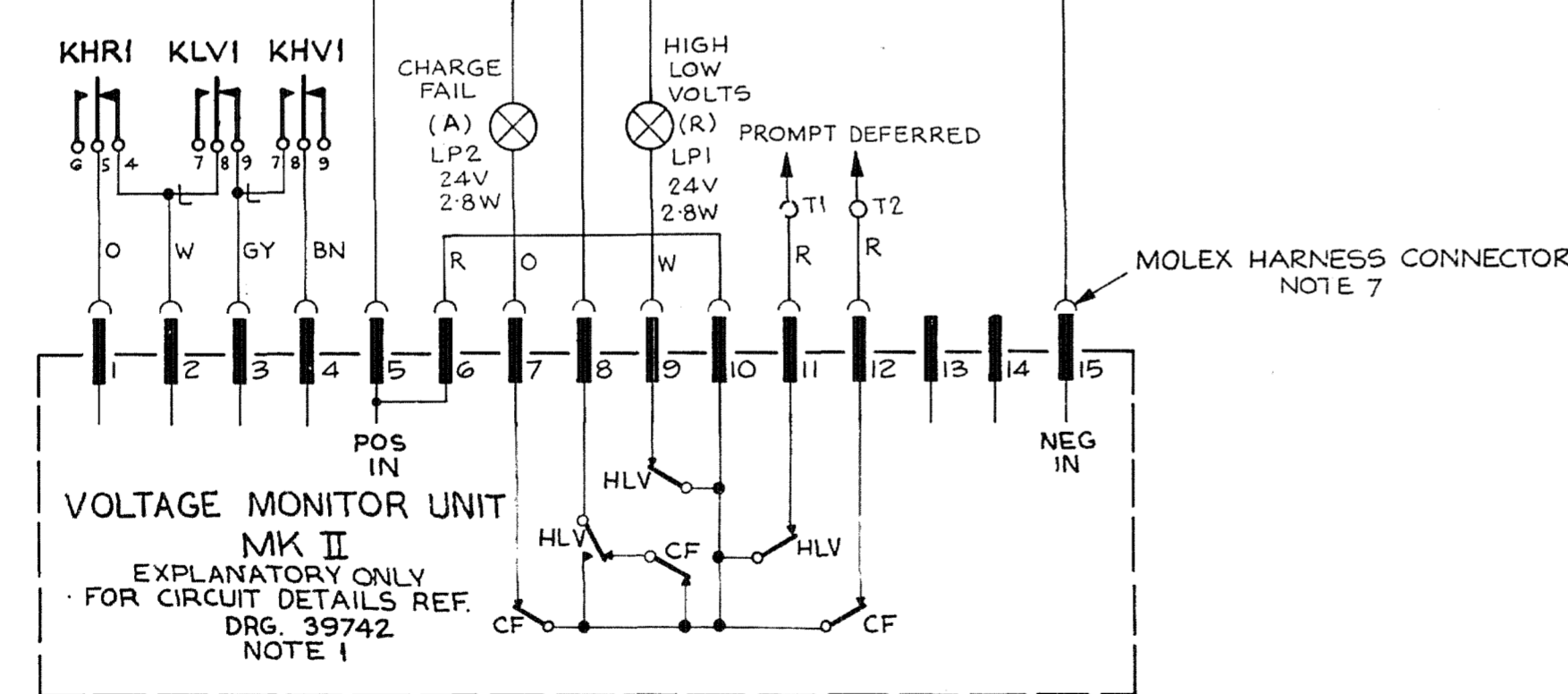
FIT 3 PIN SOCKETS

T4 T3 D1 IN4-003

NUMBERING OF 1000 TYPE KEYS (AS SEEN FROM REAR)



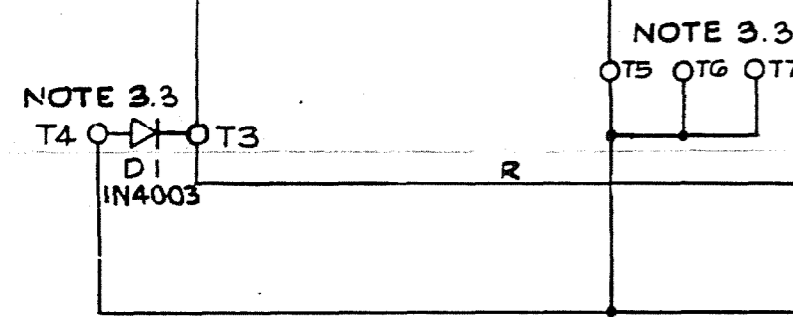
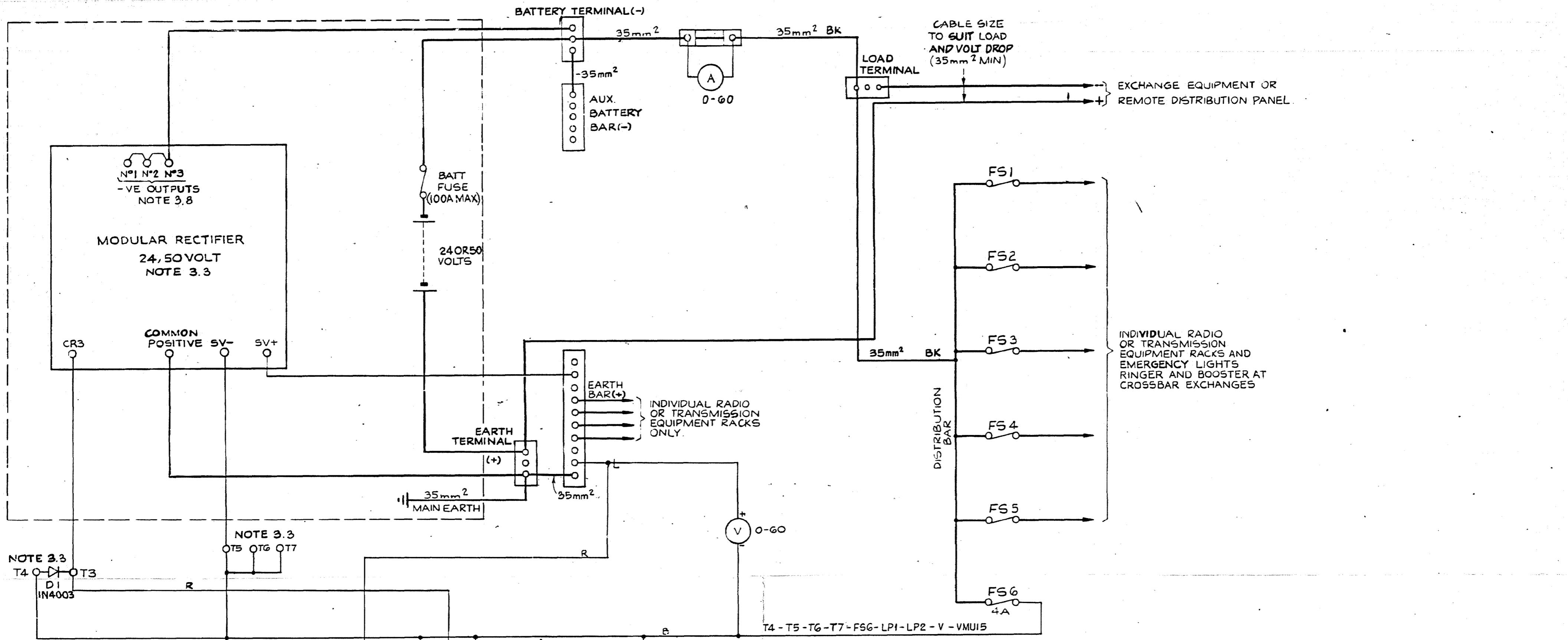
NB SPRING POSITIONS ARE COUNTED WHETHER EQUIPPED OR NOT



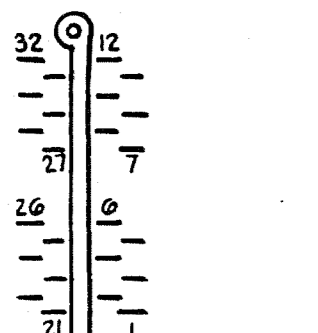
HIGH VOLTS RESET (KHR)	+	TEST HIGH VOLTS (KHV)	+	TEST CHARGE FAIL & LOW VOLTS (KLV)
2		2		2

- NOTES:**
- VOLTAGE MONITOR UNIT IS TO BE SET IN ACCORDANCE WITH THE VOLTAGES SPECIFIED IN E.I. POWER GENERAL A4010. NOTES PR2103 GIVE DETAILED INSTRUCTIONS FOR ADJUSTING THE UNIT AND OPERATING THIS PANEL.
 - ALL INTERNAL WIRING IS TO BE 16/20 UNLESS OTHERWISE SPECIFIED. COLOUR CODE IS :- R-RED, B-BLUE, BK-BLACK, Y-YELLOW, G-GREEN, W-WHITE, O-ORANGE, GY-GREY, BN-BROWN.
 -
 - TYPICAL RECTIFIER AND BATTERY ARRANGEMENT SHOWN FOR EXPLANATORY PURPOSES. ITEMS ENCLOSED BY DOTTED LINES DO NOT FORM PART OF PANEL.
 - FOR CONSTRUCTION DETAILS SEE SH. 1.
 - RECTIFIERS NOT TO BE OPERATED ON BOOST. BOOST POTENTIOMETERS ARE TO BE LEFT IN 'MIN' POSITION.
 - THE VOLTAGE MONITOR UNIT HAS 24V AND 50V CONNECTION POINTS. CARE MUST BE TAKEN WHEN PLUGGING IN THE HARNESS CONNECTOR THAT THE RELEVANT OPERATING VOLTAGE POSITION IS SELECTED.
 - CABLE SIZES ARE METRIC. IMPERIAL EQUIVALENTS MAY BE USED.
 - PREVIOUS PANELS WERE MADE TO DRG. 39741

DC POWER PANEL						TYPE EM 12 (30A) 24/50 VOLT		CIRCUIT DIAGRAM	
DEL	CKD	APD	ORDER	DATE	ISS	CHANGE		N Z P O	
AGO	LRB	GBC	144159	20-9-77	A			ENGINEER-IN-CHIEF WELLINGTON	
202	LRB	GBC	147555	1-4-78	B	AND CHANGE SHIT 4 ADDED.		COY NO	
215	ITPM	GBC	182452	11-7-78	C	NOTE 2 CHANGED		ORIGIN:EM(POW)	
222	LRB	GBC	18290	28-2-79	D	REFERENCE TO 12V DELETED.		DRAWN: E.M. TRACED: AGO	
109	LRB	GBC	09947	23-11-79	E	DI ADDED MINOR AMD.		2 OF 4	
								A2	
								41194	

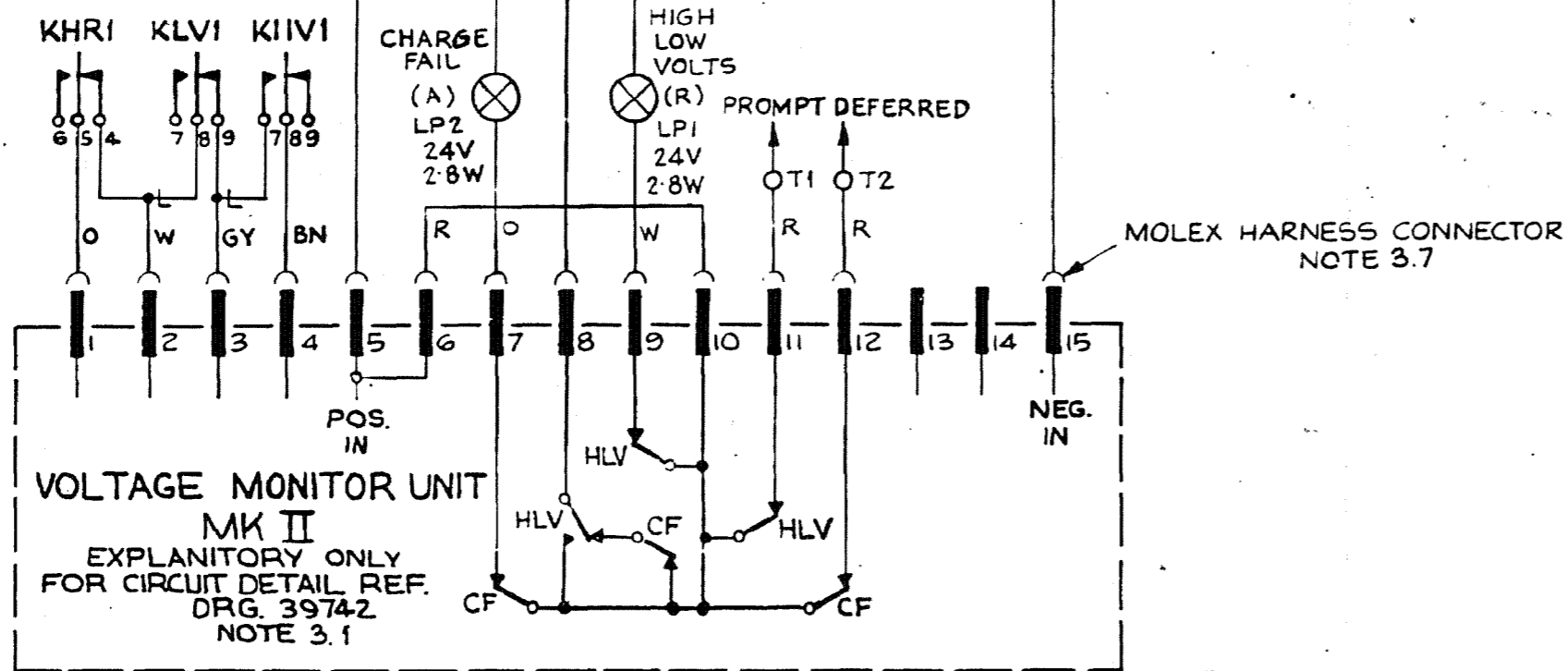


NUMBERING OF 1000 TYPE KEYS
(AS SEEN FROM REAR)

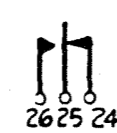


FRAME
CHAMFER OR MARKING
INDICATES COMMENCEMENT
END FOR TAG NUMBERING.

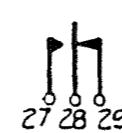
NB SPRING POSITIONS ARE COUNTED
WHETHER EQUIPPED OR NOT



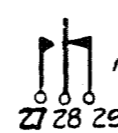
KHR2



KHV2



KLV2



HIGH VOLTS RESET (KHR)	TEST HIGH VOLTS (KHV)	TEST CHARGE FAIL & LOW VOLTS (KLV)
2	2	2

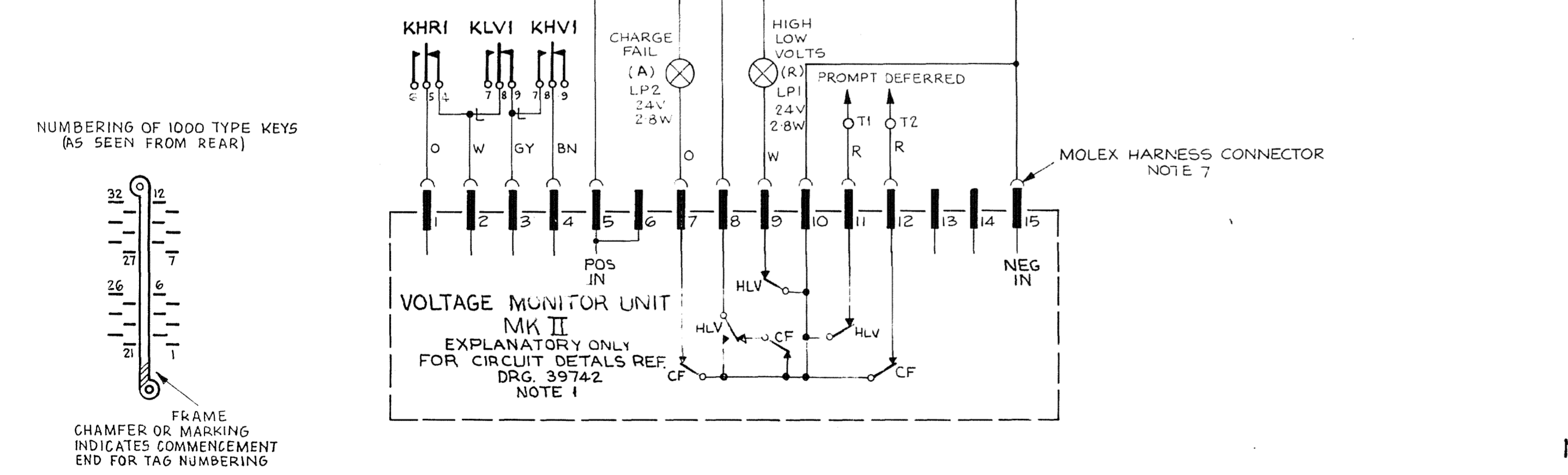
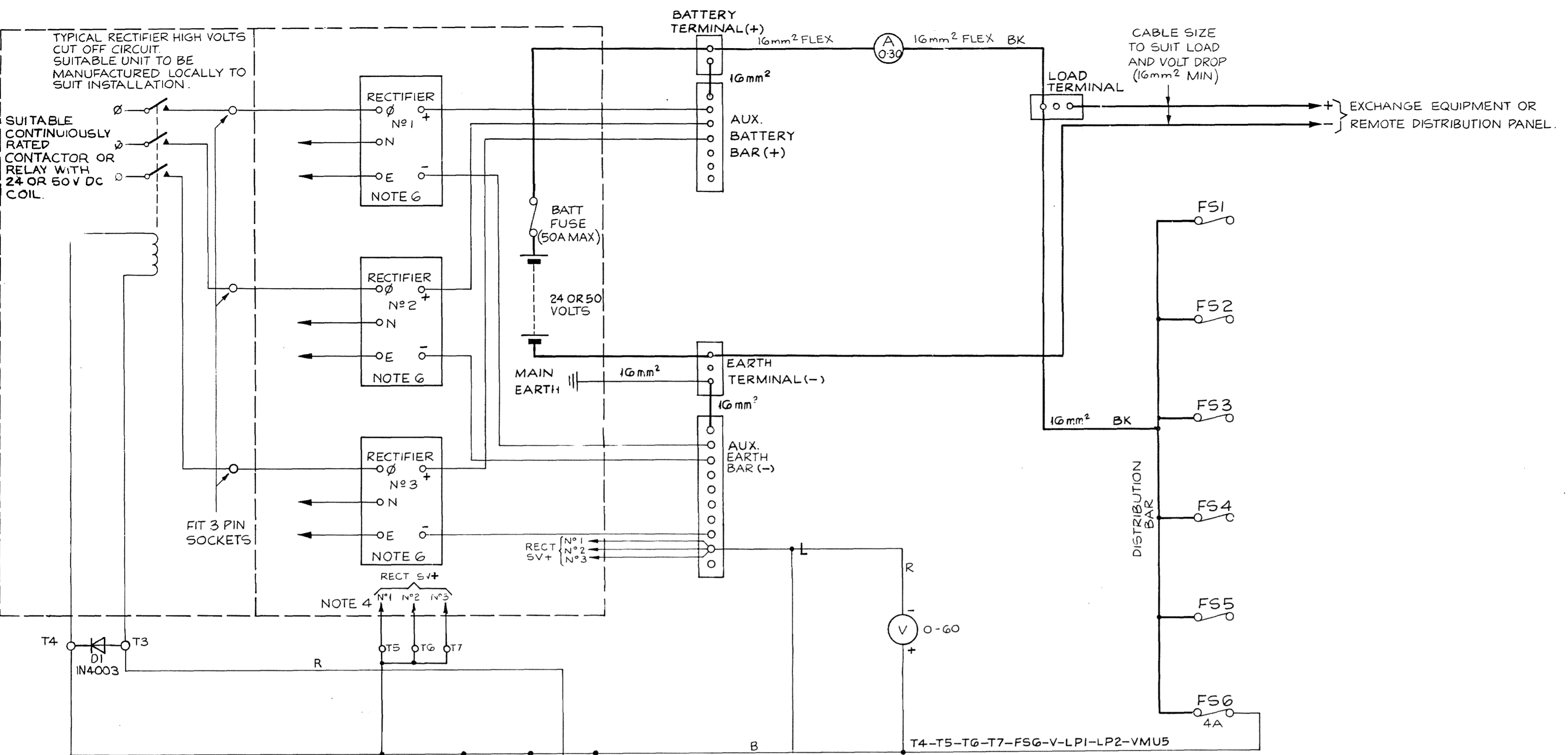
NOTES:

- VOLTAGE MONITOR UNIT IS TO BE SET IN ACCORDANCE WITH THE VOLTAGES SPECIFIED IN E.I. POWER GENERAL A4010. NOTES PR2103 GIVE DETAILED INSTRUCTIONS FOR ADJUSTING THE UNIT AND OPERATING THIS PANEL.
- ALL INTERNAL WIRING IS TO BE 16/20 UNLESS OTHERWISE SPECIFIED. COLOUR CODE IS :- R-RED, B-BLUE, BK-BLACK, Y-YELLOW, G-GREEN, W-WHITE, O-ORANGE, GY-GREY, BN-BROWN.
- WHEN STATIC RECTIFIERS ARE USED INSTEAD OF MODULAR RECTIFIER, WIRE RECTIFIER CABLES AND SENSING LEADS AS SHOWN ON SHEET 2.
- TYPICAL RECTIFIER AND BATTERY ARRANGEMENT SHOWN FOR EXPLANATORY PURPOSES. ITEMS ENCLOSED BY DOTTED LINES DO NOT FORM PART OF PANEL.
- FOR CONSTRUCTION DETAILS SEE SHT. 1.
- CABLE SIZES ARE METRIC, IMPERIAL EQUIVALENTS MAY BE USED.
- THE VOLTAGE MONITOR UNIT HAS 24V AND 50V CONNECTION POINTS CARE MUST BE TAKEN WHEN PLUGGING IN THE HARNESS CONNECTOR THAT THE RELEVANT OPERATING VOLTAGE POSITION IS SELECTED.
- ON EARLY MODEL S.T.C. MODULAR RECTIFIER SETS, THE NEGATIVE OUTPUT IS TO BE TAKEN DIRECTLY FROM THE -VE FLOAT TERMINAL. THIS TERMINAL MUST NOT BE STRAPPED TO THE -VE BOOST TERMINAL. THE STRAPPING ARRANGEMENT SHOWN RELATES ONLY TO LATER MODEL RECTIFIER SETS.
- PREVIOUS PANELS WERE MADE TO DRAWING 39741.

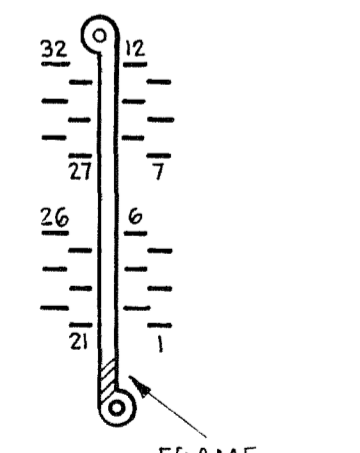
DC POWER PANEL
TYPE EM 13 (60A) 24/50 VOLT
CIRCUIT DIAGRAM

DEL	CHD	APD	ORDER	DATE	ISS	CHANGE	N.Z.P.O.
AG0	LRB	GBC	144169	20.3.78	A		ENGINEER-IN-CHIEF WELLINGTON
52	LRB	GBC	147353	17.4.78	B	NO CHANGE SH1 & ADDED	
17	TPM	GBC	182655	18.7.78	C	DISTRIBUTION BAR CHANGED	ORIGIN EM(POW)
2	LRB	GBC	182900	28.2.79	D	FUSES RENUMBERED	
10	LRB	GBC	182900	28.11.79	E	DIAGRAM MINOR AMP	
17	LRB	GBC	18410	16.9.81	F	MINOR AMP	

3 OF 4 DRAWN: E-M TRACED: AGO
A2 41194

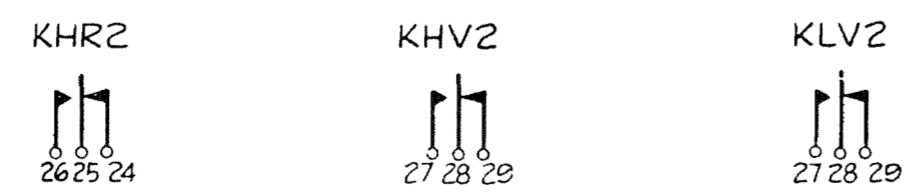


NUMBERING OF 1000 TYPE KEYS (AS SEEN FROM REAR)



FRAME CHAMFER OR MARKING INDICATES COMMENCEMENT END FOR TAG NUMBERING

NB SPRING POSITIONS ARE COUNTED WHETHER EQUIPPED OR NOT



HIGH VOLTS RESET (KHR)	+ TEST HIGH VOLTS (KHV)	TEST CHARGE FAIL & LOW VOLTS (KLV)
2	2	2

NOTES:

- VOLTAGE MONITOR UNIT IS TO BE SET IN ACCORDANCE WITH THE VOLTAGES SPECIFIED IN E.I. POWER GENERAL A4010. NOTES PR2103 GIVE DETAILED INSTRUCTIONS FOR ADJUSTING THE UNIT AND OPERATING THIS PANEL.
- ALL INTERNAL WIRING IS TO BE 16/20 UNLESS OTHERWISE SPECIFIED. COLOUR CODE IS :- R-RED, B-BLUE, BK-BLACK, Y-YELLOW, G-GREEN, W-WHITE, O-ORANGE, GY-GREY, BN-BROWN.
- IF A 30 AMP PANEL EM12 IS NOT AVAILABLE, THEN PANEL TYPE EM13 SHOULD BE USED INSTEAD.
- TYPICAL RECTIFIER AND BATTERY ARRANGEMENT SHOWN FOR EXPLANATORY PURPOSES. ITEMS ENCLOSED BY DOTTED LINES DO NOT FORM PART OF PANEL.
- FOR CONSTRUCTION DETAILS SEE SH.1
- RECTIFIERS NOT TO BE OPERATED ON BOOST. BOOST POTENTIOMETERS ARE TO BE LEFT IN 'MIN' POSITION.
- THE VOLTAGE MONITOR UNIT HAS 24V AND 50V CONNECTION POINTS. CARE MUST BE TAKEN WHEN PLUGGING IN THE HARNESS CONNECTOR THAT THE RELEVANT OPERATING VOLTAGE POSITION IS SELECTED.
- CABLE SIZES ARE METRIC. IMPERIAL EQUIVALENTS MAY BE USED.
- PREVIOUS PANEL WERE MADE TO UKA 12741

NOT TO BE USED FOR NEW WORK - SEE DRG. NZPO 42004

DC POWER PANEL										
MODIFIED TYPE EM 12 (30A) 24/50 VOLT NEGATIVE EARTH										
CIRCUIT DIAGRAM										
DEL	CKD	APD	ORDER	DATE	ISS	CHANGE	NZPO			ENGINEER-IN-CHIEF WELLINGTON
DI	LRB	JBL	141253	7-4-76	B	NEW SHEET	COY NO	ORIGIN: EM(POV)		
TA	TPM	GBC	18295	21-7-78	C	NOTE 2 CHANGED				
47	LRB	GBC	18290	28-2-79	D	REFERENCE TO 12V DELETED.				
10P	LRB	GBC	09947	23-11-75	E	DIAGNOSTIC MINOR AMD				
							4 OF 4	DRAWN: E-M	TRACED: AGO	
							A2	41194		