SHEET INDEX

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OPTION INDEX

APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION
(Y),(Z)	1	306,307	B#1AA B#1CA-B#1GA D#1

DWG ISSUE	CO ISSUE	DATE ISSUED	ORIGIN	APPD
1	1	12-23-83	A.S PRS	MLV JCM RTG

SUPPORTING INFORMATION

CATEGORY	NO.
DESCRIPTION	BSP-234-112-010
THEORY	BSP-234-112-011
TOPS	BSP-234-15-055
EQUIPMENT DESIGN REQUIREMENTS	J-68960A (BSP-804-050-153)
CIRCUIT PACK	SD-50210-01
EQUIPMENT DRAWING	J-68960A-( )

SHEET INDEX NOTES

1. WHEN CHANGES ARE MADE IN THIS DRAWING ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
2. THIS SHEET INDEX WILL BE REISSUED AND BROUGHT UP TO DATE EACH TIME ANY SHEET OF THE DRAWING IS REISSUED, OR A NEW SHEET IS ADDED.
3. THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
4. SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
5. THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING.

XT13

5ESS™ EXPORT

PERIODIC PULSE METERING CIRCUIT

WECO STANDARD

DWG SIZE 6S

ISSUE 1

PRINTED IN U.S.A.

SHEET INDEX

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FS 2 POWER & MISC CIRCUIT	B#2AA	1
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APP FIG. 1-3	C#1	1
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FIGURES, NOTES AND OTHER INFORMATION REFERENCED IN THIS DRAWING BUT NOT LISTED IN THIS "OPERATION AND MAINTENANCE" SHEET INDEX ARE REQUIRED FOR ENGINEERING AND MANUFACTURING PURPOSED ONLY AND ARE NOT PROVIDED.

SESS™ EXPORT

PERIODIC PULSE METERING CIRCUIT

OPERATIONS AND MAINTENANCE

WECO STANDARD

DWG SIZE: B8

ISSUE: 1

BELL LABORATORIES | SD-5X202-01 | 7 SHEETS A#1

DESIGNATION MNEMONICS INDEX

MNEMONIC	ES/SYM	DEFINITION
+12V	2/1	+12 VOLT POWER SUPPLY
+5V	2/1	+5 VOLT POWER SUPPLY
-48V00	2/1	-48 VOLT POWER FROM FEEDER 0
-48V01	1/1	-48 VOLT POWER FROM FEEDER 1
-48V02	1/9	-48 VOLT POWER FROM FEEDER 2
ACL	1/18	ATTENUATION-CONTINUATION-LEVEL
AMPGT	1/17	AMPLITUDE GREATER THAN
AMPLT	1/17	AMPLITUDE LESS THAN
CLKEN	1/18	CLOCK ENABLE
CLK(0,1)N	1/17	NEGATIVE WIRE OF THE CLOCK (0,1) CABLES
CLK(0,1)P	1/17	POSITIVE WIRE OF THE CLOCK (0,1) CABLES
CRCLR(00-15)	1/17	CONTINUITY RELAY CLEAR FANOUTS 00 - 15
CR(00-15)	1/17	CONTINUITY RELAY FANOUTS 00 - 15
CT	1/18	CONTINUITY TEST FOR TONE CIRCUIT
C(00-07)	1/17	CIRCUIT SELECT BIT 0 FANOUTS 0 - 7
C(10-17)	1/17	CIRCUIT SELECT BIT 1 FANOUTS 0 - 7
EN12	1/17	12 KHZ TONE ENABLE
EN16	1/17	16 KHZ TONE ENABLE
EQ(A,B)	1/18	EQUIPMENT LOCATION BIT A & B
F40	1/17	40 KHZ CLOCK TEST BIT
INTZ	1/18	TONE INTERRUPT SIGNAL
LEA(00-15)	1/17	LINE APPLIQUE ENABLE FANOUTS 0 - 15
MSG(0,1)N	1/17	NEGATIVE WIRE OF THE (0,1) MESSAGE TWIST PAIR
MSG(0,1)P	1/17	POSITIVE WIRE OF THE (0,1) MESSAGE TWIST PAIR
NCURPR	1/1	CURRENT PROGRAM RESISTOR NEGATIVE TERMINAL
NINT(0,1)N	1/17	NEGATIVE WIRE OF THE (0,1) INTERRUPT TWIST PAIR
NINT(0,1)P	1/17	POSITIVE WIRE OF THE (0,1) INTERRUPT TWIST PAIR
OSC	1/17	OSCILLATOR CLOCK
PCOOS	1/17	OUT-OF-SERVICE LIGHT POWER CONTROL
PCURPR	1/1	CURRENT PROGRAM RESISTOR POSITIVE TERMINAL
PTS1	2/1	PUSH TO START
RBTB(0,1)	1/1	REVERSE BATTERY TEST BUS (0,1)
REFCLK	1/17	REFERENCE CLOCK
RI.0(00-15)	1/1-16	RING IN CIRCUIT 0
RI.1(00-15)	1/1-16	RING IN CIRCUIT 1
RI.2(00-15)	1/1-16	RING IN CIRCUIT 2
RI.3(00-15)	1/1-16	RING IN CIRCUIT 3
RO.0(00-15)	1/1-16	RING OUT CIRCUIT 0
RO.1(00-15)	1/1-16	RING OUT CIRCUIT 1
RO.2(00-15)	1/1-16	RING OUT CIRCUIT 2
RO.3(00-15)	1/1-16	RING OUT CIRCUIT 3
RPLY(0,1)N	1/17	NEGATIVE WIRE OF THE (0,1) REPLY TWIST PAIR CABLE
RPLY(0,1)P	1/17	POSITIVE WIRE OF THE (0,1) REPLY TWIST PAIR CABLE
RST	1/17	RESET
SLCT(0,1)N	1/17	NEGATIVE WIRE OF THE (0,1) SELECT TWIST PAIR CABLE
SLCT(0,1)P	1/17	POSITIVE WIRE OF THE (0,1) SELECT TWIST PAIR CABLE
S(00-07)	1/17	FANOUTS 0-7 FOR THE STATE BIT 0
S(10-17)	1/17	FANOUTS 0-7 FOR THE STATE BIT 1
TBR	1/1	TEST BUS RING
TBT	1/1	TEST BUS TIP
TCLK(0-7)	1/17	TONE PULSE WIDTH REFERENCE CLOCK FANOUTS 0-7
TCT	1/1	TEST CIRCUIT TIP
TCR	1/1	TEST CIRCUIT RING
TI.0(00-15)	1/1-16	TIP IN CIRCUIT 0
TI.1(00-15)	1/1-16	TIP IN CIRCUIT 1
TI.2(00-15)	1/1-16	TIP IN CIRCUIT 2
TI.3(00-15)	1/1-16	TIP IN CIRCUIT 3
TNCLK	1/18	TONE CLOCK
TNSG	1/17	TONE SIGNAL
TN12	1/18	12 KHZ TONE
TN16	1/18	16 KHZ TONE
TO.0(00-15)	1/1-16	TIP OUT CIRCUIT 0
TO.1(00-15)	1/1-16	TIP OUT CIRCUIT 1
TO.2(00-15)	1/1-16	TIP OUT CIRCUIT 2
TO.3(00-15)	1/1-16	TIP OUT CIRCUIT 3
TRB(0-7)	1/1-16	TONE REFERENCE BUSES 0-7
VAMP	1/18	VARIABLE TONE AMPLITUDE
V(2,3,5,9)F	1/17	2, 3, 5, 9 VOLT FEEDBACK
V(2,3,5,9)H	1/17	2, 3, 5, 9 TONE VOLTAGES, ACTIVE HIGH

PERIODIC PULSE METERING UNIT		
	JAG SIZE 12	ISSUE 1
BELL LABORATORIES	SD-5X202-01	A#2

11/07/83

APPARATUS INDEX

EQUIP LOC	APP NO.	FIGURE SH NO.
CIRCUIT PACKS		
04-008	1	C#1
04-028	1	C#1
04-040	2	C#1
04-052	3	C#1
04-052	3	C#1
04-060	3	C#1
04-060	3	C#1
04-068	3	C#1
04-068	3	C#1
04-076	3	C#1
04-076	3	C#1
04-084	3	C#1
04-084	3	C#1
04-092	3	C#1
04-092	3	C#1
04-100	3	C#1
04-100	3	C#1
04-108	3	C#1
04-108	3	C#1
04-116	3	C#1
04-116	3	C#1
04-124	3	C#1
04-124	3	C#1
04-132	3	C#1
04-132	3	C#1
04-140	3	C#1
04-140	3	C#1
04-148	3	C#1
04-148	3	C#1
04-156	3	C#1
04-156	3	C#1
04-164	3	C#1
04-164	3	C#1
04-172	3	C#1
04-172	3	C#1

DESIG	APP NO.	FIG. SH NO.
CIRCUIT PACKS(CONT)		
PPM8D13	3	C#1
PPM8D13	3	C#1
PPM8D14	3	C#1
PPM8D14	3	C#1
PPM8D15	3	C#1
PPM8D15	3	C#1
PPMCON	1	C#1
PPMTTT	2	C#1
PWRCONV	1	C#1

DESIG
PPM8D00 3 C#1
PPM8D00 3 C#1
PPM8D01 3 C#1
PPM8D01 3 C#1
PPM8D02 3 C#1
PPM8D02 3 C#1
PPM8D03 3 C#1
PPM8D03 3 C#1
PPM8D04 3 C#1
PPM8D04 3 C#1
PPM8D05 3 C#1
PPM8D05 3 C#1
PPM8D06 3 C#1
PPM8D06 3 C#1
PPM8D07 3 C#1
PPM8D07 3 C#1
PPM8D08 3 C#1
PPM8D08 3 C#1
PPM8D09 3 C#1
PPM8D09 3 C#1
PPM8D10 3 C#1
PPM8D10 3 C#1
PPM8D11 3 C#1
PPM8D11 3 C#1
PPM8D12 3 C#1
PPM8D12 3 C#1

DESIG	LOCATION FS/SYM	APP FIG	EQPT
CIRCUIT PACK-CP			
PPM8D00	1/1	3	04-052
PPM8D00	1/1	3	04-052
PPM8D01	1/2	3	04-060
PPM8D01	1/2	3	04-060
PPM8D02	1/3	3	04-068
PPM8D02	1/3	3	04-068
PPM8D03	1/4	3	04-076
PPM8D03	1/4	3	04-076
PPM8D04	1/5	3	04-084
PPM8D04	1/5	3	04-084
PPM8D05	1/6	3	04-092
PPM8D05	1/6	3	04-092
PPM8D06	1/7	3	04-100
PPM8D06	1/7	3	04-100
PPM8D07	1/8	3	04-108
PPM8D07	1/8	3	04-108
PPM8D08	1/9	3	04-116
PPM8D08	1/9	3	04-116
PPM8D09	1/10	3	04-124
PPM8D09	1/10	3	04-124
PPM8D10	1/11	3	04-132
PPM8D10	1/11	3	04-132
PPM8D11	1/12	3	04-140
PPM8D11	1/12	3	04-140
PPM8D12	1/13	3	04-148
PPM8D12	1/13	3	04-148
PPM8D13	1/14	3	04-156
PPM8D13	1/14	3	04-156
PPM8D14	1/15	3	04-164
PPM8D14	1/15	3	04-164
PPM8D15	1/16	3	04-172
PPM8D15	1/16	3	04-172
PPMCON	1/17	1	04-028
PPMTTT	1/18	2	04-040
PWRCONV	2/1	1	04-008

LEAD INDEX

DESIG	LOCATION FS/SYM	CAD
LINE UNIT		
RI.000	1/1	03
RI.001	1/2	03
RI.002	1/3	03
RI.003	1/4	03
RI.004	1/5	03
RI.005	1/6	03
RI.006	1/7	03
RI.007	1/8	03
RI.008	1/9	03
RI.009	1/10	03
RI.010	1/11	03
RI.011	1/12	03
RI.012	1/13	03
RI.013	1/14	03
RI.014	1/15	03
RI.015	1/16	03
RI.100	1/1	03
RI.101	1/2	03
RI.102	1/3	03
RI.103	1/4	03
RI.104	1/5	03
RI.105	1/6	03
RI.106	1/7	03
RI.107	1/8	03
RI.108	1/9	03
RI.109	1/10	03
RI.110	1/11	03
RI.111	1/12	03
RI.112	1/13	03
RI.113	1/14	03
RI.114	1/15	03
RI.115	1/16	03
RI.200	1/1	03
RI.201	1/2	03
RI.202	1/3	03
RI.203	1/4	03
RI.204	1/5	03
RI.205	1/6	03
RI.206	1/7	03
RI.207	1/8	03
RI.208	1/9	03
RI.209	1/10	03
RI.210	1/11	03
RI.211	1/12	03
RI.212	1/13	03
RI.213	1/14	03
RI.214	1/15	03
RI.215	1/16	03
RI.300	1/1	03
RI.301	1/2	03
RI.302	1/3	03
RI.303	1/4	03
RI.304	1/5	03
RI.305	1/6	03
RI.306	1/7	03
RI.307	1/8	03
RI.308	1/9	03
RI.309	1/10	03
RI.310	1/11	03
RI.311	1/12	03
RI.312	1/13	03
RI.313	1/14	03
RI.314	1/15	03
RI.315	1/16	03
TI.000	1/1	03

DESIG	LOCATION FS/SYM	CAD
LINE UNIT (CONT)		
TI.001	1/2	03
TI.002	1/3	03
TI.003	1/4	03
TI.004	1/5	03
TI.005	1/6	03
TI.006	1/7	03
TI.007	1/8	03
TI.008	1/9	03
TI.009	1/10	03
TI.010	1/11	03
TI.011	1/12	03
TI.012	1/13	03
TI.013	1/14	03
TI.014	1/15	03
TI.015	1/16	03
TI.100	1/1	03
TI.101	1/2	03
TI.102	1/3	03
TI.103	1/4	03
TI.104	1/5	03
TI.105	1/6	03
TI.106	1/7	03
TI.107	1/8	03
TI.108	1/9	03
TI.109	1/10	03
TI.110	1/11	03
TI.111	1/12	03
TI.112	1/13	03
TI.113	1/14	03
TI.114	1/15	03
TI.115	1/16	03
TI.200	1/1	03
TI.201	1/2	03
TI.202	1/3	03
TI.203	1/4	03
TI.204	1/5	03
TI.205	1/6	03
TI.206	1/7	03
TI.207	1/8	03
TI.208	1/9	03
TI.209	1/10	03
TI.210	1/11	03
TI.211	1/12	03
TI.212	1/13	03
TI.213	1/14	03
TI.214	1/15	03
TI.215	1/16	03
TI.300	1/1	03
TI.301	1/2	03
TI.302	1/3	03
TI.303	1/4	03
TI.304	1/5	03
TI.305	1/6	03
TI.306	1/7	03
TI.307	1/8	03
TI.308	1/9	03
TI.309	1/10	03
TI.310	1/11	03
TI.311	1/12	03
TI.312	1/13	03
TI.313	1/14	03
TI.314	1/15	03
TI.315	1/16	03

DESIG	LOCATION FS/SYM	CAD
MODULAR CONTROL UNIT		
CLKON	1/17	04
CLKOP	1/17	04
CLK1N	1/17	04
CLK1P	1/17	04
MSGON	1/17	04
MSGOP	1/17	04
MSG1N	1/17	04
MSG1P	1/17	04
NINTON	1/17	04
NINTOP	1/17	04
NINT1N	1/17	04
NINT1P	1/17	04
RPLYON	1/17	04
RPLYOP	1/17	04
RPLY1N	1/17	04
RPLY1P	1/17	04
SLCTON	1/17	04
SLCTOP	1/17	04
SLCT1N	1/17	04
SLCT1P	1/17	04
SUBSCRIBER UNIT		
RO.000	1/1	03
RO.001	1/2	03
RO.002	1/3	03
RO.003	1/4	03
RO.004	1/5	03
RO.005	1/6	03
RO.006	1/7	03
RO.007	1/8	03
RO.008	1/9	03
RO.009	1/10	03
RO.010	1/11	03
RO.011	1/12	03
RO.012	1/13	03
RO.013	1/14	03
RO.014	1/15	03
RO.015	1/16	03
RO.100	1/1	03
RO.101	1/2	03
RO.102	1/3	03
RO.103	1/4	03
RO.104	1/5	03
RO.105	1/6	03
RO.106	1/7	03
RO.107	1/8	03
RO.108	1/9	03
RO.109	1/10	03
RO.110	1/11	03
RO.111	1/12	03
RO.112	1/13	03
RO.113	1/14	03
RO.114	1/15	03
RO.115	1/16	03

DESIG	LOCATION FS/SYM	CAD
SUBSCRIBER UNIT (CONT)		
RO.200	1/1	03
RO.201	1/2	03
RO.202	1/3	03
RO.203	1/4	03
RO.204	1/5	03
RO.205	1/6	03
RO.206	1/7	03
RO.207	1/8	03
RO.208	1/9	03
RO.209	1/10	03
RO.210	1/11	03
RO.211	1/12	03
RO.212	1/13	03
RO.213	1/14	03
RO.214	1/15	03
RO.215	1/16	03
RO.300	1/1	03
RO.301	1/2	03
RO.302	1/3	03
RO.303	1/4	03
RO.304	1/5	03
RO.305	1/6	03
RO.306	1/7	03
RO.307	1/8	03
RO.308	1/9	03
RO.309	1/10	03
RO.310	1/11	03
RO.311	1/12	03
RO.312	1/13	03
RO.313	1/14	03
RO.314	1/15	03
RO.315	1/16	03
TO.000	1/1	03
TO.001	1/2	03
TO.002	1/3	03
TO.003	1/4	03
TO.004	1/5	03
TO.005	1/6	03
TO.006	1/7	03
TO.007	1/8	03
TO.008	1/9	03
TO.009	1/10	03
TO.010	1/11	03
TO.011	1/12	03
TO.012	1/13	03
TO.013	1/14	03
TO.014	1/15	03
TO.015	1/16	03
TO.100	1/1	03
TO.101	1/2	03
TO.102	1/3	03
TO.103	1/4	03
TO.104	1/5	03
TO.105	1/6	03
TO.106	1/7	03
TO.107	1/8	03

ISSUE 1

PERIODIC PULSE METERING UNIT

SD-5X202-01-A#3

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE C2

LEAD INDEX (CONT)

DESIG	LOCATION FS/SYM	CAD
SUBSCRIBER UNIT (CONT)		
TD.108	1/9	03
TD.109	1/10	03
TD.110	1/11	03
TD.111	1/12	03
TD.112	1/13	03
TD.113	1/14	03
TD.114	1/15	03
TD.115	1/16	03
TD.200	1/1	03
TD.201	1/2	03
TD.202	1/3	03
TD.203	1/4	03
TD.204	1/5	03
TD.205	1/6	03
TD.206	1/7	03
TD.207	1/8	03
TD.208	1/9	03
TD.209	1/10	03
TD.210	1/11	03
TD.211	1/12	03
TD.212	1/13	03
TD.213	1/14	03
TD.214	1/15	03
TD.215	1/16	03
TD.300	1/1	03
TD.301	1/2	03
TD.302	1/3	03
TD.303	1/4	03
TD.304	1/5	03
TD.305	1/6	03
TD.306	1/7	03
TD.307	1/8	03
TD.308	1/9	03
TD.309	1/10	03
TD.310	1/11	03
TD.311	1/12	03
TD.312	1/13	03
TD.313	1/14	03
TD.314	1/15	03
TD.315	1/16	03

ISSUE 1

PERIODIC PULSE METERING UNIT

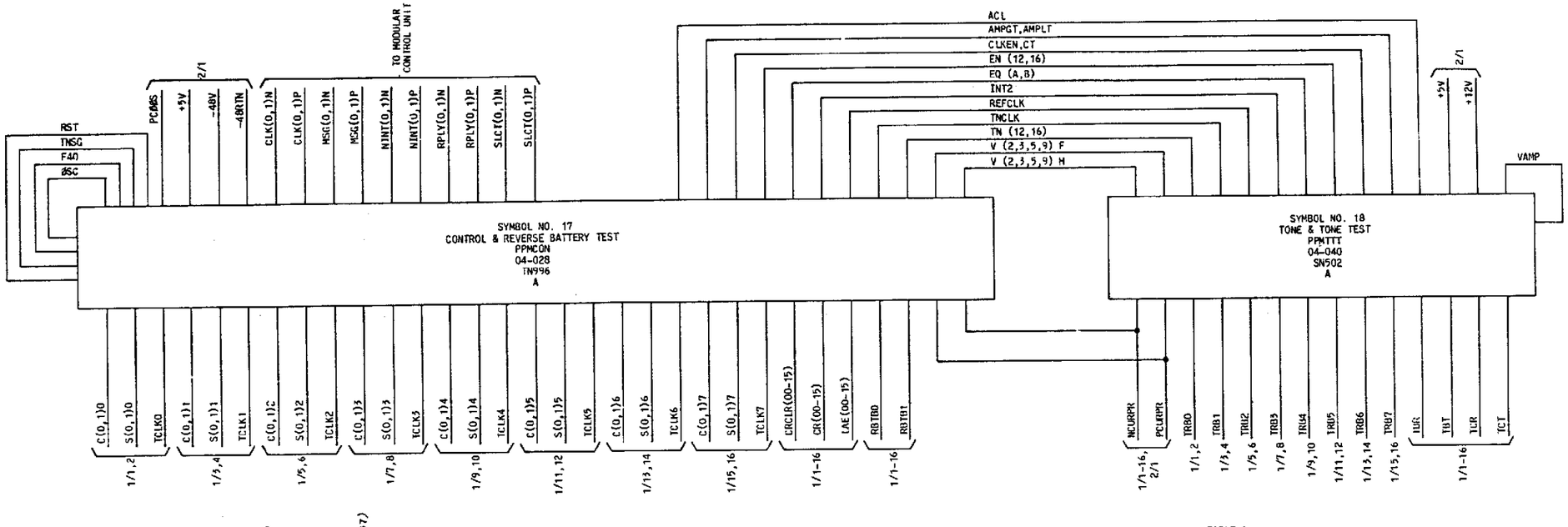
BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE E2

SD-5X202-01-A#4

PART OF FS I

PERIODIC PULSE METERING



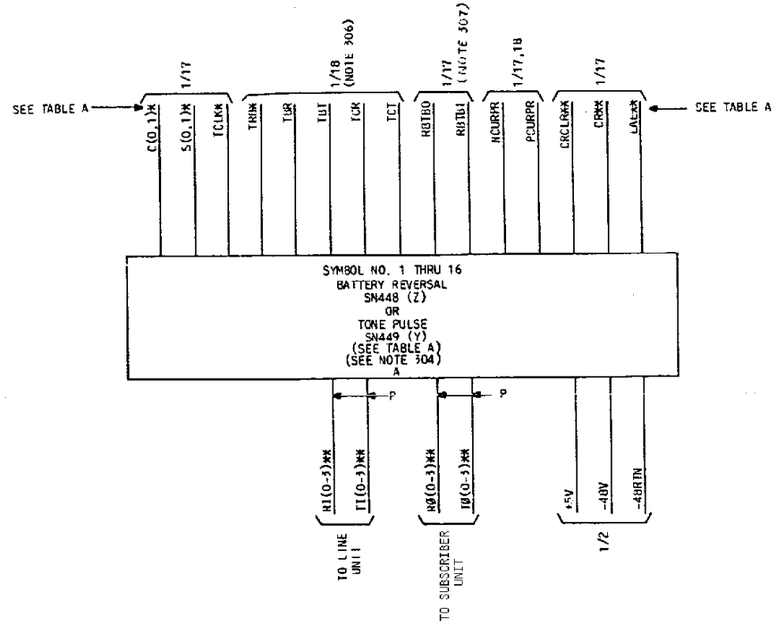


TABLE A

SYMBOL NO.	DESIG	EQPT LOC	*	**
1	PPMB000	04-052	0	00
2	01	04-060	0	01
3	02	04-068	1	02
4	03	04-076	1	03
5	04	04-084	2	04
6	05	04-092	2	05
7	06	04-100	3	06
8	07	04-108	3	07
9	08	04-116	4	08
10	09	04-124	4	09
11	10	04-132	5	10
12	11	04-140	5	11
13	12	04-148	6	12
14	13	04-156	6	13
15	14	04-164	7	14
16	15	04-172	7	15

PERIODIC PULSE METERING UNIT

DWG SIZE: BS

ISSUE: 1

BELL LABORATORIES

SD-5X202-01

SHEET: B#1AA

PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 1

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD00	04-052	SN448	A	(Z)
PPMBD00	04-052	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		Z/1	
	PWR	+5V	054		Z/1	
	PWR	+5V	153		Z/1	
	PWR	+5V	154		Z/1	
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
	PWR	-48V	024		1/2,1/3 1/4,1/5 1/6,1/7 1/8	
CRCLR00	I	CRCLR	050		1/17	
CR00	I	CR	051		1/17	
C00	I	C0	047		1/17	
C10	I	C1	046		1/17	
GRD04052	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE00	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/2,1/3 1/4,1/5 1/6,1/7 1/8,1/9 1/10,1/11 1/12,1/13 1/14,1/15 1/16 1/17	307
RBTB1	(Z)OT	RBTB1	039		1/2,1/3 1/4,1/5 1/6,1/7 1/8,1/9 1/10,1/11 1/12,1/13 1/14,1/15 1/16 1/17	307
RI.000	I	RI.0	015		TO LINE UNIT	P/TI.000
RI.100	I	RI.1	016		TO LINE UNIT	P/TI.100
RI.200	I	RI.2	017		TO LINE UNIT	P/TI.200
RI.300	I	RI.3	018		TO LINE UNIT	P/TI.300
RO.000	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.000
RO.100	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.100
RO.200	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.200

SYMBOL NO. 1 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD00	04-052	SN448	A	(Z)
PPMBD00	04-052	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
RO.300	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.300
S00	I	S0	049		1/17	
S10	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/2,1/3 1/4,1/5 1/6,1/7 1/8,1/9 1/10,1/11 1/12,1/13 1/14,1/15 1/16 1/18	306
TBT	(Y)OT	TBT	138		1/2,1/3 1/4,1/5 1/6,1/7 1/8,1/9 1/10,1/11 1/12,1/13 1/14,1/15 1/16 1/18	306
TCLK0	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/2,1/3 1/4,1/5 1/6,1/7 1/8,1/9 1/10,1/11 1/12,1/13 1/14,1/15 1/16 1/18	306
TCT	(Y)OT	TCT	140		1/2,1/3 1/4,1/5 1/6,1/7 1/8,1/9 1/10,1/11 1/12,1/13 1/14,1/15 1/16,1/18	306
TI.000	I	TI.0	115		TO LINE UNIT	P/RI.000
TI.100	I	TI.1	116		TO LINE UNIT	P/RI.100
TI.200	I	TI.2	117		TO LINE UNIT	P/RI.200
TI.300	I	TI.3	118		TO LINE UNIT	P/RI.300
TO.000	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.000
TO.100	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.100
TO.200	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.200
TO.300	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.300
TRB0	(Y)I	TRB	137		1/18	306

SYMBOL NO. 2

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD01	04-060	SN448	A	(Z)
PPMBD01	04-060	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		Z/1	
	PWR	+5V	054		Z/1	
	PWR	+5V	153		Z/1	
	PWR	+5V	154		Z/1	
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR01	I	CRCLR	050		1/17	
CR01	I	CR	051		1/17	
C00	I	C0	047		1/17	
C10	I	C1	046		1/17	
GRD04060	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE01	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.001	I	RI.0	015		TO LINE UNIT	P/TI.001
RI.101	I	RI.1	016		TO LINE UNIT	P/TI.101
RI.201	I	RI.2	017		TO LINE UNIT	P/TI.201
RI.301	I	RI.3	018		TO LINE UNIT	P/TI.301
RO.001	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.001
RO.101	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.101
RO.201	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.201
RO.301	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.301
S00	I	S0	049		1/17	
S10	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK0	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.001	I	TI.0	115		TO LINE UNIT	P/RI.001
TI.101	I	TI.1	116		TO LINE UNIT	P/RI.101
TI.201	I	TI.2	117		TO LINE UNIT	P/RI.201
TI.301	I	TI.3	118		TO LINE UNIT	P/RI.301

SYMBOL NO. 2 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD01	04-060	SN448	A	(Z)
PPMBD01	04-060	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TO.001	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.001
TO.101	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.101
TO.201	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.201
TO.301	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.301
TRB0	(Y)I	TRB	137		1/18	306

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SYMBOL(S) 1 2

PERIODIC PULSE METERING UNIT	DWG SIZE: D2	ISSUE: 1
BELL LABORATORIES	SD-5X202-01	B#1CA

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PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 3

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD02	04-068	SN448	A	(Z)
PPMBD02	04-068	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR02	I	CRCLR	050		1/17	
CR02	I	CR	051		1/17	
C01	I	C0	047		1/17	
C11	I	C1	046		1/17	
GRD04068	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE02	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.002	I	RI.0	015		TO LINE UNIT	P/TI.002
RI.102	I	RI.1	016		TO LINE UNIT	P/TI.102
RI.202	I	RI.2	017		TO LINE UNIT	P/TI.202
RI.302	I	RI.3	018		TO LINE UNIT	P/TI.302
RO.002	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.002
RO.102	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.102
RO.202	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.202
RO.302	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.302
S01	I	S0	049		1/17	
S11	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK1	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.002	I	TI.0	115		TO LINE UNIT	P/RI.002
TI.102	I	TI.1	116		TO LINE UNIT	P/RI.102
TI.202	I	TI.2	117		TO LINE UNIT	P/RI.202
TI.302	I	TI.3	118		TO LINE UNIT	P/RI.302

SYMBOL NO. 3 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD02	04-068	SN448	A	(Z)
PPMBD02	04-068	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TO.002	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.002
TO.102	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.102
TO.202	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.202
TO.302	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.302
TRB1	(Y)I	TRB	137		1/18	306

SYMBOL NO. 4

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD03	04-076	SN448	A	(Z)
PPMBD03	04-076	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR03	I	CRCLR	050		1/17	
CR03	I	CR	051		1/17	
C01	I	C0	047		1/17	
C11	I	C1	046		1/17	
GRD04076	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE03	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	

SYMBOL NO. 4 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD03	04-076	SN448	A	(Z)
PPMBD03	04-076	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.003	I	RI.0	015		TO LINE UNIT	P/TI.003
RI.103	I	RI.1	016		TO LINE UNIT	P/TI.103
RI.203	I	RI.2	017		TO LINE UNIT	P/TI.203
RI.303	I	RI.3	018		TO LINE UNIT	P/TI.303
RO.003	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.003
RO.103	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.103
RO.203	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.203
RO.303	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.303
S01	I	S0	049		1/17	
S11	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK1	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.003	I	TI.0	115		TO LINE UNIT	P/RI.003
TI.103	I	TI.1	116		TO LINE UNIT	P/RI.103
TI.203	I	TI.2	117		TO LINE UNIT	P/RI.203
TI.303	I	TI.3	118		TO LINE UNIT	P/RI.303
TO.003	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.003
TO.103	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.103
TO.203	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.203
TO.303	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.303
TRB1	(Y)I	TRB	137		1/18	306

SYMBOL NO. 5

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD04	04-084	SN448	A	(Z)
PPMBD04	04-084	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	

SYMBOL NO. 5 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD04	04-084	SN448	A	(Z)
PPMBD04	04-084	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR04	I	CRCLR	050		1/17	
CR04	I	CR	051		1/17	
C02	I	C0	047		1/17	
C12	I	C1	046		1/17	
GRD04084	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE04	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.004	I	RI.0	015		TO LINE UNIT	P/TI.004
RI.104	I	RI.1	016		TO LINE UNIT	P/TI.104
RI.204	I	RI.2	017		TO LINE UNIT	P/TI.204
RI.304	I	RI.3	018		TO LINE UNIT	P/TI.304
RO.004	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.004
RO.104	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.104
RO.204	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.204
RO.304	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.304
S02	I	S0	049		1/17	
S12	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK2	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.004	I	TI.0	115		TO LINE UNIT	P/RI.004
TI.104	I	TI.1	116		TO LINE UNIT	P/RI.104
TI.204	I	TI.2	117		TO LINE UNIT	P/RI.204
TI.304	I	TI.3	118		TO LINE UNIT	P/RI.304
TO.004	O	TO.0	102		TO SUBSCRIBER	P/RO.004

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SYMBOL(S) 3 4 5

PERIODIC PULSE METERING UNIT	DWG SIZE: D	ISSUE: 1
BELL LABORATORIES	SD-5X202-01	B#1CB

PRINTED IN U. S. A. 10/27/83

PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 5 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD04	04-084	SN448	A	(Z)
PPMBD04	04-084	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TO.104	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.104
TO.204	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.204
TO.304	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.304
TRB2	(Y)I	TRB	137		1/18	306

SYMBOL NO. 6

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD05	04-092	SN448	A	(Z)
PPMBD05	04-092	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR05	I	CRCLR	050		1/17	
CR05	I	CR	051		1/17	
C02	I	C0	047		1/17	
C12	I	C1	046		1/17	
GRD04092	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE05	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	

SYMBOL NO. 6 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD05	04-092	SN448	A	(Z)
PPMBD05	04-092	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.005	I	RI.0	015		TO LINE UNIT	P/TI.005
RI.105	I	RI.1	016		TO LINE UNIT	P/TI.105
RI.205	I	RI.2	017		TO LINE UNIT	P/TI.205
RI.305	I	RI.3	018		TO LINE UNIT	P/TI.305
RO.005	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.005
RO.105	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.105
RO.205	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.205
RO.305	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.305
S02	I	S0	049		1/17	
S12	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK2	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.005	I	TI.0	115		TO LINE UNIT	P/RI.005
TI.105	I	TI.1	116		TO LINE UNIT	P/RI.105
TI.205	I	TI.2	117		TO LINE UNIT	P/RI.205
TI.305	I	TI.3	118		TO LINE UNIT	P/RI.305
TO.005	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.005
TO.105	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.105
TO.205	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.205
TO.305	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.305
TRB2	(Y)I	TRB	137		1/18	306

SYMBOL NO. 7

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD06	04-100	SN448	A	(Z)
PPMBD06	04-100	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	

SYMBOL NO. 7 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD06	04-100	SN448	A	(Z)
PPMBD06	04-100	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR06	I	CRCLR	050		1/17	
CR06	I	CR	051		1/17	
C03	I	C0	047		1/17	
C13	I	C1	046		1/17	
GRD04100	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE06	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.006	I	RI.0	015		TO LINE UNIT	P/TI.006
RI.106	I	RI.1	016		TO LINE UNIT	P/TI.106
RI.206	I	RI.2	017		TO LINE UNIT	P/TI.206
RI.306	I	RI.3	018		TO LINE UNIT	P/TI.306
RO.006	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.006
RO.106	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.106
RO.206	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.206
RO.306	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.306
S03	I	S0	049		1/17	
S13	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK3	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.006	I	TI.0	115		TO LINE UNIT	P/RI.006
TI.106	I	TI.1	116		TO LINE UNIT	P/RI.106
TI.206	I	TI.2	117		TO LINE UNIT	P/RI.206
TI.306	I	TI.3	118		TO LINE UNIT	P/RI.306
TO.006	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.006
TO.106	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.106
TO.206	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.206
TO.306	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.306
TRB3	(Y)I	TRB	137		1/18	306

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SYMBOL(S) 5 6 7

PERIODIC PULSE METERING UNIT

DWG SIZE: D2
ISSUE: 1

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PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 8

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD07	04-108	SN448	A	(Z)
PPMBD07	04-108	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V01	PWR	-48V	023		1/1	
	PWR	-48V	024		1/1	
	PWR	-48V	123		1/1	
	PWR	-48V	124		1/1	
CRCLR07	I	CRCLR	050		1/17	
CR07	I	CR	051		1/17	
C03	I	C0	047		1/17	
C13	I	C1	046		1/17	
GRD04108	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE07	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.007	I	RI.0	015		TO LINE UNIT	P/TI.007
RI.107	I	RI.1	016		TO LINE UNIT	P/TI.107
RI.207	I	RI.2	017		TO LINE UNIT	P/TI.207
RI.307	I	RI.3	018		TO LINE UNIT	P/TI.307
RO.007	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.007
RO.107	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.107
RO.207	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.207
RO.307	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.307
S03	I	S0	049		1/17	
S13	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK3	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.007	I	TI.0	115		TO LINE UNIT	P/RI.007
TI.107	I	TI.1	116		TO LINE UNIT	P/RI.107
TI.207	I	TI.2	117		TO LINE UNIT	P/RI.207
TI.307	I	TI.3	118		TO LINE UNIT	P/RI.307

SYMBOL NO. 8 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD07	04-108	SN448	A	(Z)
PPMBD07	04-108	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TO.007	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.007
TO.107	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.107
TO.207	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.207
TO.307	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.307
TRB3	(Y)I	TRB	137		1/18	306

SYMBOL NO. 9

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD08	04-116	SN448	A	(Z)
PPMBD08	04-116	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
	PWR	-48V	024		1/10,1/11 1/12,1/13 1/14,1/15 1/16	
CRCLR08	I	CRCLR	050		1/17	
CR08	I	CR	051		1/17	
C04	I	C0	047		1/17	
C14	I	C1	046		1/17	
GRD04116	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			

SYMBOL NO. 9 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD08	04-116	SN448	A	(Z)
PPMBD08	04-116	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
LAE08	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.008	I	RI.0	015		TO LINE UNIT	P/TI.008
RI.108	I	RI.1	016		TO LINE UNIT	P/TI.108
RI.208	I	RI.2	017		TO LINE UNIT	P/TI.208
RI.308	I	RI.3	018		TO LINE UNIT	P/TI.308
RO.008	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.008
RO.108	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.108
RO.208	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.208
RO.308	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.308
S04	I	S0	049		1/17	
S14	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK4	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.008	I	TI.0	115		TO LINE UNIT	P/RI.008
TI.108	I	TI.1	116		TO LINE UNIT	P/RI.108
TI.208	I	TI.2	117		TO LINE UNIT	P/RI.208
TI.308	I	TI.3	118		TO LINE UNIT	P/RI.308
TO.008	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.008
TO.108	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.108
TO.208	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.208
TO.308	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.308
TRB4	(Y)I	TRB	137		1/18	306

SYMBOL NO. 10

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD09	04-124	SN448	A	(Z)
PPMBD09	04-124	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR09	I	CRCLR	050		1/17	
CR09	I	CR	051		1/17	
C04	I	C0	047		1/17	
C14	I	C1	046		1/17	
GRD04124	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE09	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.009	I	RI.0	015		TO LINE UNIT	P/TI.009
RI.109	I	RI.1	016		TO LINE UNIT	P/TI.109
RI.209	I	RI.2	017		TO LINE UNIT	P/TI.209
RI.309	I	RI.3	018		TO LINE UNIT	P/TI.309
RO.009	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.009
RO.109	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.109
RO.209	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.209
RO.309	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.309
S04	I	S0	049		1/17	
S14	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK4	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.009	I	TI.0	115		TO LINE UNIT	P/RI.009
TI.109	I	TI.1	116		TO LINE UNIT	P/RI.109

SYMBOL NO. 10

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD09	04-124	SN448	A	(Z)
PPMBD09	04-124	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	

PART OF FS 1

SYMBOL(S) 8 9 10

PERIODIC PULSE METERING UNIT

DWG SIZE: D

ISSUE: 1

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PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 10 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD09	04-124	SN448	A	(Z)
PPMBD09	04-124	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TI.209	I	TI.2	117		TO LINE UNIT	P/RI.209
TI.309	I	TI.3	118		TO LINE UNIT	P/RI.309
TO.009	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.009
TO.109	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.109
TO.209	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.209
TO.309	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.309
TRB4	(Y)I	TRB	137		1/18	306

SYMBOL NO. 11

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD10	04-132	SN448	A	(Z)
PPMBD10	04-132	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR10	I	CRCLR	050		1/17	
CR10	I	CR	051		1/17	
C05	I	C0	047		1/17	
C15	I	C1	046		1/17	
GRD04132	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			

SYMBOL NO. 11 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD10	04-132	SN448	A	(Z)
PPMBD10	04-132	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
LAE10	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.010	I	RI.0	015		TO LINE UNIT	P/TI.010
RI.110	I	RI.1	016		TO LINE UNIT	P/TI.110
RI.210	I	RI.2	017		TO LINE UNIT	P/TI.210
RI.310	I	RI.3	018		TO LINE UNIT	P/TI.310
RO.010	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.010
RO.110	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.110
RO.210	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.210
RO.310	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.310
S05	I	S0	049		1/17	
S15	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK5	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.010	I	TI.0	115		TO LINE UNIT	P/RI.010
TI.110	I	TI.1	116		TO LINE UNIT	P/RI.110
TI.210	I	TI.2	117		TO LINE UNIT	P/RI.210
TI.310	I	TI.3	118		TO LINE UNIT	P/RI.310
TO.010	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.010
TO.110	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.110
TO.210	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.210
TO.310	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.310
TRB5	(Y)I	TRB	137		1/18	306

SYMBOL NO. 12

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD11	04-140	SN448	A	(Z)
PPMBD11	04-140	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	

SYMBOL NO. 12 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD11	04-140	SN448	A	(Z)
PPMBD11	04-140	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR11	I	CRCLR	050		1/17	
CR11	I	CR	051		1/17	
C05	I	C0	047		1/17	
C15	I	C1	046		1/17	
GRD04140	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE11	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.011	I	RI.0	015		TO LINE UNIT	P/TI.011
RI.111	I	RI.1	016		TO LINE UNIT	P/TI.111
RI.211	I	RI.2	017		TO LINE UNIT	P/TI.211
RI.311	I	RI.3	018		TO LINE UNIT	P/TI.311
RO.011	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.011
RO.111	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.111
RO.211	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.211
RO.311	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.311
S05	I	S0	049		1/17	
S15	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK5	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.011	I	TI.0	115		TO LINE UNIT	P/RI.011
TI.111	I	TI.1	116		TO LINE UNIT	P/RI.111
TI.211	I	TI.2	117		TO LINE UNIT	P/RI.211
TI.311	I	TI.3	118		TO LINE UNIT	P/RI.311
TO.011	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.011
TO.111	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.111
TO.211	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.211
TO.311	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.311
TRB5	(Y)I	TRB	137		1/18	306

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SYMBOL(S) 10 11 12

PERIODIC PULSE METERING UNIT

DWG SIZE: D2

ISSUE: 1

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PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 13

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD12	04-148	SN448	A	(Z)
PPMBD12	04-148	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR12	I	CRCLR	050		1/17	
CR12	I	CR	051		1/17	
C06	I	C0	047		1/17	
C16	I	C1	046		1/17	
GRD04148	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE12	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.012	I	RI.0	015		TO LINE UNIT	P/TI.012
RI.112	I	RI.1	016		TO LINE UNIT	P/TI.112
RI.212	I	RI.2	017		TO LINE UNIT	P/TI.212
RI.312	I	RI.3	018		TO LINE UNIT	P/TI.312
RO.012	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.012
RO.112	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.112
RO.212	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.212
RO.312	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.312
S06	I	S0	049		1/17	
S16	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK6	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.012	I	TI.0	115		TO LINE UNIT	P/RI.012
TI.112	I	TI.1	116		TO LINE UNIT	P/RI.112
TI.212	I	TI.2	117		TO LINE UNIT	P/RI.212
TI.312	I	TI.3	118		TO LINE UNIT	P/RI.312

SYMBOL NO. 13 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD12	04-148	SN448	A	(Z)
PPMBD12	04-148	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TO.012	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.012
TO.112	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.112
TO.212	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.212
TO.312	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.312
TRB6	(Y)I	TRB	137		1/18	306

SYMBOL NO. 14

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD13	04-156	SN448	A	(Z)
PPMBD13	04-156	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR13	I	CRCLR	050		1/17	
CR13	I	CR	051		1/17	
C06	I	C0	047		1/17	
C16	I	C1	046		1/17	
GRD04156	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE13	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	

SYMBOL NO 14 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD13	04-156	SN448	A	(Z)
PPMBD13	04-156	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.013	I	RI.0	015		TO LINE UNIT	P/TI.013
RI.113	I	RI.1	016		TO LINE UNIT	P/TI.113
RI.213	I	RI.2	017		TO LINE UNIT	P/TI.213
RI.313	I	RI.3	018		TO LINE UNIT	P/TI.313
RO.013	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.013
RO.113	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.113
RO.213	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.213
RO.313	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.313
S06	I	S0	049		1/17	
S16	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK6	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.013	I	TI.0	115		TO LINE UNIT	P/RI.013
TI.113	I	TI.1	116		TO LINE UNIT	P/RI.113
TI.213	I	TI.2	117		TO LINE UNIT	P/RI.213
TI.313	I	TI.3	118		TO LINE UNIT	P/RI.313
TO.013	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.013
TO.113	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.113
TO.213	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.213
TO.313	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.313
TRB6	(Y)I	TRB	137		1/18	306

SYMBOL NO. 15

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD14	04-164	SN448	A	(Z)
PPMBD14	04-164	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	

SYMBOL NO. 15 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD14	04-164	SN448	A	(Z)
PPMBD14	04-164	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR14	I	CRCLR	050		1/17	
CR14	I	CR	051		1/17	
C07	I	C0	047		1/17	
C17	I	C1	046		1/17	
GRD04164	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE14	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.014	I	RI.0	015		TO LINE UNIT	P/TI.014
RI.114	I	RI.1	016		TO LINE UNIT	P/TI.114
RI.214	I	RI.2	017		TO LINE UNIT	P/TI.214
RI.314	I	RI.3	018		TO LINE UNIT	P/TI.314
RO.014	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.014
RO.114	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.114
RO.214	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.214
RO.314	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.314
S07	I	S0	049		1/17	
S17	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK7	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.014	I	TI.0	115		TO LINE UNIT	P/RI.014
TI.114	I	TI.1	116		TO LINE UNIT	P/RI.114
TI.214	I	TI.2	117		TO LINE UNIT	P/RI.214
TI.314	I	TI.3	118		TO LINE UNIT	P/RI.314
TO.014	O	TO.0	102		TO SUBSCRIBER	P/RO.014

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SYMBOL(S) 13 14 15

PERIODIC PULSE METERING UNIT

DWG SIZE: D2

ISSUE: 1

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PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 15 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD14	04-164	SN448	A	(Z)
PPMBD14	04-164	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
TO.114	O	TO.1	103		UNIT TO SUBSCRIBER UNIT	P/RO.114
TO.214	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.214
TO.314	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.314
TRB7	(Y)I	TRB	137		1/18	306

SYMBOL NO. 16

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD15	04-172	SN448	A	(Z)
PPMBD15	04-172	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	(Z)O	BC.0	032		TEST PT	307
	(Z)O	BC.1	033		TEST PT	307
	(Z)O	BC.2	034		TEST PT	307
	(Z)O	BC.3	035		TEST PT	307
	(Z)O	SCN.0	132		TEST PT	307
	(Z)O	SCN.1	133		TEST PT	307
	(Z)O	SCN.2	134		TEST PT	307
	(Z)O	SCN.3	135		TEST PT	307
+5V	PWR	+5V	053		2/1	
	PWR	+5V	054		2/1	
	PWR	+5V	153		2/1	
	PWR	+5V	154		2/1	
-48V02	PWR	-48V	023		1/9	
	PWR	-48V	024		1/9	
	PWR	-48V	123		1/9	
	PWR	-48V	124		1/9	
CRCLR15	I	CRCLR	050		1/17	
CR15	I	CR	051		1/17	
C07	I	C0	047		1/17	
C17	I	C1	046		1/17	
GRD04172	(Z)GRD	GRD	000			307
	(Z)GRD	GRD	001			307
	GRD	GRD	043			
	GRD	GRD	045			
	GRD	GRD	055			
	GRD	GRD	056			
	(Z)GRD	GRD	100			307
	(Z)GRD	GRD	101			307
	GRD	GRD	144			
	GRD	GRD	146			
	GRD	GRD	148			
	GRD	GRD	155			
	GRD	GRD	156			
LAE15	I	LAE	044		1/17	
NCURPR	I	NCURPR	149		1/18	
PCURPR	I	PCURPR	150		1/18	

SYMBOL NO. 16 (CONT)

BATTERY REVERSAL OR TONE PULSE

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMBD15	04-172	SN448	A	(Z)
PPMBD15	04-172	SN449	A	(Y)

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
RBTB0	(Z)OT	RBTB0	139		1/1	307
RBTB1	(Z)OT	RBTB1	039		1/1	307
RI.015	I	RI.0	015		TO LINE UNIT	P/TI.015
RI.115	I	RI.1	016		TO LINE UNIT	P/TI.115
RI.215	I	RI.2	017		TO LINE UNIT	P/TI.215
RI.315	I	RI.3	018		TO LINE UNIT	P/TI.315
RO.015	O	RO.0	002		TO SUBSCRIBER UNIT	P/TO.015
RO.115	O	RO.1	003		TO SUBSCRIBER UNIT	P/TO.115
RO.215	O	RO.2	004		TO SUBSCRIBER UNIT	P/TO.215
RO.315	O	RO.3	005		TO SUBSCRIBER UNIT	P/TO.315
S07	I	S0	049		1/17	
S17	I	S1	048		1/17	
TBR	(Y)OT	TBR	038		1/1	306
TBT	(Y)OT	TBT	138		1/1	306
TCLK7	I	TCLK	042		1/17	
TCR	(Y)OT	TCR	040		1/1	306
TCT	(Y)OT	TCT	140		1/1	306
TI.015	I	TI.0	115		TO LINE UNIT	P/RI.015
TI.115	I	TI.1	116		TO LINE UNIT	P/RI.115
TI.215	I	TI.2	117		TO LINE UNIT	P/RI.215
TI.315	I	TI.3	118		TO LINE UNIT	P/RI.315
TO.015	O	TO.0	102		TO SUBSCRIBER UNIT	P/RO.015
TO.115	O	TO.1	103		TO SUBSCRIBER UNIT	P/RO.115
TO.215	O	TO.2	104		TO SUBSCRIBER UNIT	P/RO.215
TO.315	O	TO.3	105		TO SUBSCRIBER UNIT	P/RO.315
TRB7	(Y)I	TRB	137		1/18	306

SYMBOL NO. 17

CONTROL AND REVERSE BATTERY TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMCON	04-028	TN996	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	O	TPC16	002		TEST PT	
	O	TPRK	003		TEST PT	
	O	TPTK	004		TEST PT	
	O	TPC12	102		TEST PT	
	O	TPC36	103		TEST PT	
	O	TPC44	104		TEST PT	
	O	TPSA	105		TEST PT	
	O	TPSB	106		TEST PT	
	O	TPC11	107		TEST PT	
	O	TPC9	108		TEST PT	
	O	ASH00	121		TEST PT	
	O	INT1	123		TEST PT	

SYMBOL NO. 17 (CONT)

CONTROL AND REVERSE BATTERY TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMCON	04-028	TN996	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
	O	INT0	124		TEST PT	
	O	TPAB2	151		TEST PT	
	O	TPAB4	152		TEST PT	
	O	TPC5	202		TEST PT	
	I	ASW10	117		TEST PT	
	I	TPEN2	138		TEST PT	
	I	TPD0	139		TEST PT	
	I	TPF40	153		TEST PT	
	I	DRIN	155		TEST PT	
	I	TPEN1	203		TEST PT	
	I	TPT5	204		TEST PT	
	I	TPT4	295		TEST PT	
	I	TPT3	206		TEST PT	
	I	TPSEQN	207		TEST PT	
	I	TPCK	238		TEST PT	
	I	TPT2	302		TEST PT	
	I	TPT1	303		TEST PT	
	I	TPS2	304		TEST PT	
	I	TPS1	305		TEST PT	
+5V	PWR	VCC	056		2/1	
	PWR	VCC	156		2/1	
	PWR	VCC	256		2/1	
	PWR	VCC	356		2/1	
-48V00	PWR	N48L	000		2/1	
	PWR	N48	100		2/1	
	PWR	N48	101		2/1	
ACL	I	ACL	132		1/18	
AMPGT	O	AMPGT	005		1/18	
AMPLT	O	AMPLT	006		1/18	
CLKEN	I	CLKEN	118		1/18	
CLKON	I	CLKON	035		TO MODULAR CONTROL UNIT	
CLKOP	I	CLKOP	135		TO MODULAR CONTROL UNIT	
CLK1N	I	CLK1N	235		TO MODULAR CONTROL UNIT	
CLK1P	I	CLK1P	335		TO MODULAR CONTROL UNIT	
CRCLR00	O	CRCLR00	338		1/1	
CRCLR01	O	CRCLR01	339		1/2	
CRCLR02	O	CRCLR02	340		1/3	
CRCLR03	O	CRCLR03	341		1/4	
CRCLR04	O	CRCLR04	342		1/5	
CRCLR05	O	CRCLR05	343		1/6	
CRCLR06	O	CRCLR06	344		1/7	
CRCLR07	O	CRCLR07	324		1/8	
CRCLR08	O	CRCLR08	323		1/9	
CRCLR09	O	CRCLR09	322		1/10	
CRCLR10	O	CRCLR10	321		1/11	
CRCLR11	O	CRCLR11	320		1/12	
CRCLR12	O	CRCLR12	319		1/13	
CRCLR13	O	CRCLR13	318		1/14	
CRCLR14	O	CRCLR14	317		1/15	
CRCLR15	O	CRCLR15	316		1/16	
CR00	O	CR00	040		1/1	
CR01	O	CR01	041		1/2	
CR02	O	CR02	042		1/3	
CR03	O	CR03	043		1/4	
CR04	O	CR04	044		1/5	
CR05	O	CR05	045		1/6	
CR06	O	CR06	046		1/7	

SYMBOL NO. 17 (CONT)

CONTROL AND REVERSE BATTERY TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMCON	04-028	TN996	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
CR07	O	CR07	047		1/8	
CR08	O	CR08	140		1/9	
CR09	O	CR09	141		1/10	
CR10	O	CR10	142		1/11	
CR11	O	CR11	143		1/12	
CR12	O	CR12	144		1/13	
CR13	O	CR13	145		1/14	
CR14	O	CR14	146		1/15	
CR15	O	CR15	147		1/16	
CT	I	CT	007		1/18	
C00	O	C00	017		1/1,1/2	
C01	O	C01	018		1/3,1/4	
C02	O	C02	019		1/5,1/6	
C03	O	C03	020		1/7,1/8	
C04	O	C04	021		1/9,1/10	
C05	O	C05	022		1/11,1/12	
C06	O	C06	023		1/13,1/14	
C07	O	C07	024		1/15,1/16	
C10	O	C10	217		1/1,1/2	
C11	O	C11	218		1/3,1/4	
C12	O	C12	219		1/5,1/6	
C13	O	C13	220		1/7,1/8	
C14	O	C14	221		1/9,1/10	
C15	O	C15	222		1/11,1/12	
C16	O	C16	223		1/13,1/14	
C17	O	C17	224		1/15,1/16	
EN12	O	EN12	307		1/18	
EN16	O	EN16	306		1/18	
EQA	I	EQA	120		1/18	
EQB	I	EQB	119		1/18	
FGRD	GRD	FGRD	232			
	GRD	FGRD	332			
F40	O	F400	051			
	I	F401	052			
GRD04028	GRD	GRD	001			
	GRD	GRD	012			
	GRD	GRD	053			
	GRD	GRD	109			
	GRD	GRD	110			
	GRD	GRD	113			
	GRD	GRD	114			
	GRD	GRD	115			
	GRD	GRD	116			
	GRD	GRD	200			
	GRD	GRD	201			
	GRD	GRD	212			
	GRD	GRD	300			
	GRD	GRD	301			
	GRD	GRD	345			
INT2	I	INT2	122		1/18	

PART OF FS 1

SYMBOL(S) 15 16 17

PERIODIC PULSE METERING UNIT	DWG SIZE D2	ISSUE 1
BELL LABORATORIES	SD-5X202-01	B#1CG

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PART OF FS 1

PERIODIC PULSE METERING

SYMBOL NO. 17 (CONT)

CONTROL AND REVERSE BATTERY TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMCON	04-028	TN996	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
LAE00	O	LAE0	008		1/1	
LAE01	O	LAE1	208		1/2	
LAE02	O	LAE2	009		1/3	
LAE03	O	LAE3	209		1/4	
LAE04	O	LAE4	010		1/5	
LAE05	O	LAE5	210		1/6	
LAE06	O	LAE6	011		1/7	
LAE07	O	LAE7	211		1/8	
LAE08	O	LAE8	013		1/9	
LAE09	O	LAE9	213		1/10	
LAE10	O	LAE10	014		1/11	
LAE11	O	LAE11	214		1/12	
LAE12	O	LAE12	015		1/13	
LAE13	O	LAE13	215		1/14	
LAE14	O	LAE14	016		1/15	
LAE15	O	LAE15	216		1/16	
MSG0N	I	MSG0N	036		TO MODULAR CONTROL UNIT	
MSG0P	I	MSG0P	136		TO MODULAR CONTROL UNIT	
MSG1N	I	MSG1N	236		TO MODULAR CONTROL UNIT	
MSG1P	I	MSG1P	336		TO MODULAR CONTROL UNIT	
NCURPR	I	NCURPR	149		1/18	
NINTON	O	NINTON	033		TO MODULAR CONTROL UNIT	
NINT0P	O	NINT0P	133		TO MODULAR CONTROL UNIT	
NINT1N	O	NINT1N	233		TO MODULAR CONTROL UNIT	
NINT1P	O	NINT1P	333		TO MODULAR CONTROL UNIT	
OSC	O	OSCO	347			
	I	OSCI	346			
PCODS	IO	PCODS	050		2/1	
PCURPR	I	PCURPR	150		1/18	
RBT80	IO	RBT80	048		1/1	
RBT81	IO	RBT81	148		1/1	
REFCLK	O	REFCLK	049		1/18	
RPLYON	O	RPLYON	037		TO MODULAR CONTROL UNIT	
RPLY0P	O	RPLY0P	137		TO MODULAR CONTROL UNIT	
RPLY1N	O	RPLY1N	237		TO MODULAR CONTROL UNIT	
RPLY1P	O	RPLY1P	337		TO MODULAR CONTROL UNIT	
RST	I	RST	054			
	I	RST	055			
SLCTON	I	SLCTON	034		TO MODULAR CONTROL UNIT	
SLCT0P	I	SLCT0P	134		TO MODULAR CONTROL UNIT	
SLCT1N	I	SLCT1N	234		TO MODULAR CONTROL UNIT	
SLCT1P	I	SLCT1P	334		TO MODULAR CONTROL UNIT	
S00	O	S00	248		1/1,1/2	
S01	O	S01	249		1/3,1/4	
S02	O	S02	250		1/5,1/6	
S03	O	S03	251		1/7,1/8	

SYMBOL NO. 17 (CONT)

CONTROL AND REVERSE BATTERY TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMCON	04-028	TN996	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
S04	O	S04	252		1/9,1/10	
S05	O	S05	253		1/11,1/12	
S06	O	S06	254		1/13,1/14	
S07	O	S07	255		1/15,1/16	
S10	O	S10	348		1/1,1/2	
S11	O	S11	349		1/3,1/4	
S12	O	S12	350		1/5,1/6	
S13	O	S13	351		1/7,1/8	
S14	O	S14	352		1/9,1/10	
S15	O	S15	353		1/11,1/12	
S16	O	S16	354		1/13,1/14	
S17	O	S17	355		1/15,1/16	
TCLK0	O	TCLK0	240		1/1,1/2	
TCLK1	O	TCLK1	241		1/3,1/4	
TCLK2	O	TCLK2	242		1/5,1/6	
TCLK3	O	TCLK3	243		1/7,1/8	
TCLK4	O	TCLK4	244		1/9,1/10	
TCLK5	O	TCLK5	245		1/11,1/12	
TCLK6	O	TCLK6	246		1/13,1/14	
TCLK7	O	TCLK7	247		1/15,1/16	
TNCLK	I	TNCLK	154		1/18	
TNSG	IO	TNSGO	111			
	IO	TNSGI	112			
TN12	I	TN12	039		1/18	
TN16	I	TN16	038		1/18	
V2F	I	V2F	312		1/18	
V2H	O	V2H	308		1/18	
V3F	I	V3F	313		1/18	
V3H	O	V3H	309		1/18	
V5F	I	V5F	314		1/18	
V5H	O	V5H	310		1/18	
V9F	I	V9F	315		1/18	
V9H	O	V9H	311		1/18	

SYMBOL NO. 18

TONE AND TONE TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMTTT	04-040	SN502	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	PWR	-12V	148		TEST PT	
	O	LV	124		TEST PT	
	I	FLT	003		TEST PT	
	I	REF9L	023		TEST PT	
	I	REF3L	024		TEST PT	
	I	REF5L	032		TEST PT	
	I	REF3H	123		TEST PT	
	I	REF2H	135		TEST PT	
	I	REF2L	136		TEST PT	
	I	REF5H	137		TEST PT	
	I	REF9H	138		TEST PT	
	I	DAMP	141		TEST PT	

SYMBOL NO. 18 (CONT)

TONE AND TONE TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMTTT	04-040	SN502	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
+12V	PWR	+12V	033		2/1	
+5V	PWR	+5V	051		2/1	
	PWR	+5V	052		2/1	
	PWR	+5V	151		2/1	
	PWR	+5V	152		2/1	
ACL	O	ACL	047		1/17	
AMPGT	IO	AMPGT	040		1/17	
AMPLT	IO	AMPLT	041		1/17	
CLKEN	O	CLKEN	012		1/17	
CT	O	CT	048		1/17	
EN12	I	EN12	017		1/17	
EN16	I	EN16	018		1/17	
EOA	O	EOA	120		1/17	
EOB	O	EOB	119		1/17	
GRD04040	GRD	GRD	007			
	GRD	GRD	015			
	GRD	GRD	020			
	GRD	GRD	055			
	GRD	GRD	056			
	GRD	GRD	106			
	GRD	GRD	115			
	GRD	GRD	132			
	GRD	GRD	155			
	GRD	GRD	156			
INT2	O	INT2	004		1/17	
NCURPR	IO	NCURPR	149		1/1,1/2 1/3,1/4 1/5,1/6 1/7,1/8 1/9,1/10 1/11,1/12 1/13,1/14 1/15,1/16 1/17,2/1	
PCURPR	IO	PCURPR	150		1/1,1/2 1/3,1/4 1/5,1/6 1/7,1/8 1/9,1/10 1/11,1/12 1/13,1/14 1/15,1/16 1/17,2/1	
REFCLK	I	REFCLK	134		1/17	
TBR	IO	TBR	108		1/1	
TBT	IO	TBT	109		1/1	
TCR	IO	TCR	035		1/1	
TCT	OT	TCT	034		1/1	
TNCLK	O	TNCLK	107		1/17	
TN12	O	TN12	006		1/17	
TN16	O	TN16	005		1/17	
TRB0	IO	TRB0	011		1/1,1/2	
TRB1	IO	TRB1	111		1/3,1/4	
TRB2	IO	TRB2	010		1/5,1/6	
TRB3	IO	TRB3	110		1/7,1/8	
TRB4	IO	TRB4	013		1/9,1/10	
TRB5	IO	TRB5	113		1/11,1/12	
TRB6	IO	TRB6	014		1/13,1/14	
TRB7	IO	TRB7	114		1/15,1/16	
VAMP	O	VAMP0	008			
	I	VAMPI	009			
V2F	IO	V2F	022		1/17	
V2H	I	V2H	118		1/17	

SYMBOL NO. 18 (CONT)

TONE AND TONE TEST

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PPMTTT	04-040	SN502	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
V3F	IO	V3F	122		1/17	
V3H	I	V3H	117		1/17	
V5F	IO	V5F	021		1/17	
V5H	I	V5H	116		1/17	
V9F	IO	V9F	121		1/17	
V9H	I	V9H	016		1/17	

PART OF FS 1
SYMBOL(S) 17 18

PERIODIC PULSE METERING UNIT

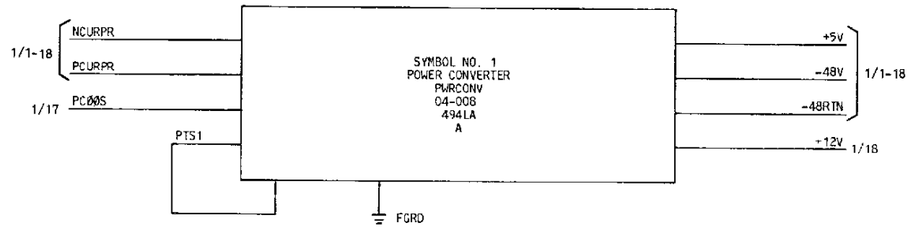
DWG SIZE: D2
ISSUE: 1

BELL LABORATORIES | SD-5X202-01 | B#1CH

PRINTED IN U. S. A. 10/27/83

PART OF FS 2

POWER AND MISC CIRCUIT



PERIODIC PULSE METERING UNIT		DWG SIZE 6S	ISSUE 1
BELL LABORATORIES	SD-5X202-01		SHEET B#2AA

PART OF FS 2

POWER AND MISC CKT

SYMBOL NO. 1

POWER SUPPLY (+5V,-12V)

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PWRCONV	04-008	494LA	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
NC	O	ALMC1	014			
	O	ALMCO	113			
+12V	PWR		123		2/1	
	PWR		124		2/1	
	PWR		024		1/18	
+5V	PWR		015		2/1	
	PWR		045		2/1	
	PWR		046		2/1	
	PWR		047		2/1	
	PWR		048		2/1	
	PWR		049		2/1	
	PWR		050		2/1	
	PWR		051		2/1	
	PWR		052		2/1	
	PWR		053		2/1	
	PWR		054		2/1	
	PWR		055		2/1	
	PWR		056		2/1	
	PWR		145		2/1	
	PWR		146		2/1	
	PWR		147		2/1	
	PWR		148		2/1	
	PWR		149		2/1	
	PWR		150		2/1	
	PWR		151		2/1	
	PWR		152		2/1	
	PWR		153		2/1	
	PWR		154		2/1	
	PWR		155		2/1	
	PWR		156		2/1	
	PWR		019		1/1,1/2 1/3,1/4 1/5,1/6 1/7,1/8 1/9,1/10 1/11,1/12 1/13,1/14 1/15,1/16 1/17,1/18	
-48V00	PWR		007		2/1	
	PWR		008		2/1	
	PWR		106		2/1	
	PWR		107		2/1	
	PWR		108		2/1	
	PWR		006		1/17	
FGRD	GRD		000			
	GRD		001			
	GRD		100			
	GRD		101			
GRD04008	GRD		002			
	GRD		003			
	GRD		004			
	GRD		022			
	GRD		023			
	GRD		032			
	GRD		033			
	GRD		034			
	GRD		035			
	GRD		036			
	GRD		037			
	GRD		038			
	GRD		039			

SYMBOL NO. 1 (CONT)

POWER SUPPLY (+5V,-12V)

DESIG	EQPT LOC	CODE	ELEM IDENT	OPT
PWRCONV	04-008	494LA	A	

LEAD DESIG	FUNC	TERM. MOD	TERM.	TERM. OPT	DESTINATION	NOTE
	GRD		040			
	GRD		041			
	GRD		042			
	GRD		043			
	GRD		102			
	GRD		103			
	GRD		104			
	GRD		119			
	GRD		122			
	GRD		132			
	GRD		133			
	GRD		134			
	GRD		135			
	GRD		136			
	GRD		137			
	GRD		138			
	GRD		139			
	GRD		140			
	GRD		141			
	GRD		142			
	GRD		143			
NCURPR	I	NCURPR	117		1/18	
PCODS	I	PCODS	115		1/17	
PCURPR	I	PCURPR	017		1/18	
PTS1	I	PTS1	109			
	I	PTS1	110			

PART OF FS 2
SYMBOL(S) 1

PERIODIC PULSE METERING UNIT

DWG SIZE	ISSUE
12	1

BELL LABORATORIES	SD-5X202-01	B#2CA

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APP FIG. 1

CIRCUIT PACK

EQPT LOC	04-008		04-028		EQPT LOC
DESIG	PWRCONV		PPMCON		DESIG
CODE	494LA		TN996		CODE
OPTION					OPTION
ELEM IDENT		CKT		CKT	ELEM IDENT
CKT	DESIG	FS/SYM	DESIG	FS/SYM	CKT
A		2/1		1/17	A

APP FIG. 2

CIRCUIT PACK

EQPT LOC	04-040		EQPT LOC
DESIG	PPMTTT		DESIG
CODE	SN502		CODE
OPTION			OPTION
ELEM IDENT		CKT	ELEM IDENT
CKT	DESIG	FS/SYM	CKT
A		1/18	A

APP FIG. 3

CIRCUIT PACK

EQPT LOC	04-052		04-052		04-060		04-060		04-068		04-068		04-076		04-076		04-084		04-084		04-092		04-092		04-100		EQPT LOC
DESIG	PPMBD00		PPMBD00		PPMBD01		PPMBD01		PPMBD02		PPMBD02		PPMBD03		PPMBD03		PPMBD04		PPMBD04		PPMBD05		PPMBD05		PPMBD06		DESIG
CODE	SN449		SN448		SN449		SN448		SN449		SN448		SN449		SN448		SN449		SN448		SN449		SN448		SN449		CODE
OPTION	Y		Z		Y		Z		Y		Z		Y		Z		Y		Z		Y		Z		Y		OPTION
ELEM IDENT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT	ELEM IDENT
CKT	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	CKT
A		1/1		1/1		1/2		1/2		1/3		1/3		1/4		1/4		1/5		1/5		1/6		1/6		1/7	A

CIRCUIT PACK

EQPT LOC	04-100		04-108		04-108		04-116		04-116		04-124		04-124		04-132		04-132		04-140		04-140		04-148		04-148		EQPT LOC
DESIG	PPMBD06		PPMBD07		PPMBD07		PPMBD08		PPMBD08		PPMBD09		PPMBD09		PPMBD10		PPMBD10		PPMBD11		PPMBD11		PPMBD12		PPMBD12		DESIG
CODE	SN448		SN449		SN448		SN449		SN448		SN449		SN448		SN449		SN448		SN449		SN448		SN449		SN448		CODE
OPTION	Z		Y		Z		Y		Z		Y		Z		Y		Z		Y		Z		Y		Z		OPTION
ELEM IDENT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT		CKT	ELEM IDENT
CKT	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	CKT
A		1/7		1/8		1/8		1/9		1/9		1/10		1/10		1/11		1/11		1/12		1/12		1/13		1/13	A

CIRCUIT PACK

EQPT LOC	04-156		04-156		04-164		04-164		04-172		04-172		EQPT LOC
DESIG	PPMBD13		PPMBD13		PPMBD14		PPMBD14		PPMBD15		PPMBD15		DESIG
CODE	SN449		SN448		SN449		SN448		SN449		SN448		CODE
OPTION	Y		Z		Y		Z		Y		Z		OPTION
ELEM IDENT		CKT		CKT		CKT		CKT		CKT		CKT	ELEM IDENT
CKT	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	DESIG	FS/SYM	CKT
A		1/14		1/14		1/15		1/15		1/16		1/16	A

ISSUE 1

PERIODIC PULSE METERING UNIT

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE C2

SD-5XZ02-01-C#1

EQUIPMENT NOTES:

201. CABLING

THE REQUIREMENTS OS [1] SPECIFIED THAT TIP AND RING PAIRS WOULD ROUTE IN AND OUT OF A PPMU TO THE MDF WHERE THEY COULD BE CROSS CONNECTED TO ANY LINES. HOWEVER, IF THE OFFICE USES A GAS TUBE EQUIPPED LINE INTERFACE FRAME (LNI) LOCATED ELECTRICALLY BETWEEN A PPMU AND THE LINE UNITS ASSOCIATED WITH IT, THE PPMU WOULD HAVE TO ABSORB LIGHTNING CURRENTS WHEN THE GAS TUBES FIRED.

A REVISED CABLING SCHEME WILL PROTECT THE PPMU'S. IF AN OFFICE USES LINE INTERFACE FRAMES, THE PPMU'S SHALL LIE ELECTRICALLY BETWEEN LINE INTERFACE FRAMES AND LINE UNITS. OTHERWISE, THE PPMU'S SHALL LIE ELECTRICALLY BETWEEN THE MAIN DISTRIBUTING FRAME AND THE LINE UNITS. IN EITHER CASE THE PPMU'S WILL RECEIVE GAS TUBE ELECTRICAL PROTECTION.

TRAFFIC CONSIDERATION DICTATES THAT THE 64 PAIRS OF TIP AND RING FROM ONE PPMU SHALL BE SPREAD OVER FOUR LU'S. THE CABLING SCHEME ALSO WILL ALLOW GROWTH UP TO A MAXIMUM PPM CAPACITY OF 25% OF THE LINES. THE MAJORITY OF THE CABLE SHALL BE 800 TYPE (26 AWG).

202. POWER

EACH PPMU CONTAINS ONE POWER CONVERTER. THIS POWER CONVERTER SUPPLIES +5 VOLTS AND +12 VOLTS FOR THE PPMU. THE POWER CONVERTER USES -48 VOLTS, AND CAN SUPPLY 13 AMPERES OF +5V AND ONE AMPERE OF +12V.

THE 5 VOLTS IS USED BY ALL CIRCUITS ON THE PPMU AND THE +12 VOLTS IS USED BY THE PPMTTT BOARD.

BECAUSE OF THE LARGE AMOUNT OF +5 VOLT CURRENT AVAILABLE, ALL CIRCUIT BOARDS ARE REQUIRED TO HAVE A PROGRAMMING RESISTOR TO SET THE OVER CURRENT PROTECTION CIRCUITRY ON THE CONVERTER UNIT.

203. GROUNDING

THERE ARE TWO GROUND SYSTEMS ON THE PPMU. THE SMALLER ONE IS ONLY USED FOR A PICB REFERENCE ON THE INTERFACE PACK AND ON THE POWER UNIT. THE LARGER GROUND SYSTEM CONNECTS ALL -48 RETURNS TOGETHER ALONG WITH THE +5 AND +12 RETURNS FOR ALL THE CIRCUIT PACKS. ANY LIGHTNING SURGES SUSTAINED BY THIS UNIT ARE DIRECTED TOWARDS THE -48 RETURNS AT THE BOTTOM OF THE UNIT.

204. GENERAL REQUIREMENTS

THE PHYSICAL DESIGN OF THE PPMU MUST MEET THE "EQUIPMENT DESIGN REQUIREMENTS FOR CENTRAL OFFICE EQUIPMENT" [4] AND THE "PHYSICAL AND ENVIRONMENTAL SPECIFICATIONS FOR INTERNATIONAL APPLICATIONS OF NEW SWITCHING EQUIPMENT" [5] WITH ONE EXCEPTION. THE REQUIREMENT THAT EQUIPMENT BE COOLED BY NATURAL AIR CONVECTION HAS BEEN ELIMINATED; THE NO. 5 ESS EQUIPMENT WILL BE MOUNTED IN CLOSED CABINETS WITH FAN COOLING.

205. UNIT PHYSICAL DESIGN

THE APPLICATION OF PPM PULSES OCCURS THROUGH A PPM CIRCUIT SIMILAR TO ONE DEVELOPED FOR THE NO. 1A ESS. EACH BELLPAC ✱ UNIT OCCUPIES ONE 8.5 INCH HIGH SHELF AND INCLUDES, AS VIEWED FROM LEFT TO RIGHT FROM THE EQUIPMENT AISLE, A POWER SUPPLY, A PACK PROVIDING CONTROL AND REVERSE BATTERY TEST CIRCUITRY (PPMCON), A PACK PROVIDING TONE AND TONE TEST CIRCUITRY (PPMTTT), AND 16 PPM BOARDS (PPMD'S).

TWO INTERCHANGEABLE PPM BOARDS ARE PLANNED. ONE CONTAINS CIRCUITRY FOR BATTERY REVERSAL PULSING; THE OTHER CONTAINS CIRCUITRY FOR 12 OR 16 KHZ TONE PULSING. THIS ALLOWS THE SAME UNIT TO SERVICE SOME CUSTOMERS WITH REVERSE BATTERY PULSING AND OTHERS WITH TONE PULSING. SOFTWARE IN THE ESS SELECTS THE 12 OR 16 KHZ TONE OPTION ON A PER UNIT BASIS, SO BOTH TONES CANNOT BE SIMULTANEOUSLY PROVIDED FROM THE SAME UNIT. IN THE SAME WAY THE ESS SELECTS A TONE AMPLITUDE OF WITHER 2, 3, 5, OR 9 VRMS, SO A UNIT CAN PROVIDE ONLY ONE TONE AMPLITUDE AT A TIME.

THE DESIGN PROVIDES FOUR PPM CIRCUITS (PPMCKT'S) (SERVING FOUR PPM CUSTOMERS) ON EACH PPMBD. UP TO 16 PPMBD'S SPACES ON ONE INCH MOUNTING CENTERS EQUIP THE PPMU. UNDER FULL EQUIPAGE, THE UNIT SERVES 64 LINES.

A LIST OF PACK NAMES AND CIRCUIT PACK NUMBERS FOLLOWS:

CIRCUIT PACK NAME	ABBREVIATION	CP NUMBER
POWER SUPPLY (+5, -12V)		494LA
CONTROL AND REV BAT. TEST CP	PPMCON	TN996
TONE AND TONE TEST CP	PPMTTT	SN502
BATTERY REVERSAL CP	PPMBDR	SN448
TONE PULSE CP	PPMDDT	SN449

EQUIPMENT NOTES: (CONT)

206. SYSTEM PHYSICAL DESIGN

PPMU'S CAN BE LOCATED ANYWHERE IN THE LINE AND TRUNK PERIPHERAL CABINETS WITHIN AN IM. PPMU ALLOCATION ACROSS IM'S IS GOVERNED BY THE TIME SLOTS AVAILABLE AND THE DESIRED TRAFFIC LOADING. NEITHER FUSING REQUIREMENTS NOR NUMBER OF PICB'S WILL BE CONSTRAINTS ON PPMU'S WITHIN KNOWN NO. 5 ESS EXPORT IM CONFIGURATIONS.

207. MAINTENANCE

THE PPM UNIT IS A SERVICE GROUP. IT WILL PROVIDE FOR UP TO 64 LINES. THE MAINTENANCE SCHEME USED HERE MEETS THE NO. 5 ESS SYSTEM GUIDELINE OF A NO MORE THAN 64 LINES AFFECTED BY A SIMPLEX CIRCUIT FAILURE.

THERE ARE NO TEST CIRCUITS ON PPM BOARDS. THE TEST CIRCUITRY IN THE PPMTTT AND PPMCON PACKS WILL BE USED FOR THE TESTING OF ALL PPM BOARDS IN THE SHELD. FAULTS IN A PPM BOARD WILL NOT GENERATE AN IMMEDIATE SERVICE REQUEST SINCE THEY WILL AFFECT AT MOST THE 4 CIRCUITS ON THE PACK. THESE FAULT TYPES WILL BE CAUGHT DURING ROUTINE MAINTENANCE. FAULTS COMMON TO A PPM UNIT SUCH AS FAULTS IN THE PPMTTT OR PPMCON PACK WILL GENERATE AN IMMEDIATE SERVICE REQUEST. THE PPMCON WILL SEND THE SERVICE REQUEST TO THE IMPU.

IF A POWER CONVERTER HAS FAILED THE CONVERTER ALARM LAMP WILL LIGHT.

PERIODIC PULSE METERING UNIT

DWG SIZE: 8S | ISSUE: 1

BELL LABORATORIES | SD-5X202-01 | SHEET: D1

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:
VALUES PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.

302.

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP OR WRG	QUANTITY
PERIODIC PULSE METERING UNIT	1		1
TONE AND TONE TEST CIRCUIT	2		1 PER FIRST APP FIG. 3
BATTERY REVERSAL CIRCUIT	3	Z	1 (MAX 16; SEE NOTE 304)
TONE PULSE CIRCUIT	3	Y	1 (MAX 16; SEE NOTE 304)

303.

RECORD OF FIGURES, WIRING AND APPARATUS CHANGES						
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD

304. THE PERIODIC PULSE METERING UNIT MAY BE EQUIPPED WITH A MAXIMUM OF SIXTEEN BATTERY REVERSAL CIRCUIT PACKS, TONE PULSE CIRCUIT PACKS OR ANY COMBINATION OF BOTH. APP FIG. 3 REFERENCES ALL 16 POSSIBLE EQUIPMENT LOCATIONS.

305. ONLY ONE TONE AND TONE TEST CIRCUIT PACK WILL BE REQUIRED FOR A MAXIMUM OF 16 TONE PULSE CIRCUIT PACKS.

306. THESE LEAD DESIGNATIONS (NETS) ARE FUNCTIONAL ONLY WHEN SN449 TONE PULSE CIRCUIT PACKS ARE PROVIDED.

307. THESE LEAD DESIGNATIONS (NETS) ARE FUNCTIONAL ONLY WHEN SN448 BATTERY REVERSAL CIRCUIT PACKS ARE PROVIDED.

PERIODIC PULSE METERING UNIT		DWG SIZE	ISSUE
			1
BELL LABORATORIES	SD-5X202-01		SHEET 0 of 1

CAD 02

TO CONNECTION				FROM CONNECTION					
DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....				01-014	-48VLUG	.....			
TO POWER DIST CIRCUIT	-48V00			0B0	-48V00				
.....				01-024	GRDLUG	.....			
TO POWER DIST CIRCUIT	GRD04008			0B0	GRD04008				
.....				01-043	-48VLUG	.....			
TO POWER DIST CIRCUIT	-48V01			0B0	-48V01				
.....				01-081	GRDLUG	.....			
TO POWER DIST CIRCUIT	GRD04008			0B0	GRD04008				
.....				01-112	-48VLUG	.....			
TO POWER DIST CIRCUIT	-48V02			0B0	-48V02				
.....				01-145	GRDLUG	.....			
TO POWER DIST CIRCUIT	GRD04008			0B0	GRD04008				

CAD 03

TO CONNECTION				FROM CONNECTION					
DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....J1				04-052	JACK/CP	.....			
TO SUBSCRIBER UNIT	RO.000			002	RO.000				
	RO.100			003	RO.100				
	RO.200			004	RO.200				
	RO.300			005	RO.300				
	RO.001			006	RO.001	04-060	CP	002	
	RO.101			007	RO.101	04-060	CP	003	
	RO.201			008	RO.201	04-060	CP	004	
	RO.301			009	RO.301	04-060	CP	005	
	TO.000			102	TO.000				
	TO.100			103	TO.100				
	TO.200			104	TO.200				
	TO.300			105	TO.300				
	TO.001			106	TO.001	04-060	CP	102	
	TO.101			107	TO.101	04-060	CP	103	
	TO.201			108	TO.201	04-060	CP	104	
	TO.301			109	TO.301	04-060	CP	105	
.....J2				04-052	JACK/CP	.....			
TO LINE UNIT	RI.000			015	RI.000				
	RI.100			016	RI.100				
	RI.200			017	RI.200				
	RI.300			018	RI.300				
	RI.001			019	RI.001	04-060	CP	015	
	RI.101			020	RI.101	04-060	CP	016	
	RI.201			021	RI.201	04-060	CP	017	
	RI.301			022	RI.301	04-060	CP	018	
	TI.000			115	TI.000				
	TI.100			116	TI.100				
	TI.200			117	TI.200				
	TI.300			118	TI.300				
	TI.001			119	TI.001	04-060	CP	115	
	TI.101			120	TI.101	04-060	CP	116	
	TI.201			121	TI.201	04-060	CP	117	
	TI.301			122	TI.301	04-060	CP	118	

CAD 03 (CONT'D)

TO CONNECTION				FROM CONNECTION					
DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....J1				04-068	JACK/CP	.....			
TO SUBSCRIBER UNIT	RO.002			002	RO.002				
	RO.102			003	RO.102				
	RO.202			004	RO.202				
	RO.302			005	RO.302				
	RO.003			006	RO.003	04-076	CP	002	
	RO.103			007	RO.103	04-076	CP	003	
	RO.203			008	RO.203	04-076	CP	004	
	RO.303			009	RO.303	04-076	CP	005	
	TO.002			102	TO.002				
	TO.102			103	TO.102				
	TO.202			104	TO.202				
	TO.302			105	TO.302				
	TO.003			106	TO.003	04-076	CP	102	
	TO.103			107	TO.103	04-076	CP	103	
	TO.203			108	TO.203	04-076	CP	104	
	TO.303			109	TO.303	04-076	CP	105	
.....J2				04-068	JACK/CP	.....			
TO LINE UNIT	RI.002			015	RI.002				
	RI.102			016	RI.102				
	RI.202			017	RI.202				
	RI.302			018	RI.302				
	RI.003			019	RI.003	04-076	CP	015	
	RI.103			020	RI.103	04-076	CP	016	
	RI.203			021	RI.203	04-076	CP	017	
	RI.303			022	RI.303	04-076	CP	018	
	TI.002			115	TI.002				
	TI.102			116	TI.102				
	TI.202			117	TI.202				
	TI.302			118	TI.302				
	TI.003			119	TI.003	04-076	CP	115	
	TI.103			120	TI.103	04-076	CP	116	
	TI.203			121	TI.203	04-076	CP	117	
	TI.303			122	TI.303	04-076	CP	118	
.....J1				04-084	JACK/CP	.....			
TO SUBSCRIBER UNIT	RO.004			002	RO.004				
	RO.104			003	RO.104				
	RO.204			004	RO.204				
	RO.304			005	RO.304				
	RO.005			006	RO.005	04-092	CP	002	
	RO.105			007	RO.105	04-092	CP	003	
	RO.205			008	RO.205	04-092	CP	004	
	RO.305			009	RO.305	04-092	CP	005	
	TO.004			102	TO.004				
	TO.104			103	TO.104				
	TO.204			104	TO.204				
	TO.304			105	TO.304				
	TO.005			106	TO.005	04-092	CP	102	
	TO.105			107	TO.105	04-092	CP	103	
	TO.205			108	TO.205	04-092	CP	104	
	TO.305			109	TO.305	04-092	CP	105	
.....J2				04-084	JACK/CP	.....			
TO LINE UNIT	RI.004			015	RI.004				
	RI.104			016	RI.104				
	RI.204			017	RI.204				
	RI.304			018	RI.304				
	RI.005			019	RI.005	04-092	CP	015	
	RI.105			020	RI.105	04-092	CP	016	
	RI.205			021	RI.205	04-092	CP	017	
	RI.305			022	RI.305	04-092	CP	018	
	TI.004			115	TI.004				
	TI.104			116	TI.104				
	TI.204			117	TI.204				
	TI.304			118	TI.304				
	TI.005			119	TI.005	04-092	CP	115	
	TI.105			120	TI.105	04-092	CP	116	
	TI.205			121	TI.205	04-092	CP	117	
	TI.305			122	TI.305	04-092	CP	118	
.....J1				04-100	JACK/CP	.....			
TO SUBSCRIBER UNIT	RO.006			002	RO.006				
	RO.106			003	RO.106				
	RO.206			004	RO.206				
	RO.306			005	RO.306				
	RO.007			006	RO.007	04-108	CP	002	

CAD 03 (CONT'D)

TO CONNECTION				FROM CONNECTION					
DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....J1				04-100 (CONT'D)	JACK/CP	.....			
	RO.107			007	RO.107	04-108	CP	003	
	RO.207			008	RO.207	04-108	CP	004	
	RO.307			009	RO.307	04-108	CP	005	
	TO.006			102	TO.006				
	TO.106			103	TO.106				
	TO.206			104	TO.206				
	TO.306			105	TO.306				
	TO.007			106	TO.007	04-108	CP	102	
	TO.107			107	TO.107	04-108	CP	103	
	TO.207			108	TO.207	04-108	CP	104	
	TO.307			109	TO.307	04-108	CP	105	
.....J2				04-100	JACK/CP	.....			
TO LINE UNIT	RI.006			015	RI.006				
	RI.106			016	RI.106				
	RI.206			017	RI.206				
	RI.306			018	RI.306				
	RI.007			019	RI.007	04-108	CP	015	
	RI.107			020	RI.107	04-108	CP	016	
	RI.207			021	RI.207	04-108	CP	017	
	RI.307			022	RI.307	04-108	CP	018	
	TI.006			115	TI.006				
	TI.106			116	TI.106				
	TI.206			117	TI.206				
	TI.306			118	TI.306				
	TI.007			119	TI.007	04-108	CP	115	
	TI.107			120	TI.107	04-108	CP	116	
	TI.207			121	TI.207	04-108	CP	117	
	TI.307			122	TI.307	04-108	CP	118	
.....J1				04-116	JACK/CP	.....			
TO SUBSCRIBER UNIT	RO.008			002	RO.008				
	RO.108			003	RO.108				
	RO.208			004	RO.208				
	RO.308			005	RO.308				
	RO.009			006	RO.009	04-124	CP	002	
	RO.109			007	RO.109	04-124	CP	003	
	RO.209			008	RO.209	04-124	CP	004	
	RO.309			009	RO.309	04-124	CP	005	
	TO.008			102	TO.008				
	TO.108			103	TO.108				
	TO.208			104	TO.208				
	TO.308			105	TO.308				
	TO.009			106	TO.009	04-124	CP	102	
	TO.109			107	TO.109	04-124	CP	103	
	TO.209			108	TO.209	04-124	CP	104	
	TO.309			109	TO.309	04-124	CP	105	
.....J2				04-116	JACK/CP	.....			
TO LINE UNIT	RI.008			015	RI.008				
	RI.108			016	RI.108				
	RI.208			017	RI.208				
	RI.308			018	RI.308				
	RI.009			019	RI.009	04-124	CP	015	
	RI.109			020	RI.109	04-124	CP	016	
	RI.209			021	RI.209	04-124	CP	017	
	RI.309			022	RI.309	04-124	CP	018	
	TI.008			115	TI.008				
	TI.108			116	TI.108				
	TI.208			117	TI.208				
	TI.308			118	TI.308				
	TI.009			119	TI.009	04-124	CP	115	
	TI.109			120	TI.109	04-124	CP	116	
	TI.209			121	TI.209	04-124	CP	117	
	TI.309			122	TI.309	04-124	CP	118	

PERIODIC PULSE METERING UNIT

DWG SIZE C2 | ISSUE 1

BELL LABORATORIES | SD-5X202-01 | GB2

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CAD 03
(CONT'D)

—TO CONNECTION— DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	—FROM CONNECTION— LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....J1				04-132	JACK/CP				
TO SUBSCRIBER UNIT	RO.010			002	RO.010				
	RO.110			003	RO.110				
	RO.210			004	RO.210				
	RO.310			005	RO.310				
	RO.011			006	RO.011	04-140	CP	002	
	RO.111			007	RO.111	04-140	CP	003	
	RO.211			008	RO.211	04-140	CP	004	
	RO.311			009	RO.311	04-140	CP	005	
	TO.010			102	TO.010				
	TO.110			103	TO.110				
	TO.210			104	TO.210				
	TO.310			105	TO.310				
	TO.011			106	TO.011	04-140	CP	102	
	TO.111			107	TO.111	04-140	CP	103	
	TO.211			108	TO.211	04-140	CP	104	
	TO.311			109	TO.311	04-140	CP	105	
.....J2				04-132	JACK/CP				
TO LINE UNIT	RI.010			015	RI.010				
	RI.110			016	RI.110				
	RI.210			017	RI.210				
	RI.310			018	RI.310				
	RI.011			019	RI.011	04-140	CP	015	
	RI.111			020	RI.111	04-140	CP	016	
	RI.211			021	RI.211	04-140	CP	017	
	RI.311			022	RI.311	04-140	CP	018	
	TI.010			115	TI.010				
	TI.110			116	TI.110				
	TI.210			117	TI.210				
	TI.310			118	TI.310				
	TI.011			119	TI.011	04-140	CP	115	
	TI.111			120	TI.111	04-140	CP	116	
	TI.211			121	TI.211	04-140	CP	117	
	TI.311			122	TI.311	04-140	CP	118	
.....J1				04-148	JACK/CP				
TO SUBSCRIBER UNIT	RO.012			002	RO.012				
	RO.112			003	RO.112				
	RO.212			004	RO.212				
	RO.312			005	RO.312				
	RO.013			006	RO.013	04-156	CP	002	
	RO.113			007	RO.113	04-156	CP	003	
	RO.213			008	RO.213	04-156	CP	004	
	RO.313			009	RO.313	04-156	CP	005	
	TO.012			102	TO.012				
	TO.112			103	TO.112				
	TO.212			104	TO.212				
	TO.312			105	TO.312				
	TO.013			106	TO.013	04-156	CP	102	
	TO.113			107	TO.113	04-156	CP	103	
	TO.213			108	TO.213	04-156	CP	104	
	TO.313			109	TO.313	04-156	CP	105	
.....J2				04-148	JACK/CP				
TO LINE UNIT	RI.012			015	RI.012				
	RI.112			016	RI.112				
	RI.212			017	RI.212				
	RI.312			018	RI.312				
	RI.013			019	RI.013	04-156	CP	015	
	RI.113			020	RI.113	04-156	CP	016	
	RI.213			021	RI.213	04-156	CP	017	
	RI.313			022	RI.313	04-156	CP	018	
	TI.012			115	TI.012				
	TI.112			116	TI.112				
	TI.212			117	TI.212				
	TI.312			118	TI.312				
	TI.013			119	TI.013	04-156	CP	115	
	TI.113			120	TI.113	04-156	CP	116	
	TI.213			121	TI.213	04-156	CP	117	
	TI.313			122	TI.313	04-156	CP	118	
.....J1				04-164	JACK/CP				
TO SUBSCRIBER UNIT	RO.014			002	RO.014				
	RO.114			003	RO.114				
	RO.214			004	RO.214				
	RO.314			005	RO.314				
	RO.015			006	RO.015	04-172	CP	002	

CAD 03
(CONT'D)

—TO CONNECTION— DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	—FROM CONNECTION— LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....J1				04-164 (CONT'D)	JACK/CP				
	RO.115			007	RO.115	04-172	CP	003	
	RO.215			008	RO.215	04-172	CP	004	
	RO.315			009	RO.315	04-172	CP	005	
	TO.014			102	TO.014				
	TO.114			103	TO.114				
	TO.214			104	TO.214				
	TO.314			105	TO.314				
	TO.015			106	TO.015	04-172	CP	102	
	TO.115			107	TO.115	04-172	CP	103	
	TO.215			108	TO.215	04-172	CP	104	
	TO.315			109	TO.315	04-172	CP	105	
.....J2				04-164	JACK/CP				
TO LINE UNIT	RI.014			015	RI.014				
	RI.114			016	RI.114				
	RI.214			017	RI.214				
	RI.314			018	RI.314				
	RI.015			019	RI.015	04-172	CP	015	
	RI.115			020	RI.115	04-172	CP	016	
	RI.215			021	RI.215	04-172	CP	017	
	RI.315			022	RI.315	04-172	CP	018	
	TI.014			115	TI.014				
	TI.114			116	TI.114				
	TI.214			117	TI.214				
	TI.314			118	TI.314				
	TI.015			119	TI.015	04-172	CP	115	
	TI.115			120	TI.115	04-172	CP	116	
	TI.215			121	TI.215	04-172	CP	117	
	TI.315			122	TI.315	04-172	CP	118	

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—TO CONNECTION— DESTINATION	LEAD DESIG	METHOD	WIRE SYM	TERMINAL	—FROM CONNECTION— LEAD DESIG	TERMINATION	TERMINAL	OPT	NOTE
.....J1				04-028	JACK/CP				
TO MODULAR CONTROL UNIT	NINTON			033	NINTON				
	SLCTON			034	SLCTON				
	CLKON			035	CLKON				
	MSGON			036	MSGON				
	RPLYON			037	RPLYON				
	NINTOP			133	NINTOP				
	SLCTOP			134	SLCTOP				
	CLKOP			135	CLKOP				
	MSGOP			136	MSGOP				
	RPLYOP			137	RPLYOP				
.....J2				04-028	JACK/CP				
TO MODULAR CONTROL UNIT	NINT1N			233	NINT1N				
	SLCT1N			234	SLCT1N				
	CLK1N			235	CLK1N				
	MSG1N			236	MSG1N				
	RPLY1N			237	RPLY1N				
	NINT1P			333	NINT1P				
	SLCT1P			334	SLCT1P				
	CLK1P			335	CLK1P				
	MSG1P			336	MSG1P				
	RPLY1P			337	RPLY1P				

PERIODIC PULSE METERING UNIT

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