

CONTENTS		
L	EQUIPMENT	SH
1	SERIES TRIP, 3P	2
2	ELEC SPRING REL	3
3	SHUNT TRIP	3
4	ELEC LO (MO BKR)	3
5	UNDERVOLTAGE	3
6	O C TR SW (OTS)	4
7	HIGH LOAD SW(HLS)	5
8	PWR OPR MECH, STD	6
9	PWR OPR MECH, SPL	7
10	SERIES TRIP, 2P	8
11	AUX SW 1	9
12	AUX SW 2	10
13	AUX SW 3	11
14	AUX CT FOR GRD EL	12
15	MISC	13
16	SERIES TR AMPT II	14
17	SPECIAL	15

LEGEND
 AMPT = AMPTECTOR, SOL-STATE CON
 ACTR = ACTUATOR, SOL-STATE BKR TR
 HLS = HIGH LOAD SW
 LCS = LATCH CHECK SW
 LO = LOCK OUT
 LS = LIMIT SW FOR CLOSING SPR
 MOT = MOTOR FOR SPG CHARGING
 OTS = OVERCURRENT TRIP SW
 PB = PUSHBUTTON
 SEN = SENSOR
 SH TR = SHUNT TRIP
 SR = SPRING RELEASE
 UV = UNDERVOLTAGE
 Y = ANTI-PUMP RELAY

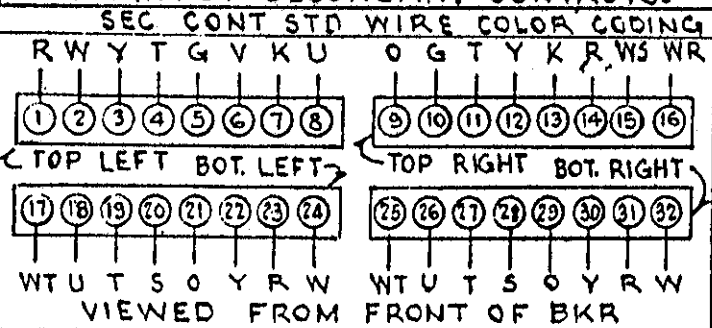
OPERATION OF PWR OPR MECH STD. (REFER TO FIG. 6A)

- 1- WHEN BKR OPENS MOT IS ENERGIZED THRU LS & "b" CONT.
 - 2- MOT RUNS & CHARGES CL SPG
 - 3- WHEN CL SPG ARE FULLY CHARGED LS CONTACTS REVERSE.
 - 4- CLOSING CS-C CONT ENERGIZES SR COIL THRU Y, LS & "b" CONT.
 - 5- WHEN BKR CLOSES "b" OPENS & Y COIL IS ENERG IN SER WITH SR COIL.
 - 6- Y CONT OPENS TO OPEN SR COIL CKT & PREVENT PUMPING SHOULD BKR OPEN WHILE CS-C IS HELD CLOSED. Y COIL HAS VERY LOW DROP OUT VOLTAGE.
- SPECIAL (FIG. 7A)**

SAME AS FOR STD ABOVE EXCEPT MOTOR RUNNING DEPENDS ONLY ON LS CONTACT

EQUIPMENT SHOWN OUTSIDE OF BKR BROKEN-LINE OUTLINE IS NOT SUPPLIED WITH BKRS.

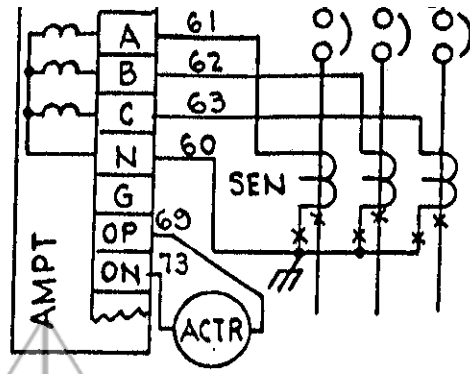
DIAGRAM DETAILS ARE SHOWN F.V. FOR DRAWOUT BKRS. FOR FIXED BKRS USE CORRESPONDING T. BLK POINTS INSTEAD OF DRAWOUT SECONDARY CONTACTS.



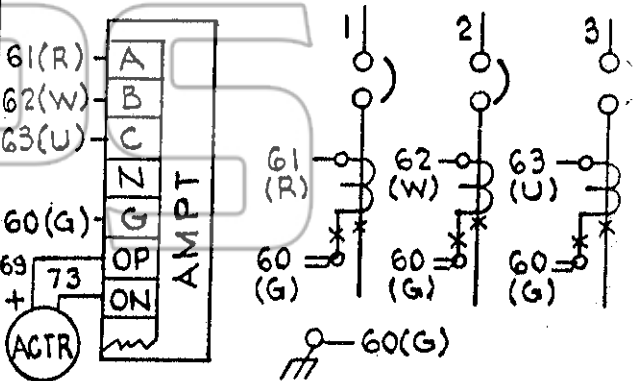
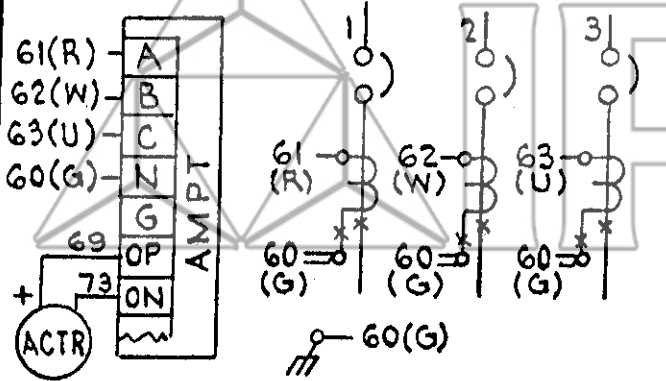
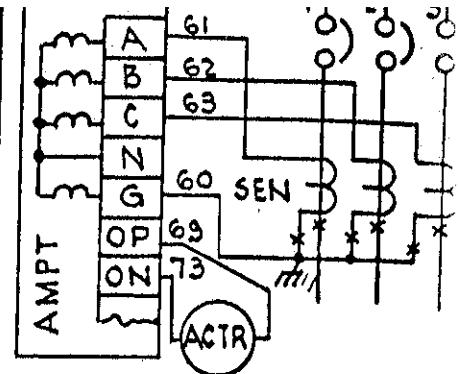
NOTES: (1) TABULATION ON LH SIDE OF EACH FIG. IS LOCATION CODE FOR WIRING HARNESS. (2) A NUMERAL IS ADDED TO CERTAIN FIG. NO. ON THE BKR NP TO INDICATE COIL VOLTAGE AS FOLLOWS: 1, 2, 3 & 4 = 24, 48, 125 & 250 V DC, RESP.; 5, 6, 7 & 8 = 115, 208/230, 460 & 208V ONLY, AC, RESP.; 9 = ANY OTHER VOLT. (32V DC, ETC.) MAN. OPR BKR WITH SHUNT TRIP & CAP DEY WILL HAVE DIAG CODE 3BC

WESTINGHOUSE ELECTRIC CORPORATION		800A600
TITLE TYPE DS ACB; INTERNAL "Y" RELAY, STD DIAGRAM		
DIVISION SWGR	PLANT LOCATION E. PGH. PA SH 1	

(R) 5.1-3.2
 (W) 5.2-3.3
 (U) 5.3-3.4
 (G) 5.4-3.4-
 3.3-3.2-
 3.1

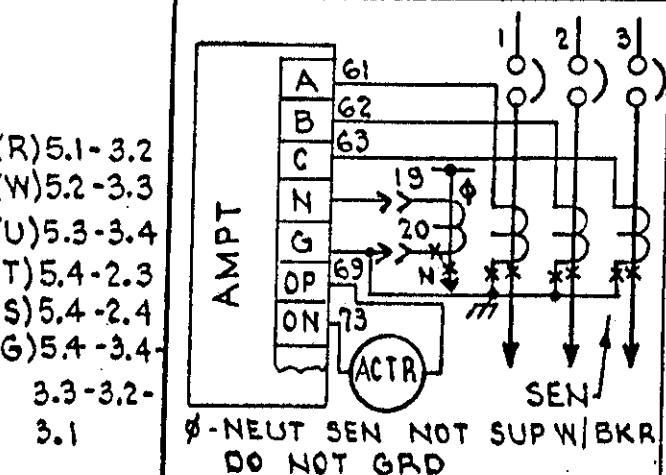


(R) 5.1-3.2
 (W) 5.2-3.3
 (U) 5.3-3.4
 (G) 5.4-3.4-
 3.3-3.2-
 3.1



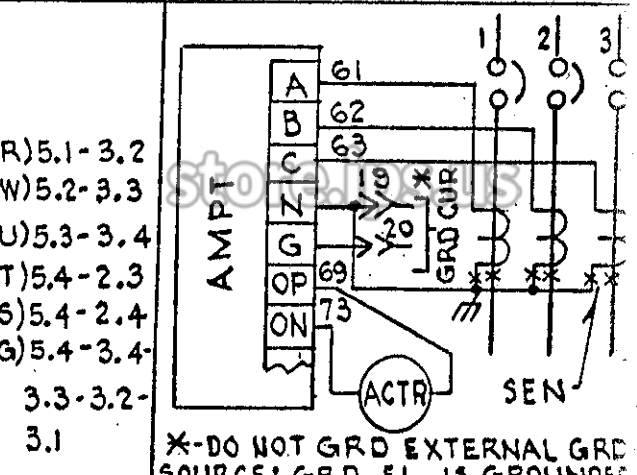
STD SERIES TRIP (NO GRD) 2A

SER TRIP W/GRD, NO NEUT CONN 2E



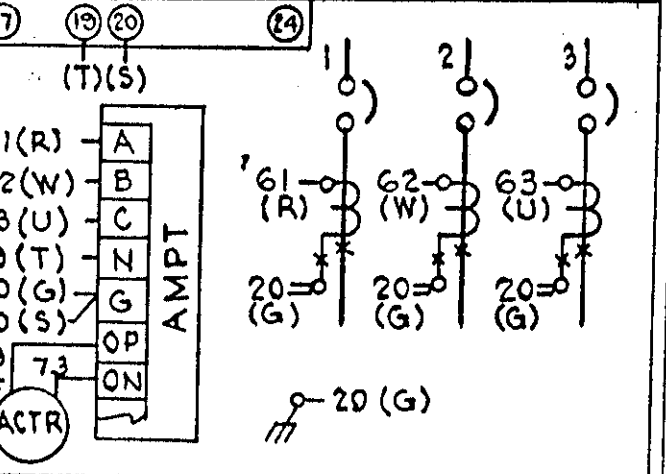
(R) 5.1-3.2
 (W) 5.2-3.3
 (U) 5.3-3.4
 (T) 5.4-2.3
 (S) 5.4-2.4
 (G) 5.4-3.4-
 3.3-3.2-
 3.1

Ø-NEUT SEN NOT SUP W/BKR
 DO NOT GRD

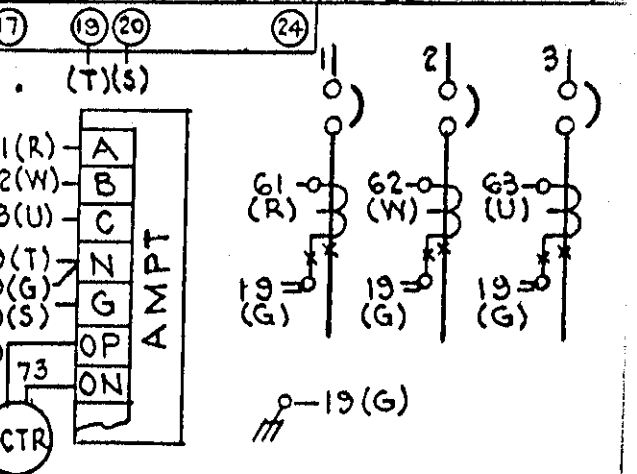


(R) 5.1-3.2
 (W) 5.2-3.3
 (U) 5.3-3.4
 (T) 5.4-2.3
 (S) 5.4-2.4
 (G) 5.4-3.4-
 3.3-3.2-
 3.1

*-DO NOT GRD EXTERNAL GRD
 SOURCE; GRD EL IS GROUNDED



SER TRIP W/GRD, W/NEUT CONN 2C



SER TRIP W/GRD, EXT GRD CUR 2D

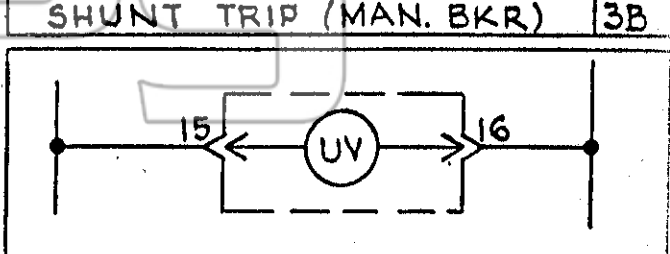
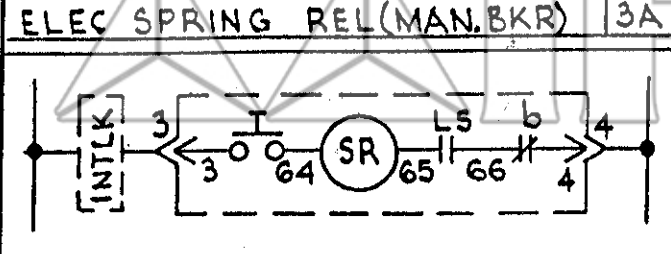
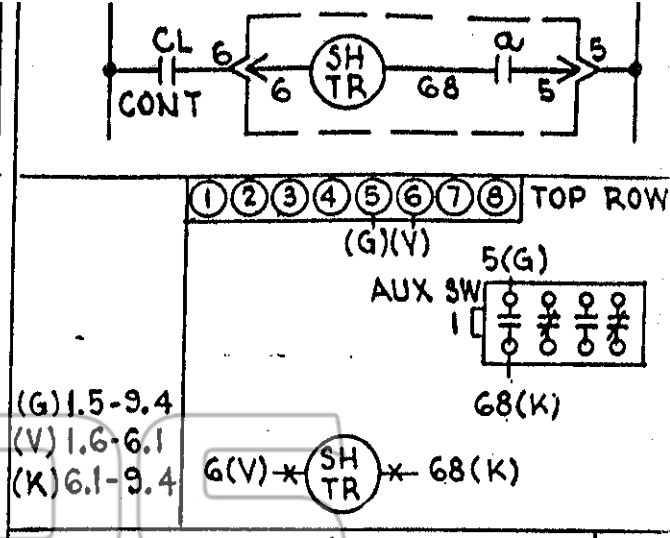
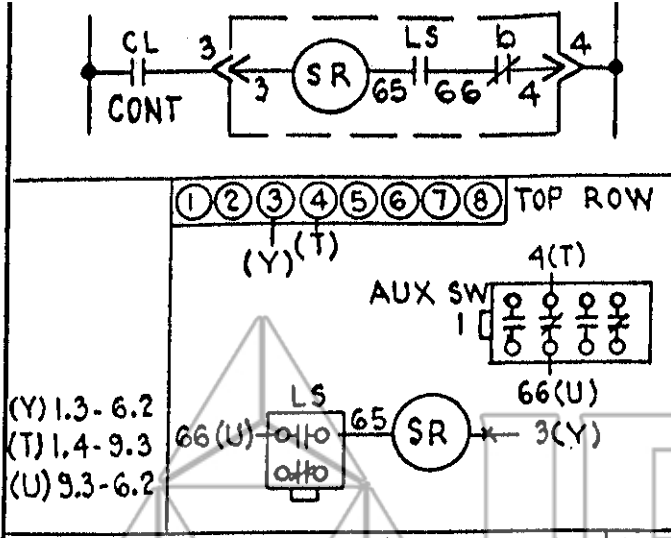
WESTINGHOUSE ELECTRIC CORPORATION

800A600

TITLE SERIES TRIP, 3P AMPTECTOR

DIVISION SWGR

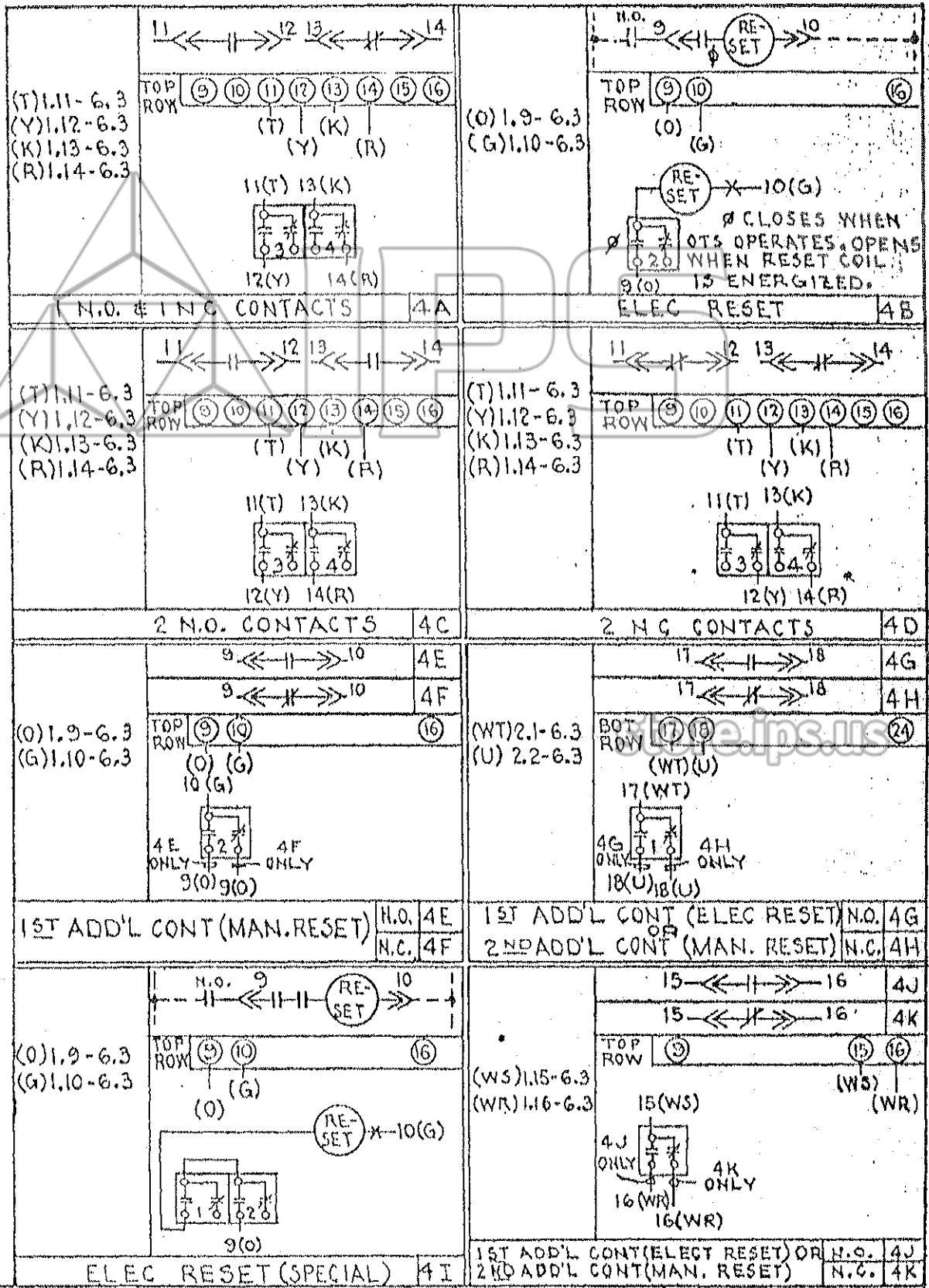
PLANT LOCATION E-PGH PA SH 2



WESTINGHOUSE ELECTRIC CORPORATION
BASIC ACCESSORIES

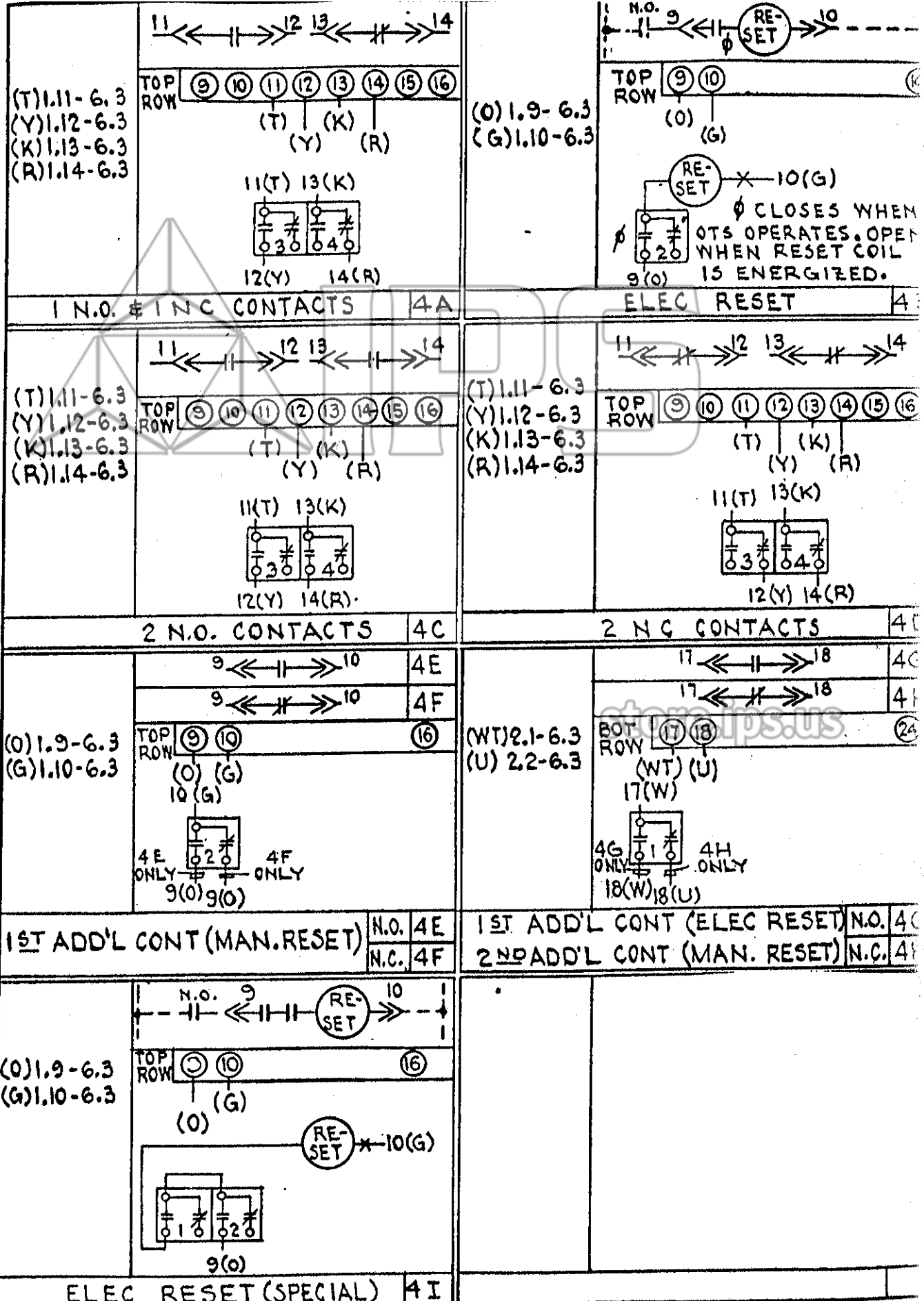
800A600

TITLE _____ DIVISION _____ PLANT LOCATION **E. PGH PA SH 3**



11

<p>WESTINGHOUSE ELECTRIC CORPORATION OVERCURRENT TRIP SWITCH (OTS)</p>		800A 600A
<p>TITLE CONTACTS CHG STATE & LATCH ONLY WHEN AMPT TRIPS BKR</p>		
<p>DIVISION SWGR</p>		<p>PLANT LOCATION E. PGH., PA SH 4-</p>



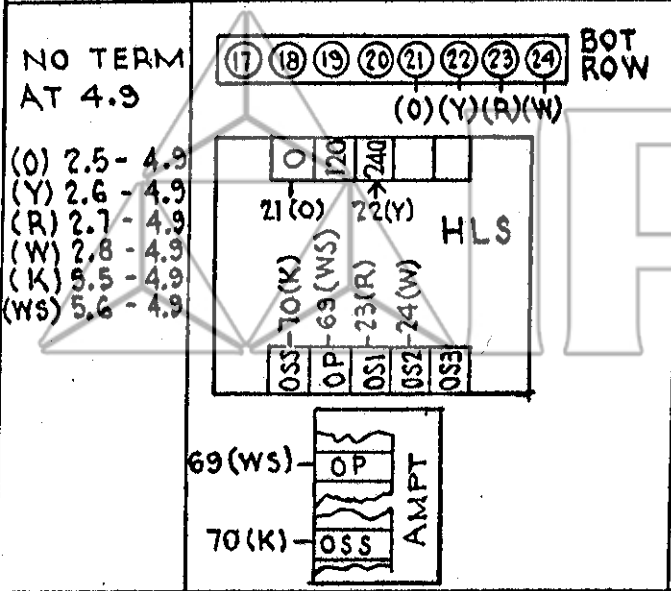
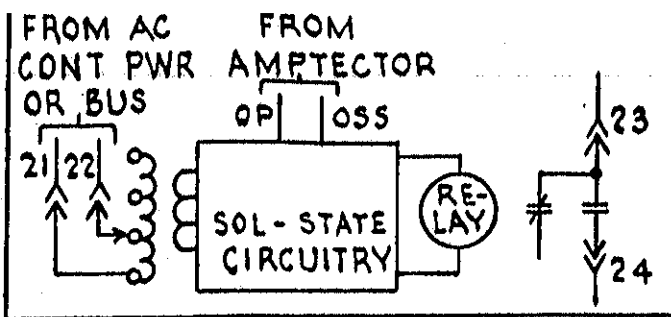
WESTINGHOUSE ELECTRIC CORPORATION

800A600

TITLE OVERCURRENT TRIP SWITCH (OTS)

DIVISION SWGR

PLANT LOCATION E. PGH., PA SH 4



HIGH LOAD SWITCH (HLS) 5A

store.ips.us

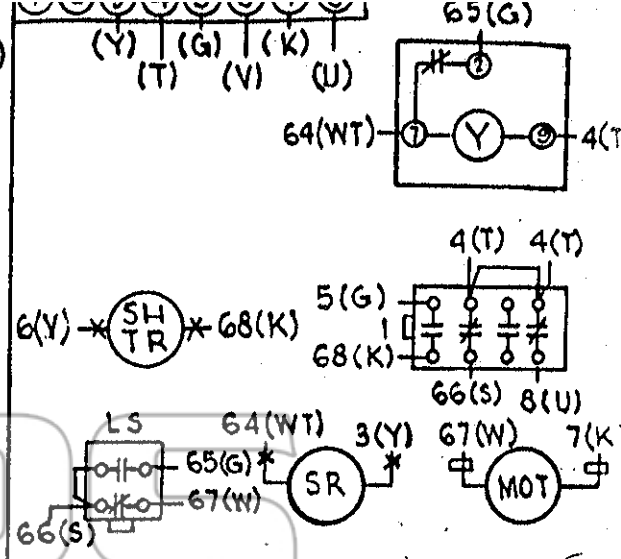
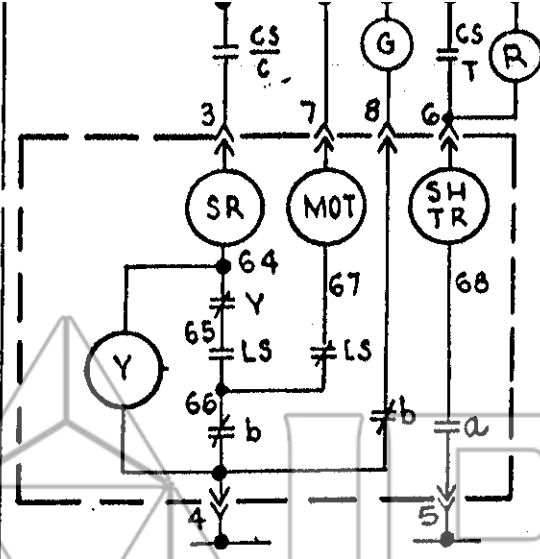
WESTINGHOUSE ELECTRIC CORPORATION
HIGH LOAD SWITCH

800A600

TITLE
DIVISION SWGR

PLANT LOCATION E. PGH PA SH B

- (Y) 1.3-6.2
- (T) 1.4-9.1
- (G) 1.5-9.4
- (G) 6.2-10.3
- (V) 1.6-6.1
- (K) 6.1-9.4
- (K) 1.7-10.1
- (U) 1.8-9.1
- (S) 9.3-6.2
- (W) 6.2-10.1
- (WT) 6.2-10.3
- (T) 9.3-10.3

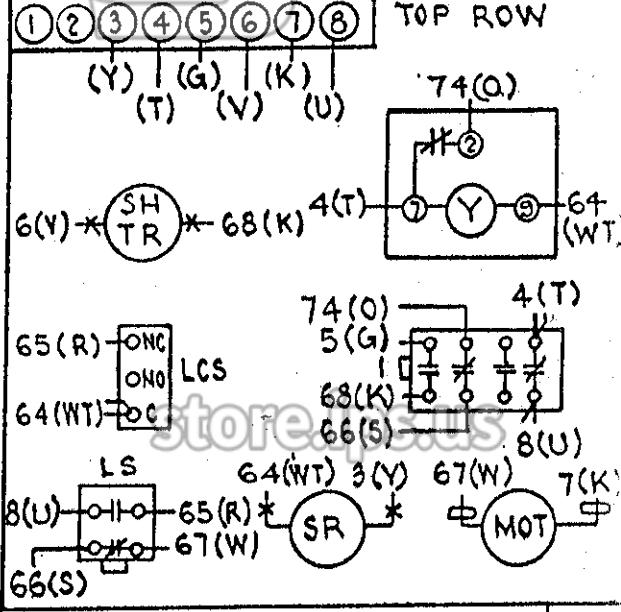
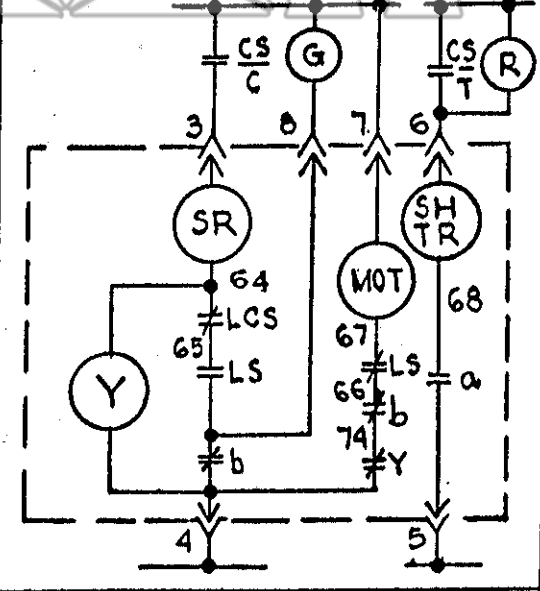


4+7
3+4
5+6

PWR OPR MECH, STD

6A

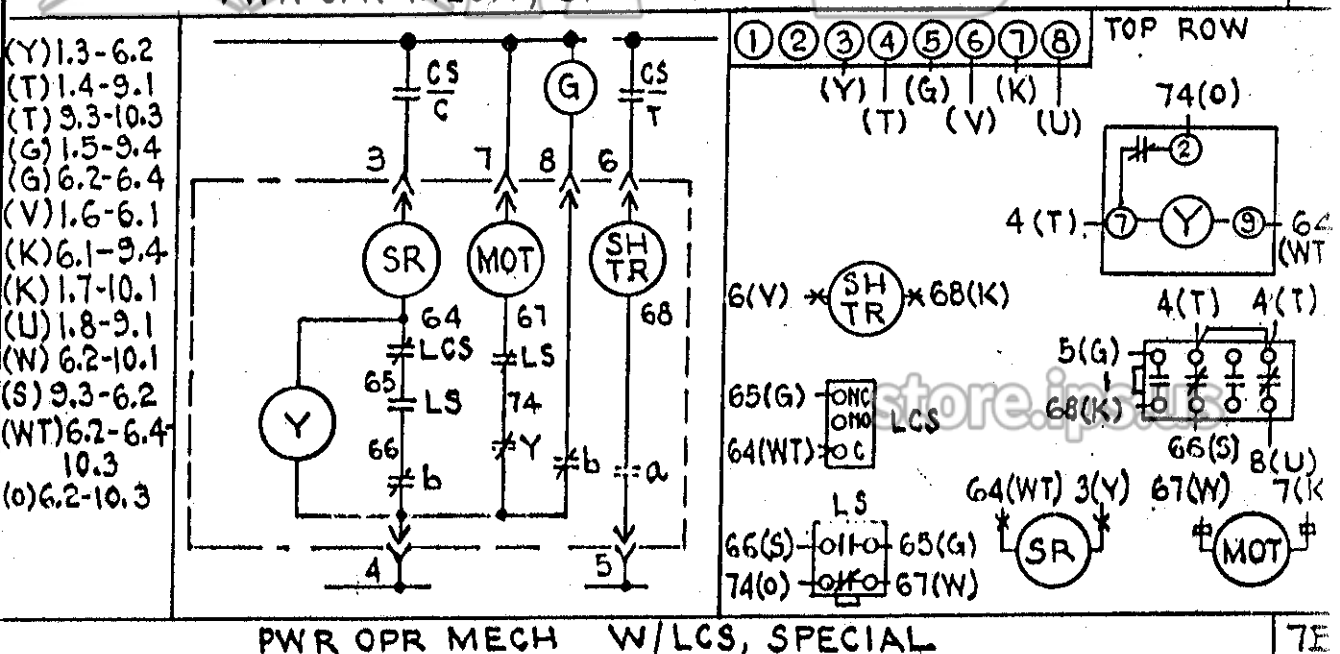
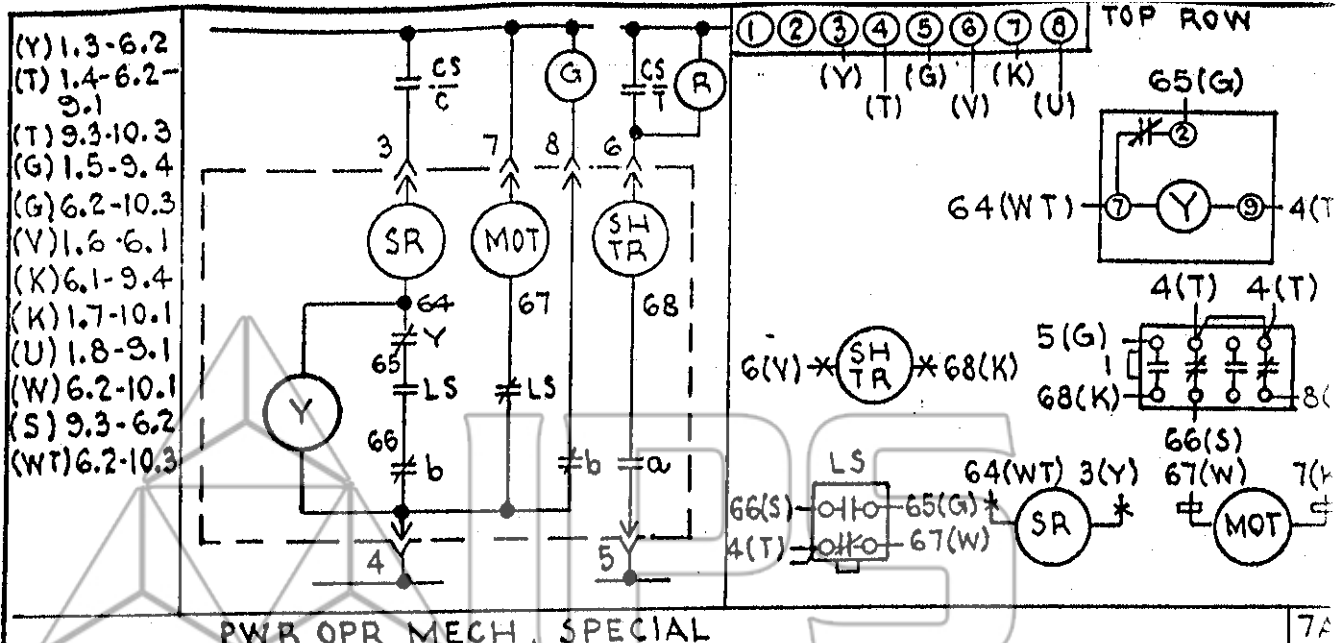
- (Y) 1.3-6.2
- (T) 1.4-9.1-10.3
- (G) 1.5-9.4
- (O) 9.3-10.3
- (V) 1.6-6.1
- (K) 6.1-9.4
- (K) 1.7-10.1
- (U) 1.8-9.1-6.2
- (W) 10.1-6.2
- (WT) 6.2-6.4-10.3
- (R) 6.2-6.4
- (S) 6.2-9.3



PWR OPR MECH STD W/LCS

6B

WESTINGHOUSE ELECTRIC CORPORATION		<h1 style="margin: 0;">800A600</h1>
POWER OPERATED MECH STD (CL) SPRINGS CHARGED AFTER BKRO OPENS		
TITLE _____	DIVISION <u>SWGR</u>	PLANT LOCATION <u>E. PGH PA SH 6</u>

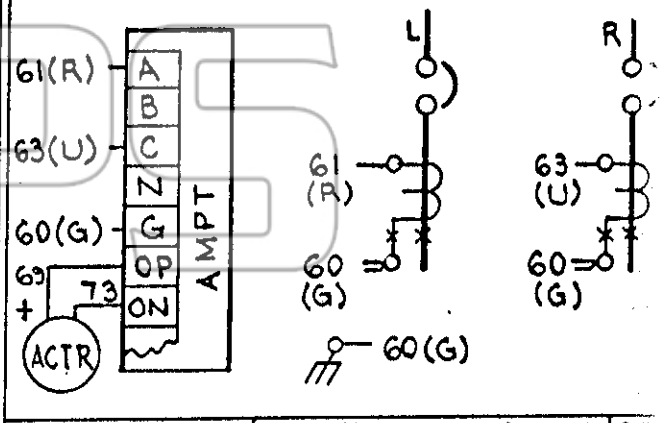
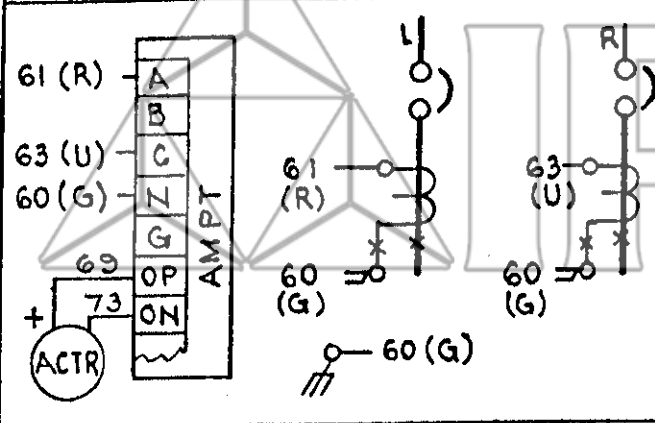
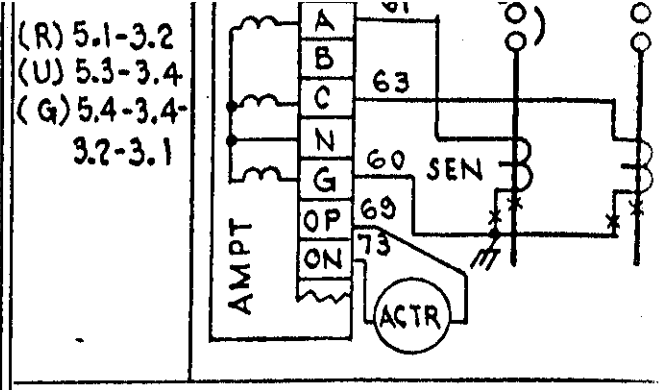
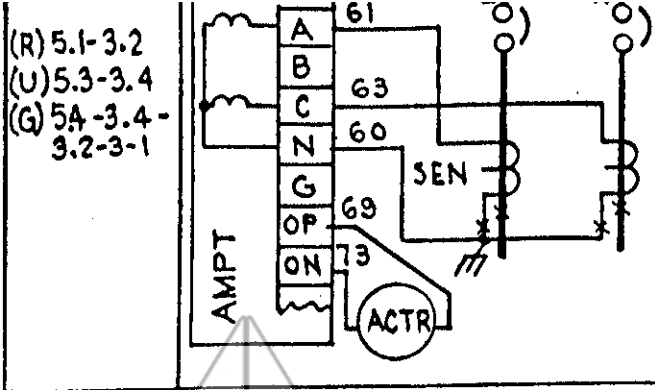


WESTINGHOUSE ELECTRIC CORPORATION
 PWR OPERATED MECH SPECIAL
 (CL SPRINGS CHARGED AFTER BKR CLOSES)

800A600

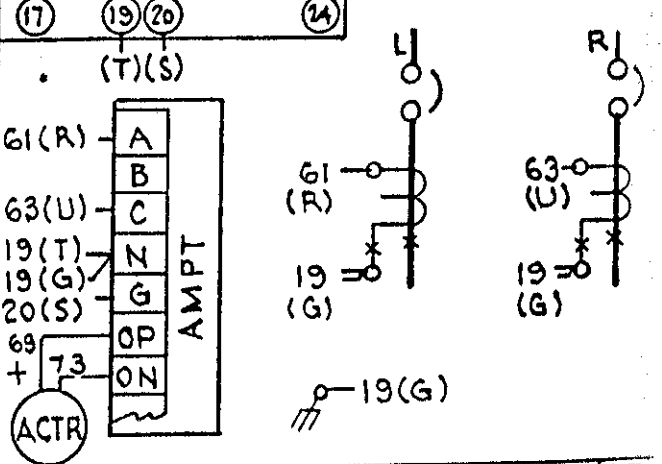
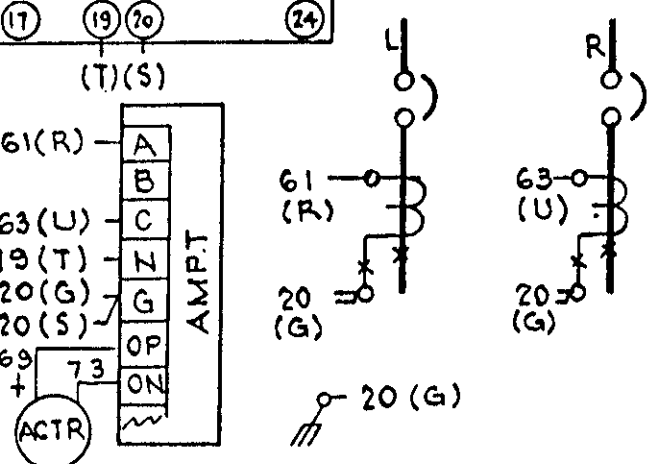
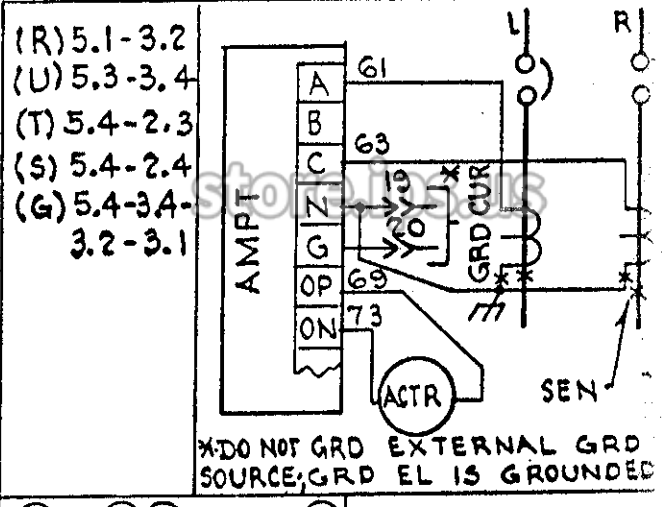
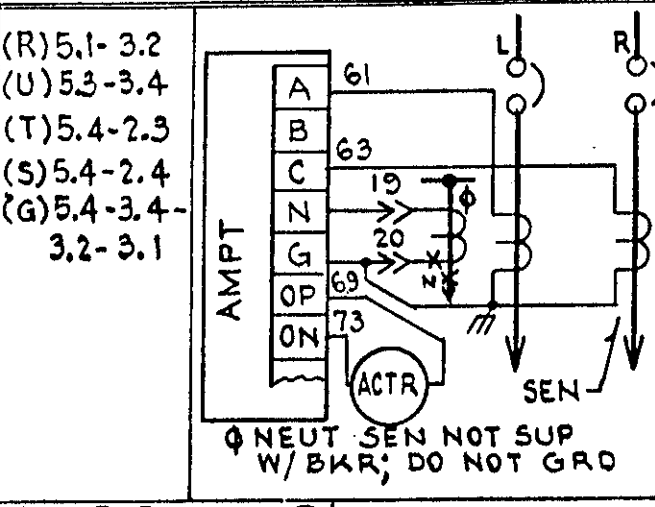
TITLE
 DIVISION SWGR

PLANT LOCATION E. PGH PA. SH 7



STD SERIES TRIP 8A

SER TRIP W/GRD NO NEUT CONN 8E



SER TRIP W/GRD, W/NEUT CONN 8C

SER TRIP W/GRD, EXT GRD CUR 8D

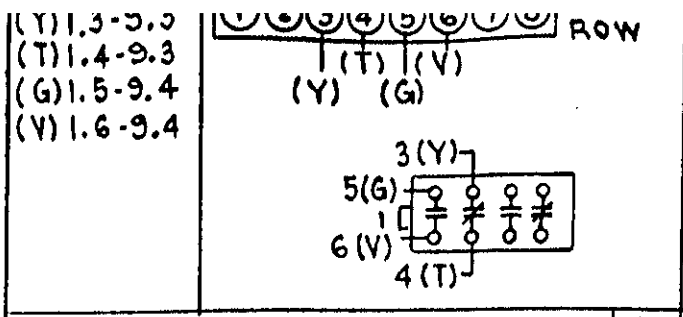
WESTINGHOUSE ELECTRIC CORPORATION

800 A 600

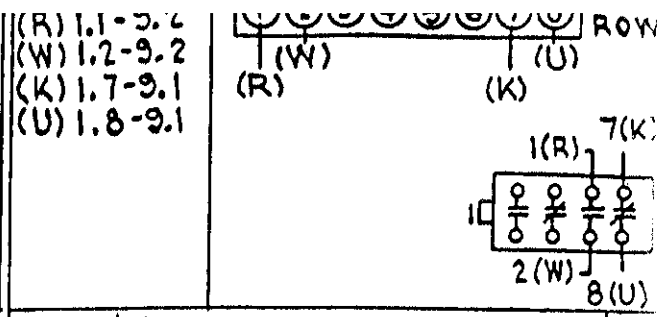
TITLE SERIES TRIP, 2P, AMPTECTOR

DIVISION SWGR

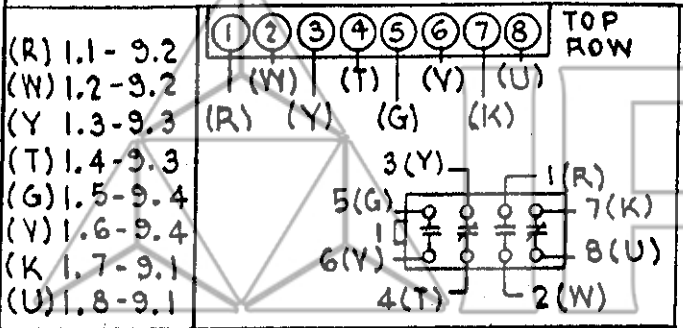
PLANT LOCATION E.PGH PA SH 8



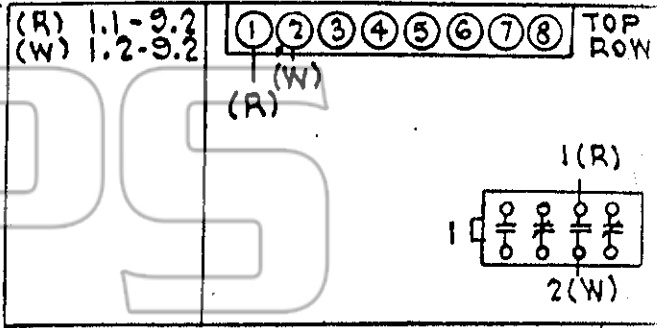
a1 & b1 9A



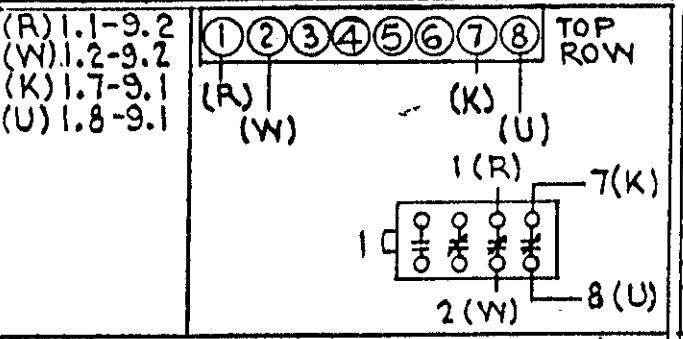
a2 & b2 9E



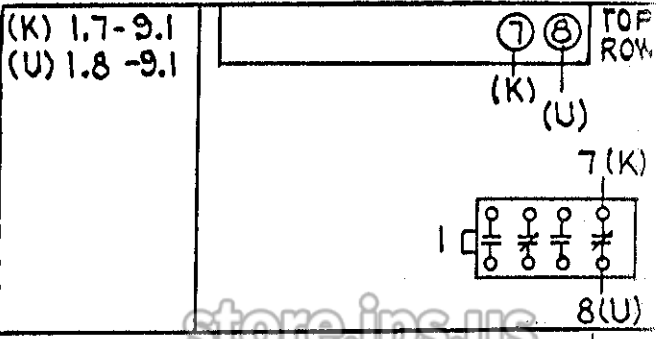
a1, b1, a2 & b2 9C



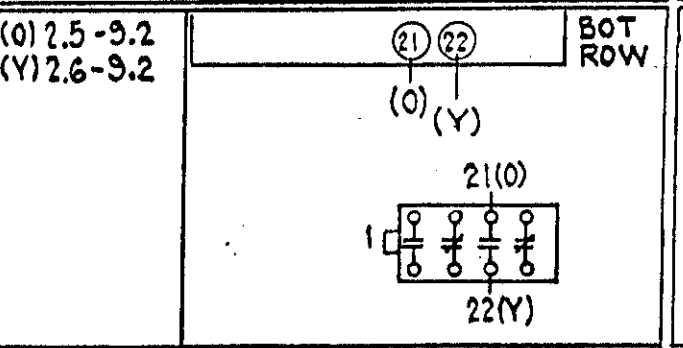
a2 9D



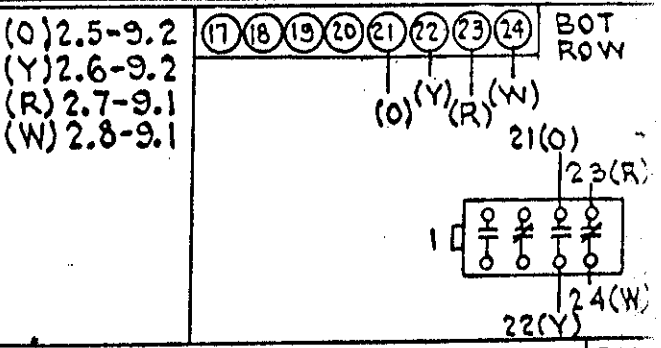
b2 & b3 9E



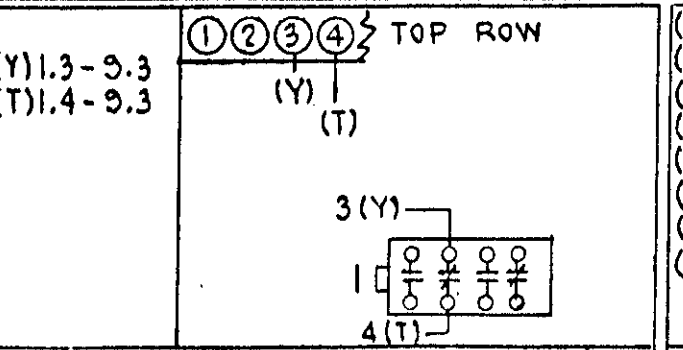
b2 9F



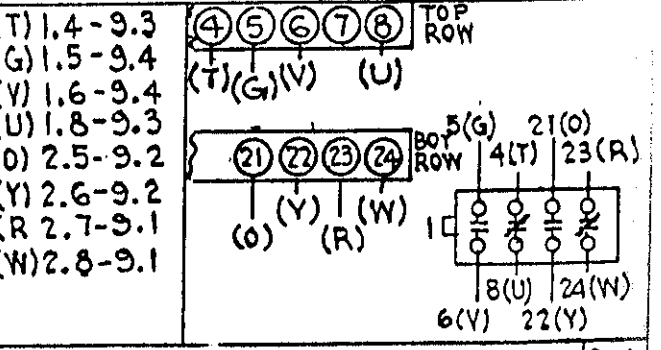
a2 9G



a2 & b2 9H



b1 9I



a1, b1, a2 & b2 9J

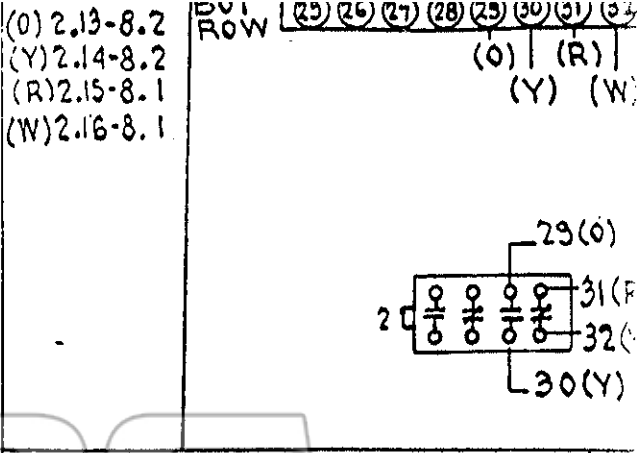
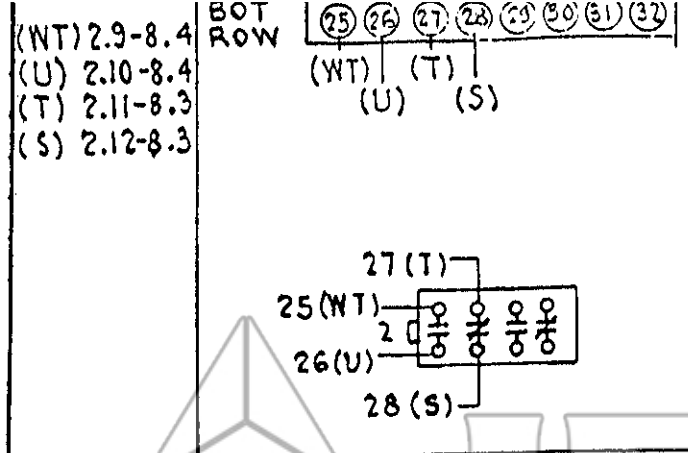
9 6A 10C

WESTINGHOUSE ELECTRIC CORPORATION
AUXILIARY SWITCH 1

800A600

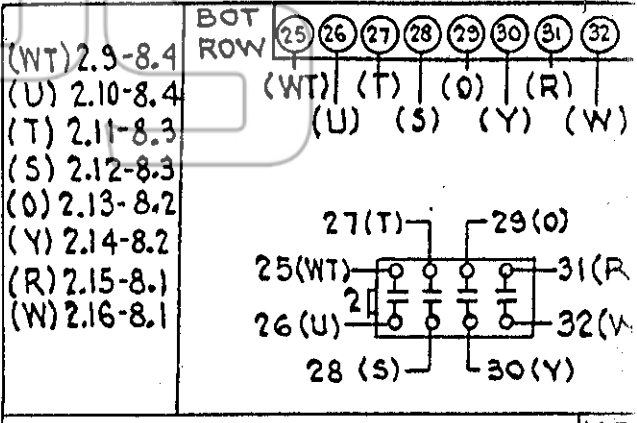
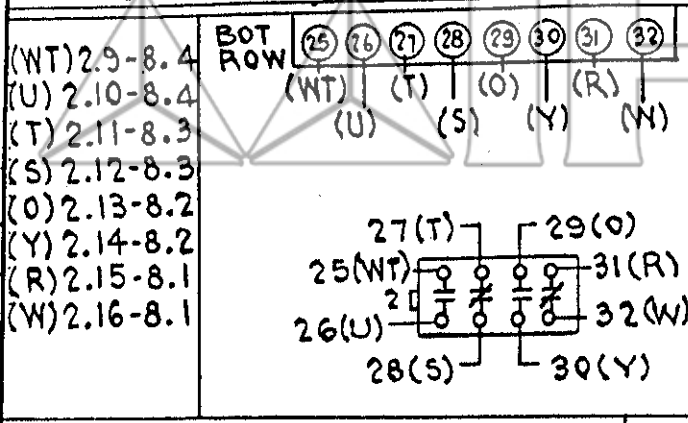
TITLE _____
DIVISION SWGR

PLANT LOCATION E. PGH PA SH 9



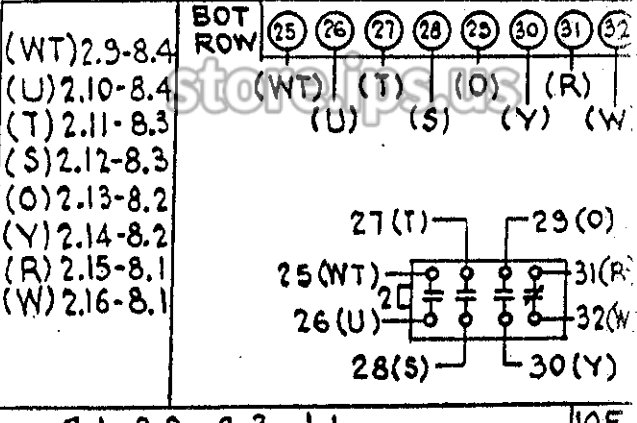
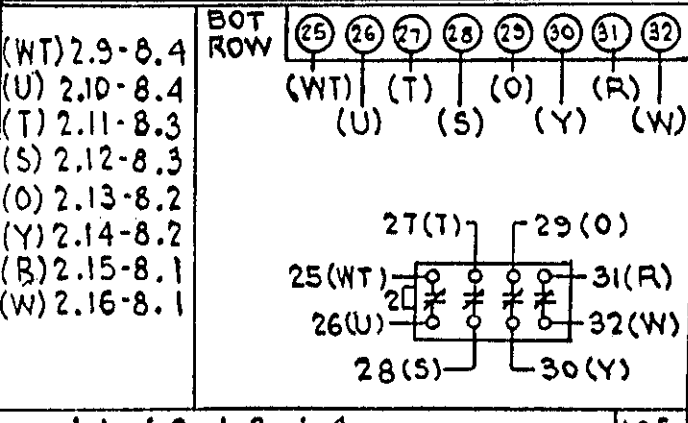
a 1 & b 1 10A

a 2 & b 2 10E



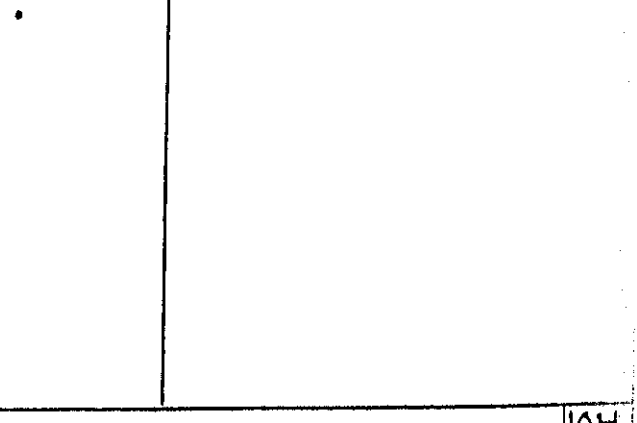
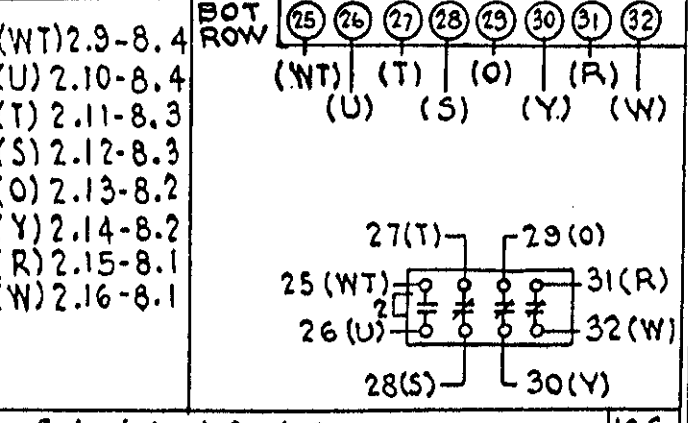
a 1, b 1, a 2 & b 2 10C

a 1, a 2, a 3, a 4 10D



b 1, b 2, b 3, b 4 10E

a 1, a 2, a 3, b 1 10F



a 1, b 1 b 2, b 3 10G

a 1, a 2, a 3, b 1 10H

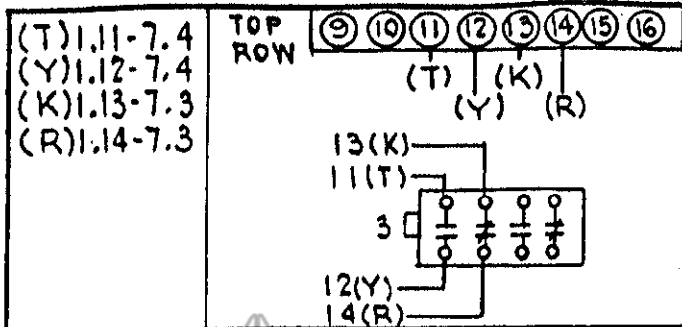
WESTINGHOUSE ELECTRIC CORPORATION

800 A 600

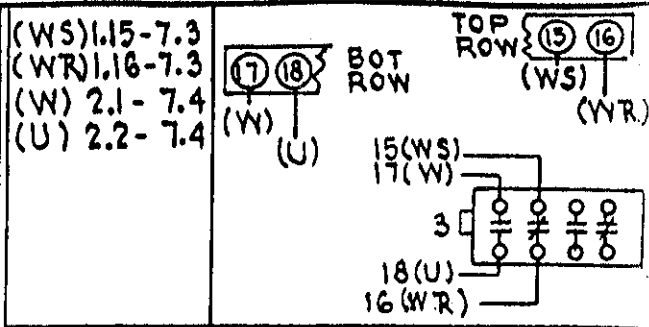
TITLE AUXILIARY SWITCH 2

DIVISION SWGR

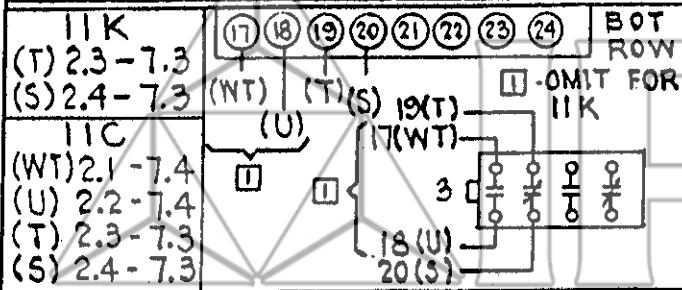
PLANT LOCATION E. PGH PA. SH 10



a1 & b1 11A

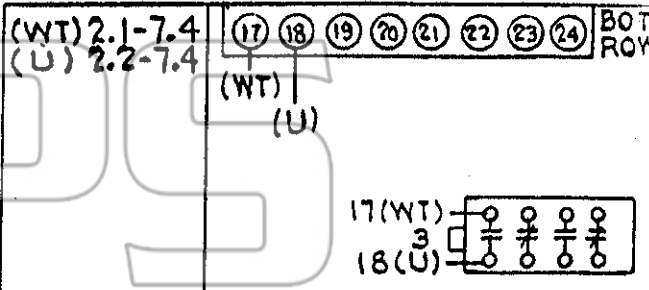


a1 & b1 11B

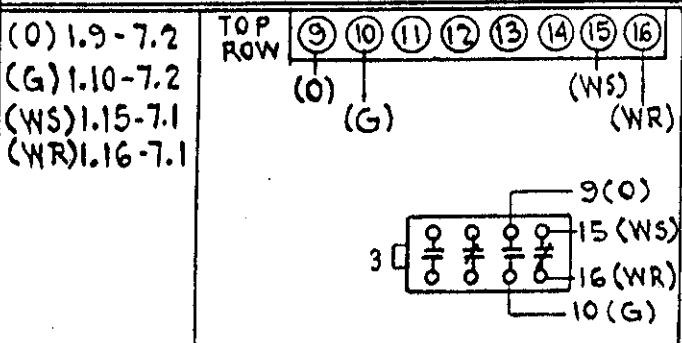


b1 11K

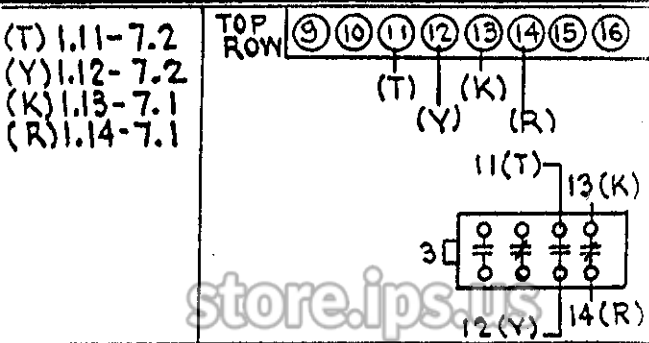
a1 & b1 11C



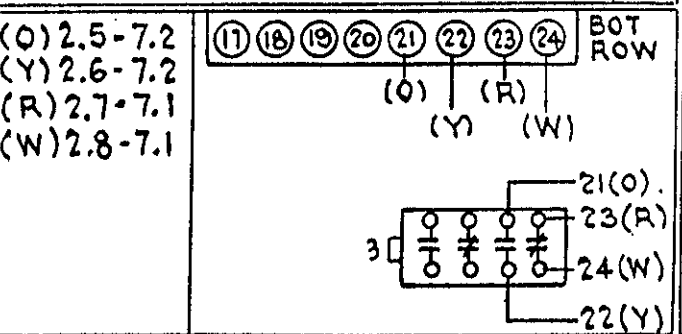
a1 11D



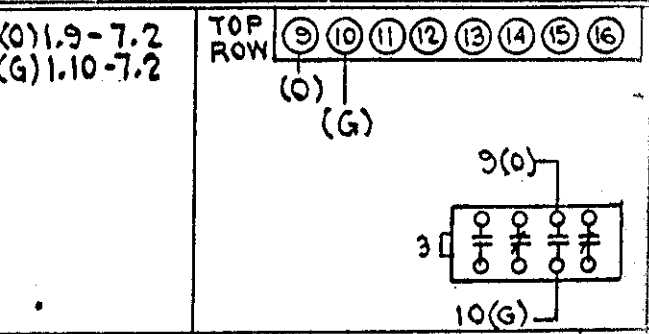
a2 & b2 11E



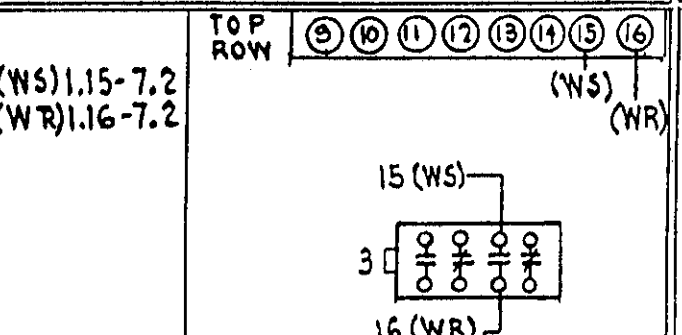
a2 & b2 11F



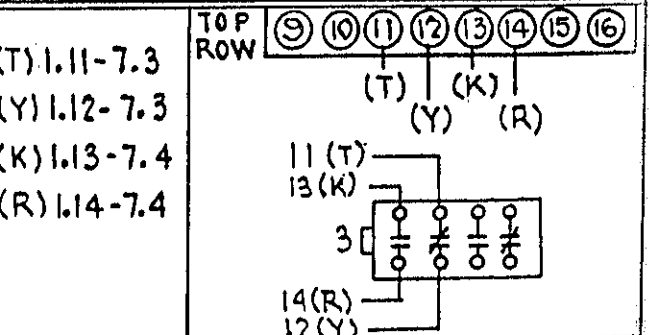
a2 & b2 11G



a2 11H



a2 11I



a1 & b1 11J

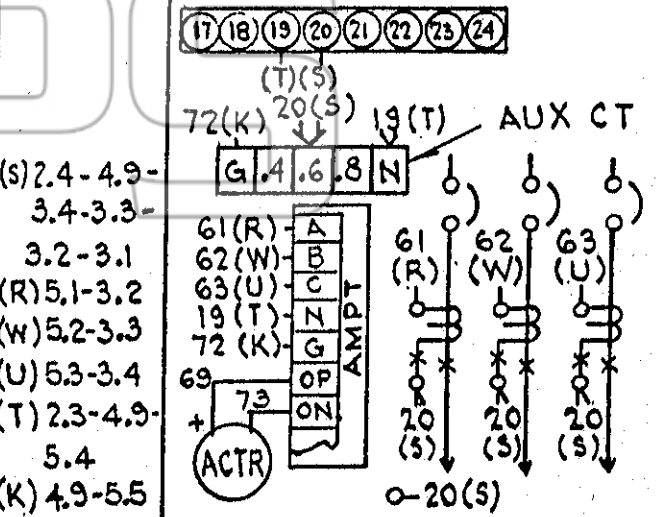
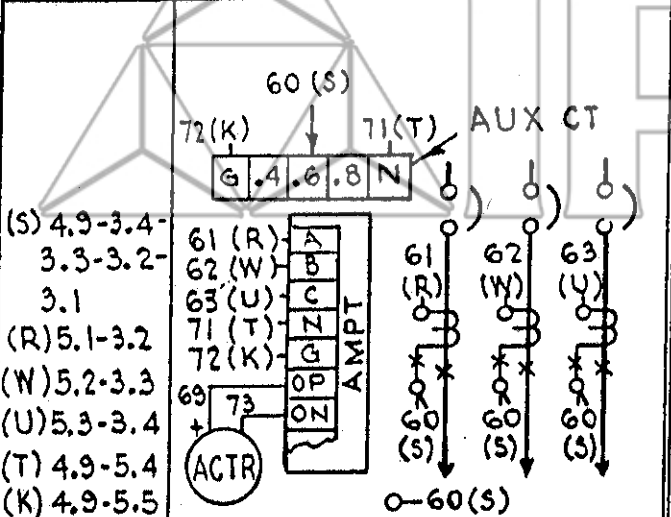
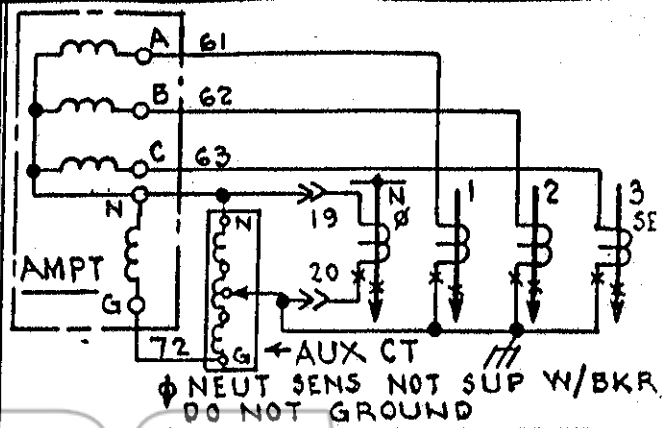
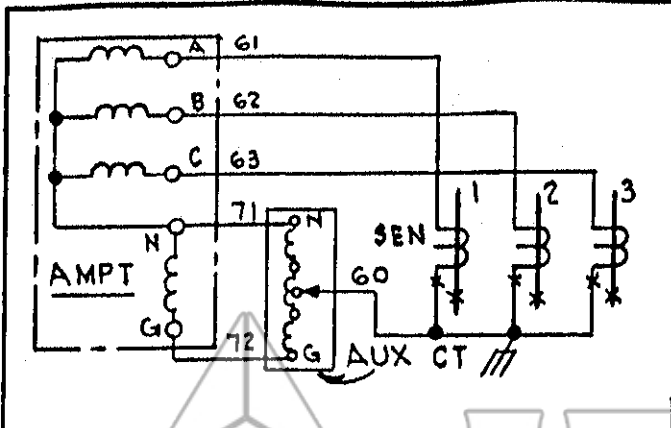
WESTINGHOUSE ELECTRIC CORPORATION

TITLE AUXILIARY SWITCH 3

800A600

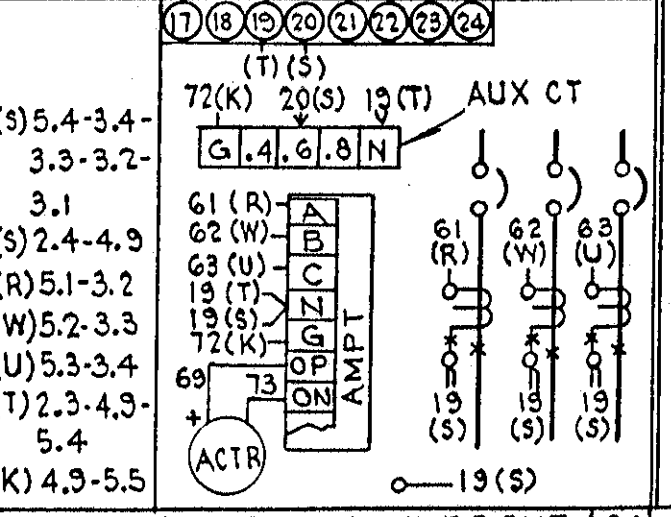
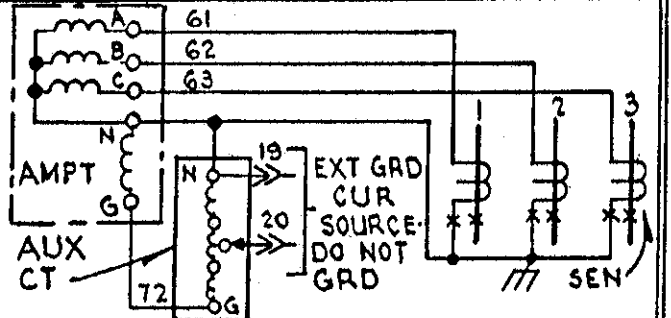
DIVISION SWGR

PLANT LOCATION E.PGH PA SH11



3-PHASE, 3 WIRE 12A

3-PHASE, 4-WIRE 12B



EXTERNAL GROUND CURRENT 12C

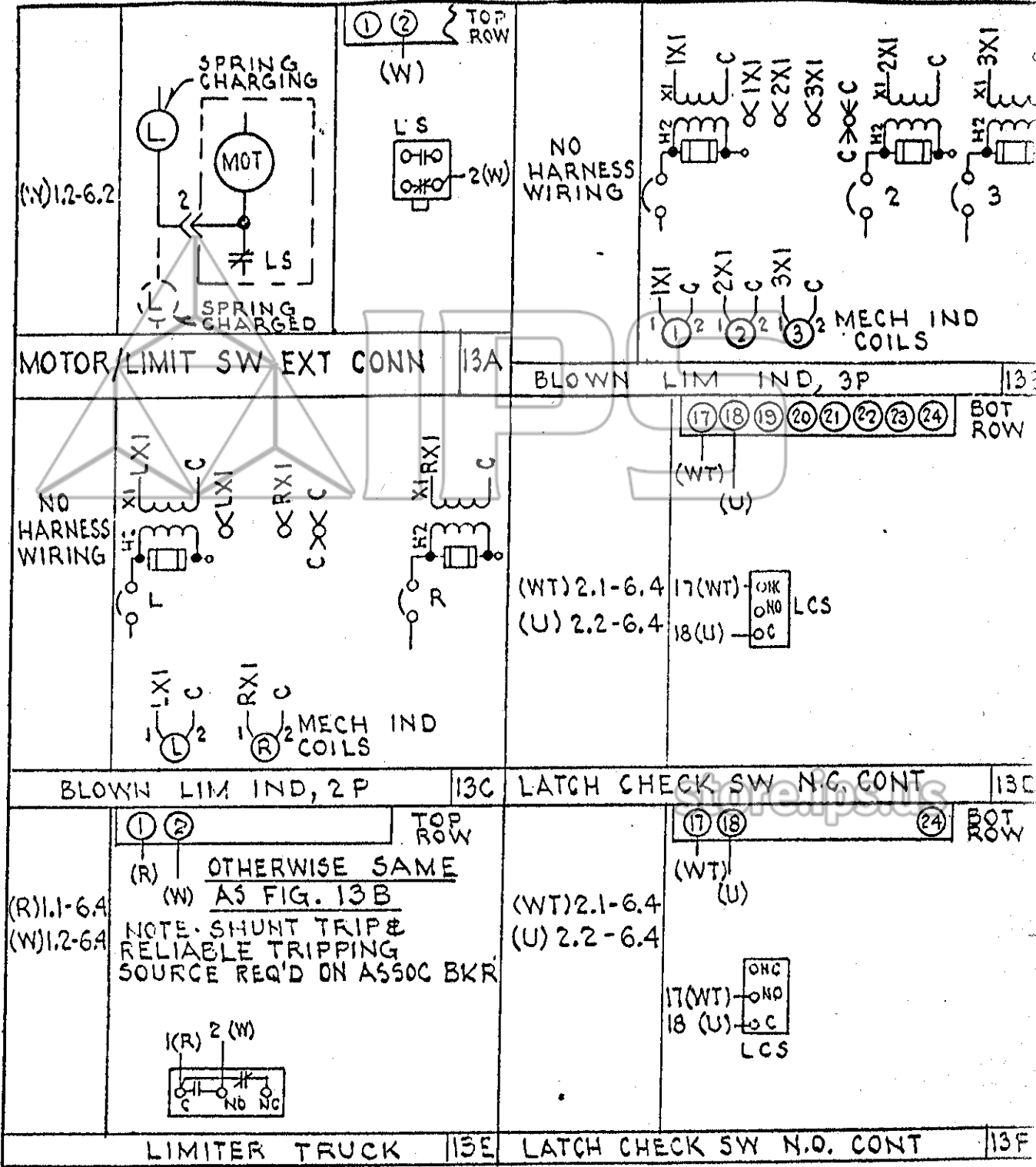
WESTINGHOUSE ELECTRIC CORPORATION

800 A 600

TITLE AUX CT FOR AMPTECTOR GRD ELEMENT, 3P

DIVISION SWGR

PLANT LOCATION E PG H, PA, SH 12



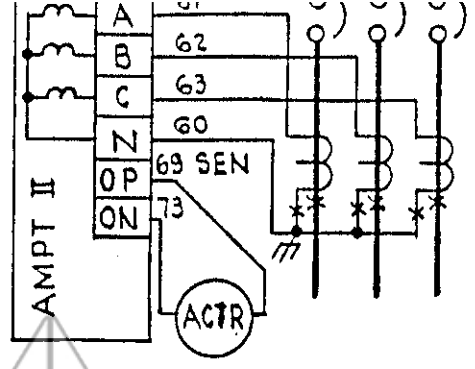
WESTINGHOUSE ELECTRIC CORPORATION
MISCELLANEOUS

800A600

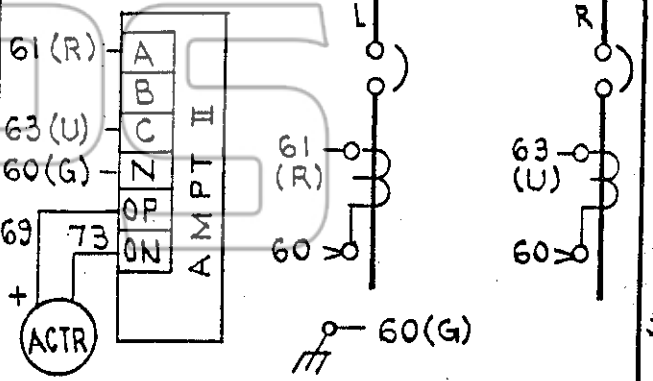
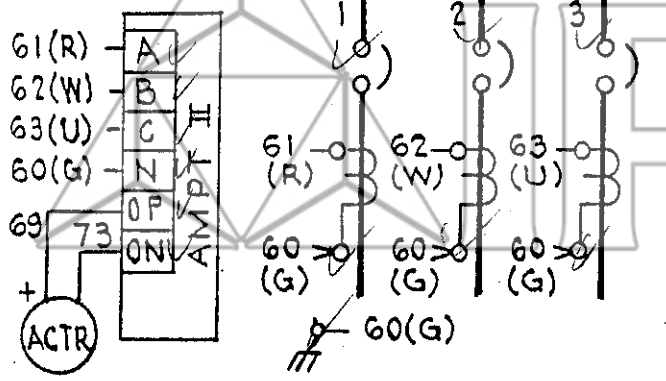
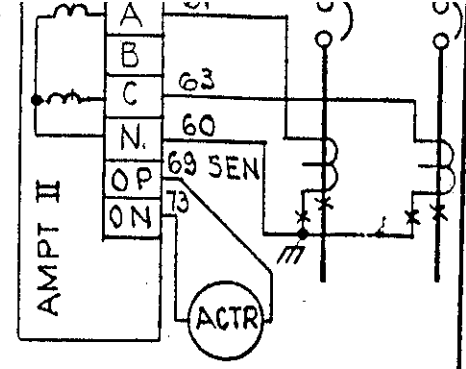
TITLE
DIVISION SWGR

PLANT LOCATION E. PGH PA SH 13

(R) 5.1-3.2
 (W) 5.2-3.3
 (U) 5.3-3.4
 (G) 5.4-3.4-
 3.3-3.2-
 3.1



(R) 5.1-3.2
 (U) 5.3-3.4
 (G) 5.4-3.4-
 3.2-3.1



3-POLE

14A

2-POLE

14B

store.ips.us

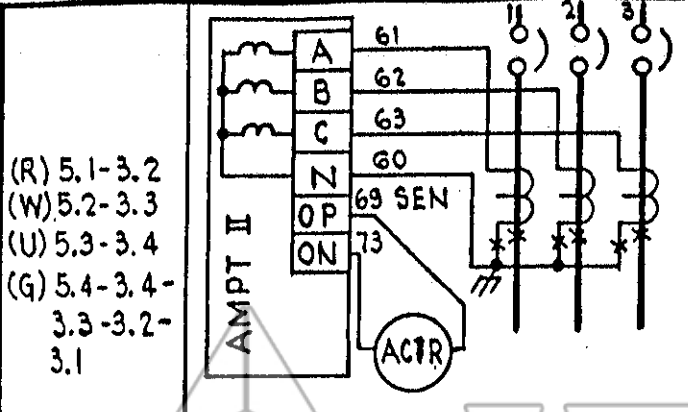
WESTINGHOUSE ELECTRIC CORPORATION

800A 600

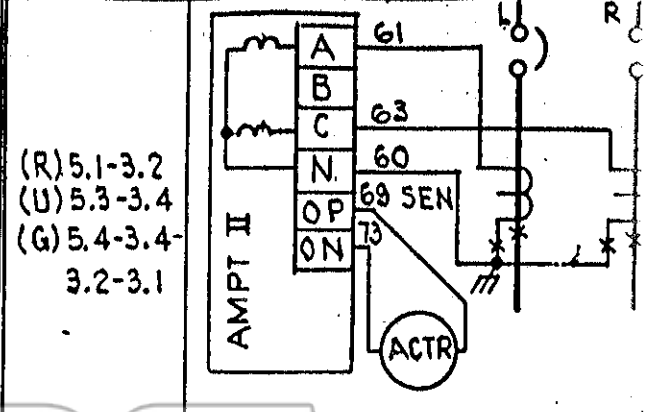
TITLE **SERIES TRIP AMPTECTOR II 2P & 3P**

DIVISION **SWGR**

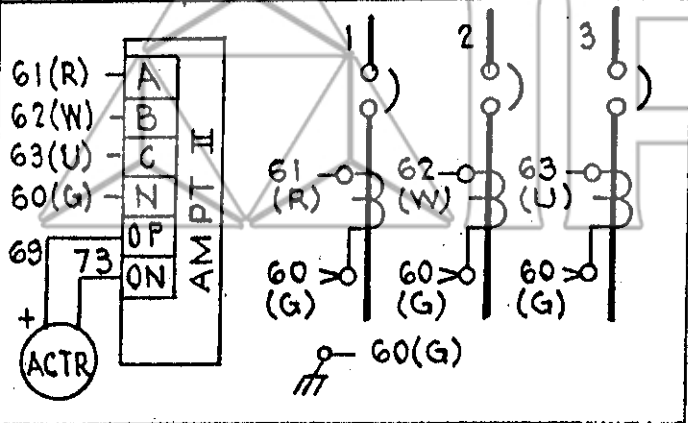
PLANT LOCATION **E.PGH PA SH 14**



(R) 5.1-3.2
 (W) 5.2-3.3
 (U) 5.3-3.4
 (G) 5.4-3.4-
 3.3-3.2-
 3.1

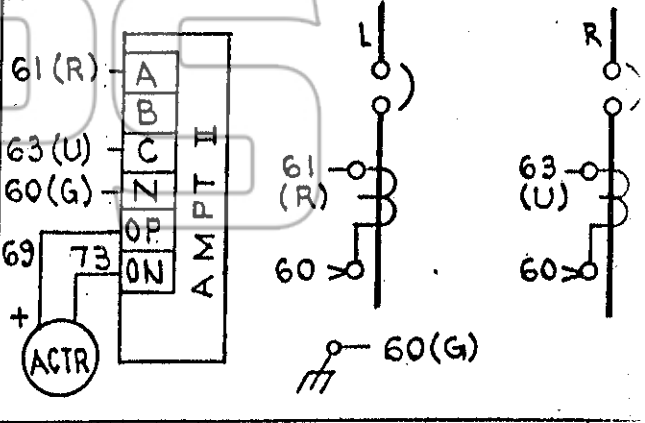


(R) 5.1-3.2
 (U) 5.3-3.4
 (G) 5.4-3.4-
 3.2-3.1



3-POLE

14A



2-POLE

14E

store.ips.us

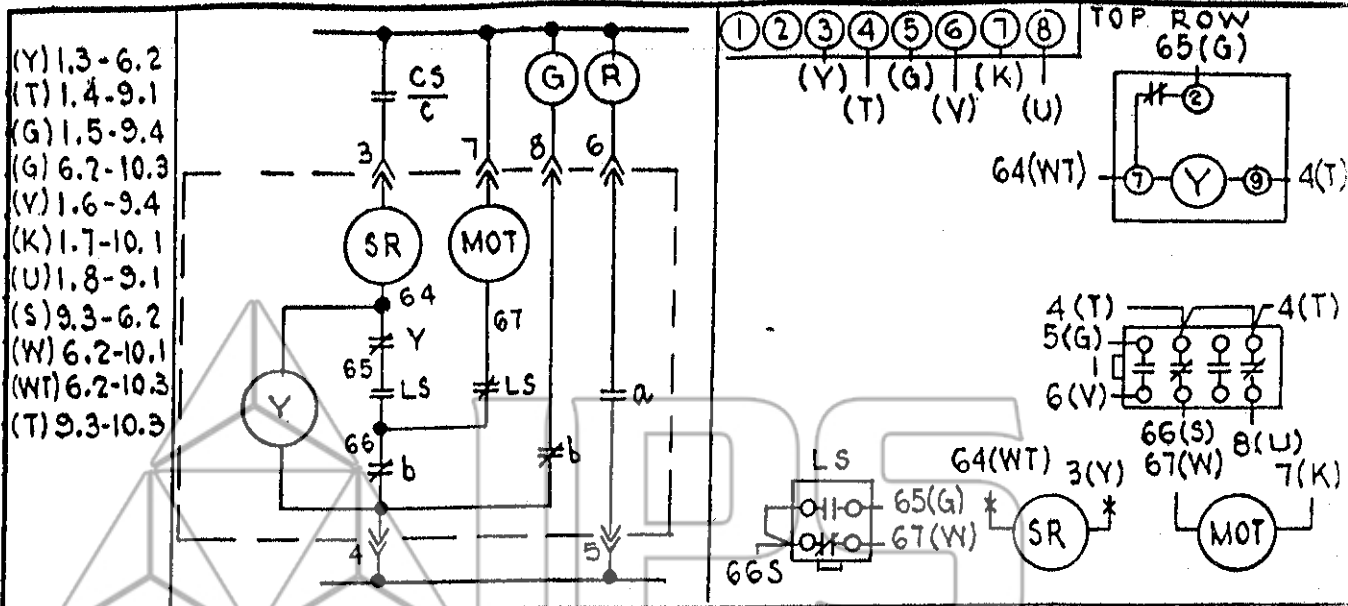
WESTINGHOUSE ELECTRIC CORPORATION

800A 600

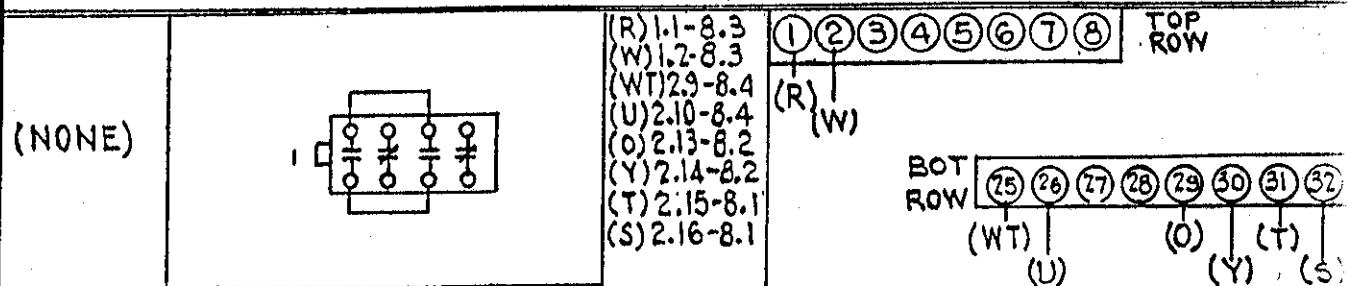
TITLE SERIES TRIP AMPTECTOR II 2P & 3P

DIVISION SWGR

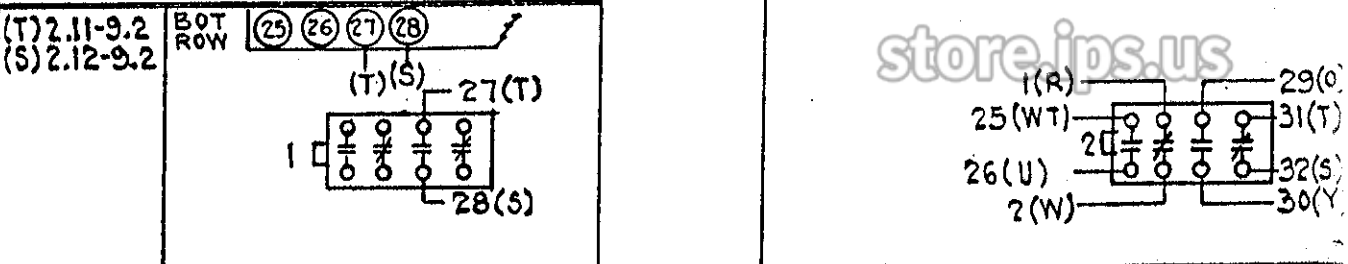
PLANT LOCATION E. PGH PA SH 14



PWR QPR MECH W/O SHUNT TRIP 15A



AUX SW 1 JUMPERS 15B



AUX SW 1 a2 15C AUX SW 2 a1, b1, a2, b2 15D

WESTINGHOUSE ELECTRIC CORPORATION

800A600

TITLE SPECIAL

DIVISION SW GR

PLANT LOCATION E. PGH PA SH. 15