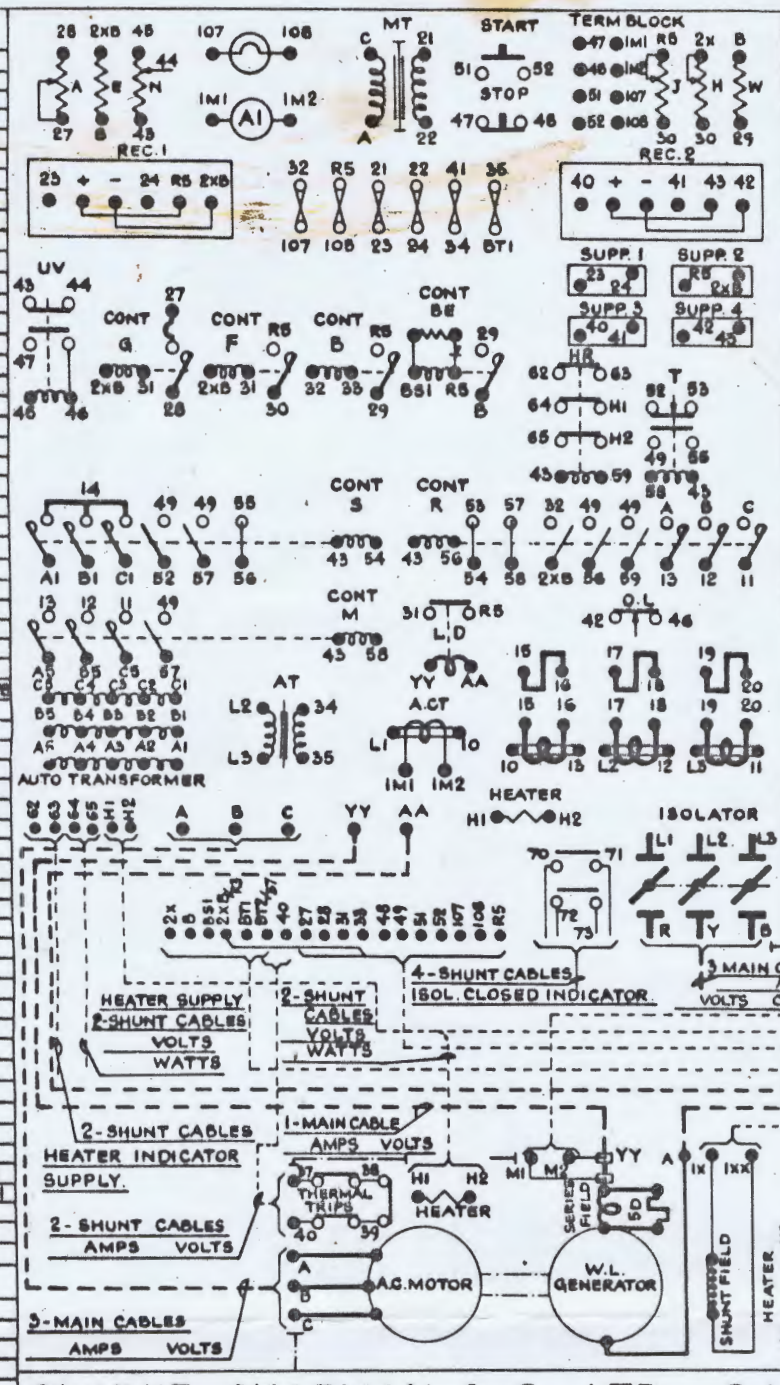
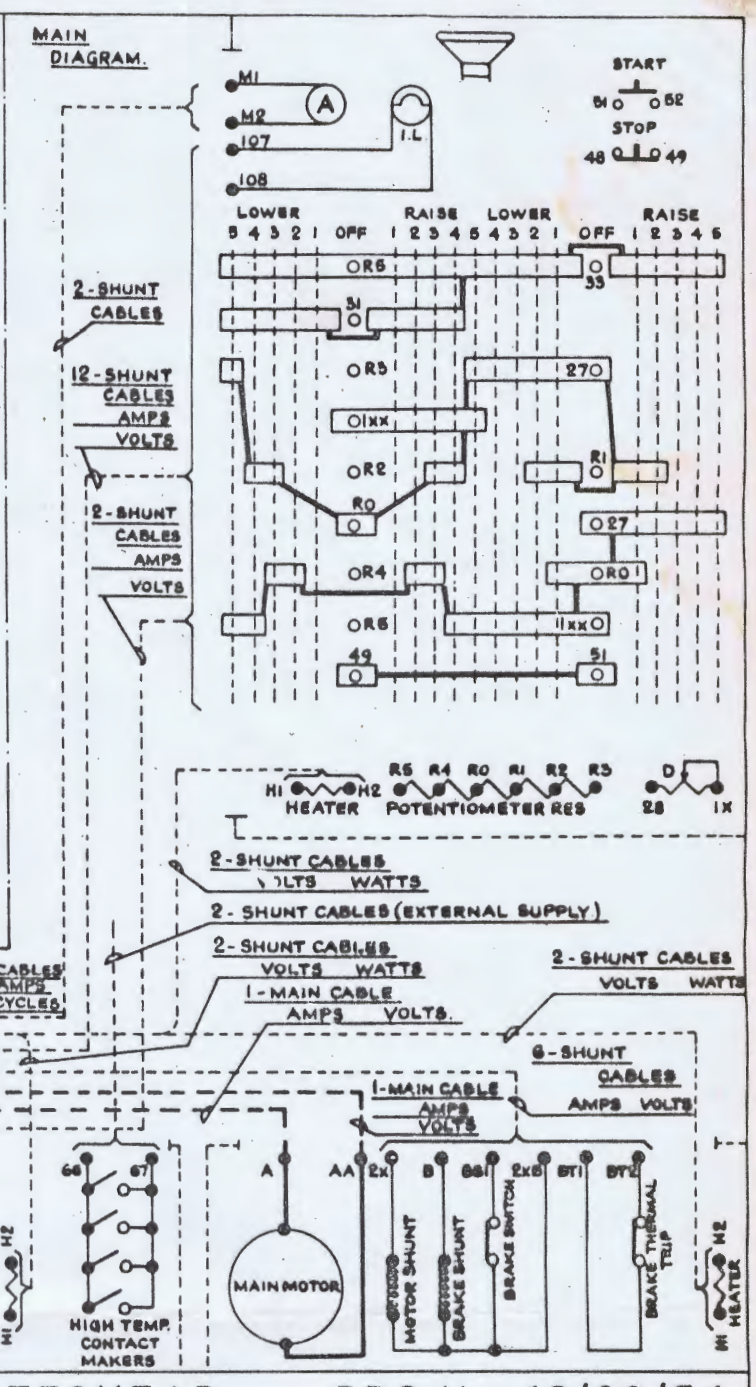
WIRE Nº	ROUTE FOR PANEL SHUNTS
15	CT - OL
16	CT - OL
17	CT - OL
18	CT - OL
19	CT - OL
20	CT - OL
21	MAIN TRANSFORMER - FUSE
22	MAIN TRANSFORMER - FUSE
23	FUSE - RECT. 1 - SUPP. 1
24	FUSE - RECT. 1 - SUPP. 1
27	TERM. 27 - CONT. G - RES. A
28	TERM. 28 - CONT. G - RES. A
29	CONT. B - CONT. BE - RES. W.
30	CONT F - RES. J - RES. H
31	TERM. 31 - L.D. - CONT. G - CONT. F
32	FUSE - CONT. B - CONT. R
33	TERM. 33 - CONT. B
34	AUX. TRANSFORMER - FUSE
35	AUX. TRANSFORMER - FUSE
40	TERM. 40 - RECT. 2 - SUPP. 3
41	RECT. 2 - SUPP. 3 - FUSE
42	RECT. 2 - SUPP. 4 - O.L.
43	RECT. 2 - SUPP. 4 - T - HR - RES. N - UV - CONT. S - CONT. R - CONT. M
44	UV - RES. N (TAP)
45	UV - RES. N
46	UV - O.L.
47	UV - TERM. BLOCK - STOP PB.
48	TERM. 48 - TERM. BLOCK - STOP PB.
49	TERM. 49 - T - CONT. M - CONT. S - CONT. R
51	TERM. 51 - TERM. BLOCK - START PB.
52	TERM. 52 - CONT. S - T - TERM. BLOCK - START PB.
53	CONT. R - T
54	CONT. R - CONT. S
55	CONT. S - T
56	CONT. R - CONT. S
57	CONT. S - CONT. R - CONT. M
58	CONT. M - CONT. R - T
59	CONT. M - HR
62	TERM. 62 - HR
63	TERM. 63 - HR
64	TERM. 64 - HR
65	TERM. 65 - HR
107	TERM. 107 - FUSE - TERM. BLOCK - LAMP
108	TERM. 108 - FUSE - TERM. BLOCK - LAMP
A	CONT. R - MAIN - TRANSFORMER
C	CONT. R - MAIN - TRANSFORMER
2x	TERM. 2x - RES. H
B	TERM. B - CONT. BE - RES. W - RES. E
BSI	TERM. BSI - CONT. BE
2XB	TERM. 2xB - RECT. 1 - SUPP. 2 - CONT. G - CONT. F - CONT. R - RES. E
BT1	TERM. BT1 - FUSE
R5	TERM. R5 - RECT. 1 - SUPP. 2 - CONT. F - CONT. B - CONT. BE - LD - FUSE - RES. J
IM1	AMMETER CT - TERM. BLOCK - AMMETER - A1
IM2	AMMETER CT - TERM. BLOCK - AMMETER - A1
H1	TERM. H1 - HR
H2	TERM. H2 - HR

	ROUTE FOR PANEL MAINS.
L1	ISOLATOR - AMMETER CT.
L2	ISOLATOR - CT
L3	ISOLATOR - CT
A	TERM. A - AUTO-TRANSFORMER - CONT. R.
B	TERM. B - AUTO-TRANSFORMER - CONT. R.
C	TERM. C - AUTO-TRANSFORMER - CONT. R.
A1	AUTO - TRANSFORMER - CONT. S
B1	AUTO - TRANSFORMER - CONT. S
C1	AUTO - TRANSFORMER - CONT. S
A5	AUTO - TRANSFORMER - CONT. M
B5	AUTO - TRANSFORMER - CONT. M
C5	AUTO - TRANSFORMER - CONT. M
AA	TERM. AA - LD
YY	TERM. YY - LD
10	AMMETER CT - CT.
11	CT - CONT. M - CONT. R
12	CT - CONT. M - CONT. R
13	CT - CONT. M - CONT. R

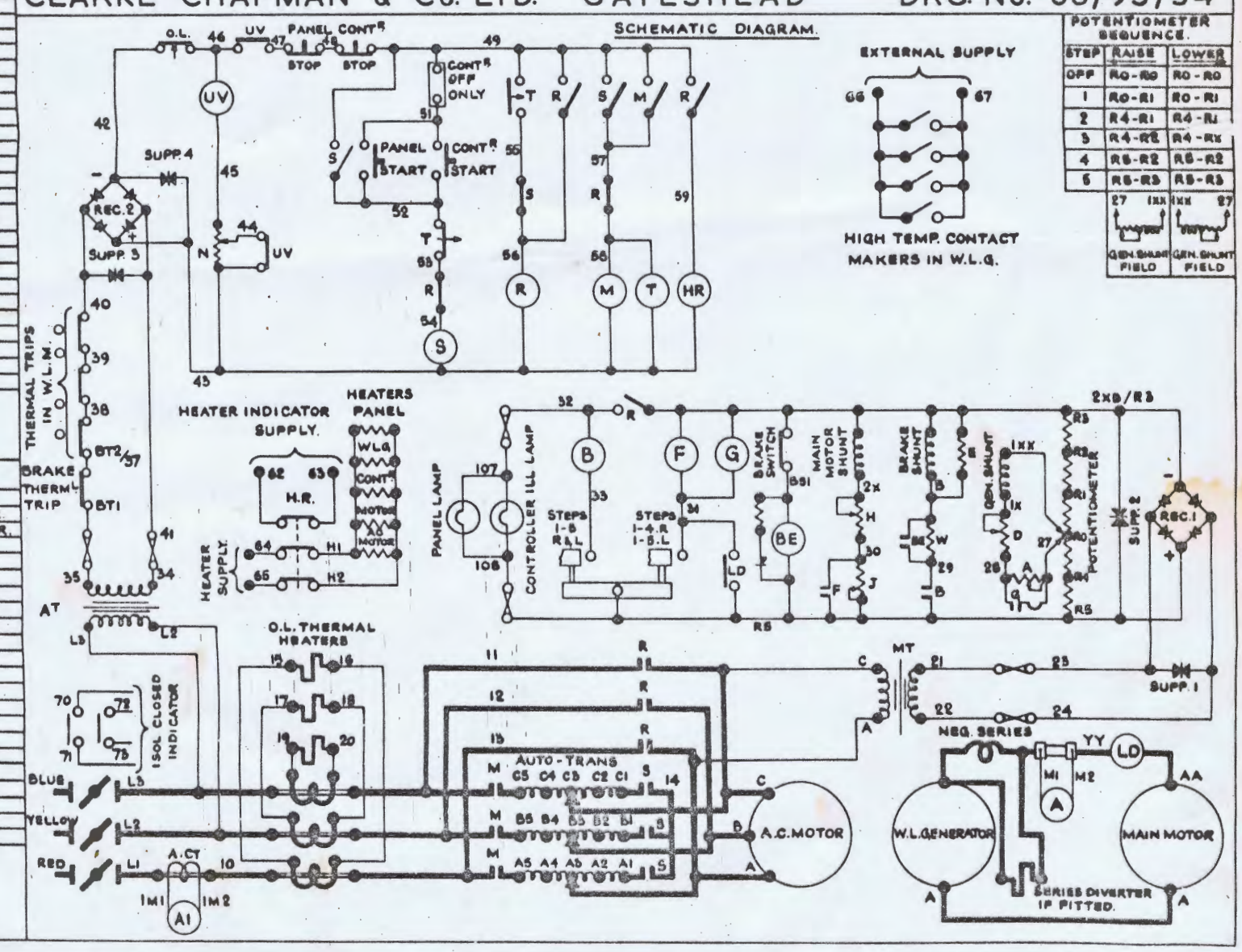
	ROUTE FOR CONTROLLER SHUNTS
R0	FINGER R0 - FINGER R0 - POT. RES.
R1	FINGER R1 - POT. RES.
R2	FINGER R2 - POT. RES.
R3	FINGER R3 - POT. RES.
R4	FINGER R4 - POT. RES.
R5	FINGER R5 - FINGER R5 - POT. RES.
1xx	FINGER 1xx - FINGER 1xx.
27	FINGER 27 - FINGER 27.
49	FINGER 49 - STOP PUSHBUTTON.
51	FINGER 51 - START PUSHBUTTON.

SYMBOL	DESCRIPTION
M.R.C.S	STARTING CONTACTORS
F	FIELD WEAKENING RESISTANCE CONTACTOR.
G	GEN. WEAKENING RESISTANCE CONTACTOR.
B	BRAKE CONTACTOR.
BE	BRAKE ECONOMY CONTACTOR.
REC	RECTIFIER
O.L	OVERLOAD RELAY
U.V	UNDER VOLTAGE RELAY
RES & H	SETTING RESISTANCE
A1 & N	ECONOMY RESISTANCE
CONT.	CONTACTOR
TERM	TERMINAL
M.T	MAIN TRANSFORMER
A.T	AUXILIARY TRANSFORMER
C.T	CURRENT TRANSFORMER
GEN.	GENERATOR
W.L	WARD-LEONARD
L.D	LOAD DISCRIMINATING RELAY
SUPP.	SUPPRESSOR
POT	POTENTIOMETER
RES	RESISTANCE
S.D	SERIES DIVERTER





CLARKE CHAPMAN & Co. LTD. GATESHEAD DRG. No. 68/93/54



D	V. DOYLE			
CH				
DATE	7-6-68			

Forward Windlass

DIAGRAM OF CONNECTIONS.
CLARKE CHAPMAN & Co. LTD. GATESHEAD 8
DRG. No. 68/93/54