

# RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

TITLE ROUTINE TEST UNIT FOR DISCRIMINATING SELECTOR  
REPEATERS ORDINARY AND C.C.B. 200 OUTLET.  
2000 TYPE.

## COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW		
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8			
AA	4115				1	2									
AB	4662				1	2	4	7	22	24	26	28			
AC	20050				1	2	5	22							
AD	4664				1	2	4	6	22	24				C1	
AE	6363				1	2	4	6	22	24					
AF	2593				1	2									
AO	1005				1	2									
AP	5004				1	2	4	22							
AR	4788				1	2									
AT	10430				1	2	4	22						C2 B1	

D1 IN 4007  
 SCA STRIP TERMINAL  
 TRI TRANSISTOR TEXAS TIP 49  
 EC 44199 ELECTRONIC PULSE GEN.

NOTE: MOUNT COMPONENTS FOR E.P.G.  
 TO SUIT LOCAL CONDITIONS AND  
 MARK UP ACCL. ACCORDINGLY.

CLASS	RELAY	NOTES
C1	AD	SPGS. 21 AND 22 UNWIRED.
C2	AT	SPGS. 3 AND 4 UNWIRED
B1	AT	TEST AND READJUST FIGURES.

LAYOUT. RACK N° 1.

YE/ZN/YZB	YK/X/W	YBA/BB/BC	YD/L/N	M&B	MRJ
YV/ZF	YH/P/V	ZM/H/SA-C	ZB/C/D/E	YA/G	+
YJ/FA/FB	YI/Z/L	ZP/Q/K/J	ZU/ZA		
M	MM	AO	GAA		
MF	CB	MFB	GAB		
TK	PB	CX	QB		
PA	MRC/F	MGA/B	MRCG		
GQ	LA	LB	LE		
BQ	DG	JD	LF		
BT	MRK/E	MRD	JC		
RX	RD	RO	OM		
NR	RL	PC	BB		
MRH	RH	LD	LH		
BR	AT	BH	LG		
CQ	CW	BG	SA		
CT	I	SL	LC		
JH	AP	SC	MR		
MT	MH	OL	AF		
PS	JB	DA	RA		
RT	RTA	SD	TD		
TL	SM	SZ	SS		
KA	KC	SG	PL		
RS	KB	PJ	PK		
DB	LT	CL	PH		
AD	PE	PF	PG		
PT	PX	PY	SR		
TT	BM	AE	BS		
QF	GP	GC			
S	TB	TA			
IP	IR	AA	DS		
IQ	DT	AB	DX		
TS	TU	AC	BC		
TZ	TR	CC	C		
GE					
MP					
MA	MB	MC	SO		
NP	PM	MZ	MS		
	+	+	ZT		
	+	+	GI		

ORIGINATED BY E.T.  
 DATE 10.3.50  
 SIGNED FOR COMMITTEE [Signature]

ISSA 22.10.95  
 (54605) IS.1265/9GE

RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. & C.C.B.

200 OUTLET. 2000 TYPE.

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW			
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8				
BA	10354				2	22										
					1	21										
					M	M										
BB	10354				2	22										
					1	21										
					M	M										
BC	4069				2	4	22	24								
					1	3	21	23								
					M	M	M	M								
BG	2093				2	4	22									
					1	3	21									
					M	M	M									
BH	2093				2	4	22									
					1	3	21									
					M	M	M									
BI	4722*				2	22										
					1	21										
					B	M										
BM	4789 P				2	4	6	22	25	24						
					1	3	5	21	23	23						
					P	M	M	M	M	C						
BQ	73291				2	5	8	7	22	24	27	26				
					1	3	6	7	21	23	25	25				
					M	C	C	C	M	M	C					
BR	4663				2	5	8	7	22	25	24	28	27			
					1	3	6	7	21	23	26	26				
					M	K	K	B	K	K						
BS	4069				2	4	22	24								C.I.
					1	3	21	23								
					M	M	M	M								

NOTES SPECIAL FACTORS OF SAFETY A  
 SPECIAL ADJUSTMENTS B  
 CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES
C.I.	BS	SPGS. 21 AND 22 UNWIRED. * FOR ALTERNATIVE BI RELAY SEE SHEET 12-12.

NZPO

ORIGINATED BY E. T.  
 DATE 10.3.50.  
 SIGNED FOR COMMITTEE *[Signature]*

155.A 15.1265/366  
 (54605) 22-10-85

RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

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 200 OUTLET. 2000 TYPE.

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW		
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8			
BT	6010				3 2 1 21	23 22 21									
C	5257				C	C									
CB	1718				2 4 6 1 3 5	22 24 21 23									
CC	4661				M M B M M B	M B									
CL	40156				2 26 28 1 25 27	22 24 21 23	5 6 4 7	24 23							
CQ	2290				M B B M C C	M C	M								
CT	1924				2 5 8 1 3 6	7 22 21 23	25 24 26 27								
CW	1467				M K K M K K	M K	K								
DA	6048				2 22 5 1 21 3	4									
DQ	73291				B B K										
					2 5 4 1 3 21	22 25 23 24									
					M C M M C M	C									
					2 25 24 1 23 21	22 4 3 5	6								
					M C M M C M	B B									
					3 2 1 21	22									
					C M										
					2 4 7 1 3 5	6 22 21 23	25 24 26								
					M M C M M C	M C									

NOTES SPECIAL FACTORS OF SAFETY A  
 SPECIAL ADJUSTMENTS B  
 CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES

NZPO

ISS. A 15, 1265/3 6E  
(54605) 22.10.85

ORIGINATED BY E. T.  
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RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. & C.C.B.  
 200 OUTLET 2000 TYPE

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW				
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8					
DS	10067				2	4	22	24									
					1	3	21	23									
					M	M	M	M									
DT	7078				3	2											
					1												
DX	6119				2												
					1												
					M												
GQ	2290				2	5	4	22	25	24							
					1	3	21	23									
					M	C	M	C									
I	2012				R	E	T	A	R	D							
IR	4768P				2	22											
					1	21											
					M	M											
IP	2017A				3	2											
					1												
					C												
IQ	4034A				2												
					1												
					M												
JB	2537				3	2	22										
					1	21											
					C	M											
JC	6030				2	5	4	23	22								
					1	3	21										
					M	C	C										

NOTES SPECIAL FACTORS OF SAFETY SPECIAL ADJUSTMENTS CIRCUIT POINTS OR MODIFICATIONS A B C

CLASS	RELAY	NOTES

NZPO

ISS. A. IS. 1265/3 GC (54605) 22-10-85

ORIGINATED BY E.T.  
 DATE 10.3.50.  
 SIGNED FOR COMMITTEE [Signature]

RELAY DESIGN FOR CIRCUIT GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. & C.C.B.  
200 OUTLET. 2000 TYPE

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW				
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8					
JD	6030				2 1	5 3	4 2	23 22									
JH	4069				2 1	4 3	22 21	24 23									
KA	20442				2 1	5 3	4 2	22 21									
KB	20442				2 1	5 3	4 2	22 21									
KC	4545				2 1	4 3	22 21										
LA	1194				2 1	4 3	6 5	22 21	24 23	26 25	28 27						
LB	4659				2 1	4 3	6 5	22 21	24 23								
LC	10167				2 1	22 21											
LD	10167				2 1	22 21											
LE	4659				2 1	4 3	6 5	22 21	24 23								

NOTES SPECIAL FACTORS OF SAFETY A  
 SPECIAL ADJUSTMENTS B  
 CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES

NZPO

ISS. A. 151265/3 GS (54-605) 22-10-85	ORIGINATED BY	E. T.
	DATE	10.3.50.
	SIGNED FOR COMMITTEE	<i>[Signature]</i>

# RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. & C.C.B  
200 OUTLET. 2000 TYPE.

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW			
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8				
LF	4659				2	4	6	22	24							
					1	3	5	21	23							
					M	M	B	M	B							
LG	10167				2	22										
					1	21										
					B	M										
LH	10167				2	22										
					1	21										
					B	M										
LT	4743				2	4	22								B.I.	
					1	3	21									
					M	B	M									
MA	7361				2											
					1											
					M											
MB	4016				2	4	22									
					1	3	21									
					M	B	B									
MC	6001				2	22										
					1	21										
					M	M										
MF	1007				2	5	4	22	25	24						
					1	3	21	23	24							
					M	C	M	C								
MH	1208				2	4	6	23	26	25					C.I.	
					1	3	5	21	22	24						
					M	B	B	C	C							
M	7339				2	4	7	22	24	26	28					
					1	3	5	6	21	23	25	27				
					M	B	C	M	M	B	B					

NOTES SPECIAL FACTORS OF SAFETY A  
 SPECIAL ADJUSTMENTS B  
 CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES
B.I.	LT	TEST AND READJUST FIGS.
C.I.	MH	SPGS. 5 AND 6 UNWIRED

NZPO  
 ISS. A 15.1255/3 GS  
 (54605) 22.10.85

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 DATE 10.3.50.  
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# RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. & C.C.B.  
200 OUTLET. 2000 TYPE.

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER										REFERENCES TO NOTES BELC		
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	0					
MM	6048				2 1	4 3	7 5	6 21	22 23	25 24							
MR	4116				2 1	4 3	22 21	24 23									
MS	2017				3 1	2											
MT	6001				2 1	22 21											
MZ	4070				2 1	4 3	6 5	22 21	24 23								
MFB	1882				2 1	4 3	22 21	24 23									
NP	5220				2 1	4 3											
NR	2537				3 1	2 21	22										C.I.
OL	6001				2 1	22 21											

NOTES SPECIAL FACTORS OF SAFETY A  
SPECIAL ADJUSTMENTS B  
CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES
C.I.	NR	SPG. 1 UNWIRED.

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200 OUTLET. 2000 TYPE.

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RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW				
			RESISTANCE	CONTACTS	1	2	3	4	5	7	8						
OM	20724				1	2	22	4									
					M	M	M										
PA	72276				1	2	4	6	22	24							
					M	B	B	M	B								
PB	6040				1	2	4	7	6	22	24	27	26				
					M	B	C	M	B	C							
PC	4219				1	2	5	4	22	25	24						
					M	K	B	K									
PE	4676				1	2	5	4	6	7	22	24	27	26			C.I.
					M	C	C	M	B	C							
PF	10137				1	2	5	4	22	24							
					M	C	B	B									
PG	1350				1	2	4	23	22								
					M	B	C										
PH	1350				1	2	4	23	22								
					M	B	C										
PJ	10137				1	2	5	4	22	24							
					M	C	B	B									
PK	1350				1	2	4	23	22								
					M	B	C										

NOTES SPECIAL FACTORS OF SAFETY SPECIAL ADJUSTMENTS CIRCUIT POINTS OR MODIFICATIONS

A  
B  
C

CLASS	RELAY	NOTES
C.I.	PE	SPG. 3 UNWIRED.

NZPO

ORIGINATED BY E. T.  
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RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. AND C.C.B.  
200 OUTLET. 2000 TYPE.

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								NOTES				
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8					
PL	7288				2	4	22	24									
					1	3	21	23									
					M	M	M	M									
PM	1005				2												
					M												
PS	6022				2	4	6	22	24								
					1	3	5	21	23								
					M	M	B	M	M								
PT	4744				2	5	23	25									TEST AND R.A. FIGURES
					1	3	4	21	24								B
					B	C	C	M									
PX	4877				2	22											
					1	2											
					C	B											
PY	4878				3	6	5	22	25	24							SPGS. 1 & 25 SPARE.
					1	2	4	21	23								
					C	K	M	C									
RA	5561				2												
					M												
RD	4073				2	22											
					1	21											
					B	M											
RH	6022				2	4	6	22	24								
					1	3	5	21	23								
					M	M	B	M	M								
RO	2022				R	E	T	A	R	D							

NOTES SPECIAL FACTORS OF SAFETY A  
SPECIAL ADJUSTMENTS B  
CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES

NZPO

ISS. A. 15-1265/3 GE (54-605) 22-10-85

ORIGINATED BY E. T.  
DATE 10.3.50.  
SIGNED FOR COMMITTEE *[Signature]*

RELAY DESIGN FOR CIRCUIT GBW 11140 MOD A

TITLE ROUTINER TEST UNIT FOR D.S.R. ORD. & C.C.B.  
200 OUTLET, 2000 TYPE.

COMMITTEE'S WIRING DIAGRAM N°

RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW				
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8					
RS	5079				2 1	5 3	4 21	22									C.I.
RT	2318				2 1	5 3	4 6	8 7	22 21	25 23	24 26	27 28	29				
RTA	1007				2 1	5 3	4 21	22 23	25 24								
SC	4069				2 1	4 3	22 21	24 23									
SD	1202				2 1	4 3	6 5	22 21	25 23	24							
SG	5562				2 1	4 3	23 21	22									
RL	10354				2 1	22 21											
SL	4015				2 1	5 3	4 6	8 7	22 21	24 23	27 25	26					
SM	6001				2 1	22 21											
SO	B6494				2 1	22 21											
SR	10286				2 1	4 3	22 21										

NOTES. SPECIAL FACTORS OF SAFETY A  
SPECIAL ADJUSTMENTS B  
CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES
C1	RS	SPRINGS 21 AND 22 UNWIRED

NZPO

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RELAY NAME	COMM. CODE	IF NEW CODE (card attached)	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER									REFERENCES TO NOTES BELOW				
			RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8						
SS	10049				2	4	7	6	22	24	27	26						
					1	3	5		21	23	25							
					M	M	C		M	M	C							
SZ	6035				2	4	6	22	24	26								
					1	3	5		21	23	25							
					M	M	M		M	M								
TD	1618				2	5	4	22										
					1	3		21										
					M	C		M										
TK	H5521				6	4												B.I.
					2													
					C													
TL	73393				2	24	22	4										
					1	23	21	3										
					M	B		M		M								
TR	4074				2	4	22											
					1	3	21											
					M	M	M											
TS	5381				2	4	6	8	22	24	26	28						
					1	3	5	7	21	23	25	27						
					M	M	M		B	M	M	M						
TT	6038				2	4	7	6	22	24	27	26						
					1	3	5		21	23	25							
					M	M	C		M	M	C							
TU	NZ 50676 AD				3	2	22											
					1	21												
					C	M												
TZ	6212				2	4	6	8	22	24	26	28						C.I.
					1	3	5	7	21	23	25	27						
					M	M	M		M	M	M	M						

NOTES SPECIAL FACTORS OF SAFETY A  
 SPECIAL ADJUSTMENTS B  
 CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES
B.I.	TK.	TEST AND READJUST FIGURES
C.I.	TZ	SPGS. 1 AND 2 UNWIRED.

NZPO

ORIGINATED BY E. T.  
 DATE 10. 3. 50.  
 SIGNED FOR COMMITTEE *[Signature]*

RELAY DESIGN FOR CIRCUIT

GBW 11140 MOD

TITLE ROUTINER TEST UNIT FOR DISCRIMINATING SELECTOR  
 REPEATERS ORDINARY AND C.C.B. 200 OUTLET  
 2000 TYPE

COMMITTEE'S WIRING DIAGRAM NO

RELAY NAME	COMM. CODE	DEPARTURES FROM DIAGRAM		SPRING NUMBERING CONTACT UNIT NUMBER								REFERENCES TO NOTES BELOW			
		RESISTANCE	CONTACTS	1	2	3	4	5	6	7	8				
BI *	20726				4 3	22 21	2 1								
DB	2537				B 3	M 2	M 21								
RX	20708				2 1	22 21									
CX	6010				B 3	M 2									

NOTES SPECIAL FACTORS OF SAFETY A  
 SPECIAL ADJUSTMENTS B  
 CIRCUIT POINTS OR MODIFICATIONS C

CLASS	RELAY	NOTES
		* FOR ALTERNATIVE 'BI' RELAY SEE SHEET 2-12.

ISS A. 15 1265/30E  
 (154.605) 22-10-85

NZPO

ORIGINATED BY	E. T.
DATE	28.12.51.
SIGNED FOR COMMITTEE	<i>[Signature]</i>