

LINE-ISOLATING UNITS No.1A AND No.2A

(NOTES 4 AND 5)

NOTES :-

- 1 CONNECT 50V. POWER SUPPLY TO + AND - OF TERMINAL BLOCK.
- 2 IF A SUITABLE APPROVED 50 VOLT D.C. SUPPLY IS AVAILABLE IT SHOULD BE USED OTHERWISE THE POWER SUPPLY SHOULD BE BY ONE OF THE FOLLOWING METHODS.

NUMBER OF UNITS	WHEN A POWER UNIT IS USED		WHEN A STANDBY BATTERY IS REQUIRED
	POWER UNIT	CABLING ARRANGEMENTS	APPARATUS - SEE INDIVIDUAL ITEM N DGMs. FOR CABLING ARRANGEMENTS
1-2	POWER UNIT NO.50A OR NO.100A/1	CABLE 2W 0.5mm LOOPED IN ALL UNITS	RECTIFIER 52V. 0.5 AMP WITH BATTERY UNIT NO. 2A
3-5	POWER UNIT NO.51A OR NO.100A/1	CABLE 2W 0.5mm LOOPED IN ALL UNITS	RECTIFIER 52V. 0.5 AMP WITH BATTERY UNIT NO. 2A
6-8	POWER UNIT NO.52A OR NO.100A/2 (NOTE 3a)	CABLE 4W 0.5mm LOOPED IN ALL UNITS	RECTIFIER 140/1.5 WITH 24 CELLS SECONDARY NO. 21/30
9-20	POWER UNIT NO.62A OR NO.100A/4 (NOTE 3b)	CABLE 6W 0.5mm LOOPED IN ALL UNITS	RECTIFIER 152C/5 WITH 24 CELLS SECONDARY NO. 21/30

- 3(a) POWER UNIT SHOULD BE MODIFIED TO ONE 2 AMP OUTPUT
- (b) POWER UNIT SHOULD BE MODIFIED TO ONE 4 AMP OUTPUT

TABLE 1

COMPONENT SCHEDULE FIG.1	
CCT CODE	DESCRIPTION
C2	CAPACITOR. PAPER NO. 7725
MRI & MR2	RECTIFIER ELEMENT NO. 1/12 AZ
A	RELAY P.O. NO. 3599
C	RELAY P.O. NO. 10184
B	RELAY P.O. NO. 12367
R2 & R6	RESISTOR, COIL NO.9 510Ω
R5	RESISTOR, COIL NO.12 350Ω
R3 & R4	RESISTOR, COIL NO.12 400Ω
C1	INCLUDED IN TRANSFORMER NO. 395A-1
AA	
CA	
R1	
TR1	

- 4(a) LIU NO.1A IS FOR USE ON EXCLUSIVE LINES WHICH REQUIRE A LOOP CONDITION FOR CALLING THE EXCHANGE.
- (b) LIU NO. 2A DGM. SA/SAW102050 IS FOR USE ON EXCLUSIVE LINES OR POA CALL BOX LINES UP TO 800 OHMS LOOP RESISTANCE. TO ENSURE ACCEPTABLE PULSING PERFORMANCE FOR 10 PPS LOOP-DISCONNECT SIGNALLING THE LOOP RESISTANCE OF THE CABLE BETWEEN LOCAL APPARATUS AND LIU NO.2A SHOULD NOT EXCEED 200 OHMS. AN ADAPTOR NO.48A DGM. SA/SAW102140 CAN BE MOUNTED IN LIU NO.2A TO PERMIT EARTH CALLING APPARATUS TO BE CONNECTED TO THE LOCAL SIDE OF THE LINE ISOLATING UNIT.
- 5(a) TRANSFORMER NO. 395A-1 IN LIU NO.1A PASSES SUFFICIENT RINGING CURRENT AT 25 H₃ TO OPERATE ONE BELL FROM THE EXCHANGE RINGING SUPPLY.

- 5(b) LIU NO.2A REQUIRES A CONTINUOUS RINGING SUPPLY. IF A SUITABLE SUPPLY IS AVAILABLE IT SHOULD BE USED OTHERWISE A CONVERTOR RINGING SHOULD BE PROVIDED TO SUIT THE TOTAL NUMBER OF BELLS TO BE RUNG. THE LIU NO.2A RESPONDS TO NORMAL RINGING CADENCE (0.4 SEC.ON - 0.2 SEC.OFF - 0.4 SEC.ON - 2 SEC.OFF) FROM THE EXCHANGE AND REPEATS THIS CADENCE ON THE LOCAL SIDE.
- 6 FUSE RATING TO SUIT NUMBER OF LIUS CONNECTED. ALLOW 0.25 AMP PER UNIT.
- 7 THE 'U' LINKS IN THE UNIT (FIG.3 AND FIG.6) MUST BE REMOVED BEFORE ANY WORK IS DONE ON THE UNIT.
- 8 THE 'U' LINKS SHOWN IN FIG.4 AND FIG.7 MUST BE REMOVED BEFORE ANY WORK IS DONE ON THE WIRING TO THE EXCHANGE LINE SIDE OF LIU OR TO FIGS.3 AND 6
- 9 HV CABLE (5KV MIN) OR 0.5mm CONDUCTORS IN HV PROOF SLEEVING (AS REQUIRED). THE CABLE SHEATH OR SLEEVING MUST BE CONTINUOUS THROUGH GROUPEMET IN LIU BASE PLATE.
- 10 WHEN EARTH CALLING/LOOP ANSWERING APPARATUS IS CONNECTED TO LOCAL SIDE OF LIU NO.2A PROVIDE AN ADAPTOR NO.48A IN ACCORDANCE WITH DGM. SA/SAW102050. THE ADAPTOR CAN BE MOUNTED INSIDE LIU BY REPLACING THE FIXING SCREW ADJACENT TO PIN 6 ON SCA WITH THE CSK 4BA X 5/8" SCREW SUPPLIED WITH THE ADAPTOR AND BY SECURING TO THE LIU BASE PLATE USING THE TWO HOLES ADJACENT TO THE EARTH TERMINAL.

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