

TATICHERLA

INTERFACE CIRCUITS

(DETAILING BOOK)

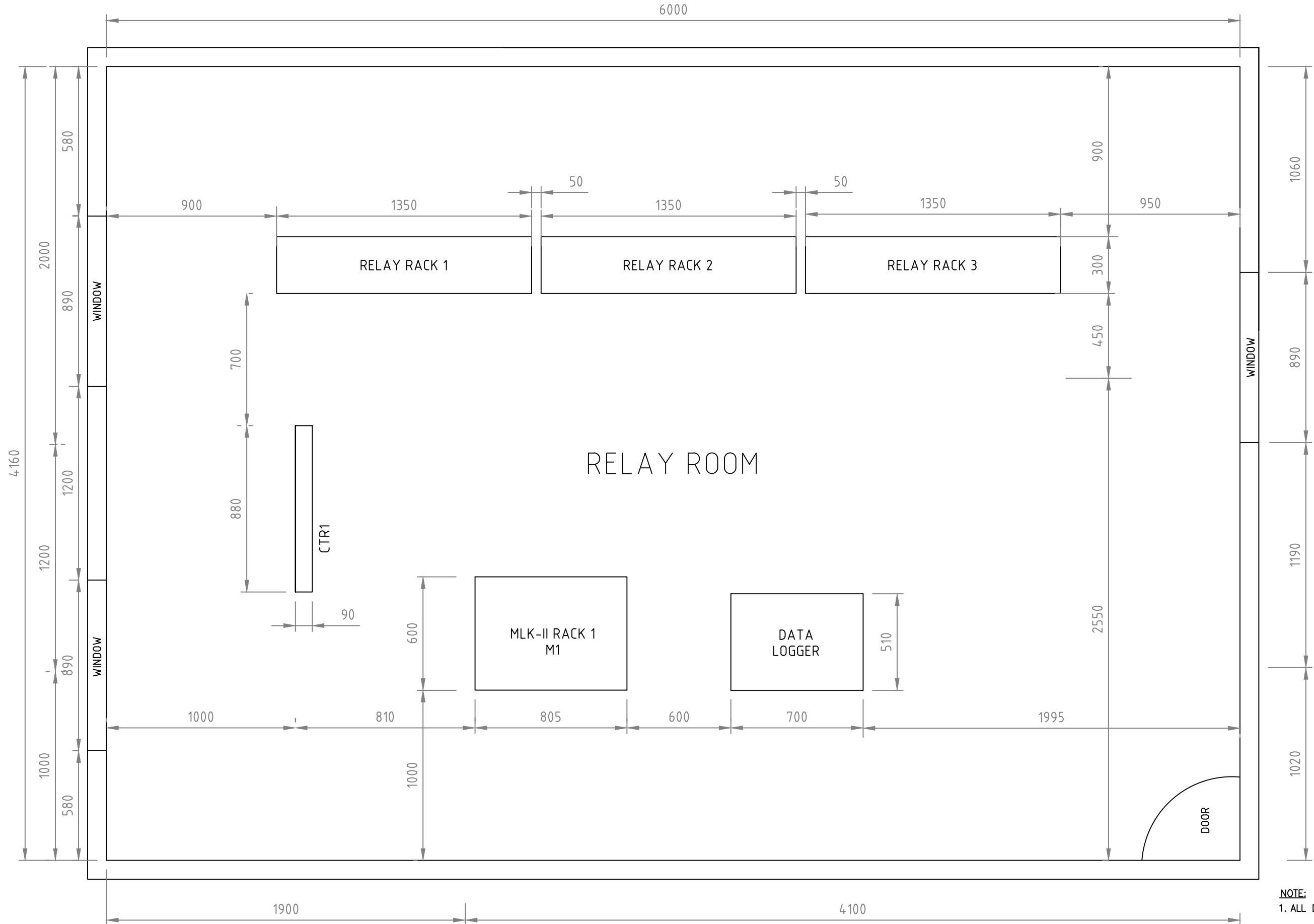
						 <p>TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in</p>	<p>IPU.2107B/3</p> <p>REVISION</p> <p>JE/Drg</p> <p>SE/SSE/Drg</p> <p>ASTE/D</p> <p>SSTE/P & P</p> <p>f CSTE</p>	<p>CHK.</p> <p>REF.SIG.PLAN.No.</p> <p>IPU.2107B/3</p> <p>शीट SHEET</p> <p>00000</p>	<p>TITLE:</p> <p>COVER SHEET</p> <p>द म रेलवे आरेक सं</p> <p>S.C.RLY.DRG.NO</p> <p>बि B</p> <p>कुल शीट SHEETS</p> <p>CONT'D ON:</p> <p>00065</p>	<p>सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS</p> <p>ताटिचेर्ला TATICHERLA</p> <p>SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL</p>
00	16.07.15	PR	RS	RSS	ASMADE					
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION					
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012					

SL.No.	DESCRIPTION	DRAWING No.	REV. No.	DCR No.
01	COVER SHEET	512_TAC_IC_00000	00	
02	INDEX	512_TAC_IC_00001	00	
03	SPARE	512_TAC_IC_00002-00015		
04	RELAY ROOM PLAN	512_TAC_IC_00016	00	
05	PANEL ROOM LAYOUT	512_TAC_IC_00017	00	
06	SPARE	512_TAC_IC_00018-00020		
07	RELAY RACK LAYOUT - R1	512_TAC_IC_00021	00	
08	RELAY RACK LAYOUT - R2	512_TAC_IC_00022	00	
09	RELAY RACK LAYOUT - R3	512_TAC_IC_00023	00	
10	SPARE	512_TAC_IC_00024-00030		
11	MLK RACK LAYOUT	512_TAC_IC_00031	00	
12	SPARE	512_TAC_IC_00032-00040		
13	SYSTEM CONFIGURATION	512_TAC_IC_00041	00	
14	SPARE	512_TAC_IC_00042-00044		
15	MICROLOK II VITAL & NON VITAL I/O BITCHART.	512_TAC_IC_00045	00	
16	SPARE	512_TAC_IC_00046-00055		
17	MICROLOK II CARD FILE LAYOUT & KEYING PLUG CONFIGURATION-M1A1/B1	512_TAC_IC_00056	00	
18	SPARE	512_TAC_IC_00057-00060		
19	CPU BOARD-CPS/EEPROM CONNECTIONS-MICROLOK II M1A1/B1	512_TAC_IC_00061	00	
20	SPARE	512_TAC_IC_00062		
21	MICROLOK II CPU BOARD JUMPER SETTING	512_TAC_IC_00063	00	
22	MICROLOK II I/O BOARD JUMPER SETTINGS & ADDRESSING CIRCUITS -M1A1/B1	512_TAC_IC_00064	00	
23	SPARE	512_TAC_IC_00065-00074		
24	MICROLOK II COMMUNICATION PCB INTERFACE CIRCUITS - M1A1	512_TAC_IC_00075	00	
25	MICROLOK II COMMUNICATION PCB INTERFACE CIRCUITS - M1B1	512_TAC_IC_00076	00	
26	SPARE	512_TAC_IC_00077-00078		
27	DIAGNOSTIC SERIAL LINK BETWEEN M1A1,M1B1 & MPC	512_TAC_IC_00079	00	
28	ETHERNET COMMUNICATION BETWEEN MPC & EDS (S1E1&S2E2) SWITCH	512_TAC_IC_00080	00	
29	SERIAL COMMUNICATION BETWEEN M1A1 M1B1 & DATALOGGER	512_TAC_IC_00081	00	
30	SERIAL COMMUNICATION TERMINATION DETAILS	512_TAC_IC_00082	00	
31	POWER DISTRIBUTION - PC & LOCATIONS	512_TAC_IC_00083	00	
32	SPARE	512_TAC_IC_00084-00579		
33	MICROLOK II CHANGE OVER CIRCUIT	512_TAC_IC_00580	00	
34	SPARE	512_TAC_IC_00581-0599		
35	POWER DISTRIBUTION OF 110V DC	512_TAC_IC_00600	00	
36	POWER DISTRIBUTION OF 110V DC	512_TAC_IC_00601	00	
37	POWER DISTRIBUTION OF 12V DC (CARDFILE SUPPLY - SYSTEM A&B)	512_TAC_IC_00602	00	
38	POWER DISTRIBUTION OF 24V DC (VITAL OUTPUT)	512_TAC_IC_00603	00	
39	POWER DISTRIBUTION OF 24V DC (VITAL INPUT)	512_TAC_IC_00604	00	
40	POWER DISTRIBUTION OF 24V DC (EXTERNAL SUPPLY)	512_TAC_IC_00605	00	
41	POWER DISTRIBUTION OF 110V AC & 24V DC	512_TAC_IC_00606	00	
42	POWER DISTRIBUTION OF 5V & 24V DC (RTC & CARDFILE FAN TRAY CIRCUIT)	512_TAC_IC_00607	00	
43	DATALOGGER ANALOG INPUTS DISTRIBUTION	512_TAC_IC_00608	00	
44	PERIMETER EARTHING SCHEME	512_TAC_IC_00609	00	
45	IPS ROOM	512_TAC_IC_00610	00	

SL.No.	DESCRIPTION	DRAWING No.	REV. No.	DCR No.
46	SPARE	512_TAC_IC_00611-624		
47	R1 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00625	00	
48	R1 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00626	00	
49	R2 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00627	00	
50	R2 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00628	00	
51	R3 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00629	00	
52	R3 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00630	00	
53	R3 RACK FUSE & TERMINAL CHART (ROWS-D&E)	512_TAC_IC_00630A		
54	M1 RACK FUSE & TERMINAL CHART (ROWS - J & K)	512_TAC_IC_00631	00	
55	M1 RACK FUSE & TERMINAL CHART (ROWS - J & K)	512_TAC_IC_00632	00	
56	M1 RACK FUSE & TERMINAL CHART (ROWS - J & K)	512_TAC_IC_00633	00	
57	M1 RACK FUSE & TERMINAL CHART (ROW - Q)	512_TAC_IC_00634	00	
58	SPARE	512_TAC_IC_00635-699		
59	M1-RACK TERMINAL CHART (ROW-G&H)	512_TAC_IC_00700	00	
60	R1-RACK TERMINAL CHART (ROW-A)	512_TAC_IC_00701	00	
61	R2-RACK TERMINAL CHART (ROW-A)	512_TAC_IC_00702	00	
62	R1-RACK TERMINAL CHART (ROW-B)	512_TAC_IC_00703	00	
63	SPARE	512_TAC_IC_00704-00710		
64	DATA LOGGER DIGITAL CARD	512_TAC_IC_00711-00714	00	
65	SPARE	512_TAC_IC_00715-00749		
66	R1 RACK CONTACT ANALYSIS (ROW-F)	512_TAC_IC_00750	00	
67	R1 RACK CONTACT ANALYSIS (ROW-G)	512_TAC_IC_00751	00	
68	RACK CONTACT ANALYSIS (ROW-)	512_TAC_IC_00752	00	
69	R1 RACK CONTACT ANALYSIS (ROW-H)	512_TAC_IC_00753	00	
70	R1 RACK CONTACT ANALYSIS (ROW-J)	512_TAC_IC_00754	00	
71	R2 RACK CONTACT ANALYSIS (ROW-H)	512_TAC_IC_00755	00	
72	R2 RACK CONTACT ANALYSIS (ROW-J)	512_TAC_IC_00756	00	
73	R3 RACK CONTACT ANALYSIS (ROW-F)	512_TAC_IC_00757	00	
74	R3 RACK CONTACT ANALYSIS (ROW-H)	512_TAC_IC_00758	00	
75	R3 RACK CONTACT ANALYSIS (ROW-J)	512_TAC_IC_00759	00	
76	MLK RACK CONTACT ANALYSIS	512_TAC_IC_00760	00	
77	MLK RACK CONTACT ANALYSIS	512_TAC_IC_00761	00	

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REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	IPU.2107B/3	REVISION	TITLE: INDEX	SIGNAL & TELECOMMUNICATIONS		
		JE/Drg				
		SE/SSE/Drg				
		ASTE/D				
		SSTE/P & P				
		f CSTE		APP.	ताटिचेर्ला TATICHERLA	
		00001		00065	SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL	
REF.SIG.PLAN.No.		द म रेलवे आरेख सं S.C.RLY.DRG.NO		बि B		
IPU.2107B/3						
शीट SHEET		कुल शीट SHEETS		CONT'D ON:		
00016						



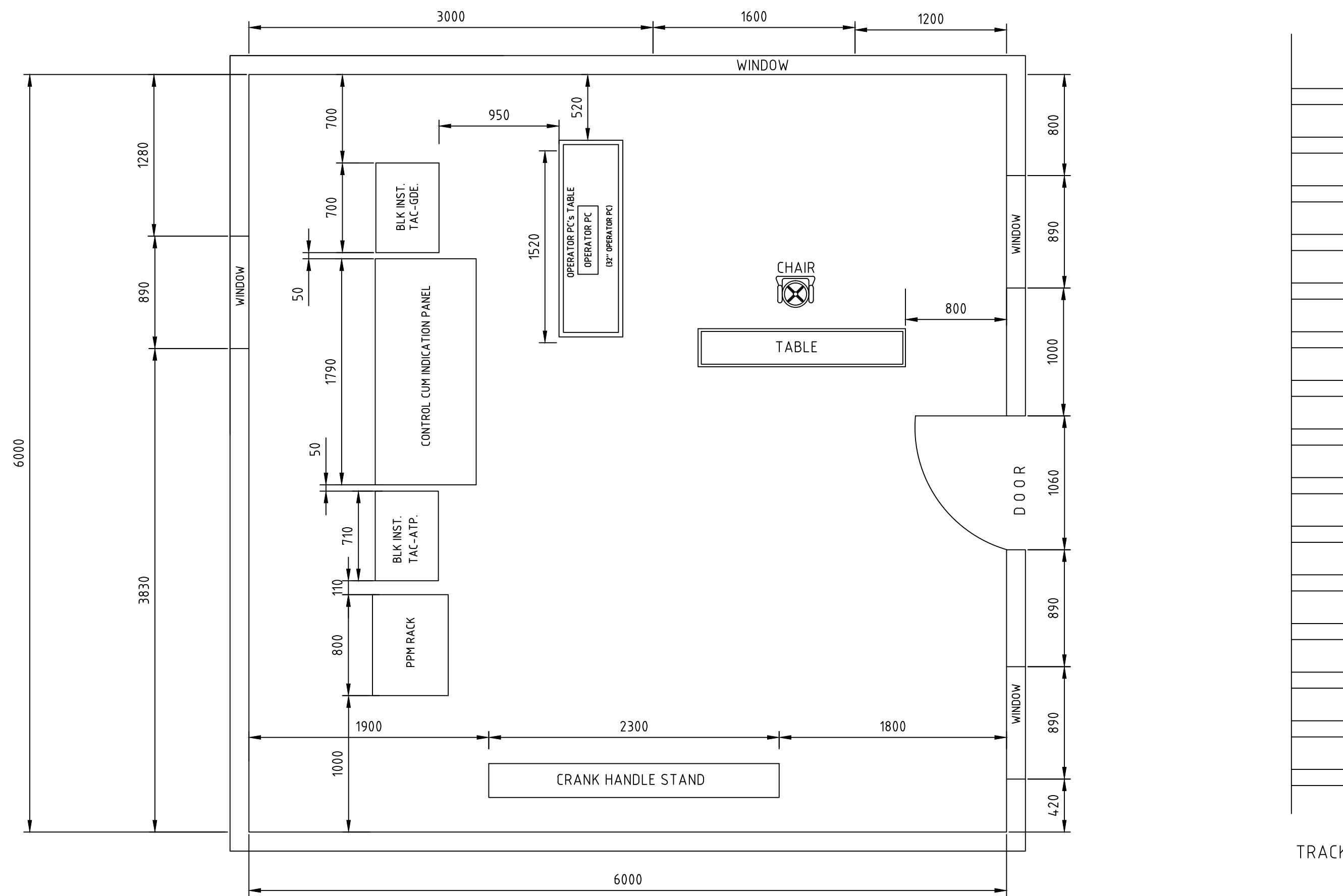
NOTE:
1. ALL DIMENSION ARE SHOWN IN mm.

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
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					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

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CHK.	TITLE:	RELAY ROOM PLAN		SIGNAL & TELECOMMUNICATIONS तातिचेर्ला TATICHERLA
		REF.SIG.PLAN.No.	द म रेलवे आरेख सं S.C.RLY.DRG.NO	
	IPU.2107B/3	REVISION		
		JE/Drg		
		SE/SSE/Drg		
		ASTE/D		
		SSTE/P & P		
		f CSTE		
APP.		शीट SHEET	कुल शीट SHEETS	CONT'D ON:
		00016	00065	00017

SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL



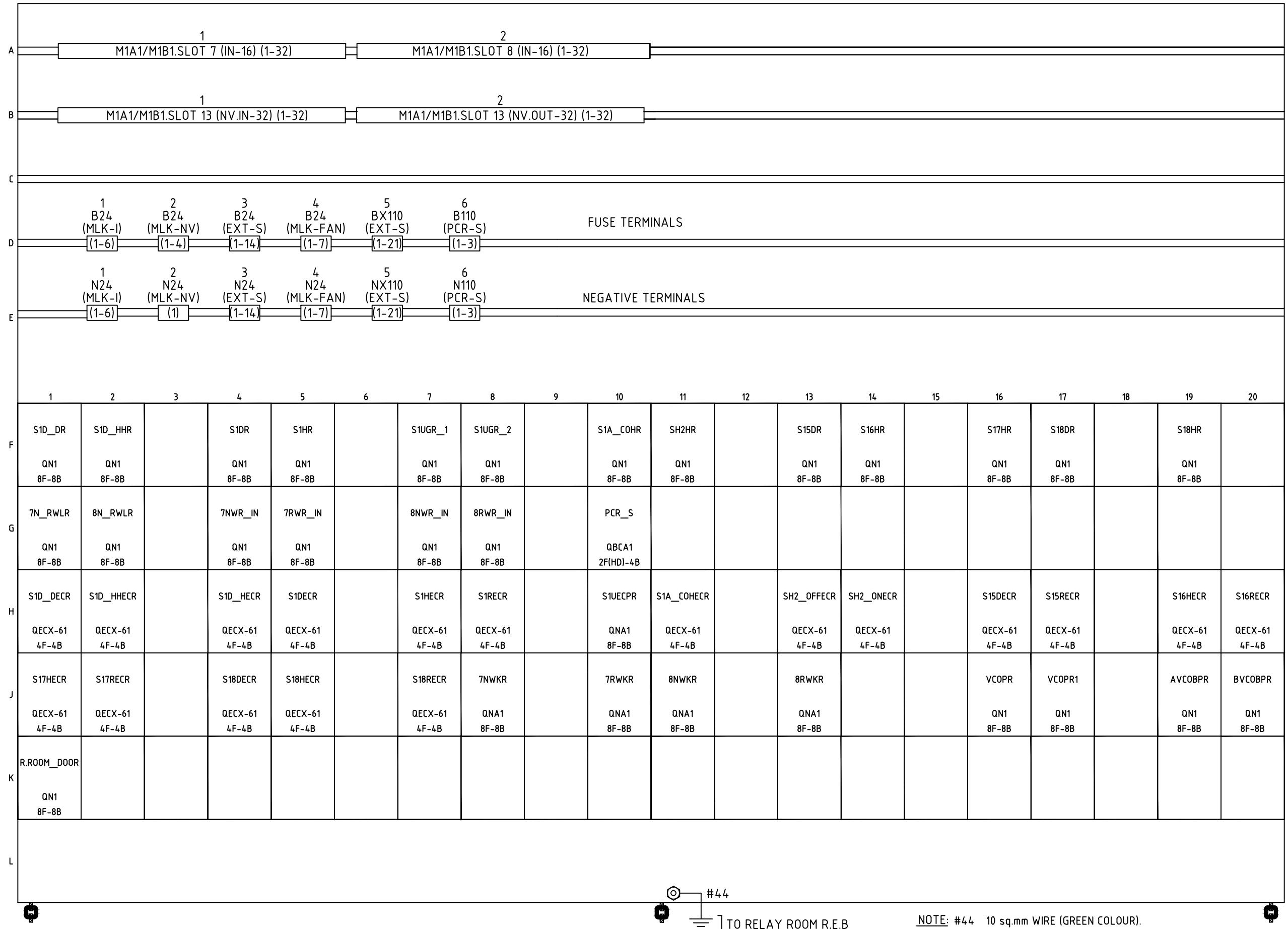
NOTE: 1. ALL DIMENSION ARE SHOWN IN mm.

						TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	TITLE:	PANEL ROOM LAYOUT		SIGNAL व दूर संचार SIGNAL & TELECOMMUNICATIONS
		REF.SIG.PLAN.No.	द म रेलवे आरक्ष सं S.C.RLY.DRG.NO	
	IPU.2107B/3	REVISION		
		JE/Drg		
		SE/SSE/Drg		
		ASTE/D		
		SSTE/P & P		
		f CSTE		
APP.		शीट SHEET	कुल शीट SHEETS	CONT'D ON:
		00017	00065	00021

सिगनल व दूर संचार
SIGNAL & TELECOMMUNICATIONS
तातिचेरला
TATICHERLA
SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL

R1 RACK



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					JE/Drg								
					SE/SSE/Drg								
					ASTE/D								
					SSTE/P & P								
00	16.07.15	PR	RS	RSS	ASMADE		f CSTE	APP.	REF.SIG.PLAN.No. <input type="text"/> द म रेलवे आरेख सं <input type="text"/> IPU.2107B/3 <input type="text"/> S.C.RLY.DRG.NO <input type="text"/> शीट SHEET <input type="text"/> कुल शीट SHEETS <input type="text"/> CONT'D ON: <input type="text"/> 00021 <input type="text"/> 00065 <input type="text"/>				
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012						

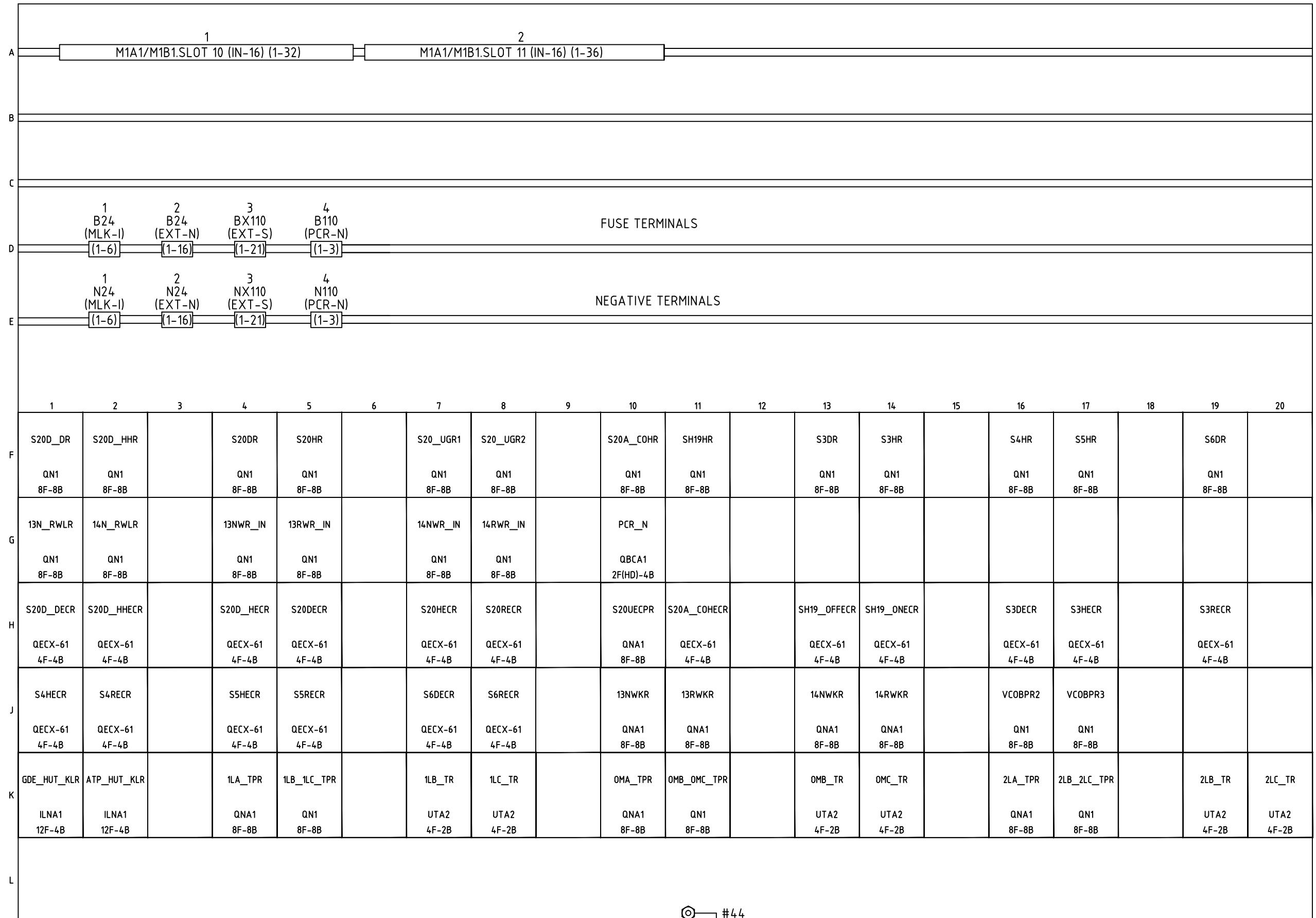
सिग्नल व दूर संचार
SIGNAL & TELECOMMUNICATIONS

तातिचेर्ला
TATICHERLA

SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL

(MICROLOK-II WARM STANDBY)

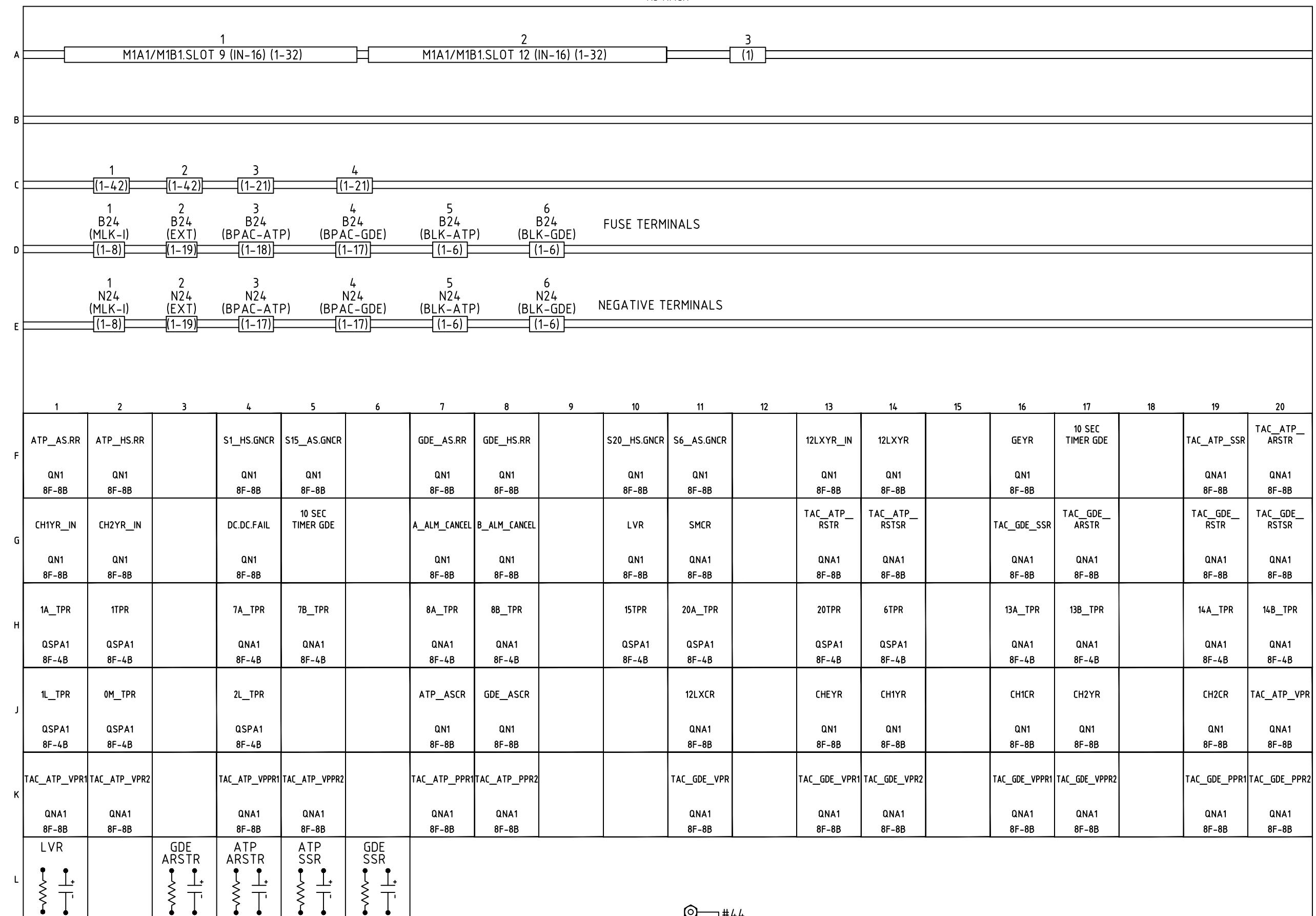
R2 RACK



REFER DETAILS ON SHT-00215,00216, 00217,00218

REFER DETAILS ON SHT-00626,00627,00628

					<p style="text-align: center;">TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in</p>	<p style="text-align: center;">IPU.2107B/3</p>	REVISION	CHK.	TITLE: RELAY RACK LAYOUT - R2			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS	
							JE/Drg						
							SE/SSE/Drg						
							ASTE/D						
							SSTE/P & P						
00	16.07.15	PR	RS	RSS			f CSTE						
REV	DATE	DESIGNED	CHECKED	APPROVED			APP.						



REFER DETAILS ON SHT-00213,00214,
00219,00220,00553

REFER DETAILS ON SHT-00577-00579,
00581,00582-584,00586

REFER DETAILS ON SHT-00629,00630

F

G

H

J

K RELAY QUANTITY

QNA1	8F-8B	24
QNA1	8F-8B	32
QSPA1	8F-8B	09
	TOTAL	65

2200MFD50V

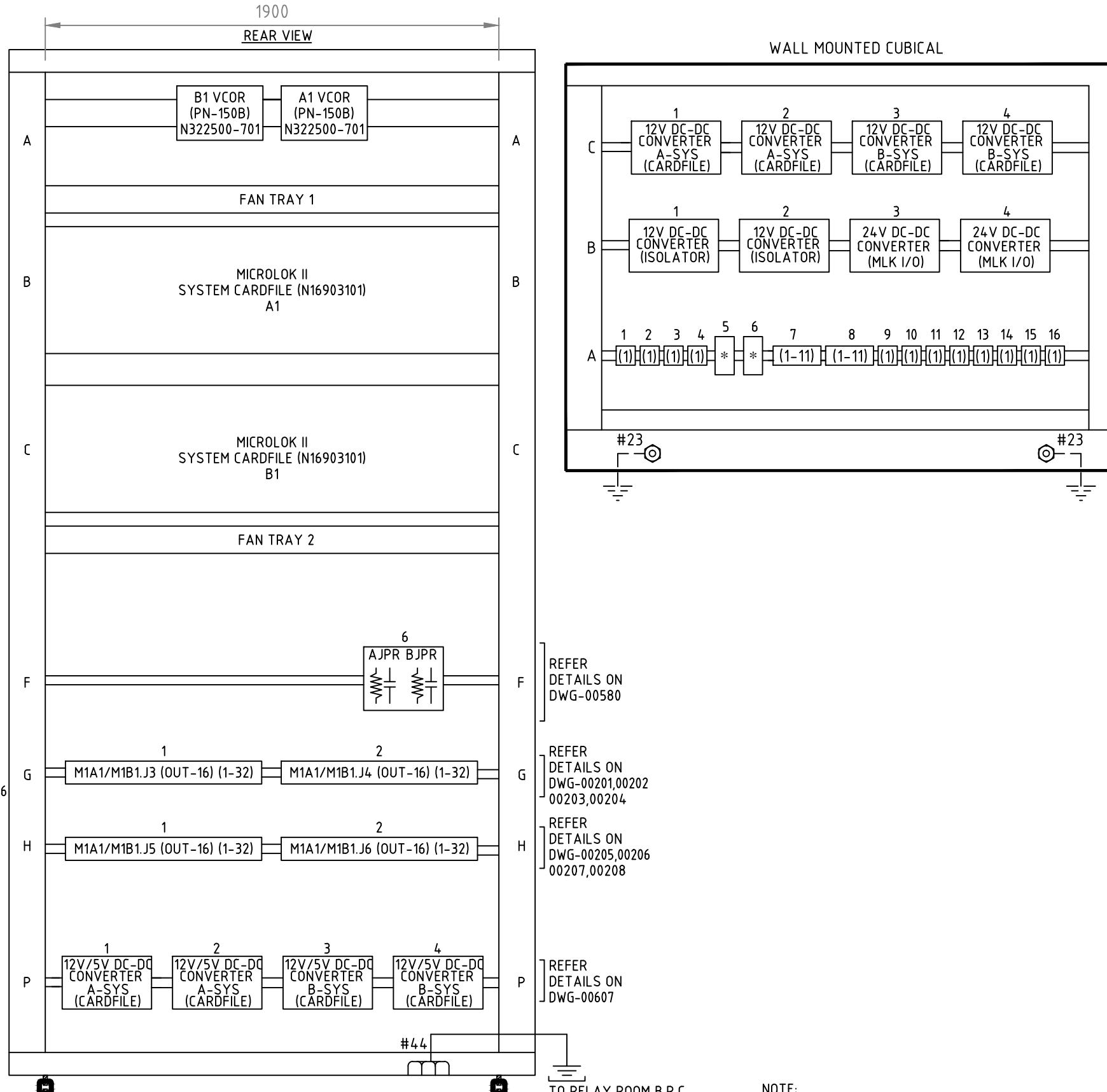
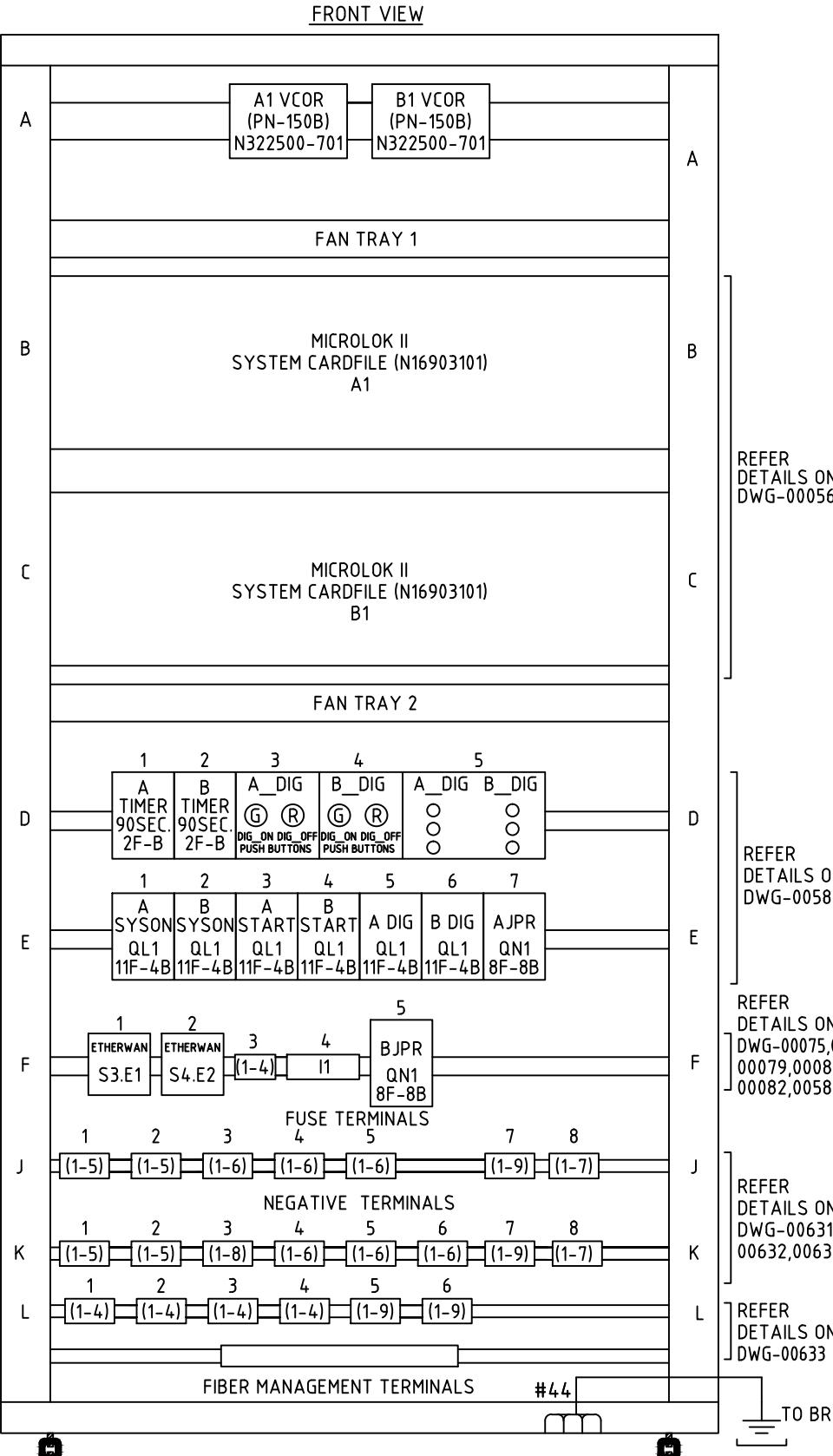
NOTE: #44 10 sq.mm WIRE (GREEN COLOUR).

#44

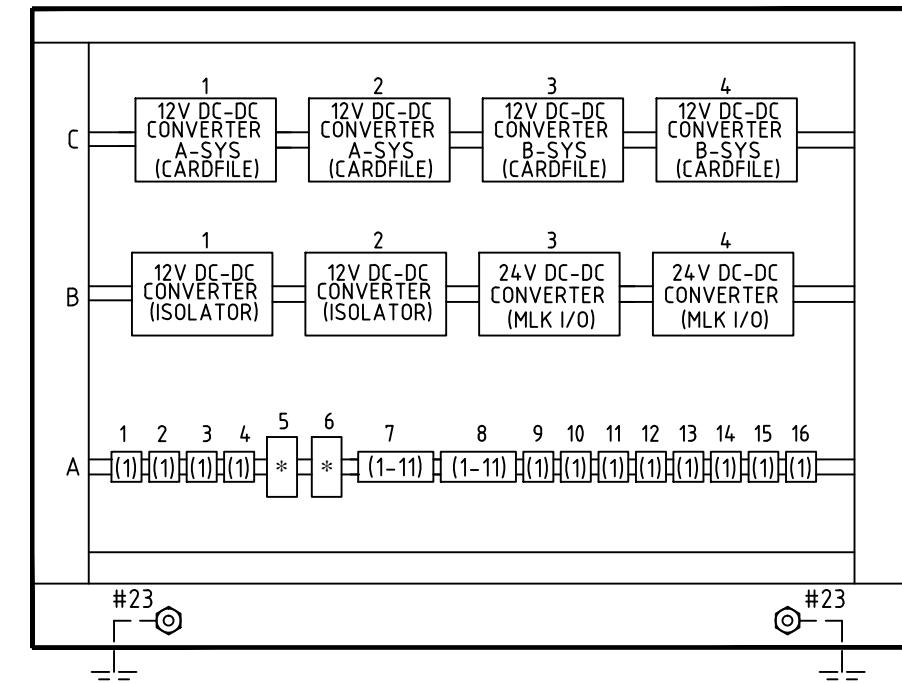
] TO RELAY ROOM R.E.B

					TVM Signalling & Transportation Systems Pvt. Ltd.	
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00	16.07.15	PR	RS	RSS	ASMADE	
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		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012				

CHK.	IPU.2107B/3	REVISION	TITLE: RELAY RACK LAYOUT - R3			SIGNAL & TELECOMMUNICATIONS	
		JE/Drg					
		SE/SSE/Drg					
		ASTE/D				तातिचेर्ला	
		SSTE/P & P				TATICHERLA	
		f CSTE				SOUTH CENTRAL RAILWAY	
		APP.	REF.SIG.PLAN.No.	द म रेलवे आरेख सं		बि B	DIVISION: GUNTAKAL
			00023	S.C.RLY.DRG.NO			(MICROLOK-II WARM STANDBY)
			00065	शीट SHEET		कुल शीट SHEETS	CONT'D ON: 00031



WALL MOUNTED CUBICAL



NOTE:

WALL MOUNTED CUBICAL SIZE OF 540x575mm AND IS KEPT IN RELAY ROOM.

* 110V DC SURGE SUPPRESSOR.

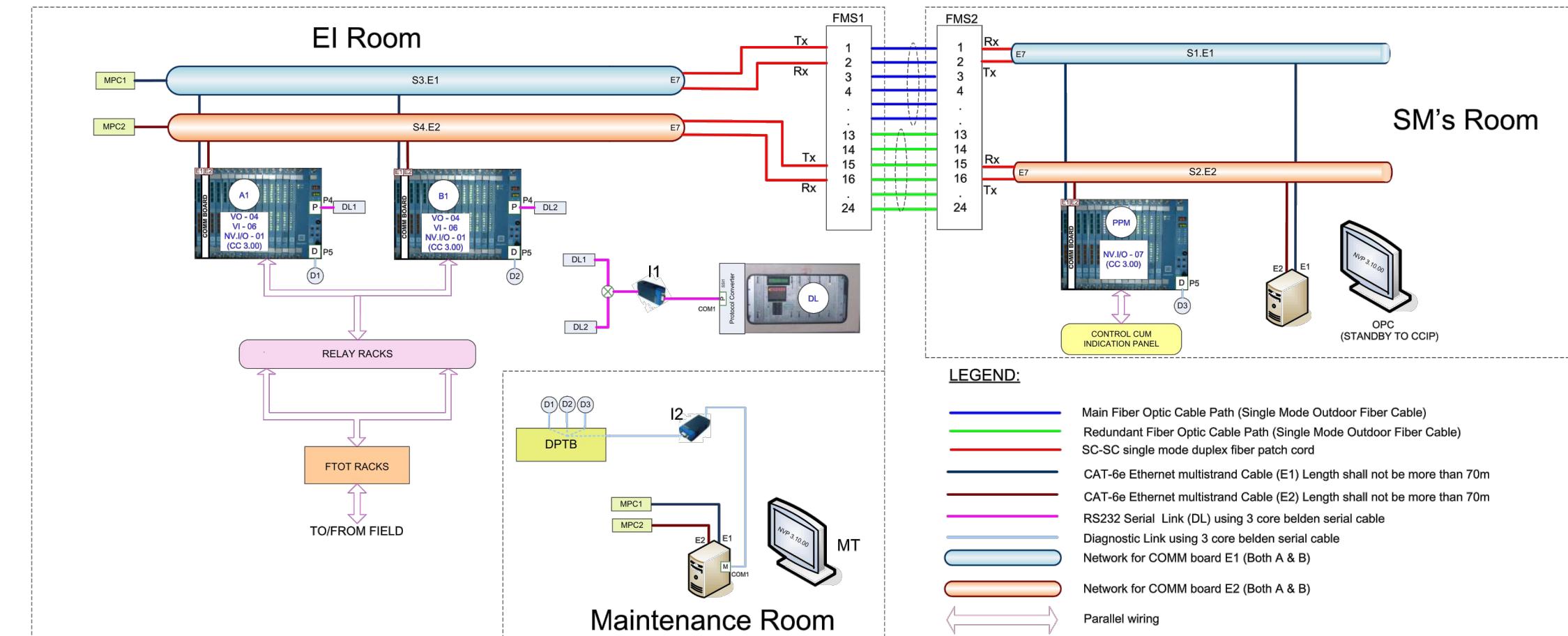
#23 4 Sq.mm WIRE (GREEN COLOUR)

#44 10 SQ.MM COPPER CABLE(GREEN COLOUR)

00	16.07.15	PR	RS	RSS	ASMADE
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CHK.	TITLE:	MLK RACK LAYOUT		SIGNAL & TELECOMMUNICATIONS
		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	
		I.PU.2107B/3	ि B	
		REVISION	S.C.RLY.DRG.NO	
		JE/Drg		
		SE/SSE/Drg		
		ASTE/D		
		SSTE/P & P		
		f CSTE	APP.	
		00031	00065	TO RELAY ROOM B.R.C
		शीट SHEET	कुल शीट SHEETS	CONT'D ON: 00041



Note:

- ⊗ Multi drop with Diode & Resistor
- FTOT Fuse Terminal & Output Terminal
- EI Electronic Interlocking
- SM Station Master
- MT Maintenance Terminal for MLK diagnosis & Maintenance VDU(MPC)
- OPC Operator PC
- DL Data Logger
- P4-5 MLK II Serial ports
- D MLK II Diagnostic Port
- P Peer
- M Master
- COM1 PC/Data Logger RS-232 serial ports
- I1-2 RS 232 ISOLATOR TCC-82
- PPM Panel Processor Microlok II
- FMS 1-2 Fiber Management System
- DPTB Diagnostic Port Termination Box

IP addresses shall be finalized during design
Data logger should be equipped with separate PC
PPM shall be placed adjacent to CCIP in SM room ensuring that cable run is less than 15 meters.
CC 3.00 MLK II Executive Version
NVP 3.10.00 MPC & OPC Exe Version - 3.10.00(OR) later shall be used for MPC & OPC
EI Room & SM Room are located in same building

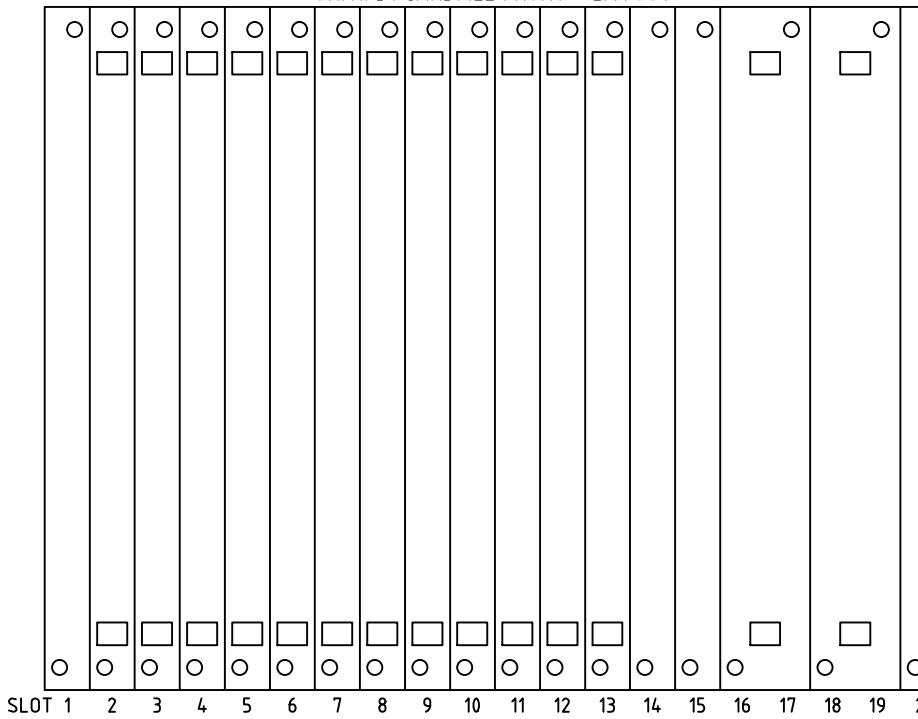
MLK II Communication equipment list

Product Image	Description	Model / Part No.	Quantity
S1.E1, S2.E2, S3.E1 & S4.E2	Unmanaged Ethernet Switch	Ether WAN	4
	RS 232 Isolator	Moxa TCC-82	2
COMM BOARD	MLK II Communication PCB	N17066403	3

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00	16.07.15	PR	RS	RSS	ASMADE			JE/Drg	SE/SSE/Drg	ASTE/D	SSTE/P & P			
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										IPU.2107B/3	S.C.RLY.DRG.NO			
										शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00045	
										00041	00065			

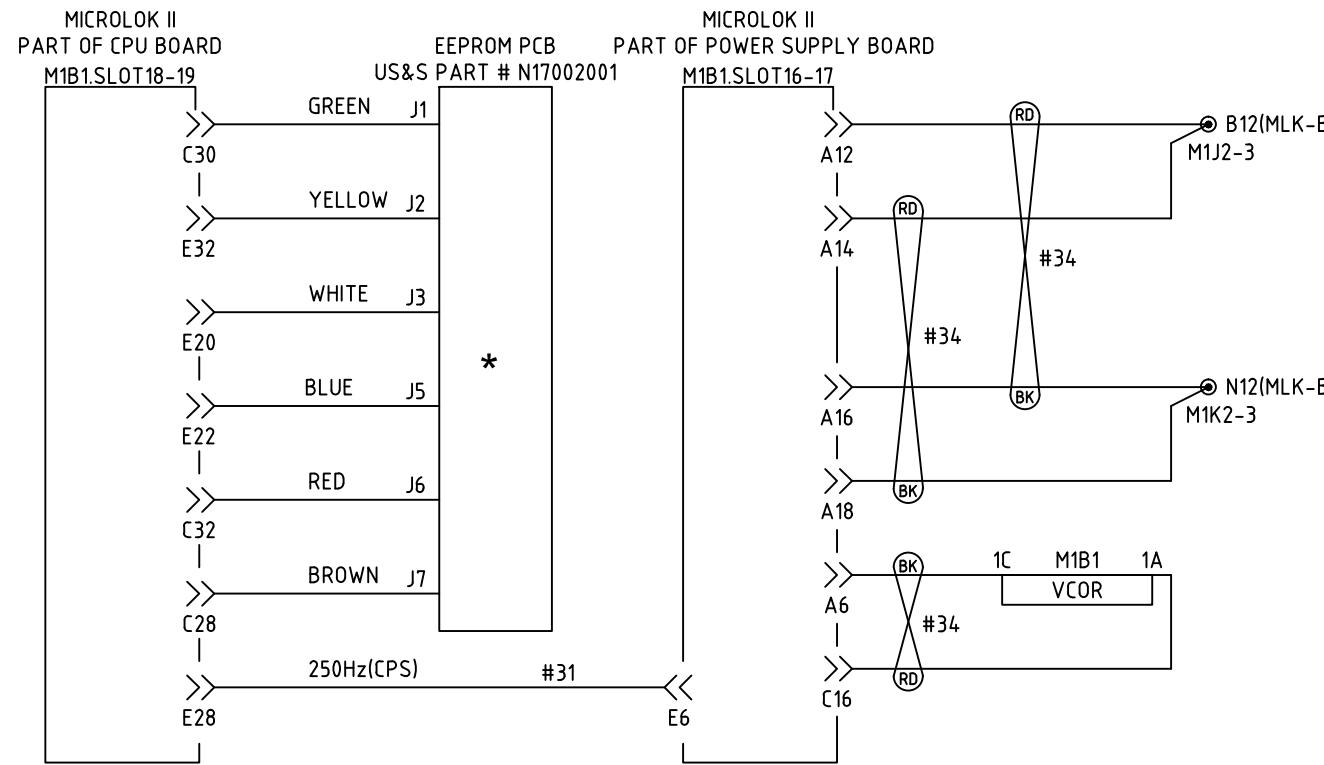
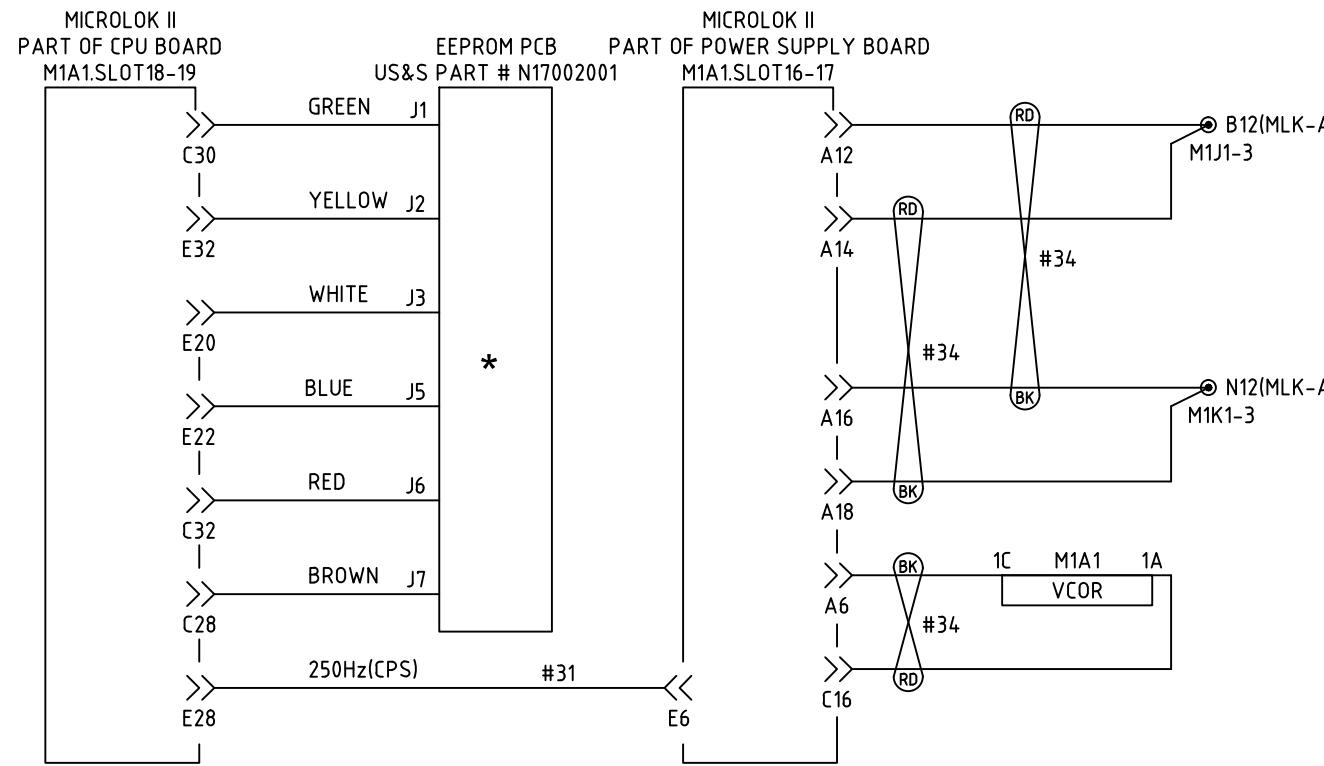
SHEET NO.			00201-00202	00203-00204	00205-00206	00207-00208	00209-00210	00211-00212	00213-00214	00215-00216	00217-00218	00219-00220	00101-00104	
POSITION	M1A1/B1 SLOT1	M1A1/B1 SLOT2	M1A1/B1 SLOT 3	M1A1/B1 SLOT 4	M1A1/B1 SLOT 5	M1A1/B1 SLOT 6	M1A1/B1 SLOT 7	M1A1/B1 SLOT 8	M1A1/B1 SLOT 9	M1A1/B1 SLOT 10	M1A1/B1 SLOT 11	M1A1/B1 SLOT 12	M1A1/B1 SLOT 13	
TYPE BIT NO.	SPARE	COMM BOARD	VITAL OUTPUT	VITAL OUTPUT	VITAL OUTPUT	VITAL INPUT	VITAL INPUT	VITAL INPUT	NON-VITAL INPUT	NON-VITAL OUTPUT				
BIT 1	COMM BOARD		S1D_DR	7NWR_IN	S20D_DR	13NWR_IN	S1D_DECR	S17HECR	1A_TPR	S20D_DECR	S5HECR	20A_TPR	S1D_DR_F	DNRT_CANC_CNT
BIT 2			S1D_HHR	7RWR_IN	S20D_HHR	13RWR_IN	S1D_HHECR	S17RECR	1TPR	S20D_HHECR	S5RECR	20TPR	S1D_HHR_F	UPRT_CANC_CNT
BIT 3			S1DR	8NWR_IN	S20DR	14NWR_IN	S1D_HECR	S18DECR	7A_TPR	S20D_HECR	S6DECR	6TPR	S1DR_F	DNCORT_CANC_CNT
BIT 4			S1HR	8RWR_IN	S20HR	14RWR_IN	S1DECR	S18HECR	7B_TPR	S20DECR	S6RECR	13A_TPR	S1HR_F	UPCORT_CANC_CNT
BIT 5			S1UGR_1	PCR_S	S20UGR_1	12LXYR_IN	S1HECR	S18RECR	8A_TPR	S20HECR	SPARE	13B_TPR	S1_UGR1_F	S1A_CNT
BIT 6			S1UGR_2	CH1YR_IN	S20UGR_2	CH2YR_IN	S1RECR	7NWKR	8B_TPR	S20RECR	13NWKR	14A_TPR	S1_UGR2_F	S20A_CNT
BIT 7			S1A_COHR	ATP_AS.RR	S20A_COHR	PCR_N	S1UECPR	7RWKR	15TPR	S20UECPR	13RWKR	14B_TPR	S1A_COHR_F	SPARE
BIT 8			SH2HR	ATP_HS.RR	SH19HR	GDE_AS.RR	S1A_COHECR	8NWKR	SPARE	S20A_COHECR	14NWKR	0M_TPR	SH2HR_F	SPARE
BIT 9			S15DR	S1_HS.GNCR	S3DR	GDE_HS.RR	SH2_OFFECR	8RWKR	ATP_ASCR	SH19_OFFECR	14RWKR	SPARE	S15DR_F	SPARE
BIT 10			S16HR	S15_AS.GNCR	S3HR	S20_HS.GNCR	SH2_ONECR	SPARE	GDE_ASCR	SH19_ONECR	CH2CR	SPARE	S16HR_F	SPARE
BIT 11			S17HR	SPARE	S4HR	S6_AS.GNCR	S15DECR	CH1CR	SPARE	S3DECR	12LXCR	1L_TPR	S17HR_F	SPARE
BIT 12			S18DR	SPARE	S5HR	SPARE	S15RECR	SPARE	SPARE	S3HECR	SPARE	SPARE	S18DR_F	SPARE
BIT 13			S18HR	SPARE	S6DR	SPARE	S16HECR	LVR	SPARE	S3RECR	SPARE	SPARE	S18HR_F	SPARE
BIT 14			7N_RWLR	SPARE	13N_RWLR	SPARE	S16RECR	SMCR	SPARE	S4HECR	SPARE	2L_TPR	S20D_DR_F	SPARE
BIT 15			8N_RWLR	SPARE	14N_RWLR	SPARE	SPARE	SPARE	TAC_ATP_VPR	S4RECR	DIG_ON	SPARE	S20D_HHR_F	SPARE
BIT 16			SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	TAC_GDE_VPR	SPARE	DIG_OFF	SPARE	S20DR_F	SPARE
													S20HR_F	SPARE
													S20_UGR1_F	SPARE
													S20_UGR2_F	SPARE
													S20A_COHR_F	SPARE
													SH19HR_F	SPARE
													S3DR_F	SPARE
													S3HR_F	SPARE
													S4HR_F	SPARE
													S5HR_F	SPARE
													S6DR_F	SPARE
													R.ROOM_DOOR	SPARE
													A.SYSON	SPARE
													B.SYSON	SPARE
													DC.DC.FAIL	SPARE
													GEYR	SPARE
													SPARE	SPARE

M1A1/B1 CARDFILE FRONT - LAY



MICROLOK II M1A1/B1

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	 IPU.2107B/3	REVISION		TITLE: MICROLOK II CARD FILE LAYOUT & KEYING PLUG CONFIGURATION-M1A1/B1			सिग्नल व दूर संचार
								SIGNAL & TELECOMMUNICATIONS					
				R. S.				ताटिचेर्ला					
00	16.07.15	PR	RS	RSS	ASMADE			TATICHERLA					
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION			SOUTH CENTRAL RAILWAY					
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012			DIVISION: GUNTAKAL					
								/MICROLOK II WARM STANDBY					



NOTE:

1. #31 16/0.2mm (0.5Sq.mm) WIRE (RED COLOUR).
 2. WIRES FROM CPU BOARD TO EEPROM PCB ARE OF SIZE 0.1 Sq.mm
 3. #34 TWISTED PAIR WIRE ARE OF SIZE 16/0.20mm "RED & BLACK" WITH "RD" BEING +VE & "BK" BEING -VE.
- * EEPROM PCB's ARE MOUNTED ON THE HOOD OF ALL CPU BOARD 48 PIN CONNECTORS.

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	I.PU.2107B/3	REVISION	CHK.	TITLE: CPU BOARD-CPS/EEPROM CONNECTIONS-MICROLOK II M1A1/B1			SIGNAL & TELECOMMUNICATIONS तातिचेर्ला TATICHERLA
00	16.07.15	PR	RS	RSS	ASMADE				REF.SIG.PLAN.No.	द म रेलवे आरेख सं	बि B		
									IPU.2107B/3	S.C.RLY.DRG.NO			
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012			शीट SHEET	कुल शीट SHEETS	CONT'D ON:		
									00061	00065	00063		

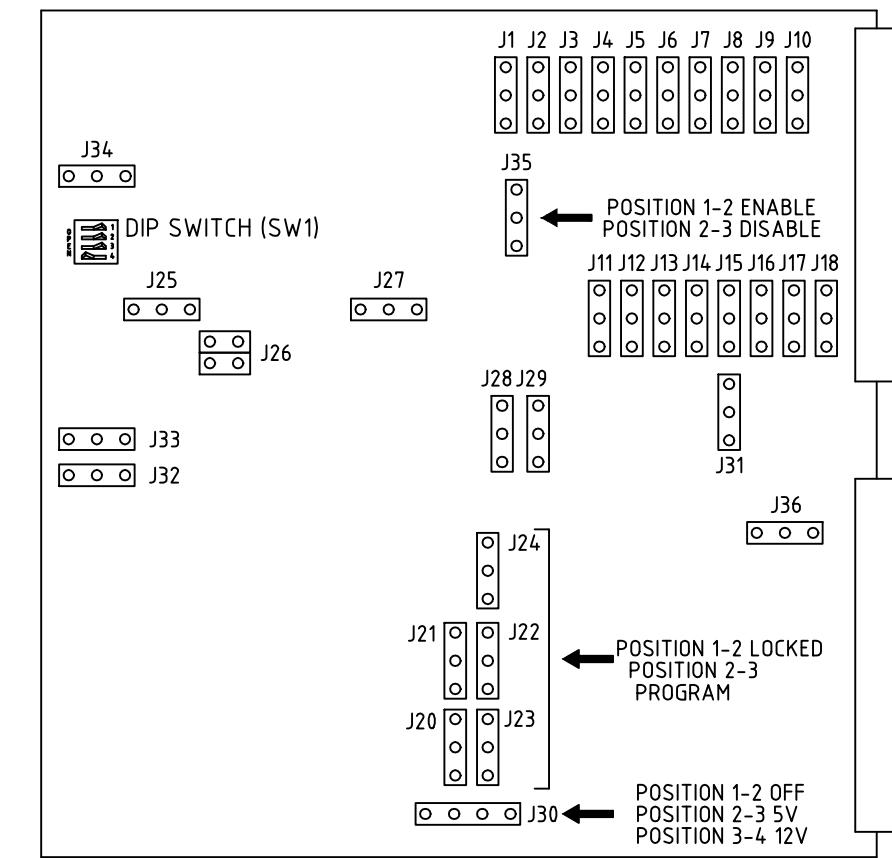
MICROLOK II CPU PCB JUMPER SETTINGS

JUMPER ID	DESCRIPTION	POSITION	NOTES
JMP1	BOTTOM PCMCIA 2 WAIT STATES	POSITION 2-3	
JMP2		NOT INSTALLED	
JMP3	ON-BOARD RAM 1 WAIT STATE	POSITION 2-3	#1
JMP4	TOP PCMCIA 2 WAIT STATES	POSITION 2-3	
JMP5		NOT INSTALLED	
JMP6	FLASH 1 WAIT STATE	POSITION 2-3	#1
JMP7	ENABLE COM4 RXD	POSITION 1-2	
JMP8	ENABLE COM4 DCD	POSITION 1-2	
JMP9	DISABLE BACKPLANE CPU RESET	POSITION 1-2	
JMP10	COM1 TX.CLK IS AN OUTPUT	POSITION 2-3	
JMP11	COM3 VOLTAGE DRIVE LEVELS	<u>RS-232</u> POSITION 1-2 <u>RS-423</u> POSITION 2-3	
JMP12	COM3 VOLTAGE DRIVE LEVELS	<u>RS-232</u> POSITION 1-2 <u>RS-423</u> POSITION 2-3	
JMP13	COM3 TX.CLK IS AN OUTPUT	POSITION 2-3	
JMP14	COM3 TX.CLK IS AN OUTPUT	POSITION 1-2	
JMP15	COM4 RX.CLK=9.83MHz	POSITION 1-2	
JMP16	COM3 RX.CLK=9.83MHz	POSITION 1-2	
JMP17	COM2 RX.CLK=9.83MHz	POSITION 1-2	
JMP18	COM1 RX.CLK=9.83MHz	POSITION 1-2	
JMP19	NOT AVAILABLE	NOT APPLICABLE	
JMP20	FLASH 3 PROGRAMMING LANGUAGE LOCKED (APPLICATION SPACE)	<u>POSITION 1-2</u> #2 POSITION 2-3	
JMP21	FLASH 1 PROGRAMMING LANGUAGE LOCKED (EXECUTIVE SPACE)	<u>POSITION 1-2</u> #2 POSITION 2-3	
JMP22	FLASH 2 PROGRAMMING LANGUAGE LOCKED (EXECUTIVE SPACE)	<u>POSITION 1-2</u> #2 POSITION 2-3	
JMP23	FLASH 4 PROGRAMMING LANGUAGE LOCKED (APPLICATION SPACE)	<u>POSITION 1-2</u> #2 POSITION 2-3	
JMP24	FLASH 1 BOOT BLOCK LOCKED (BOOT SPACE)	<u>POSITION 1-2</u> #2 POSITION 2-3	
JMP25	SPEAKER VOLUME	<u>SOFT</u> POSITION 2-3 LOUD POSITION 1-2 OFF NOT INSTALLED	

MICROLOK II CPU PCB JUMPER SETTINGS (CONT.)

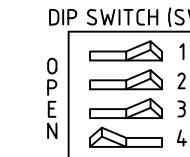
JUMPER ID	DESCRIPTION	POSITION	NOTES
JMP26	IRQ7 OFF	POSITION 2-4	
JMP27	68332 NORMAL	POSITION 1-2	#1
JMP28	TOP PCMCIA PROGRAMMING VOLTAGE LOCKED PROGRAM	POSITION 1-2 #2 POSITION 2-3	
JMP29	BOTTOM PCMCIA PROGRAMMING VOLTAGE LOCKED PROGRAM	POSITION 1-2 #2 POSITION 2-3	
JMP30	FLASH PROGRAMMING VOLTAGE OFF 5V 12V	POSITION 1-2 #2 POSITION 2-3 POSITION 3-4	
JMP31	CPS DRIVE NORMAL	POSITION 1-2	#1
JMP32	J1 COMM PORT 4 TX SELECT COMM 4 COMM 5	POSITION 1-2 POSITION 2-3	
JMP33	J1 COMM PORT 4 RX SELECT COMM 4 COMM 5	POSITION 1-2 POSITION 2-3	
JMP34	EXTERNAL "+5VBAT" ZENER DIODE SELECT (REGULATES TO 3.3V)	DISABLE POSITION 1-2 ENABLE POSITION 2-3	
JMP35	RTC COIN BATTERY ENABLE ENABLE DISABLE	POSITION 1-2 POSITION 2-3	
JMP36	BACKPLANE SYS.CLK ENABLE DISABLE	POSITION 1-2 POSITION 2-3	

JUMPER POSITIONS



MICROLOK II CPU PCB DIP SWITCH (SW1) SETTINGS

SW No.	DESCRIPTION	POSITION
SW1	-NA-	OPEN CLOSE
SW2	-NA-	OPEN CLOSE
SW3	-NA-	OPEN CLOSE
SW4	DST DISABLE DST ENABLE	OPEN CLOSE



OPEN - 57600 BAUD
CLOSE - 19200 BAUD

- NOTE:**
- #1 IF HEADER POSTS ARE NOT INSTALLED IN THESE LOCATIONS, NO JUMPER IS REQUIRED.
 - #2 SETTINGS SHOWN UNDERLINED ARE THE NORMAL JUMPER POSITIONS, WHICH LOCK THE FLASH DEVICES AND PREVENT THEIR CONTENTS FROM BEING MODIFIED.

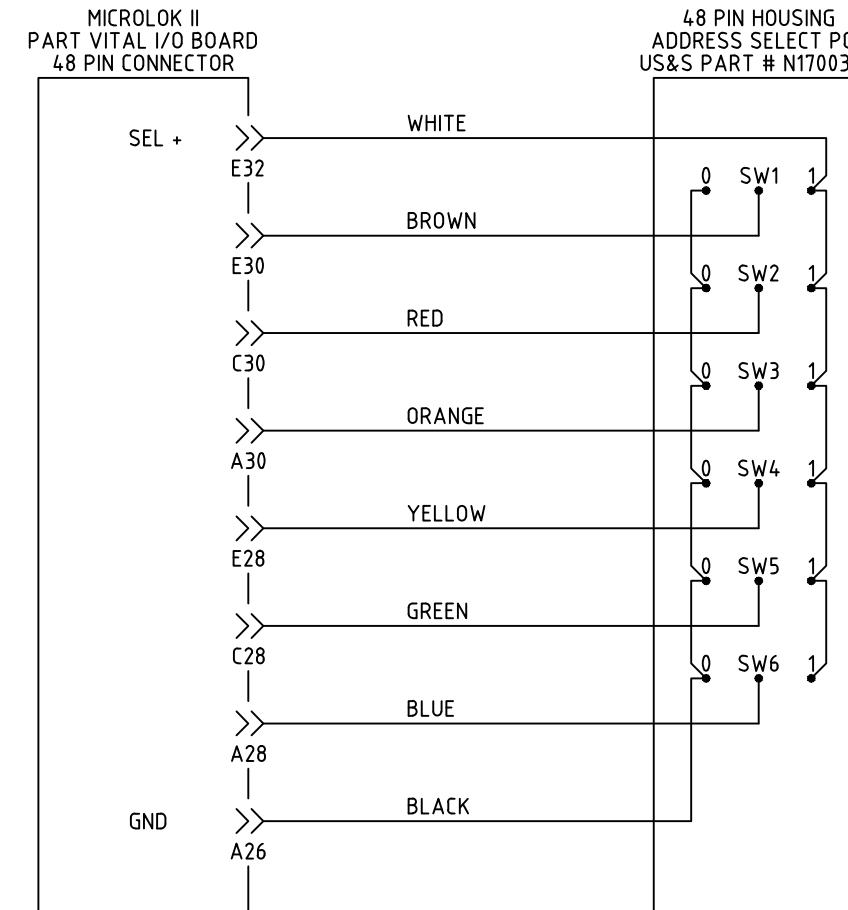
MICROLOK II CPU VERSION: CC3.0

00	16.07.15	PR	RS	RSS	ASMADE	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

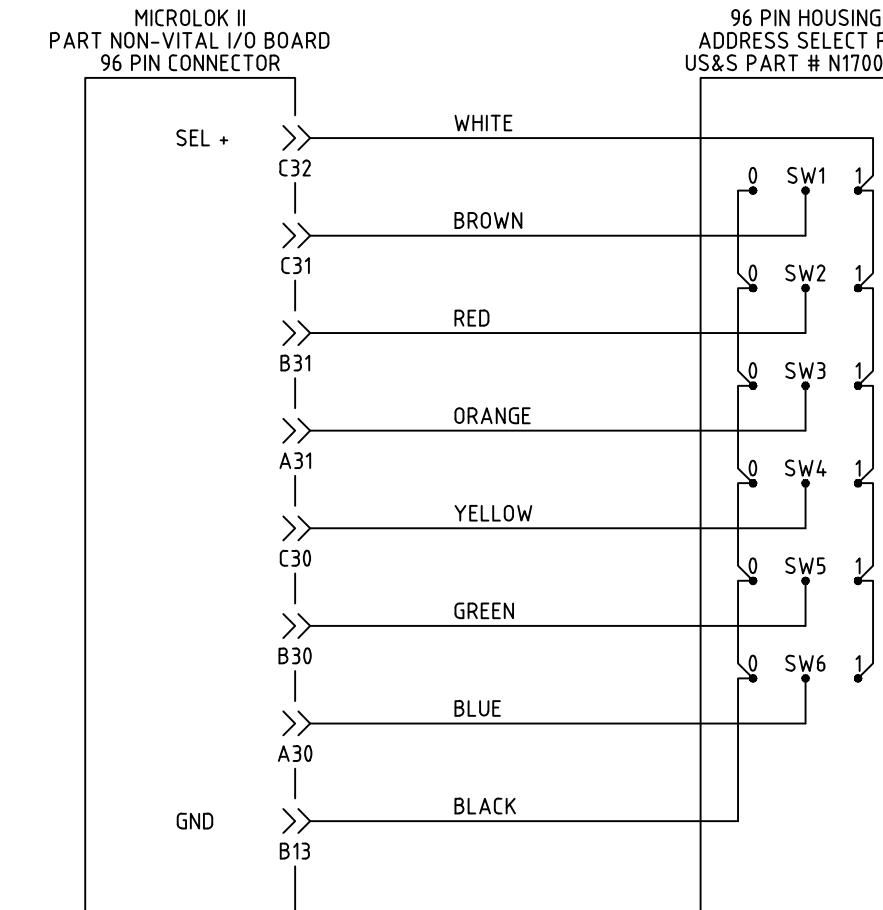
TVM Signalling & Transportation Systems Pvt. Ltd.
#610, "NARAYANA", 1st Floor, 15th Cross,
100 Feet Road, J.P.Nagar, 6th Phase,
Bengaluru – 560 078
Tel: +91 80 2654 0781,82,83
E-mail : info@tsts.in

CHK.	TITLE:	MICROLOK II CPU BOARD JUMPER SETTING			SIGNAL & TELECOMMUNICATIONS
		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	बि B	
	IPU.2107B/3	JE/Drg			
		SE/SSE/Drg			
		ASTE/D			
		SSTE/P & P			
		f CSTE	APP.	शीट SHEET कुल शीट SHEETS	CONT'D ON: 00064
				00063	00065

TYPICAL VITAL INPUT/OUTPUT BOARD ADDRESSING CIRCUIT M1A1/E



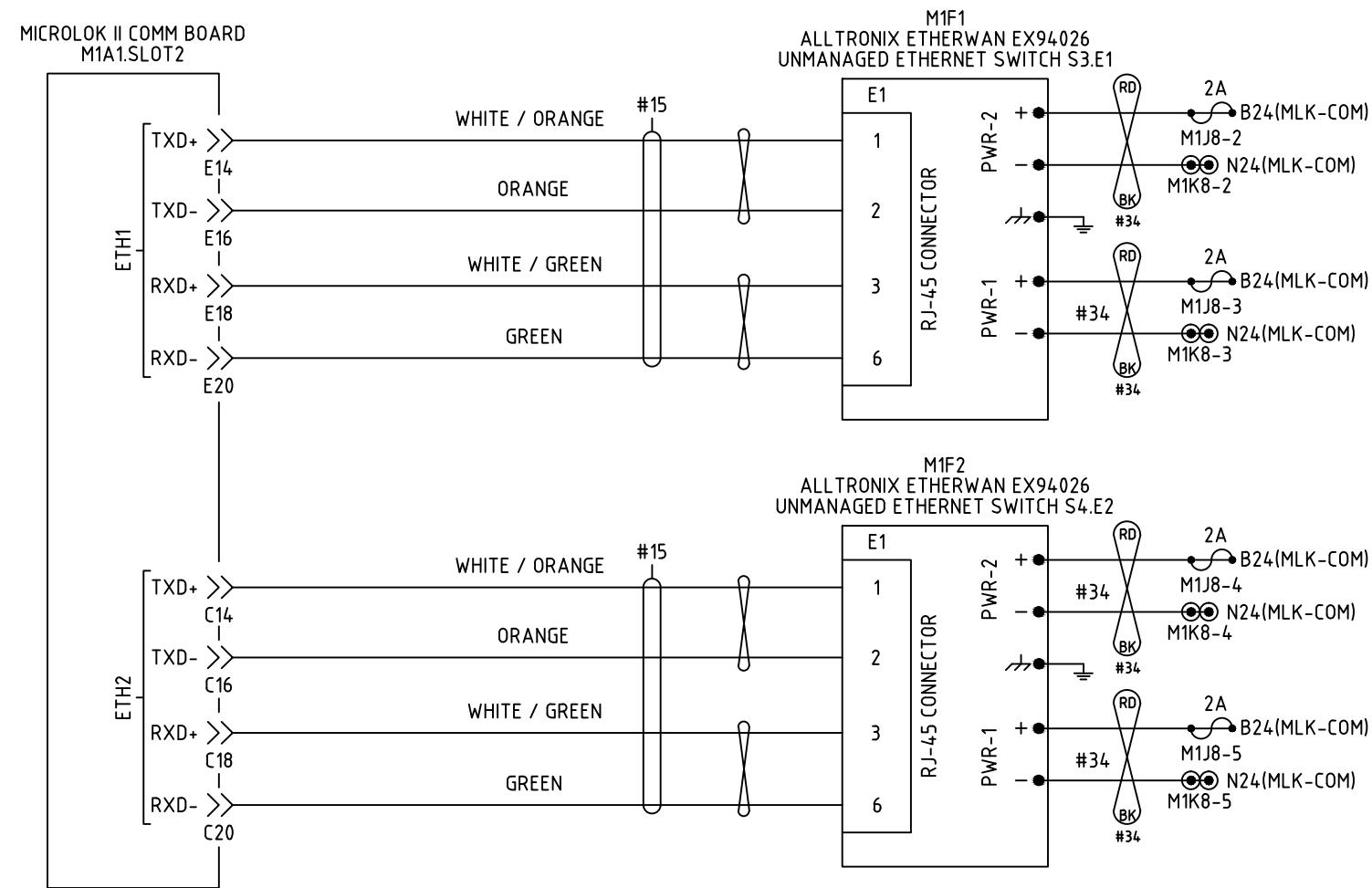
TYPICAL NON-VITAL INPUT/OUTPUT BOARD ADDRESSING CIRCUIT M1A1/B1



ADDRESS SELECT PCB JUMPER SETTINGS-M1A1/B

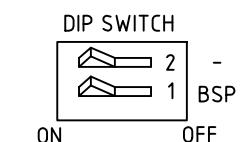
M1A1/B1 SLOT11 48 PIN HOUSING	M1A1/B1 SLOT12 48 PIN HOUSING	M1A1/B1 SLOT13 96 PIN HOUSING
ADDRESS SELECT PCB	ADDRESS SELECT PCB	ADDRESS SELECT PCB
0 • 1 SW1	0 • 1 SW1	0 • 1 SW
0 • 1 SW2	0 • 1 SW2	0 • 1 SW
0 • 1 SW3	0 • 1 SW3	0 • 1 SW
0 • 1 SW4	0 • 1 SW4	0 • 1 SW
0 • 1 SW5	0 • 1 SW5	0 • 1 SW
0 • 1 SW6	0 • 1 SW6	0 • 1 SW

NOTE:
ADDRESS SELECT PCB'S ARE MOUNTED ON
THE HOOD OF 48 & 96 PIN CONNECTORS
 INDICATES JUMPER PLACEMENT



NOTE:
#15 CAT 6e ETHERNET MULTISTRAND PATCH CORD
#34 16/0.2mm (0.5 sq.mm) WIRE "TWISTED PAIR RED/BLACK" WITH "RD"
BEING +VE AND "BK" BEING -VE.
ETH1 - 1ST ETHERNET PORT IN THE COMM BOARD
ETH2 - 2ND ETHERNET PORT IN THE COMM BOARD
COMMUNICATION CABLE SHOULD BE SEPARATED FROM THE POWER CABLE.
THE DEFAULT SETTING OF EDS SWITCHES ARE 'OFF'
BSP LIMITS NUMBER OF BROADCAST PACKETS TO SWITCH

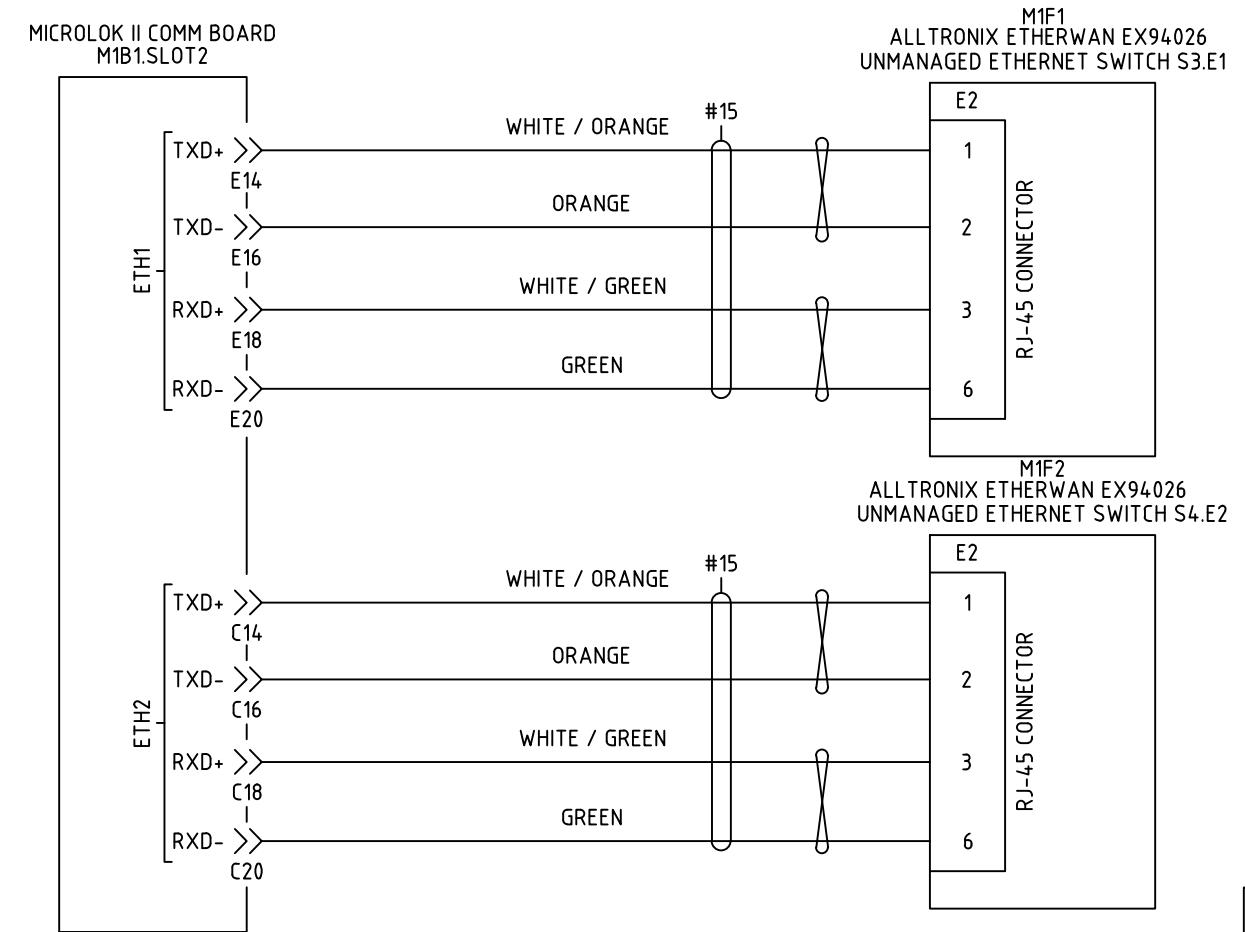
DIP SWITCH	SETTING	DESCRIPTION
-	-	SERVES NO FUNCTION (RESERVED FOR FUTURE)
BSP	ON	ENABLE BROADCAST STORM PROTECTION
	OFF	DISABLE BROADCAST STORM PROTECTION



RJ45 PINOUT DETAILS:		
PIN NO	COLOUR	FUNCTIONS
1	WHITE/ORANGE	TRANSMIT DATA + (TX+)
2	ORANGE	TRANSMIT DATA - (TX-)
3	WHITE/GREEN	RECEIVE DATA + (RX+)
4	BLUE	NOT CONNECTED
5	WHITE/BLUE	NOT CONNECTED
6	GREEN	RECEIVE DATA - (RX-)
7	WHITE/BROWN	NOT CONNECTED
8	BROWN	NOT CONNECTED

						TVM Signalling & Transportation Systems Pvt. Ltd.
						#610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

 MICROLOK II COMMUNICATION PCB INTERFACE CIRCUITS - M1A1	TITLE:		SIGNAL & TELECOMMUNICATIONS	
	REF.SIG.PLAN.No.	द म रेलवे आरेख सं	B	
	IPU.2107B/3	S.C.RLY.DRG.NO		
	SE/SSE/Drg			
	ASTE/D			
	SSTE/P & P			
CHK.		CONT'D ON:		TATICHERLA
00075		00065		SOUTH CENTRAL RAILWAY
CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		00076		DIVISION: GUNTAKAL



RJ45 PINOUT DETAILS:		
PIN NO	COLOUR	FUNCTIONS
1	WHITE/ORANGE	TRANSMIT DATA + (TX+)
2	ORANGE	TRANSMIT DATA - (TX-)
3	WHITE/GREEN	RECEIVE DATA + (RX+)
4	BLUE	NOT CONNECTED
5	WHITE/BLUE	NOT CONNECTED
6	GREEN	RECEIVE DATA - (RX-)
7	WHITE/BROWN	NOT CONNECTED
8	BROWN	NOT CONNECTED

NOTE:

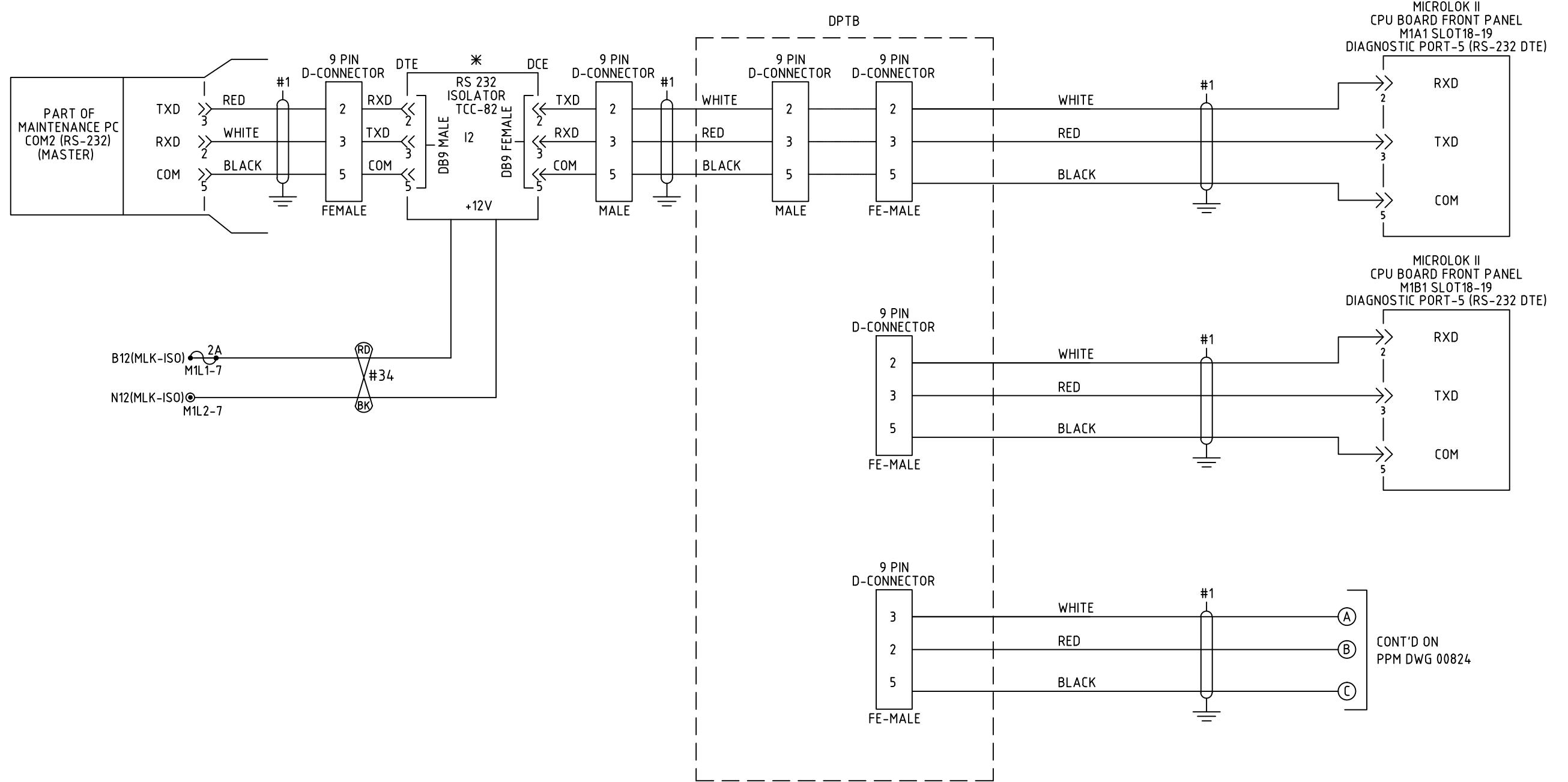
#15- CAT 6e ETHERNET MULTISTRAND PATCH CORD

ETH1 - 1ST ETHERNET PORT IN THE COMM BOARD

ETH2 - 2ND ETHERNET PORT IN THE COMM BOARD

COMMUNICATION CABLE SHOULD BE SEPARATED FROM THE POWER CABLE.

						<p>TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in</p>	IPU.2107B/3	REVISION	<p>CHK.</p>	TITLE: MICROLOK II COMMUNICATION PCB INTERFACE CIRCUITS - M1B1			 SIGNAL & TELECOMMUNICATIONS TATICHERLA SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL
00	16.07.15	PR	RS	RSS	JE/Drg								
					SE/SSE/Drg								
					ASTE/D								
					SSTE/P & P								
REV	DATE	DESIGNED	CHECKED	APPROVED	f CSTE								
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		APP.	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00079		
								00076	00065				



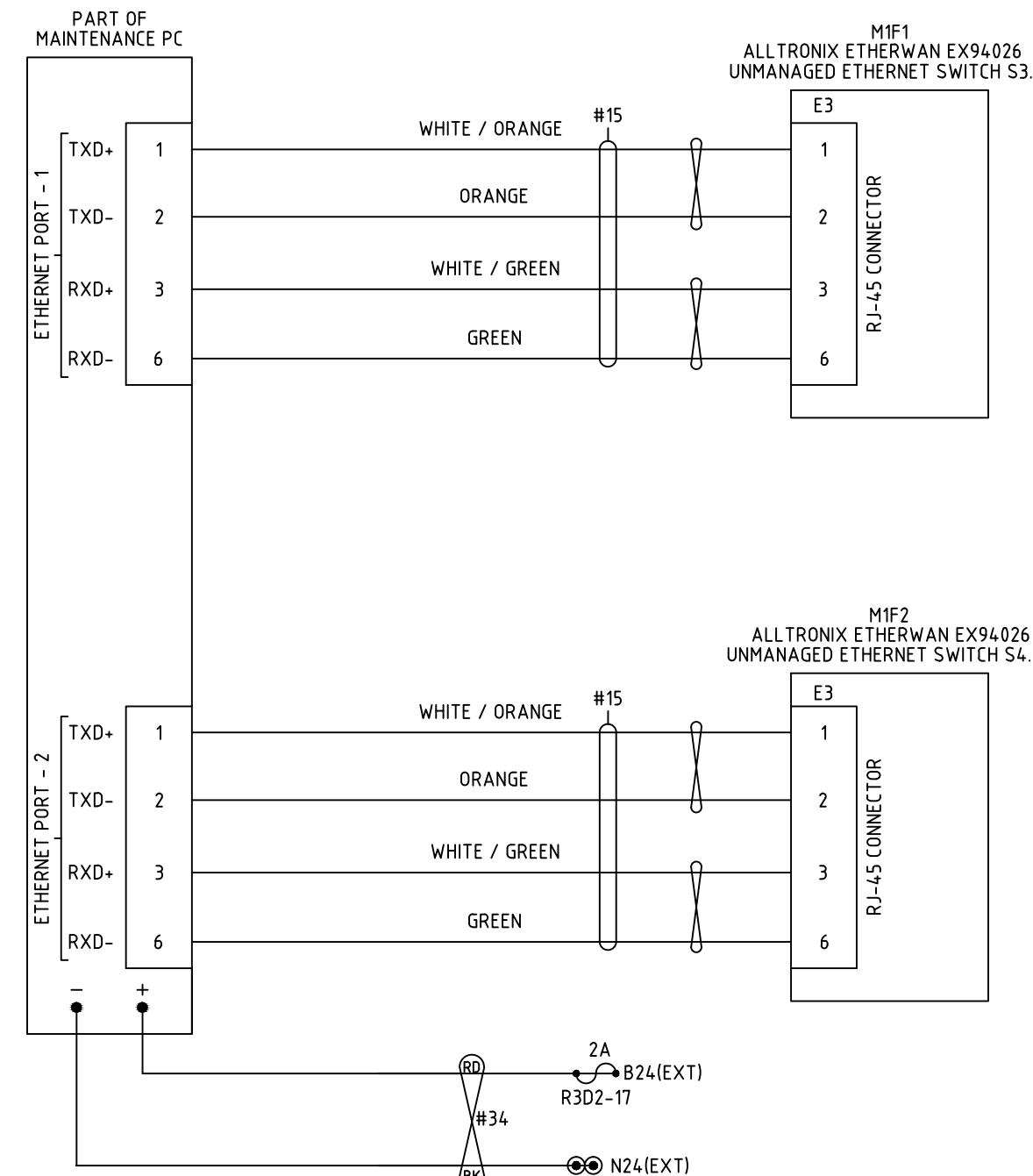
NOTE:

- * TO BE INSTALLED INSIDE THE DPTB BOX.
- 1. DPTB DIAGNOSTIC PORT TERMINATION BOX MOUNTED ON WALL, NEAR TO MAINTENANCE PC TABLE.
- 2. #1 3 CORE BELDEN SERIAL CABLE
- 3. #34 16/0.2mm (0.5Sq.mm) WIRE "TWISTED PAIR RED/BLACK" WITH "RD" BEING +VE & "BK" BEING -VE.

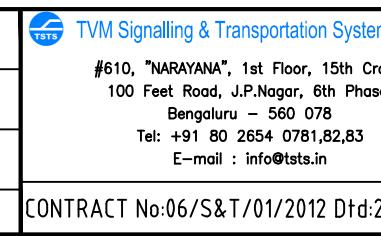
NOTE TO INSTALLER:

1. SERIAL COMMUNICATION WIRES/CABLES SHOULD BE SEPARATED FROM OTHER WIRING.
2. COMMUNICATION CABLE SHIELD EARTHING TO BE DONE AT ONLY ONE SIDE.

						TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	IPU.2107B/3 <hr/> JE/Drg <hr/> SE/SSE/Drg <hr/> ASTE/D <hr/> SST/P & P <hr/> f CSTE	REVISION <hr/> JE/Drg <hr/> SE/SSE/Drg <hr/> ASTE/D <hr/> SST/P & P <hr/> f CSTE	CHK. <hr/> REF.SIG.PLAN.No. IPU.2107B/3 S.C.RLY.DRG.NO द म रेलवे आरक्ष सं वि B <hr/> शीट SHEET कुल शीट SHEETS CONT'D ON: 00080	TITLE: DIAGNOSTIC SERIAL LINK BETWEEN M1A1,M1B1 & MPC	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS				
00	16.07.15	PR	RS	RSS	ASMADE										
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION										
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012										

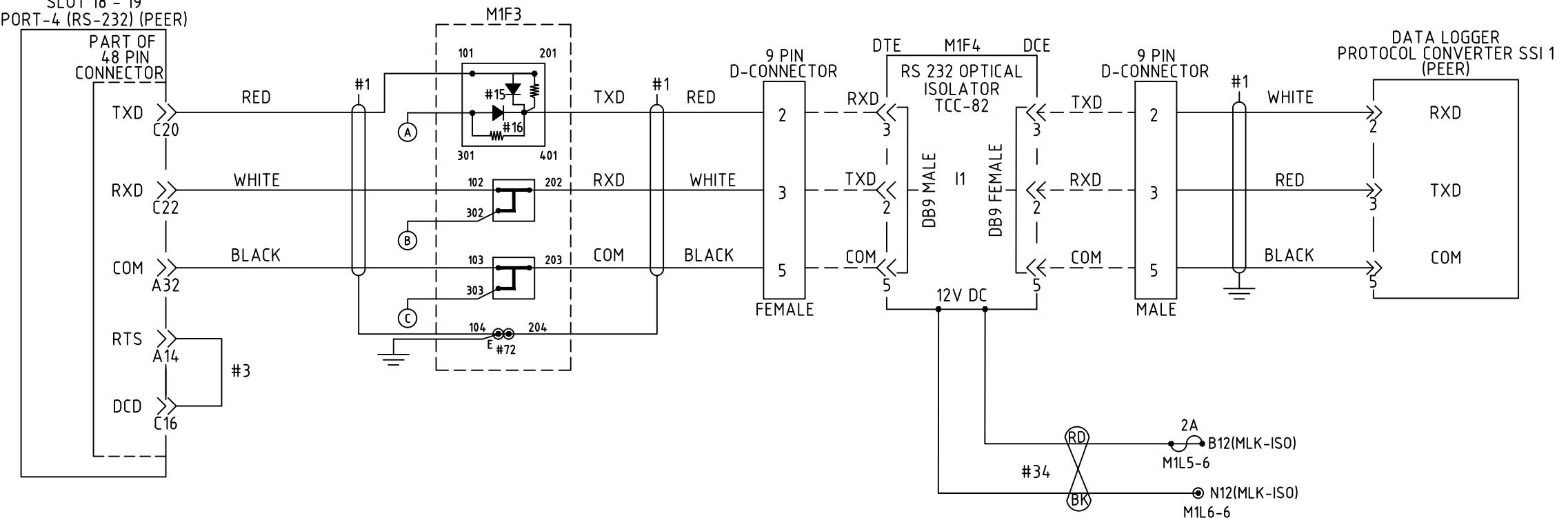


RJ45 PINOUT DETAILS:		
PIN NO	COLOUR	FUNCTIONS
1	WHITE/ORANGE	TRANSMIT DATA + (TX+)
2	ORANGE	TRANSMIT DATA - (TX-)
3	WHITE/GREEN	RECEIVE DATA + (RX+)
4	BLUE	NOT CONNECTED
5	WHITE/BLUE	NOT CONNECTED
6	GREEN	RECEIVE DATA - (RX-)
7	WHITE/BROWN	NOT CONNECTED
8	BROWN	NOT CONNECTED

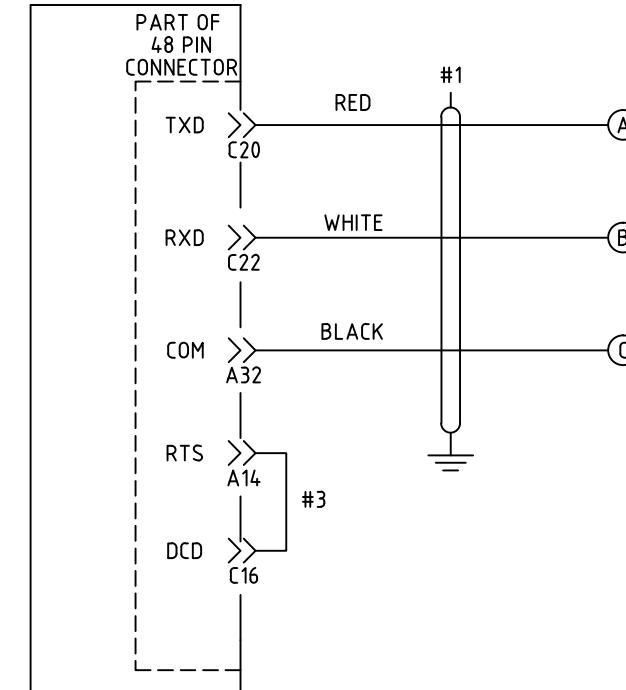
					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in		IPU.2107B/3	REVISION	CHK. TITLE: ETHERNET COMMUNICATION BETWEEN MPC & EDS (S1E1&S2E2) SWITCH REF.SIG.PLAN.No. IPU.2107B/3 S.C.RLY.DRG.NO शीट SHEET कुल शीट SHEETS 00080 00065 APP. f CSTE CONT'D ON: 00081	SIGNAL & TELECOMMUNICATIONS
00	16.07.15	PR	RS	RSS	ASMADE		JE/Drg			
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		SE/SSE/Drg			
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		ASTE/D			
							SSTE/P & P			
							f CSTE			

MICROLOK II-M1A1
PART OF CPU BOARD
SLOT 18 - 19
PORT-4 (RS-232) (PEER)

SERIAL COMMUNICATION CIRCUIT BETWEEN M1A1/M1B1 & DATALOGGER



MICROLOK II-M1B1
PART OF CPU BOARD
SLOT 18 - 19
PORT-4 (RS-232) (PEER)



NOTE:

- #1 3 CORE BELDEN SERIAL CABLE
- #3 JUMPERED INSIDE THE 48 PIN CONNECTOR HOUSE.
- #15 DIODE IN4148.
- #16 10kOhm, 0.5W RESISTER.
- #72 PHEONIX EARTH TERMINAL USLKG-5.
- #34 16/0.2mm(Sq.mm) WIRE "TWISTED PAIR RED/BLACK" WITH "RD" BEING +VE AND "BK" BEING -VE.

NOTE TO INSTALLER:

1. SERIAL COMMUNICATION WIRES/CABLES SHOULD BE SEPARATED FROM OTHER WIRING.
2. COMMUNICATION CABLE SHEILDING EARTHING TO BE DONE AT ONLY ONE SIDE.

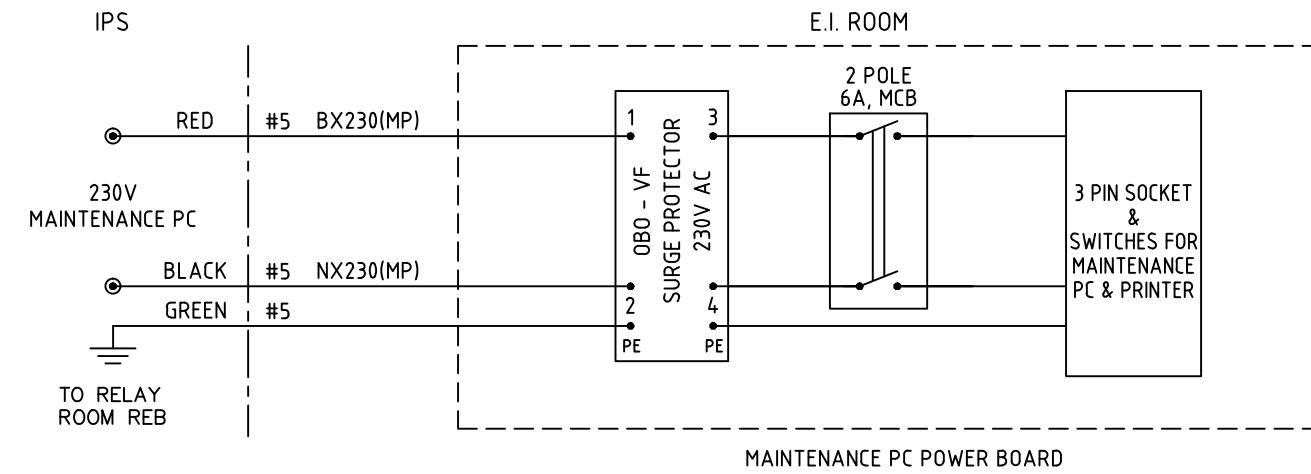
						<p>TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in</p>	<p>IPU.2107B/3</p> <p>REVISION</p> <p>CHK.</p> <p>TITLE: SERIAL COMMUNICATION BETWEEN M1A1 M1B1 & DATALOGGER</p>	<p>REF.SIG.PLAN.No. IPU.2107B/3</p> <p>JE/Drg</p> <p>SE/SSE/Drg</p> <p>ASTE/D</p> <p>SSTE/P & P</p> <p>f CSTE</p>	<p>द म रेलवे आरेख सं S.C.RLY.DRG.NO बि B</p> <p>शीट SHEET कुल शीट SHEETS</p> <p>CONT'D ON: 00082</p>	<p>सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS</p> <p>ताटिचेर्ला TATICHERLA</p> <p>SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL</p>
00	16.07.15	PR	RS	RSS	ASMADE					
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION					
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012					

PORT/ EQUIPMENT	TERMINAL ROW	FUNCTION	FROM PIN NO.	TERMINAL NO.	FUSE/ LINK	TYPE	TERMINAL NO.	FROM PIN NO.	FUNCTION	PORT/ EQUIPMENT	SHEET NO.
M1A1 PORT 4	M1F3	TXD	C20	101	•T	#61	201/401	2	RXD	TCC-82 RS 232 ISOLATOR	00081
		RXD	C22	102	•T	#63	202	3	TXD		
		COM	A32	103	•T	#63	203	5	COM		
		EARTH	-	104	•T	#72	204	-	EARTH		
M1B1 PORT 4	M1F3	TXD	C20	301	•T	#61	-	-	-		
		RXD	C22	302	•T	#63	-	-	-		
		COM	A32	303	•T	#63	-	-	-		

NOTE:

1. #61 DOUBLE DECK PHEONIX TERMINAL TYPE UKK5-DIO/UL-UR HAVING INBUILT DIODES 1N4007 WITH COMMON CATHODE
2. #63 SINGLE DECK PHEONIX NON-DISCONNECT TERMINAL TYPE UK5-TWIN.
3. #72 PHEONIX EARTH TERMINAL TYPE USLKG-5..

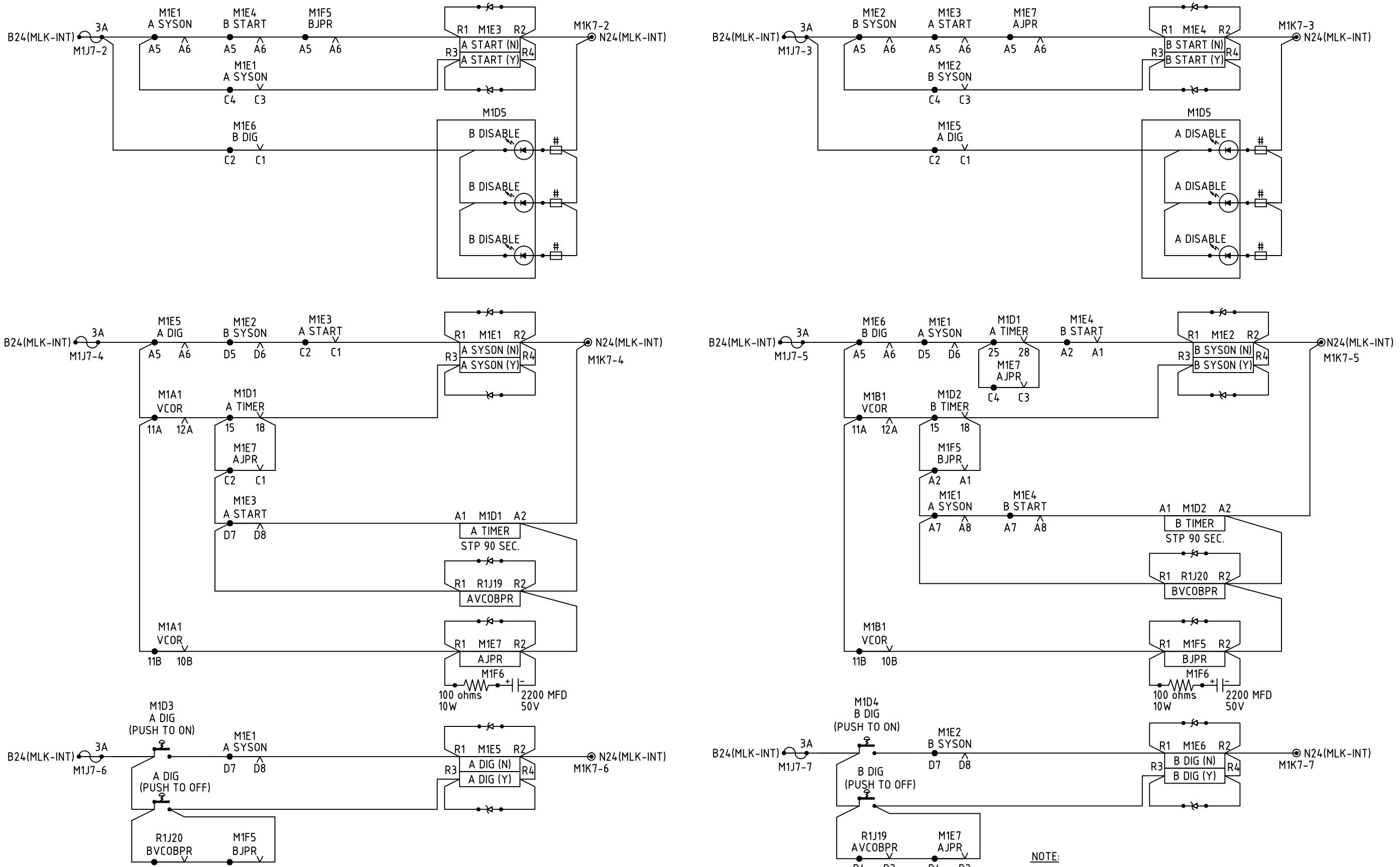
						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	IPU.2107B/3 	IPU.2107B/3	REVISION	CHK.	TITLE: SERIAL COMMUNICATION TERMINATION DETAILS		SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA
00	16.07.15	PR	RS	RSS	JE/Drg								
					SE/SSE/Drg								
					ASTE/D								
					SSTE/P & P								
					f CSTE								
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00083	SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL	
							00082	00065				(MICROLOK-II WARM STANDBY)	



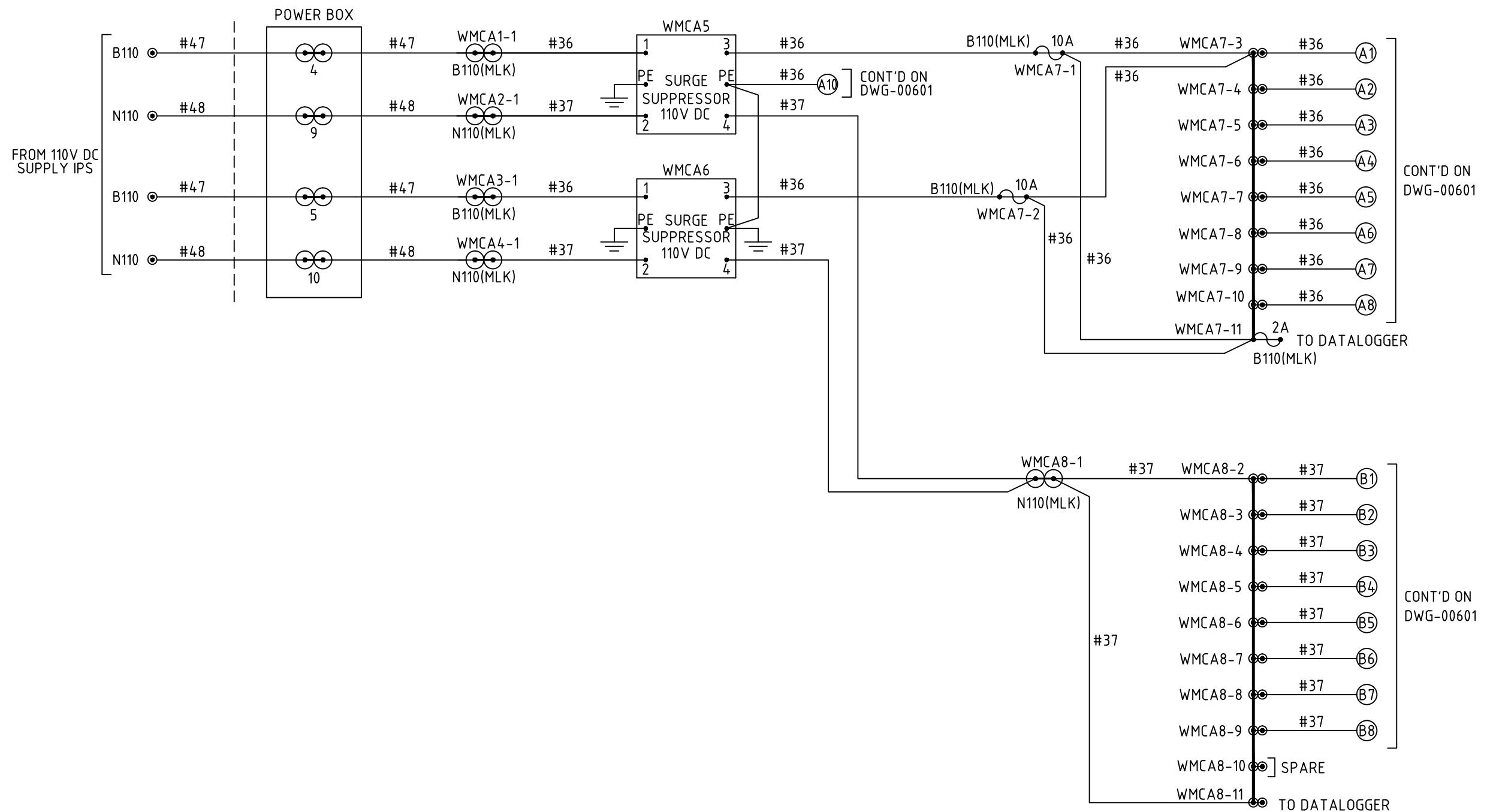
NOTE:
#5 3x2.5 sq mm WIRE

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	TITLE: POWER DISTRIBUTION - PC & LOCATIONS				SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA
	REF.SIG.PLAN.No.	IPU.2107B/3	REVISION	द म रेलवे आरेख सं	
	IPU.2107B/3	JE/Drg	SE/SSE/Drg	S.C.RLY.DRG.NO	
	SSTE/P & P	ASTE/D			
	f CSTE	APP.	शीट SHEET	कुल शीट SHEETS	
	00083		CONT'D ON:	00065	
				00580	



					TVM Signalling & Transportation Systems Pvt. Ltd.		IPU.2107B/3	REVISION	CHK.	TITLE: MICROLOK II CHANGE OVER CIRCUIT		SIGNAL & TELECOMMUNICATIONS
					#610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in			JE/Drg		REF.SIG.PLAN.No. IPU.2107B/3 S.C.RLY.DRG.NO		द म रेलवे आरेख सं वि B
00	16.07.15	PR	RS	RSS	ASMADE			SE/SSE/Drg		शीट SHEET	कुल शीट SHEETS	CONT'D ON: 00600
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		ASTE/P & P		00580	00065	
								f CSTE		APP.		

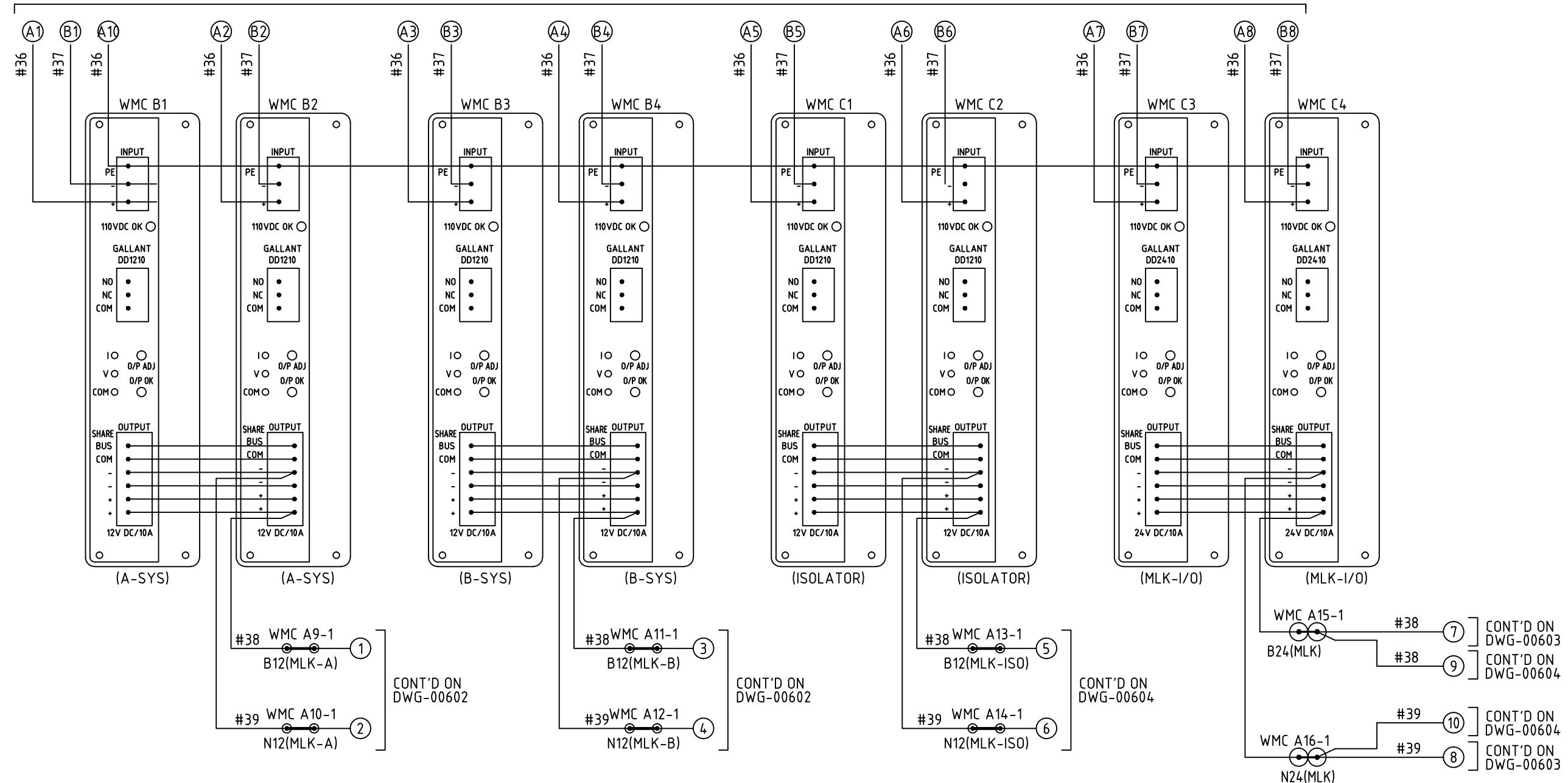


NOTE:

- #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
- #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).
- #47 16sq.mm WIRE (RED COLOUR).
- #48 16sq.mm WIRE (BLACK COLOUR).
- 10A FUSE IS HRC TYPE

						TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	IPU.2107B/3 REVISION JE/Drg SE/SSE/Drg ASTE/D SSTE/P & P f CSTE	CHK. TITLE: POWER DISTRIBUTION OF 110V DC	SIGNAL & TELECOMMUNICATIONS		
00	16.07.15	PR	RS	RSS	ASMADE				तातिचेर्ला		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION				TATICHERLA		
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012				SOUTH CENTRAL RAILWAY		
									DIVISION: GUNTAKAL		
									(MICROLOK-II WARM STANDBY)		

CONT'D ON DWG-00600

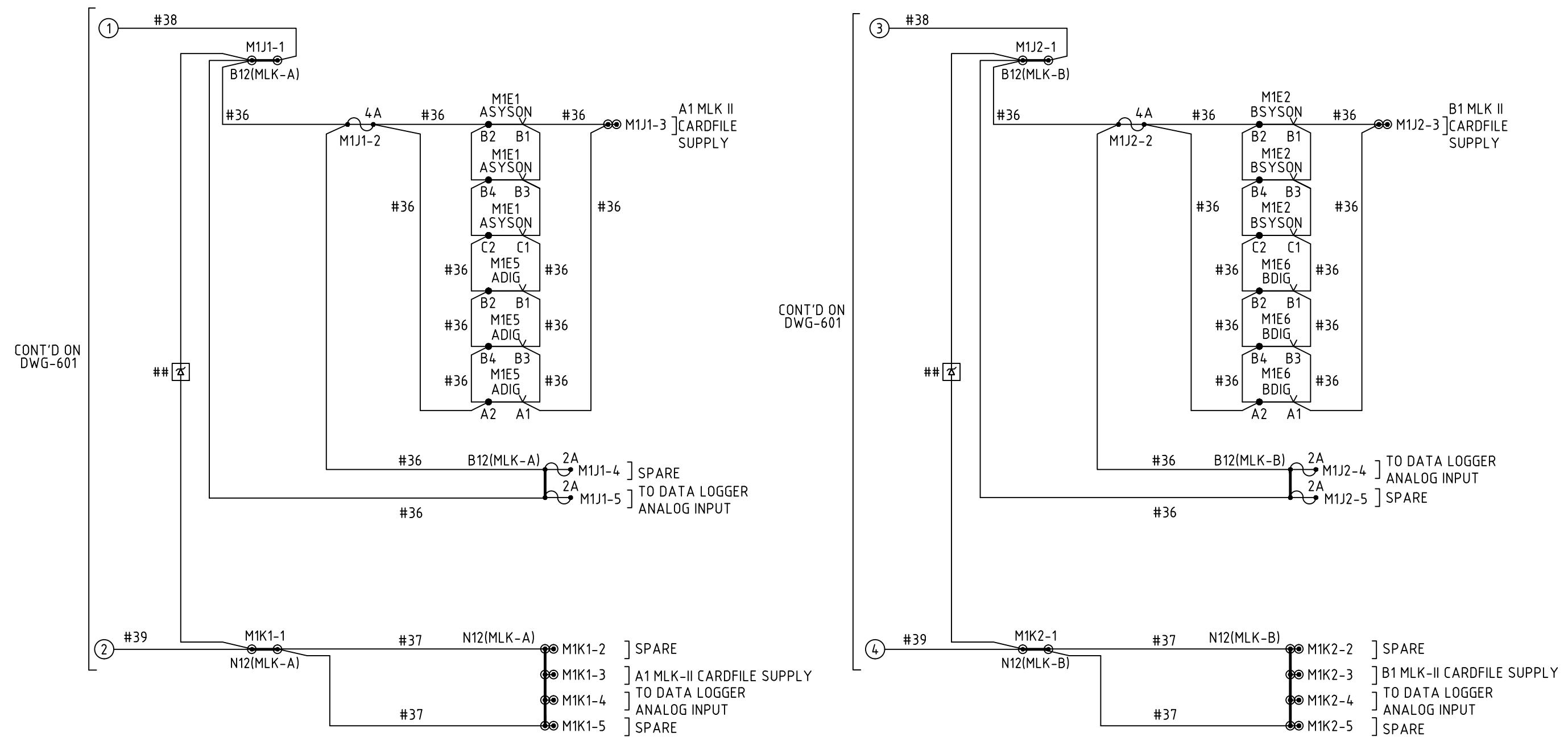


NOTE:

- #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
- #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).
- #38 56/0.3mm (4Sq.mm) WIRE (RED COLOUR).
- #39 56/0.3mm (4Sq.mm) WIRE (BLACK COLOUR).

						TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	IPU.2107B/3 	REVISION	CHK. 	TITLE: POWER DISTRIBUTION OF 110V DC			SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL
00	16.07.15	PR	RS	RSS	JE/Drg								
					SE/SSE/Drg								
					ASTE/D								
					SSTE/P & P								
					f CSTE								
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012	APP.	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00602	
									00601	00065			

M1 RACK

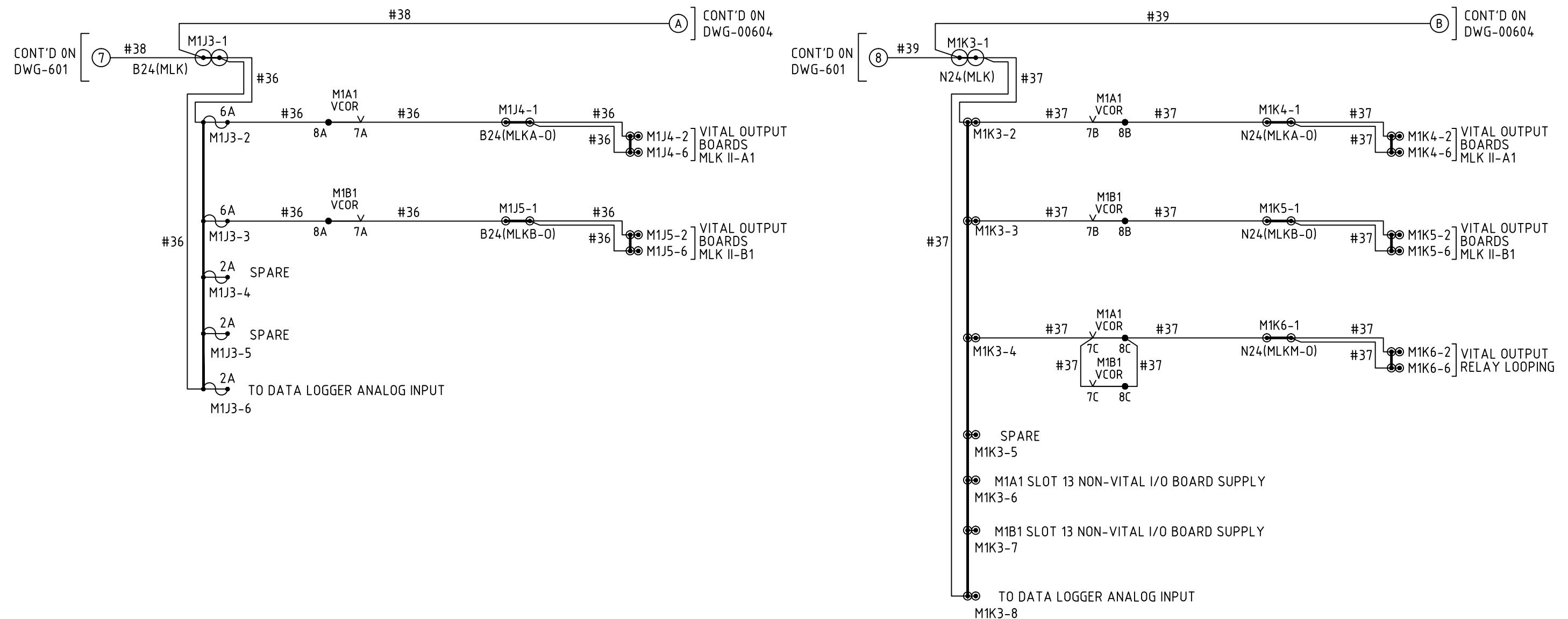


NOTE:

- #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
- #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).
- #38 56/0.3mm (4Sq.mm) WIRE (RED COLOUR).
- #39 56/0.3mm (4Sq.mm) WIRE (BLACK COLOUR).
- ## TRANSIENT VOLTAGE SUPPRESSOR TYPE 5KP16A.

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	I.PU.2107B/3 JE/Drg SE/SSE/Drg ASTE/D SSTE/P & P f CSTE	IPU.2107B/3	REVISION	TITLE: POWER DISTRIBUTION OF 12V DC (CARDFILE SUPPLY - SYSTEM A&B) REF.SIG.PLAN.No. IPU.2107B/3 S.C.RLY.DRG.NO द म रेलवे आरेख सं वि B शीट SHEET कुल शीट SHEETS 00602 00065 CONT'D ON: 00603	CHK.	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS
00	16.07.15	PR	RS	RSS	ASMADE		JE/Drg	तातिचेर्ला TATICHERLA			
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		SE/SSE/Drg	SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL			
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		ASTE/D				
							SSTE/P & P				
							f CSTE				

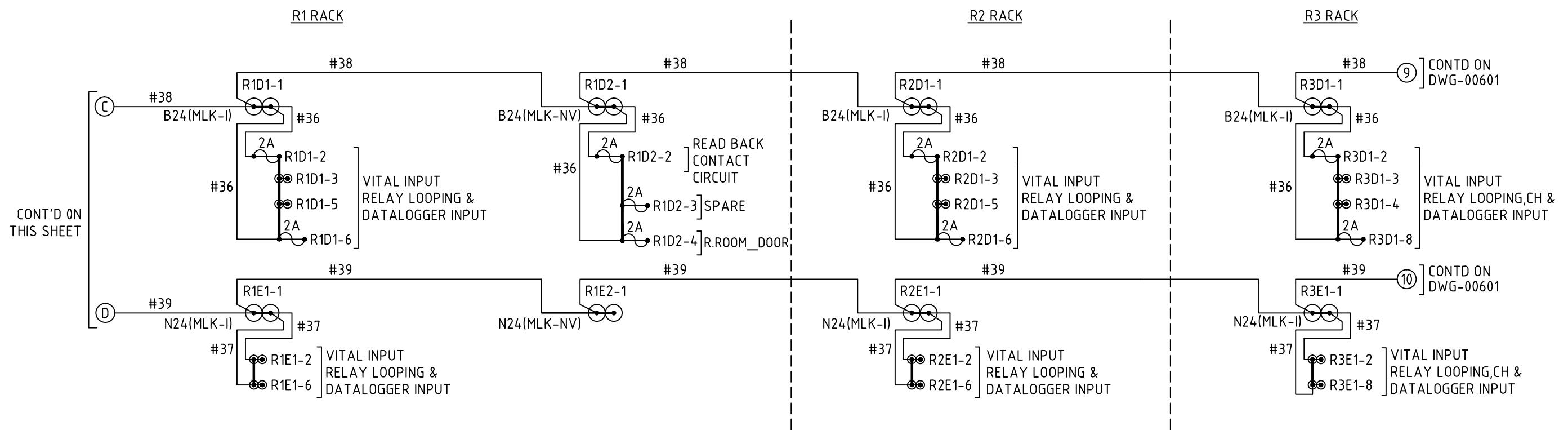
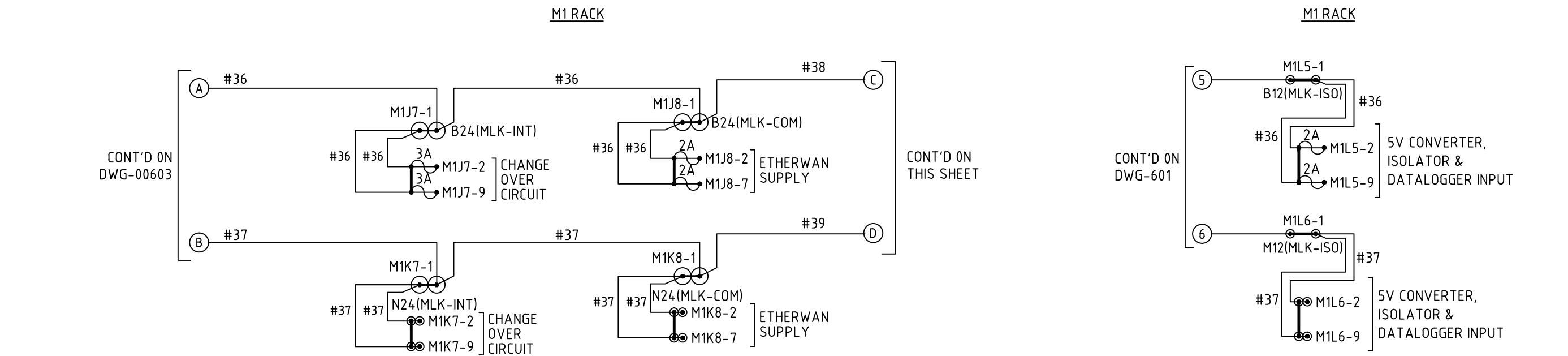
M1 RACK



NOTE:

1. #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
2. #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).
3. #38 56/0.3mm (4Sq.mm) WIRE (RED COLOUR).
4. #39 56/0.3mm (4Sq.mm) WIRE (BLACK COLOUR).

						<p>TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in</p>	<p>IPU.2107B/3</p> <p>REVISION</p> <p>JE/Drg</p> <p>SE/SSE/Drg</p> <p>ASTE/D</p> <p>SSTE/P & P</p> <p>f CSTE</p>	<p>CHK.</p> <p>REF.SIG.PLAN.No.</p> <p>IPU.2107B/3</p> <p>S.C.RLY.DRG.NO</p> <p>शीट SHEET</p> <p>फुल शीट SHEETS</p> <p>APP.</p> <p>00603</p>	<p>TITLE: POWER DISTRIBUTION OF 24V DC (VITAL OUTPUT)</p> <p>द म रेलवे आरेख सं वि B</p> <p>शीट SHEET</p> <p>फुल शीट SHEETS</p> <p>CONT'D ON: 00604</p>	<p>सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS</p> <p>तातिचेर्ला TATICHERLA</p> <p>SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL</p>
00	16.07.15	PR	RS	RSS	ASMADE					
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION					
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012					

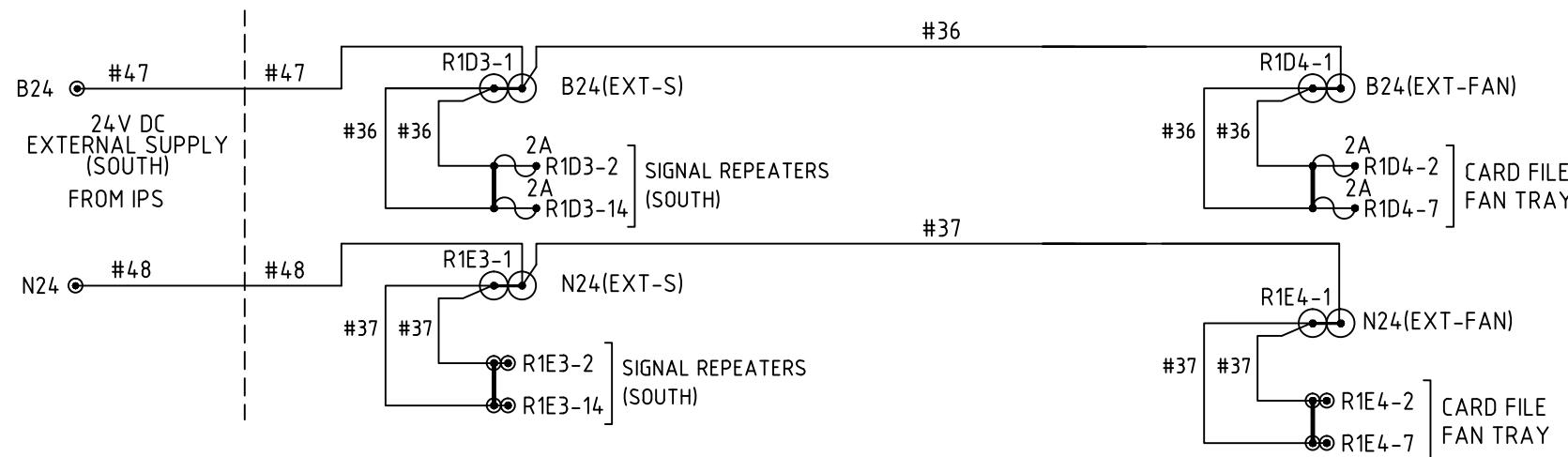


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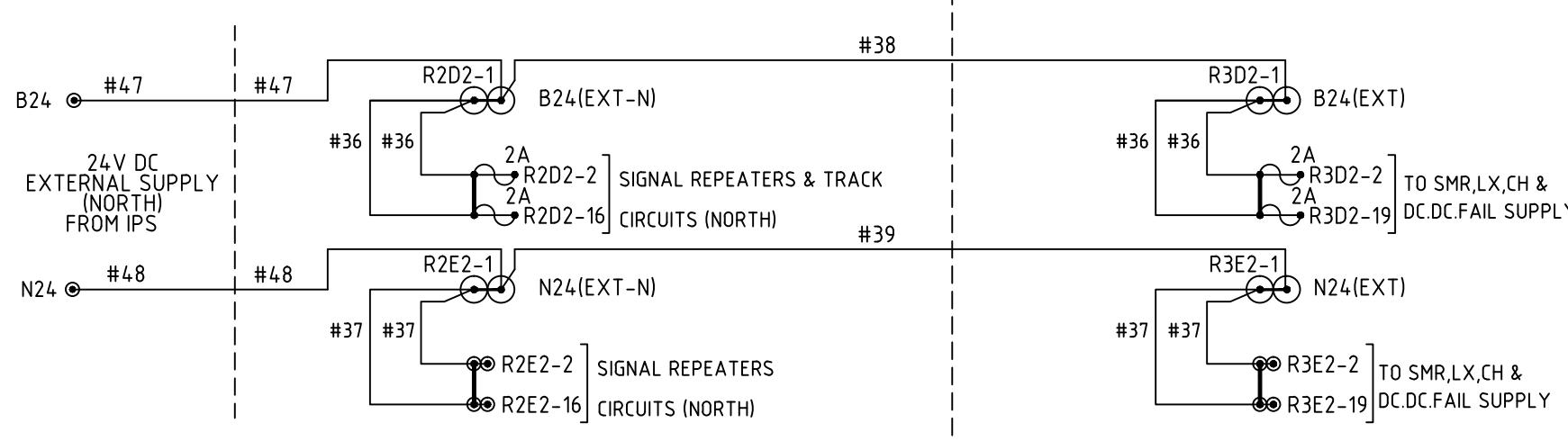
1. #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
2. #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).
3. #38 56/0.3mm (4Sq.mm) WIRE (RED COLOUR).
4. #39 56/0.3mm (4Sq.mm) WIRE (BLACK COLOUR).

						<p>TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in</p>	<p>IPU.2107B/3</p> <p>REVISION</p> <p>JE/Drg</p> <p>SE/SSE/Drg</p> <p>ASTE/D</p> <p>SSTE/P & P</p> <p>f CSTE</p>	<p>CHK.</p> <p>TITLE: POWER DISTRIBUTION OF 24V DC (VITAL INPUT)</p> <table border="1"> <tr> <td>REF.SIG.PLAN.No.</td> <td>द म रेलवे आरक्ष सं</td> <td>बि B</td> </tr> <tr> <td>IPU.2107B/3</td> <td>S.C.RLY.DRG.NO</td> <td></td> </tr> <tr> <td>शीट SHEET</td> <td>कुल शीट SHEETS</td> <td>CONT'D ON:</td> </tr> <tr> <td>00604</td> <td>00065</td> <td>00605</td> </tr> </table>	REF.SIG.PLAN.No.	द म रेलवे आरक्ष सं	बि B	IPU.2107B/3	S.C.RLY.DRG.NO		शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00604	00065	00605	<p>सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS</p> <p>तातिचेर्ला TATICHERLA</p> <p>SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL</p>
REF.SIG.PLAN.No.	द म रेलवे आरक्ष सं	बि B																			
IPU.2107B/3	S.C.RLY.DRG.NO																				
शीट SHEET	कुल शीट SHEETS	CONT'D ON:																			
00604	00065	00605																			
00	16.07.15	PR	RS	RSS	ASMADE																
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION																
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012																

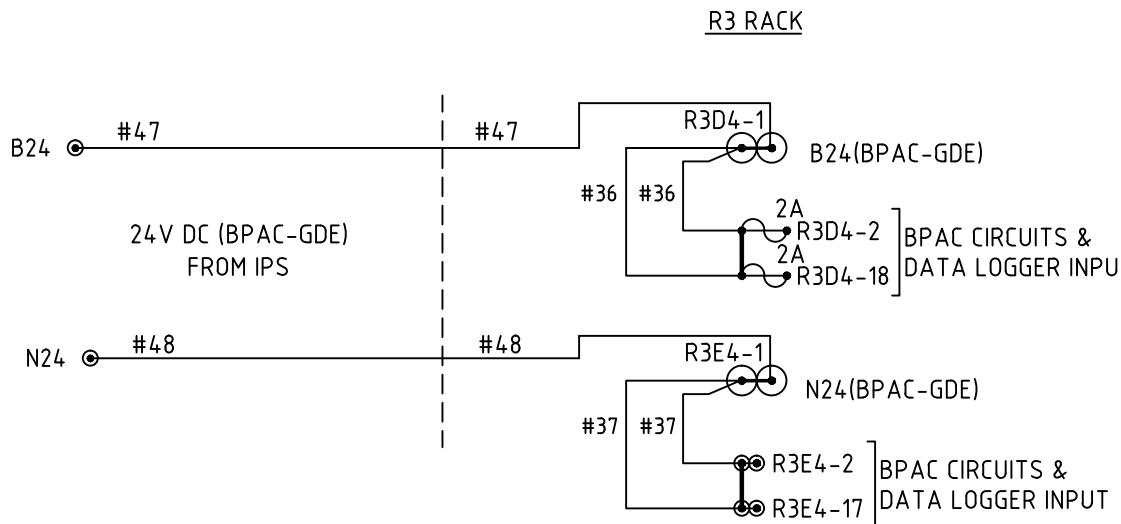
R1 RACK



R2 RACK



R3 RACK

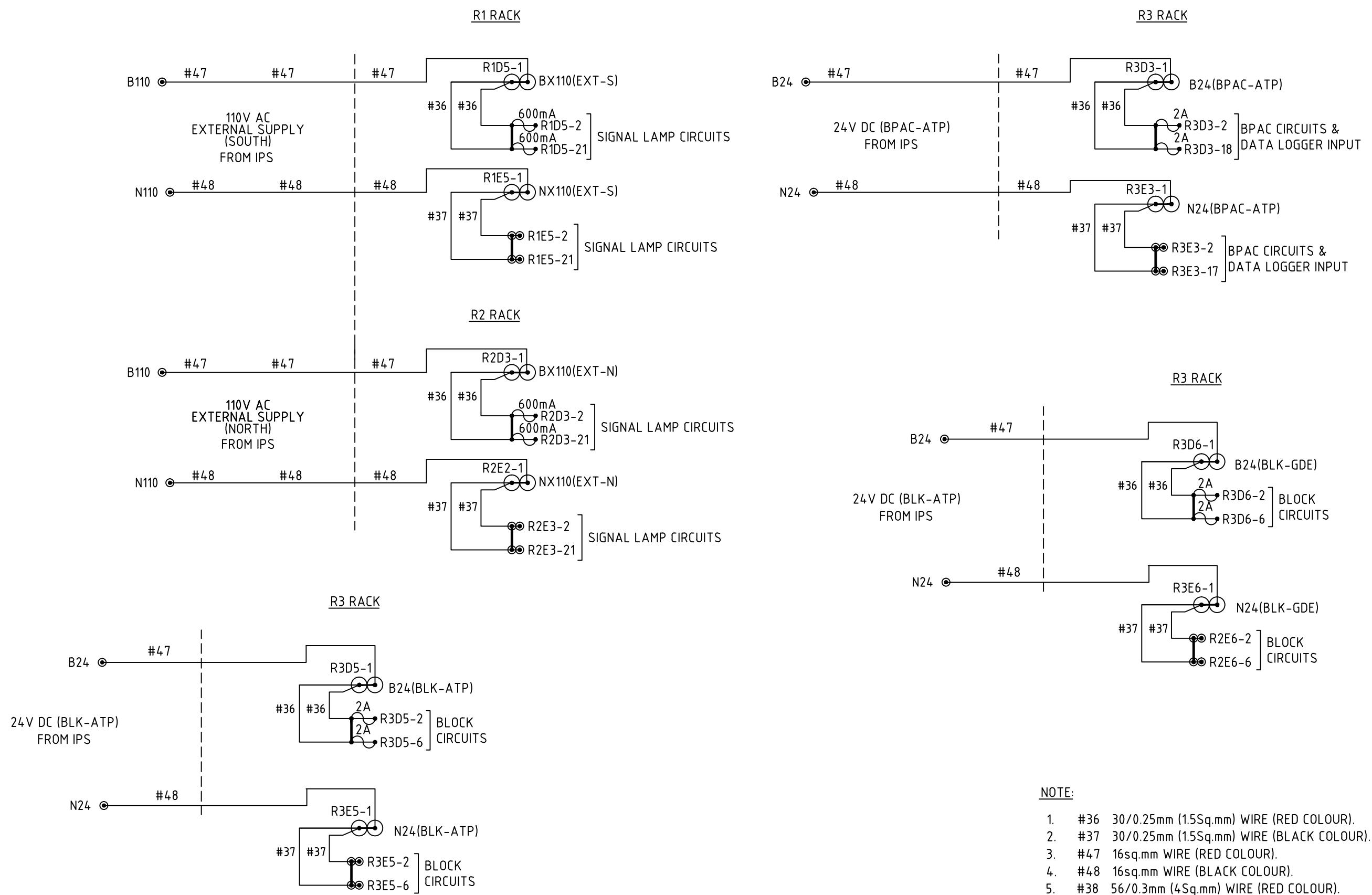


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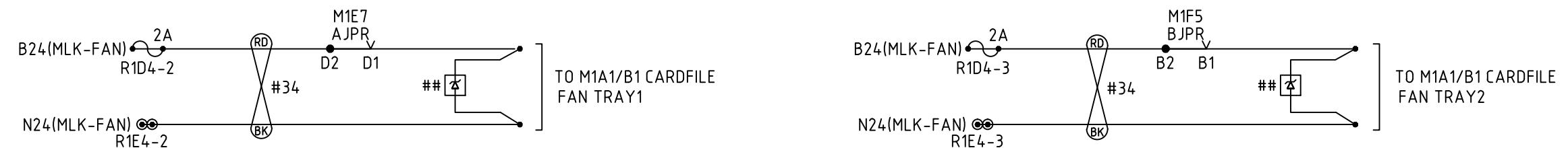
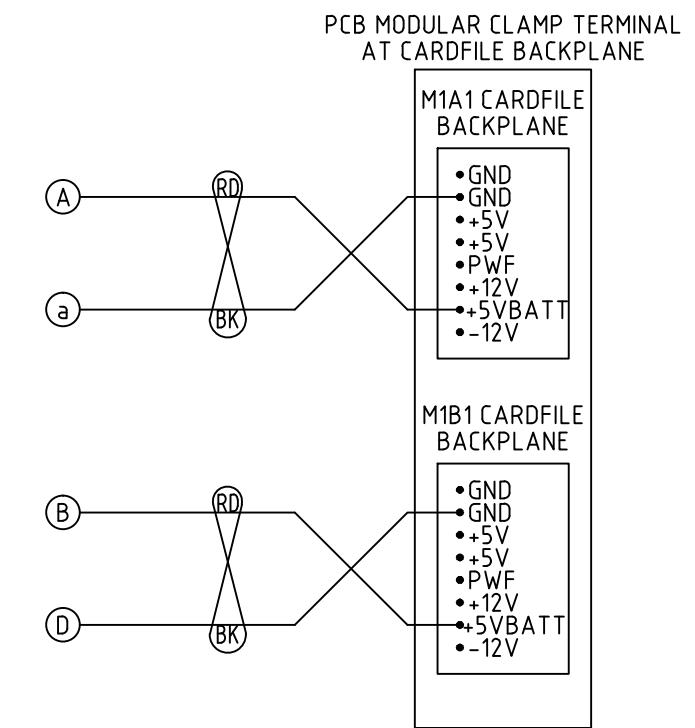
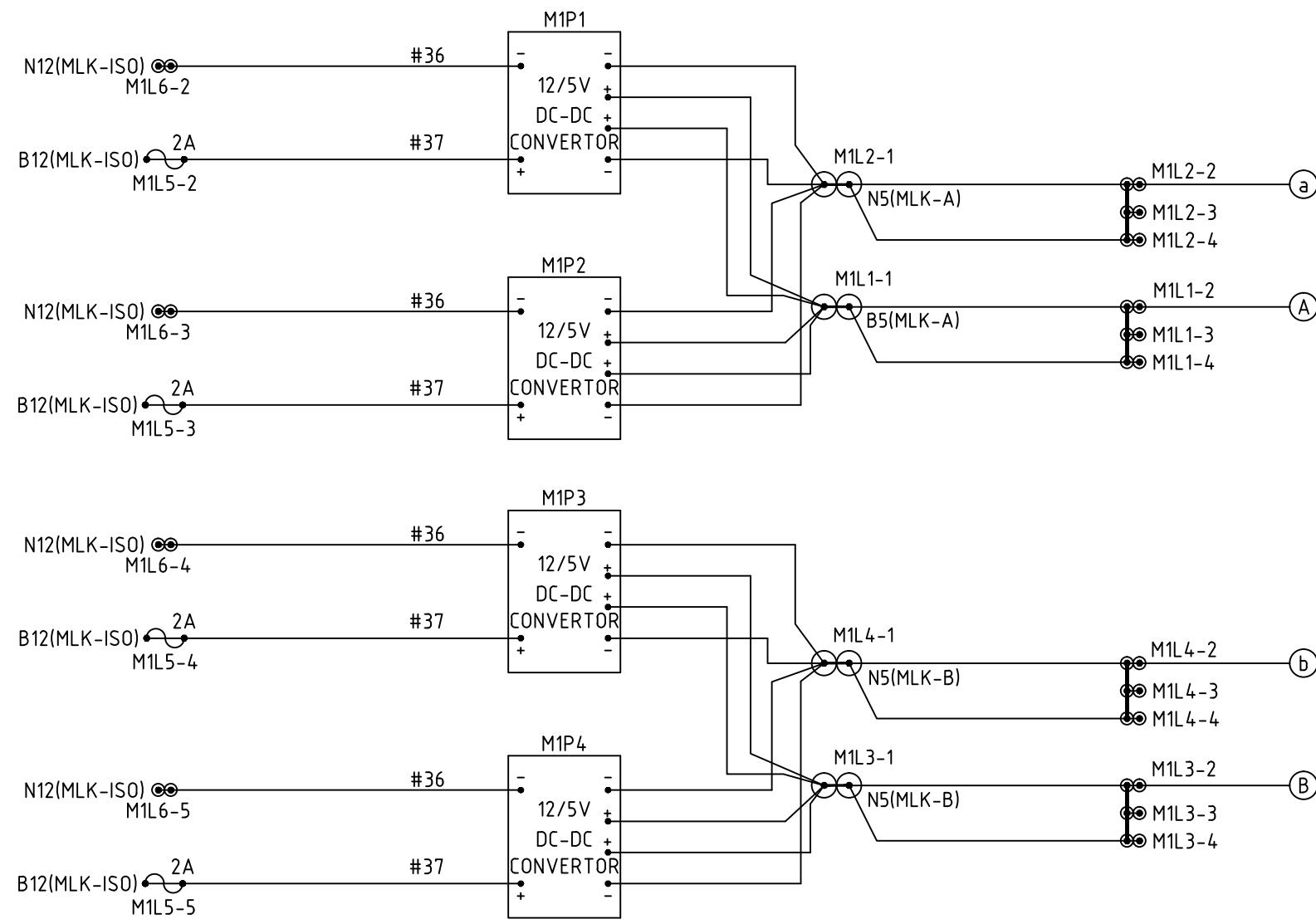
- #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
- #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).
- #38 56/0.3mm (4Sq.mm) WIRE (RED COLOUR).
- #39 56/0.3mm (4Sq.mm) WIRE (BLACK COLOUR).
- #47 16sq.mm WIRE (RED COLOUR).
- #48 16sq.mm WIRE (BLACK COLOUR).

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	TITLE:	POWER DISTRIBUTION OF 24V DC (EXTERNAL SUPPLY)		SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL
		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	
		IPU.2107B/3	S.C.RLY.DRG.NO	
		REVISION		
		JE/Drg		
		SE/SSE/Drg		
		ASTE/D		
		SSTE/P & P		
		f CSTE		
		APP.		
		शीट SHEET	कुल शीट SHEETS	CONT'D ON:
		00605	00065	00606



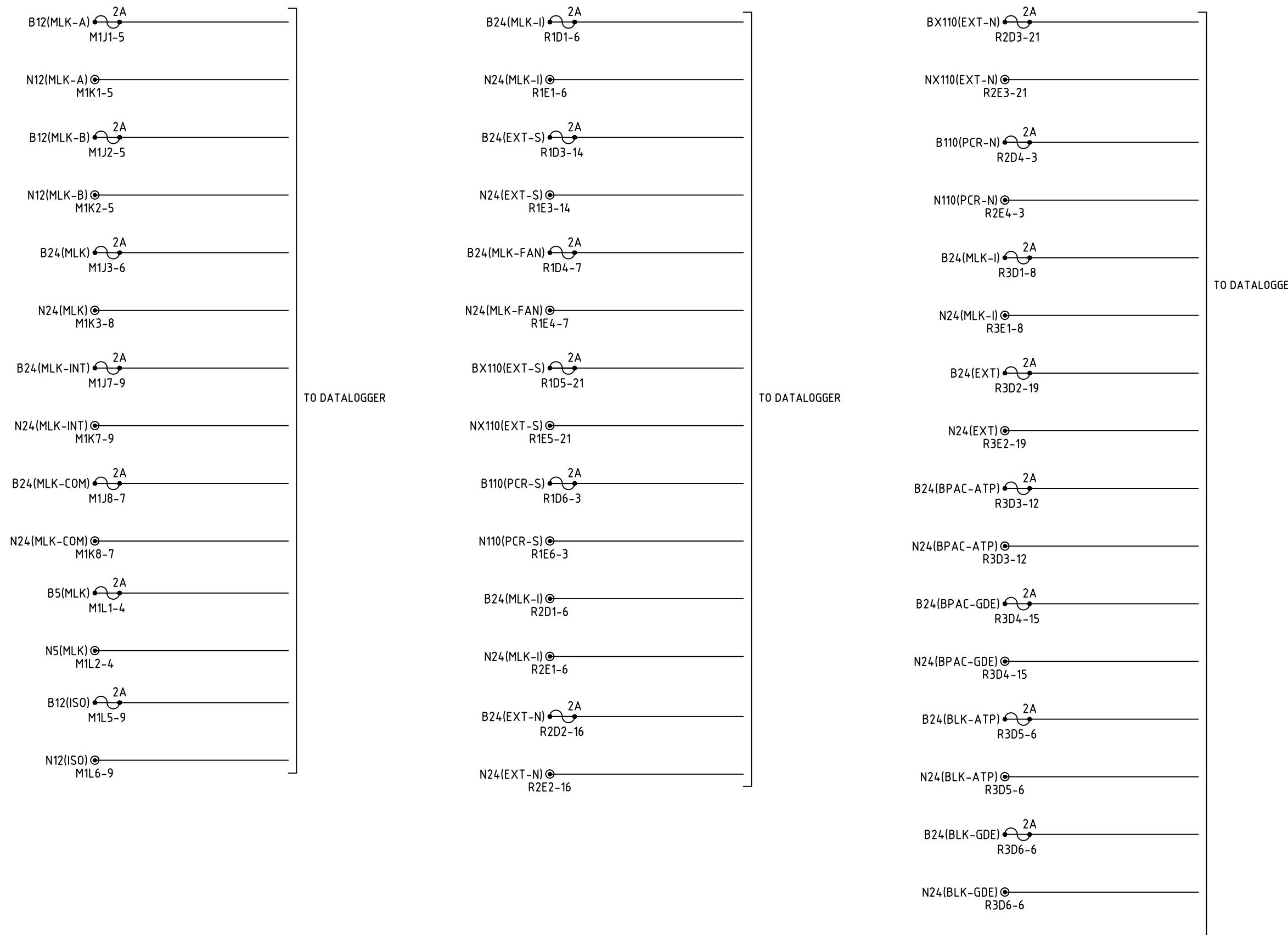
						TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	IPU.2107B/3	REVISION	CHK. TITLE: POWER DISTRIBUTION OF 110V AC & 24V DC	signal व दूर संचार	
					JE/Drg						
					SE/SSE/Drg						
					ASTE/D						
					SSTE/P & P						
					f CSTE						
00	16.07.15	PR	RS	RSS	ASMADE		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	बि B		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		IPU.2107B/3	S.C.RLY.DRG.NO			
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		शीट SHEET	कुल शीट SHEETS	CONT'D ON:		
					00606		00065	00607			
					SOUTH CENTRAL RAILWAY						
					DIVISION: GUNTAKAL						



NOTE:

- ## TRANSIENT VOLTAGE SUPPRESSOR TYPE 5KP30A
- #34 16/0.20 mm WIRE TWISTED PAIR "RED/BLACK".
WITH "RD" BEING +VE AND "BK" BEING -VE.
- #36 30/0.25mm (1.5Sq.mm) WIRE (RED COLOUR).
- #37 30/0.25mm (1.5Sq.mm) WIRE (BLACK COLOUR).

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	IPU.2107B/3	REVISION	CHK.	TITLE: POWER DISTRIBUTION OF 5V & 24V DC (RTC & CARDFILE FAN TRAY CIRCUIT)			SIGNAL & TELECOMMUNICATIONS तातिचेर्ला TATICHERLA
00	16.07.15	PR	RS	RSS	ASMADE		JE/Drg		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	बि B	
							SE/SSE/Drg		IPU.2107B/3	S.C.RLY.DRG.NO		
							ASTE/D					
							SSTE/P & P		शीट SHEET	कुल शीट SHEETS	CONT'D ON:	
							f CSTE		00607	00065	00608	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012						SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL

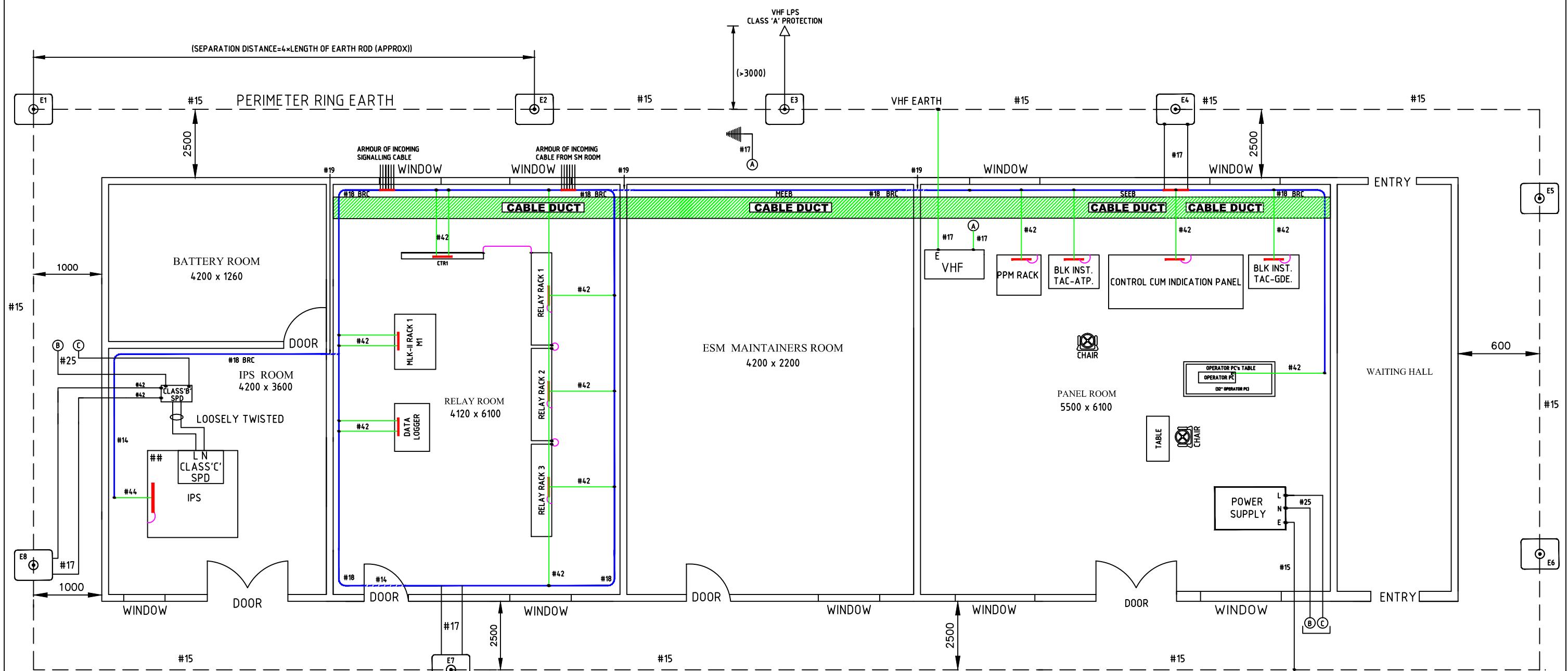


					TVM Signalling & Transportation Systems Pvt. Ltd.
					#610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

#610, "NARAYANA", 1st Floor, 15th Cross,
100 Feet Road, J.P.Nagar, 6th Phase,
Bengaluru – 560 078
Tel: +91 80 2654 0781,82,83
E-mail : info@tsts.in

CHK.	TITLE: DATALOGGER ANALOG INPUTS DISTRIBUTION		
	REF.SIG.PLAN.No.	द म रेलवे आरेख सं	बि B
	IPU.2107B/3	S.C.RLY.DRG.NO	
	JE/Drg		
	SE/SSE/Drg		
	ASTE/D		
	SSTE/P & P		
	f CSTE	APP.	
	00608	00065	CONT'D ON: 00609

सिग्नल व दूर संचार
SIGNAL & TELECOMMUNICATIONS
ताटिचेर्ला
TATICHERLA
SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL



ANANTHAPURA

GUNTAKAL

INSTALLER NOTE:

- THE INTERCONNECTING COPPER TAPE SHALL BE BURIED AT DEPTH NOT LESS THAN 600 mm.
- THIS INTERCONNECTING TAPE SHALL ALSO BE COVERED WITH EARTH ENHANCING MATERIAL.
- REB's ARE FIXED AT A NOMINAL HEIGHT OF 500 mm FROM THE FLOOR LEVEL.
- REB SHALL BE INSTALLED AGAINST THE WALL, WITH LOW VOLTAGE INSULATOR SPACERS OF HEIGHT 60 mm
- THESE EARTH PITS ARE INTERLINKED USING 25 x 3mm COPPER TAPE TO FORM A LOOP USING EXOTHERMIC WELDING TECHNIQUE.
- CLASS 'B' & 'C' SPD's PROVIDED AS PER RDSO SPECIFICATION
- ALL BURIED CONNECTIONS SHALL BE EXOTHERMICALLY WELDED.
- ALL CABLE TRAYS SHALL BE FULLY BONDED TO EACH OTHER AND SUPPORTING METAL WORK (PEC).
- ALL TERMINAL BOLTS, NUTS & WASHERS MUST BE STAINLESS STEEL METAL.

SYMBOLS

- MAINTENANCE FREE EARTH ROD.
- EQUIPMENT BUS BAR
- 10mm Sq. METAL WORK BOND
- PERIMETER RING EARTH
- 150mm RADIUS.

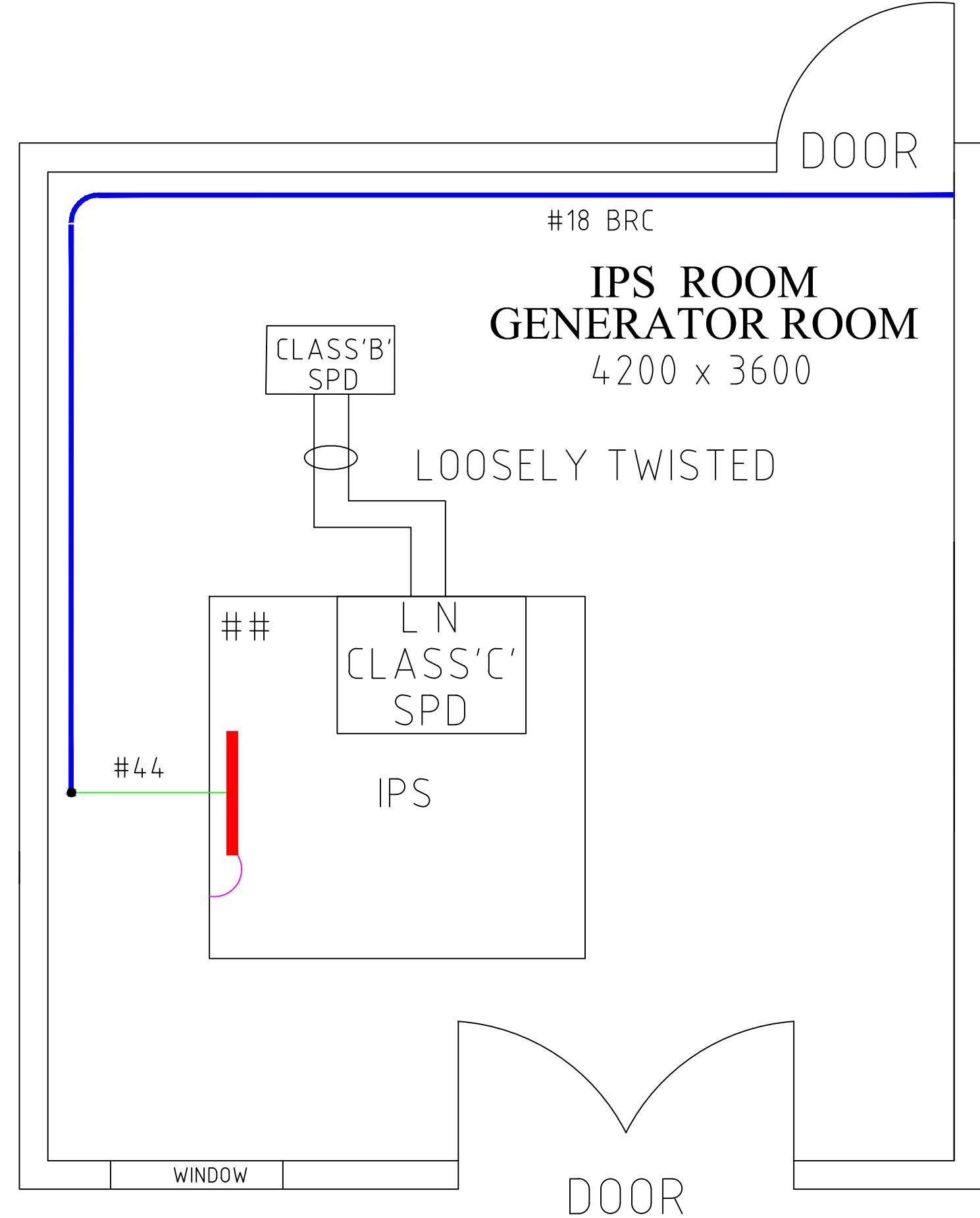
ABBREVIATIONS

- | | |
|------|-----------------------------|
| BRC | BONDING RING CONDUCTOR |
| SEEB | SUB EQUIPMENT EARTH BUSBAR |
| MEEB | MAIN EQUIPMENT EARTH BUSBAR |
| SPD | SURGE PROTECTION DEVICES |
| CTR | CABLE TERMINATION RACK |
| IPS | INTEGRATED POWER SUPPLY |
| VHF | VERY HIGH FREQUENCY |
| LPS | LIGHTNING PROTECTION SYSTEM |

NOTE:

- | | |
|-------|--|
| E1-E8 | MAINTENANCE FREE EARTH ELECTRODE (RDSO SPEC). |
| #14 | 2x35mm sq.COPPER CABLE WITH PVC INSULATED PIPE AT WALL/DOOR CROSSING. |
| #19 | 3x25mm sq.COPPER TAPE WITH PVC INSULATED PIPE AT WALL CROSSING. |
| #15 | 6 x 50 mm GALVANISED STEEL TAPE BURIED AT 600mm. |
| #17 | 4 NO's OF 35 Sq mm MULTI-STRAND SINGLE CORE PVC INSULATED COPPER CABLE (GREEN COLOUR). |
| #20 | 50x6mm COPPER BUS BAR. |
| #25 | 16 sq.mm MULTI-STRAND PVC INSULATED COPPER CABLE (GREEN COLOUR) |
| #42 | 10 Sq mm MULTI-STRAND SINGLE CORE PVC INSULATED COPPER CABLE (GREEN COLOUR)
(1.5m LENGTH MAX). |
| ##44 | 16 Sq mm MULTI-STRAND SINGLE CORE PVC INSULATED COPPER CABLE (GREEN COLOUR)
(1.5m LENGTH MAX). |
| ## | POWER EQUIPMENT DETAILS & POSITION TO BE CONFIRMED AT SITE. |
| #18 | 25x3mm COPPER TAPE,BONDING RING CONDUCTOR(BRC) MOUNTED ON INSULATED STAND-OFFS.
ALL DIMENSIONS ARE IN mm. |

						TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@sts.in	IPU.2107B/3 REVISION <hr/> JE/Drg <hr/> SE/SSE/Drg <hr/> ASTE/D <hr/> SSTE/P & P <hr/> f CSTE APP. 00609 00065	CHK. TITLE: PERIMETER EARTHING SCHEME <hr/> REF.SIG.PLAN.No. द. म. रेलवे आरेख सं. बि. B IPU.2107B/3 S.C.RLY.DRG.NO <hr/> शीट SHEET कुल शीट SHEETS CONT'D ON: 00610	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS तातिचेर्ला TATICHERLA SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL
00	16.07.15	PR	RS	RSS	ASMADE				
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION				
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012				



NOTE:
ALL DIMENSIONS ARE IN mm.

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00	16.07.15	PR	RS	RSS	ASMADE	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	TITLE: PERIMETER EARTHING SCHEME				SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA
	REF.SIG.PLAN.No.	द म रेलवे आरेक सं	S.C.RLY.DRG.NO	बि B	
	IPU.2107B/3	JE/Drg			
		SE/SSE/Drg			
		ASTE/D			
		SSTE/P & P			
		f CSTE	APP.	CONT'D ON:	
				00625	
				00610	00065

SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-I)	R1D1	1		#71	B24 MLK VITAL INPUT SUPPLY	00604
		2		#66	B24 MLK VITAL INPUT SUPPLY	00604
		3		#62	M1A1/M1B1 SLOT 7 INPUT LOOPING	00209
		4		#62	M1A1/M1B1 SLOT 8 INPUT LOOPING	00211
		5		#62	SPARE	-
B24(MLK-II)		6		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-I)	R1E1	1		#71	N24 MLK VITAL INPUT SUPPLY	00604
		2		#62	SPARE	-
		3		#62	M1A1/M1B1 SLOT 7 INPUT LOOPING	00209
		4		#62	M1A1/M1B1 SLOT 8 INPUT LOOPING	00211
		5		#62	SPARE	-
N24(MLK-II)		6		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-NV)	R1D2	1		#71	B24 MLK NON-VITAL SUPPLY	00604
		2		#66	M1A1/M1B1 SLOT 13 FRONT CONTACT SUPPLY	00101
		3		#66	TO COUNTERS	00103
B24(MLK-NV)		4		#66	R.ROOM_Door	00102

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-NV)	R1E2	1		#71	N24 MLK NON-VITAL SUPPLY	00604

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	
B24(EXT-S)	R1D3	1		#71	B24 EXTERNAL SOUTH SUPPLY	00605
		2		#66	SIGNAL REPEATER RELAY CIRCUITS - 1D	00301
		3		#66	SIGNAL REPEATER RELAY CIRCUITS - 1	00302
		4		#66	SIGNAL REPEATER RELAY CIRCUITS - 1A	00302
		5		#66	SHUNT SIGNAL REPEATER RELAYS - 2	00303
		6		#66	SIGNAL REPEATER RELAY CIRCUITS - 15	00304
		7		#66	SIGNAL REPEATER RELAY CIRCUITS - 16	00305
		8		#66	SIGNAL REPEATER RELAY CIRCUITS - 17	00306
		9		#66	SIGNAL REPEATER RELAY CIRCUITS - 18	00307
		10		#66	POINT CIRCUIT - POINT 7	00401
		11		#66	POINT CIRCUIT - POINT 8	00403
		12		#66	VCOPR SUPPLY	00554
		13		#66	SPARE	-
B24(EXT-S)		14		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	
N24(EXT-S)	R1E3	1		#71	B24 EXTERNAL SOUTH SUPPLY	00258
		2		#62	SIGNAL REPEATER RELAY CIRCUITS - 1D	00301
		3		#62	SIGNAL REPEATER RELAY CIRCUITS - 1	00302
		4		#62	SIGNAL REPEATER RELAY CIRCUITS - 1A	00302
		5		#62	SHUNT SIGNAL REPEATER RELAYS - 2	00303
		6		#62	SIGNAL REPEATER RELAY CIRCUITS - 15	00304
		7		#62	SIGNAL REPEATER RELAY CIRCUITS - 16	00305
		8		#62	SIGNAL REPEATER RELAY CIRCUITS - 17	00306
		9		#62	SIGNAL REPEATER RELAY CIRCUITS - 18	00307
		10		#62	POINT CIRCUIT - POINT 7	00401
		11		#62	POINT CIRCUIT - POINT 8	00403
		12		#62	VCOPR SUPPLY	00554
		13		#62	SPARE	-
N24(EXT-S)		14		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-FAN)	R1D4	1		#71	B24(EXT) SUPPLY FOR FAN SUPPLY	00605
		2		#66	TO M1A1/B1 CARD FILE FAN TRAY1 CIRCUIT	00607
		3		#66	TO M1A1/B1 CARD FILE FAN TRAY2 CIRCUIT	00607
		4		#66	SPARE	-
		5		#66	SPARE	-
		6		#66	SPARE	-
B24(MLK-FAN)	R1D4	7		#66	DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-FAN)	R1E4	1		#71	N24(EXT) SUPPLY FOR FAN SUPPLY	00605
		2		#62	TO M1A1/B1 CARD FILE FAN TRAY1 CIRCUIT	00607
		3		#62	TO M1A1/B1 CARD FILE FAN TRAY2 CIRCUIT	00607
		4		#62	SPARE	-
		5		#62	SPARE	-
		6		#62	SPARE	-
N24(MLK-FAN)	R1E4	7		#62	DATALOGGER ANALOG INPUT	00608

NOTE:

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.
#66 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

#66 PHOENIX FUSE TERMINAL TYPE UK5-HESI LED24

(SUITABLE FOR 3V, 12V & 24V APPLICATION).

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

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00	16.07.15	PR	RS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED
				MODIFICATION CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	TITLE: R1 RACK FUSE & TERMINAL CHART (ROWS-D&E)			SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA
REF.SIG.PLAN.No.	IPU.2107B/3	REVISION	APP.	
</tbl_info

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
BX110(EXT-S)	R1D5	1	•T	#71	SIGNAL SOUTH SUPPLY	00606
		2	600mA	#66	S1D_HHG LAMP CIRCUIT	00301
		3	600mA	#66	S1D_DG LAMP CIRCUIT	00301
		4	600mA	#66	S1D_HG LAMP CIRCUIT	00301
		5	600mA	#66	S1DG LAMP CIRCUIT	00302
		6	600mA	#66	S1HG LAMP CIRCUIT	00302
		7	600mA	#66	S1RG LAMP CIRCUIT	00302
		8	600mA	#66	SPARE	-
		9	600mA	#66	S1A_COHG LAMP CIRCUIT	00302
		10	600mA	#66	SH2 LAMP CIRCUIT	00303
		11	600mA	#66	S15DG LAMP CIRCUIT	00304
		12	600mA	#66	S15RG LAMP CIRCUIT	00304
		13	600mA	#66	S16HG LAMP CIRCUIT	00305
		14	600mA	#66	S16RG LAMP CIRCUIT	00305
		15	600mA	#66	S17HG LAMP CIRCUIT	00306
		16	600mA	#66	S17RG LAMP CIRCUIT	00306
		17	600mA	#66	S18DG LAMP CIRCUIT	00307
		18	600mA	#66	S18HG LAMP CIRCUIT	00307
		19	600mA	#66	S18RG LAMP CIRCUIT	00307
		20	2A	#66	S1UG LAMP CIRCUIT	00302
BX110(EXT-S)	R1D5	21	2A	#66	DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
NX110(EXT-S)	R1E5	1	•T	#71	SIGNAL SOUTH SUPPLY	00606
		2	•T	#62	S1D_HHG LAMP CIRCUIT	00301
		3	•T	#62	S1D_DG LAMP CIRCUIT	00301
		4	•T	#62	S1D_HG LAMP CIRCUIT	00301
		5	•T	#62	S1DG LAMP CIRCUIT	00302
		6	•T	#62	S1HG LAMP CIRCUIT	00302
		7	•T	#62	S1RG LAMP CIRCUIT	00302
		8	•T	#62	SPARE	-
		9	•T	#62	S1A_COHG LAMP CIRCUIT	00302
		10	•T	#62	SH2 LAMP CIRCUIT	00303
		11	•T	#62	S15DG LAMP CIRCUIT	00304
		12	•T	#62	S15RG LAMP CIRCUIT	00304
		13	•T	#62	S16HG LAMP CIRCUIT	00305
		14	•T	#62	S16RG LAMP CIRCUIT	00305
		15	•T	#62	S17HG LAMP CIRCUIT	00306
		16	•T	#62	S17RG LAMP CIRCUIT	00306
		17	•T	#62	S18DG LAMP CIRCUIT	00307
		18	•T	#62	S18HG LAMP CIRCUIT	00307
		19	•T	#62	S18RG LAMP CIRCUIT	00307
		20	•T	#62	S1UG LAMP CIRCUIT	00302
NX110(EXT-S)	R1E5	21	•T	#62	DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B110(PCR-S)	R1D6	1	•T	#71	B110V INPUT FROM BATTERY CHARGER	00409
		2	•T	#71	B110V OUTPUT TO FIELD	00409
B110(PCR-S)	R1D6	3	•2	#67	TO DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N110(PCR-S)	R1E6	1	•T	#71	N110V INPUT FROM BATTERY CHARGER	00409
		2	•T	#71	N110V OUTPUT TO FIELD	00409
N110(PCR-S)	R1E6	3	•T	#62	TO DATA LOGGER ANALOG INPUT	00608

NOTE:

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.
#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

#66 PHOENIX FUSETERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).

#67 PHOENIX FUSETERMINAL TYPE UK5-HESLA 230V
(SUITABLE FOR 110V & 230V APPLICATION).

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

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00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION

CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

CHK.	TITLE: R1 RACK FUSE & TERMINAL CHART (ROWS-D&E)			SIGNAL & TELECOMMUNICATIONS
	REF.SIG.PLAN.NO.	IPU.2107B/3	REVISION	
	S.C.RLY.DRG.NO	JE/Drg	SE/SSE/Drg	
		ASTE/D	SSTE/P & P	
		f CSTE	APP.	
		00626	00065	तातिचेर्ला TATICHERLA
		00627		SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-I)	R2D1	1		#71	B24 MLK VITAL INPUT SUPPLY	00604
		2		#66	B24 MLK VITAL INPUT SUPPLY	00604
		3		#62	M1A1/M1B1 SLOT 10 INPUT LOOPING	00215
		4		#62	M1A1/M1B1 SLOT 11 INPUT LOOPING	00217
		5		#62	SPARE	-
B24(MLK-II)		6		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-I)	R2E1	1		#71	N24 MLK VITAL INPUT SUPPLY	00604
		2		#62	SPARE	-
		3		#62	M1A1/M1B1 SLOT 10 INPUT LOOPING	00215
		4		#62	M1A1/M1B1 SLOT 11 INPUT LOOPING	00217
		5		#62	SPARE	-
N24(MLK-II)		6		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(EXT-N)	R2D2	1		#71	B24 EXTERNAL NORTH SUPPLY	00605
		2		#66	SIGNAL REPEATER RELAY CIRCUITS - 20D	00308
		3		#66	SIGNAL REPEATER RELAY CIRCUITS - 20	00309
		4		#66	SIGNAL REPEATER RELAY CIRCUITS - 20A	00309
		5		#66	SHUNT SIGNAL REPEATER RELAYS - 19	00310
		6		#66	SIGNAL REPEATER RELAY CIRCUITS - 3	00311
		7		#66	SIGNAL REPEATER RELAY CIRCUITS - 4	00312
		8		#66	SIGNAL REPEATER RELAY CIRCUITS - 5	00313
		9		#66	SIGNAL REPEATER RELAY CIRCUITS - 6	00314
		10		#66	POINT-13 REPEATER RELAY	00405
		11		#66	POINT-14 REPEATER RELAY	00407
		12		#66	TO COUNTER CIRCUIT	00530
		13		#66	TO OMB_OMC_TPR CIRCUIT	00502
		14		#66	TO 1LB_1LC_TPR CIRCUIT	00502
		15		#66	TO 2LB_2LC_TPR CIRCUIT	00502
B24(EXT-N)		16		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(EXT-N)	R2E2	1		#71	B24 EXTERNAL NORTH SUPPLY	00605
		2		#62	SIGNAL REPEATER RELAY CIRCUITS - 20D	00308
		3		#62	SIGNAL REPEATER RELAY CIRCUITS - 20	00309
		4		#62	SIGNAL REPEATER RELAY CIRCUITS - 20A	00309
		5		#62	SHUNT SIGNAL REPEATER RELAYS - 19	00310
		6		#62	SIGNAL REPEATER RELAY CIRCUITS - 3	00311
		7		#62	SIGNAL REPEATER RELAY CIRCUITS - 4	00312
		8		#62	SIGNAL REPEATER RELAY CIRCUITS - 5	00313
		9		#62	SIGNAL REPEATER RELAY CIRCUITS - 6	00314
		10		#62	POINT-13 REPEATER RELAY	00405
		11		#62	POINT-14 REPEATER RELAY	00407
		12		#62	TO COUNTER CIRCUIT	00530
		13		#62	TO OMB_OMC_TPR CIRCUIT	00502
		14		#62	TO 1LB_1LC_TPR CIRCUIT	00502
		15		#62	TO 2LB_2LC_TPR CIRCUIT	00502
N24(EXT-N)		16		#62	DATA LOGGER ANALOG INPUT	00608

NOTE:

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.
#66 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

#66 PHOENIX FUSE TERMINAL TYPE UK5-HESI LED24

(SUITABLE FOR 3V, 12V & 24V APPLICATION).

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

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					#610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
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REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT	TITLE: R2 RACK FUSE & TERMINAL CHART (ROWS-D&E)													
							CHK.	REF.SIG.PLAN.NO.	IPU.2107B/3	REVISION	JE/Drg	SE/SSE/Drg	ASTE/D	SSTE/P & P	f CSTE	APP.	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	
N24(MLK-I)	R2E1	1		#71	N24 MLK VITAL INPUT SUPPLY	00604														
		2		#62	SPARE	-														
		3		#62	M1A1/M1B1 SLOT 10 INPUT LOOPING	00215														
		4		#62	M1A1/M1B1 SLOT 11 INPUT LOOPING	00217														
		5		#62	SPARE	-														
N24(MLK-II)		6		#62	DATA LOGGER ANALOG INPUT	00608														
N24(EXT-N)	R2E2	1		#71	B24 EXTERNAL NORTH SUPPLY	00605														
		2		#62	SIGNAL REPEATER RELAY CIRCUITS - 20D	00308														
		3	<img alt="Terminal block diagram for row R2E2, terminal 3 showing a T-shaped connection to two fuses."/																	

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	
BX110(EXT-N)	R2D3	1	•T	#71	SIGNAL NORTH SUPPLY	00606
		2	•600mA	#66	S20D_HHG LAMP CIRCUIT	00308
		3	•600mA	#66	S20D_DG LAMP CIRCUIT	00308
		4	•600mA	#66	S20D_HG LAMP CIRCUIT	00308
		5	•600mA	#66	S20DG LAMP CIRCUIT	00309
		6	•600mA	#66	S20HG LAMP CIRCUIT	00309
		7	•600mA	#66	S20RG LAMP CIRCUIT	00309
		8	•600mA	#66	SPARE	-
		9	•600mA	#66	S20ACOHG LAMP CIRCUIT	00309
		10	•600mA	#66	SH19 LAMP CIRCUIT	00310
		11	•600mA	#66	S3DG LAMP CIRCUIT	00311
		12	•600mA	#66	S3HG LAMP CIRCUIT	00311
		13	•600mA	#66	S3RG LAMP CIRCUIT	00311
		14	•600mA	#66	S4HG LAMP CIRCUIT	00312
		15	•600mA	#66	S4RG LAMP CIRCUIT	00312
		16	•600mA	#66	S5HG LAMP CIRCUIT	00313
		17	•600mA	#66	S5RG LAMP CIRCUIT	00313
		18	•600mA	#66	S6DG LAMP CIRCUIT	00314
		19	•600mA	#66	S6RG LAMP CIRCUIT	00314
		20	•2A	#66	S20 UG LAMP CIRCUIT	00309
BX110(EXT-N)	R2D3	21	•2A	#66	DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	
NX110(EXT-N)	R2E3	1	•T	#71	SIGNAL NORTH SUPPLY	00606
		2	•T	#62	S20D_HHG LAMP CIRCUIT	00308
		3	•T	#62	S20D_DG LAMP CIRCUIT	00308
		4	•T	#62	S20D_HG LAMP CIRCUIT	00308
		5	•T	#62	S20DG LAMP CIRCUIT	00309
		6	•T	#62	S20HG LAMP CIRCUIT	00309
		7	•T	#62	S20RG LAMP CIRCUIT	00309
		8	•T	#62	SPARE	-
		9	•T	#62	S20ACOHG LAMP CIRCUIT	00309
		10	•T	#62	SH19 LAMP CIRCUIT	00310
		11	•T	#62	S3DG LAMP CIRCUIT	00311
		12	•T	#62	S3HG LAMP CIRCUIT	00311
		13	•T	#62	S3RG LAMP CIRCUIT	00311
		14	•T	#62	S4HG LAMP CIRCUIT	00312
		15	•T	#62	S4RG LAMP CIRCUIT	00312
		16	•T	#62	S5HG LAMP CIRCUIT	00313
		17	•T	#62	S5RG LAMP CIRCUIT	00313
		18	•T	#62	S6DG LAMP CIRCUIT	00314
		19	•T	#62	S6RG LAMP CIRCUIT	00314
		20	•T	#62	S20 UG LAMP CIRCUIT	00309
NX110(EXT-N)	R2E3	21	•T	#62	DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B110(PCR-N)	R2D4	1	•T	#71	B110V INPUT FROM BATTERY CHARGER	00409
		2	•T	#71	B110V OUTPUT TO FIELD	00409
B110(PCR-N)	R2D4	3	•2	#67	TO DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N110(PCR-N)	R2E4	1	•T	#71	N110V INPUT FROM BATTERY CHARGER	00409
		2	•T	#71	N110V OUTPUT TO FIELD	00409
N110(PCR-N)	R2E4	3	•T	#62	TO DATA LOGGER ANALOG INPUT	00608

NOTE:

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.
#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

PHOENIX FUSE TERMINAL TYPE UK5-HESI LED24
#66 PHOENIX FUSE TERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).
#67 PHOENIX FUSE TERMINAL TYPE UK5-HESLA 230V
(SUITABLE FOR 110V & 230V APPLICATION).
#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

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00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION

CHK.	TITLE: R2 RACK FUSE & TERMINAL CHART (ROWS-D&E)				SIGNAL & TELECOMMUNICATIONS
	REF.SIG.PLAN.NO.	IPU.2107B/3	REVISION	APP.	
	IPU.2107B/3	JE/Drg			
	SE/SSE/Drg				
	ASTE/D				
	SSTE/P & P				
	f CSTE				
	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00629	तातिचेर्ला TATICHERLA
	00628	00065			SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-I)	R3D1	1		#71	B24 MLK VITAL INPUT SUPPLY	00604
		2		#66	B24 MLK VITAL INPUT SUPPLY	00604
		3		#62	M1A1/M1B1 SLOT 9 INPUT LOOPING	00213
		4		#62	M1A1/M1B1 SLOT 12 INPUT LOOPING	00215
		5		#62	TO CH1CR	00525
		6		#62	TO CH2CR	00526
		7		#62	SPARE	-
		8		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-I)	R3E1	1		#71	N24 MLK VITAL INPUT SUPPLY	00604
		2		#62	SPARE	-
		3		#62	M1A1/M1B1 SLOT 9 INPUT LOOPING	00213
		4		#62	M1A1/M1B1 SLOT 12 INPUT LOOPING	00215
		5		#62	TO CH1CR	00525
		6		#62	TO CH2CR	00526
		7		#62	SPARE	-
		8		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(EXT)	R3D2	1	T	#71	B24 EXTERNAL SUPPLY	00605
		2	2	#66	DC.DC.FAIL SUPPLY	00554
		3	2	#66	SMCR SUPPLY	00554
		4	2	#66	GEYR	00550
		5	2	#66	12LXYR	00550
		6	2	#66	12LXYPR	00550
		7	2	#66	CH1 EKT SUPPLY	00525
		8	2	#66	CH1 YR	00525
		9	2	#66	CHEYR	00525
		10	2	#66	CH2 EKT SUPPLY	00526
		11	2	#66	CH2 YR	00526
		12	2	#66	RELAY ROOM DOOR INPUT	00552
		13	2	#66	RELAY ROOM EKT SUPPLY	00552
		14	2	#66	ALARM CANCEL SUPPLY	00553
		15	2	#66	SYSTEM FAIL ACK	00553
		16	2	#66	SYSTEM FAIL BUZZER/A_SYSOFFKE & B_SYSOFFKE	00553
		17	2	#66	MPC SUPPLY	00080
		18	2	#66	TO SMCR	00554
B24(EXT)		19	2	#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT	
N24(EXT)	R3E2	1		T	#71	N24 EXTERNAL SUPPLY	00605
		2		T	#62	DC.DC.FAIL SUPPLY	00554
		3		T	#62	SMCR SUPPLY	00554
		4		T	#62	GEYR	00550
		5		T	#62	12LXYR	00550
		6		T	#62	12LXYPR	00550
		7		T	#62	CH1 EKT SUPPLY	00525
		8		T	#62	CH1 YR	00525
		9		T	#62	CHEYR	00525
		10		T	#62	CH2 EKT SUPPLY	00526
		11		T	#62	CH2 YR	00526
		12		T	#62	RELAY ROOM DOOR INPUT	00552
		13		T	#62	RELAY ROOM EKT SUPPLY	00552
		14		T	#62	ALARM CANCEL SUPPLY	00553
		15		T	#62	SPARE	-
		16		T	#62	SYSTEM FAIL BUZZER/A_SYSOFFKE & B_SYSOFFKE	00553
		17		T	#62	MPC SUPPLY	00080
		18		T	#62	TO SMCR	00554
N24(EXT)		19		T	#62	DATA LOGGER ANALOG INPUT	00608

NOTE:

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.

#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL

#66 PHOENIX FUSETERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

							 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	
				R.				
00	16.07.15	PR	RS	RSS	ASMADE			
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION			

<p>IPU.2107B/3</p> <p>REVISION</p> <p>JE/Drg</p> <p>SE/SSE/Drg</p> <p>ASTE/D</p> <p>SSTE/P & P</p> <p>f CSTE</p>	<p>CHK.</p> <p>PP.</p>	<p>TITLE:</p> <p>R3 RACK FUSE & TERMINAL CHART (ROWS-D&E)</p>			<p>सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS</p> <p>ताटिचेर्ला TATICHERLA</p> <p>SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAI</p>	
		REF.SIG.PLAN.No.		द म रेलवे आरेख सं		
		IPU.2107B/3		S.C.RLY.DRG.NO.		वि B
		शीट SHEET	कुल शीट SHEETS	CONT'D ON:		
		00629	00065	00630		

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(BPAC-ATP)	R3D3	1		#71	B24 BPAC SUPPLY	00606
		2		#66	ATP BPAC1 AUTO RESET BOX INPUT SUPPLY	00577
		3		#66	ATP BPAC1 PP K INDICATION SUPPLY	00577
		4		#66	ATP BPAC1 CLR/OCC K INDICATION SUPPLY	00577
		5		#66	ATP BPAC2 AUTO RESET BOX INPUT SUPPLY	00578
		6		#66	ATP BPAC2 PP K INDICATION SUPPLY	00578
		7		#66	ATP BPAC2 CLR/OCC K INDICATION SUPPLY	00578
		8		#66	ATP BPAC RESET BOX INPUT/COUNTER SUPPLY	00579
		9		#66	ATP BPAC CLR/OCC K INDICATION SUPPLY	00579
		10		#66	ATP BPAC GREEN/RED K INDICATION SUPPLY	00579
		11		#66	ATP BPAC RSTR SUPPLY	00579
		12		#66	DATA LOGGER ANALOG INPUT	00608
		13		#66	ATP ARSTR TIMER CIRCUIT	00580
		14		#66	ATP VPR SUPPLY	00580
		15		#66	ATP SIDE AXLE COUNTER INDICATION SUPPLY	00579
		16		#66	SSDAC1 (TAC-ATP)	00577
		17		#66	SSDAC2 (TAC-ATP)	00578
B24(BPAC-ATP)		18		#66	SPARE	

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(BPAC-ATP)	R3E3	1		#71	B24 BPAC SUPPLY	00606
		2		#62	ATP BPAC1 AUTO RESET BOX INPUT SUPPLY	00577
		3		#62	SPARE	-
		4		#62	SPARE	-
		5		#62	ATP BPAC2 AUTO RESET BOX INPUT SUPPLY	00578
		6		#62	SPARE	-
		7		#62	SPARE	-
		8		#62	ATP BPAC RESET BOX INPUT/COUNTER SUPPLY	00579
		9		#62	SPARE	-
		10		#62	SPARE	-
		11		#62	ATP BPAC RSTR SUPPLY	00579
		12		#62	DATA LOGGER ANALOG INPUT	00608
		13		#62	ATP ARSTR TIMER CIRCUIT	00580
		14		#62	ATP VPR SUPPLY	00580
		15		#62	ATP SIDE AXLE COUNTER INDICATION SUPPLY	00579
		16		#62	SSDAC1 (TAC-ATP)	00577
N24(BPAC-ATP)		17		#62	SSDAC2 (TAC-ATP)	00578

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(BPAC-GDE)	R3D4	1		#71	B24 BPAC SUPPLY	00606
		2		#66	GDE SIDE AXLE COUNTER INDICATION SUPPLY	00584
		3		#66	ATP BPAC1 AUTO RESET BOX INPUT SUPPLY	00582
		4		#66	GDE BPAC1 PP K INDICATION SUPPLY	00582
		5		#66	GDE BPAC1 CLR/OCC K INDICATION SUPPLY	00582
		6		#66	GDE BPAC2 AUTO RESET BOX INPUT SUPPLY	00583
		7		#66	GDE BPAC2 PP K INDICATION SUPPLY	00583
		8		#66	GDE BPAC2 CLR/OCC K INDICATION SUPPLY	00583
		9		#66	GDE BPAC RESET BOX INPUT/COUNTER SUPPLY	00584
		10		#66	GDE BPAC CLR/OCC K INDICATION SUPPLY	00584
		11		#66	GDE BPAC GREEN/RED K INDICATION SUPPLY	00584
		12		#66	GDE BPAC RSTR SUPPLY	00584
		13		#66	GDE ARSTR TIMER CIRCUIT	00585
		14		#66	GDE VPR SUPPLY	00585
		15		#66	DATA LOGGER ANALOG INPUT	00608
		16		#66	SSDAC1 (TAC-GDE)	00582
B24(BPAC-GDE)		17		#66	SSDAC2 (TAC-GDE)	00582

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(BPAC-GDE)	R3E4	1		T #71	B24 BPAC SUPPLY	00606
		2		T #62	GDE SIDE AXLE COUNTER INDICATION SUPPLY	00584
		3		T #62	ATP BPAC1 AUTO RESET BOX INPUT SUPPLY	00582
		4		T #62	SPARE	-
		5		T #62	SPARE	-
		6		T #62	GDE BPAC2 AUTO RESET BOX INPUT SUPPLY	00583
		7		T #62	SPARE	-
		8		T #62	SPARE	-
		9		T #62	GDE BPAC RESET BOX INPUT/COUNTER SUPPLY	00584
		10		T #62	SPARE	-
		11		T #62	SPARE	-
		12		T #62	GDE BPAC RSTR SUPPLY	00584
		13		T #62	GDE ARSTR TIMER CIRCUIT	00585
		14		T #62	GDE VPR SUPPLY	00585
		15		T #62	DATA LOGGER ANALOG INPUT	00608
		16		T #62	SSDAC1 (TAC-GDE)	00582
N24(BPAC-GDE)		17		T #62	SSDAC2 (TAC-GDE)	00582

NOTE

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.
#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

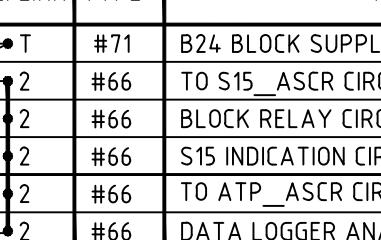
#66 PHOENIX FUSETERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

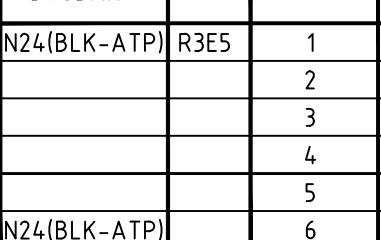
							 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS		ASMADE	
REV	DATE	DESIGNED	CHECKED	APPROVED		MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

	IPU.2107B/3	REVISION	CHK.	TITLE: R3 RACK FUSE & TERMINAL CHART (ROWS-D&E)	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS		
		JE/Drg					
		SE/SSE/Drg					
		ASTE/D					
		SSTE/P & P					
	f CSTE						
REF.SIG.PLAN.No.		द. म. रेलवे ऑरेंजमेंट	वि B		TATICHERLA		
IPU.2107B/3		S.C.RLY.DRG.NO			SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		
शीट SHEET		कुल शीट SHEETS	CONT'D ON:		00631A		
00630		00065					
APP.							

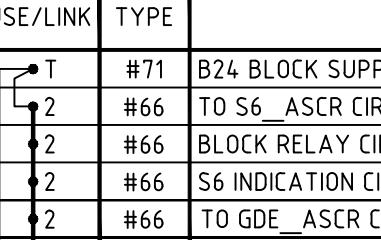
BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(BLK-ATP)	R3D5	1		#71	B24 BLOCK SUPPLY	00606
		2		#66	TO S15_ASCR CIRCUITS	0058
		3		#66	BLOCK RELAY CIRCUIT	0058
		4		#66	S15 INDICATION CIRCUIT	0058
		5		#66	TO ATP_ASCR CIRCUIT	0058
B24(BLK-ATP)		6		#66	DATA LOGGER ANALOG INPUT	00608



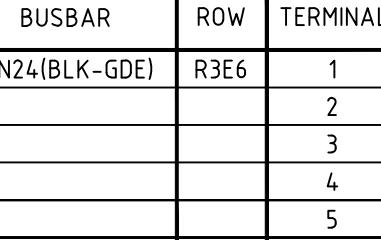
BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(BLK-ATP)	R3E5	1		#71	N24 BLOCK SUPPLY	00606
		2		#62	TO S15_ASCR CIRCUITS	00581
		3		#62	BLOCK RELAY CIRCUIT	00581
		4		#62	SPARE	-
		5		#62	TO ATP_ASCR CIRCUIT	00581
N24(BLK-ATP)		6		#62	DATA LOGGER ANALOG INPUT	00608



BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(BLK-GDE)	R3D6	1		#71	B24 BLOCK SUPPLY	00606
		2		#66	TO S6_ASCR CIRCUITS	00586
		3		#66	BLOCK RELAY CIRCUIT	00586
		4		#66	S6 INDICATION CIRCUIT	00586
		5		#66	TO GDE_ASCR CIRCUIT	00586
B24(BLK-GDE)		6		#66	DATA LOGGER ANALOG INPUT	00608



BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(BLK-GDE)	R3E6	1		#71	N24 BLOCK SUPPLY	00606
		2		#62	TO S6_ASCR CIRCUITS	00586
		3		#62	BLOCK RELAY CIRCUIT	00586
		4		#62	SPARE	00586
		5		#62	TO GDE_ASCR CIRCUIT	00586
N24(BLK-GDE)		6		#62	DATA LOGGER ANALOG INPUT	00608



NOTE

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE
#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

- #66 PHOENIX FUSETERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).
- #71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T

							 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

	IPU.2107B/3	REVISION	CHK.	TITLE: R3 RACK FUSE & TERMINAL CHART (ROWS-D&E)	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS		
		JE/Drg			ताटिचेर्ला TATICHERLA		
		SE/SSE/Drg					
		ASTE/D					
		SSTE/P & P					
	f CSTE	APP.			SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		
REF.SIG.PLAN.No.		द. म. रेलवे आरेक्स सं.		बि B			
IPU.2107B/3		S.C.RLY.DRG.NO					
शीट SHEET		कुल शीट SHEETS		CONT'D ON:		00631	
00630A		00065					

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B12(MLK-A)	M1J1	1		#65	B12(MLK-A) SUPPLY FROM CONVERTER	00602
		2		#66	TO A SYSON RELAY CONTACT	00602
		3		#62	TO M1A1 CARDFILE SUPPLY	00061
		4		#66	SPARE	-
B12(MLK-A)		5		#66	TO DATA LOGGER ANALOG INPUT	006088

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N12(MLK-A)	M1K1	1		#65	N12(MLK-A) SUPPLY FROM CONVERTER	00602
		2		#62	SPARE	-
		3		#62	TO M1A1 CARDFILE SUPPLY	00061
		4		#62	SPARE	-
N12(MLK-A)		5		#62	TO DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B12(MLK-B)	M1J2	1	T	#65	B12(MLK-B) SUPPLY FROM CONVERTER	00602
		2	4	#66	TO B SYSON RELAY CONTACT	00602
		3	T	#62	TO M1B1 CARDFILE SUPPLY	00061
		4	2	#66	SPARE	-
B12(MLK-B)		5	2	#66	TO DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N12(MLK-B)	M1K2	1		#65	N12(MLK-B) SUPPLY FROM CONVERTER	00602
		2		#62	SPARE	00602
		3		#62	TO M1B1 CARDFILE SUPPLY	00061
		4		#62	SPARE	-
N12(MLK-B)		5		#62	TO DATA LOGGER ANALOG INPUT	00608

NOTE:

NOTE NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.

#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

#65 SINGLE DECK PHOENIX DISCONNECT TERMINAL TYPE URTK/S.

#66 PHOENIX FUSETERMINAL TYPE UK5-HESI LED24

(SUITABLE FOR 3V, 12V & 24V APPLICATION).

00	16.07.15	PR	RS	RSS	ASMADE		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012	

	IPU.2107B/3	REVISION	CHK. APP.	TITLE: M1 RACK FUSE & TERMINAL CHART (ROWS - J & K)	ਸਿਗਨਲ ਵ ਟੂਰ ਸੰਚਾਰ			
		JE/Drg			SIGNAL & TELECOMMUNICATIONS			
		SE/SSE/Drg			ਤਾਟਿਚੇਰਲਾ			
		ASTE/D			TATICHERLA			
		SSTE/P & P			SOUTH CENTRAL RAILWAY			
		f CSTE			DIVISION: GUNTAKAL			
		REF.SIG.PLAN.No.	ਦ ਸ ਰੇਲਵੇ ਆਰੋਡ ਸੰ		B			
		IPU.2107B/3	S.C.RLY.DRG.NO					
		ਸੀਟ SHEET	ਕੁਲ ਸੀਟ SHEETS		CONT'D ON:	00632		
		00631	00065					

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK)	M1J3	1		#71	B24(MLK) SUPPLY FROM CONVERTER	00603
		2		#66	TO M1A1 VCOR CONTACT VITAL OUTPUT BOARDS	00603
		3		#66	TO M1B1 VCOR CONTACT VITAL OUTPUT BOARDS	00603
		4		#66	SPARE	-
		5		#66	SPARE	-
B24(MLK)		6		#66	TO DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK)	M1K3	1		#71	N24(MLK) SUPPLY FROM CONVERTER	00603
		2		#62	TO M1A1 VCOR CONTACT VITAL OUTPUT BOARDS	00603
		3		#62	TO M1B1 VCOR CONTACT VITAL OUTPUT BOARDS	00603
		4		#62	TO MLK II VITAL OUTPUT RELAY LOOPING	00603
		5		#62	SPARE	
		6		#62	TO M1A1 SLOT 13 NON-VITAL I/O BOARD	00101
		7		#62	TO M1B1 SLOT 13 NON-VITAL I/O BOARD	00101
N24(MLK)		8		#62	TO DATALOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLKA-0)	M1J4	1		#71	B24(MLKA-0) SUPPLY	00603
		2		#66	TO M1A1 SLOT 3 VITAL OUTPUT BOARD	00201
		3		#66	TO M1A1 SLOT 4 VITAL OUTPUT BOARD	00203
		4		#66	TO M1A1 SLOT 5 VITAL OUTPUT BOARD	00205
		5		#66	TO M1A1 SLOT 6 VITAL OUTPUT BOARD	00207
B24(MLKA-0)	M1J4	6		#66	SPARE	-

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLKA-0)	M1K4	1		#71	N24(MLKA-0) SUPPLY	00603
		2		#62	TO M1A1 SLOT 3 VITAL OUTPUT BOARD	00201
		3		#62	TO M1A1 SLOT 4 VITAL OUTPUT BOARD	00203
		4		#62	TO M1A1 SLOT 5 VITAL OUTPUT BOARD	00205
		5		#62	TO M1A1 SLOT 6 VITAL OUTPUT BOARD	00207
N24(MLKA-0)	M1K4	6		#62	SPARE	-

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLKB-0)	M1J5	1		#71	B24(MLKB-0) SUPPLY	00603
		2		#66	TO M1B1 SLOT 3 VITAL OUTPUT BOARD	00201
		3		#66	TO M1B1 SLOT 4 VITAL OUTPUT BOARD	00203
		4		#66	TO M1B1 SLOT 5 VITAL OUTPUT BOARD	00205
		5		#66	TO M1B1 SLOT 6 VITAL OUTPUT BOARD	00207
B24(MLKB-0)	M1J5	6		#66	SPARE	-

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLKB-0)	M1K5	1		#71	N24(MLKB-0) SUPPLY	00603
		2		#62	TO M1B1 SLOT 3 VITAL OUTPUT BOARD	00201
		3		#62	TO M1B1 SLOT 4 VITAL OUTPUT BOARD	00203
		4		#62	TO M1B1 SLOT 5 VITAL OUTPUT BOARD	00205
		5		#62	TO M1B1 SLOT 6 VITAL OUTPUT BOARD	00207
N24(MLKB-0)	M1K5	6		#62	SPARE	-

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLKM-0)	M1K6	1		#71	N24(MLK-0) SUPPLY	00603
		2		#62	TO M1A1/B1 SLOT 3 OUTPUT RELAY LOOPING	00201
		3		#62	TO M1A1/B1 SLOT 4 OUTPUT RELAY LOOPING	00203
		4		#62	TO M1A1/B1 SLOT 5 OUTPUT RELAY LOOPING	00205
		5		#62	TO M1A1/B1 SLOT 6 OUTPUT RELAY LOOPING	00207
N24(MLKM-0)	M1K6	6		#62	SPARE	-

NOTE:

NOTE: NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.

#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL

#66 PHOENIX FUSETERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION)

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T

	IPU.2107B/3	REVISION	CHK. APP.	TITLE: M1 RACK FUSE & TERMINAL CHART (ROWS - J & K)	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS	
		JE/Drg			ताटिचेर्ला TATICHERLA	
		SE/SSE/Drg				
		ASTE/D				
		SSTE/P & P				
		f ESTE			SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL	
				REF.SIG.PLAN.No.	द. न. रेलवे आरेख सं.	
				IPU.2107B/3	S.C.RLY.DRG.NO.	बि B
				शीट SHEET	कुल शीट SHEETS	CONT'D ON:
				00632	00065	00633

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-INT)	M1J7	1		#71	B24 MLK INTERNAL SUPPLY	00604
		2		#66	TO A START	00580
		3		#66	TO B START	00580
		4		#66	TO A SYSON	00580
		5		#66	TO B SYSON	00580
		6		#66	TO A DIG	00580
		7		#66	TO B DIG	00580
		8		#66	SPARE	-
B24(MLK-INT)		9		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B24(MLK-COM)	M1J8	1		#71	B24(MLK - COM) SUPPLY	00604
		2		#66	TO S1.E1 EDS SUPPLY	00075
		3		#66	TO S1.E1 EDS SUPPLY	00075
		4		#66	TO S2.E2 EDS SUPPLY	00075
		5		#66	TO S2.E2 EDS SUPPLY	00075
		6		#66	SPARE	-
B24(MLK-COM)		7		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B5(MLK)	M1L1	1		#62	FROM 5V CONVERTER	00607
		2		#62	TO M1A1 CARDFILE BACKPLANE SUPPLY	00607
		3		#62	SPARE	-
B5(MLK)		4		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B5(MLK)	M1L3	1		#62	FROM 5V CONVERTER	00607
		2		#62	TO M1B1 CARDFILE BACKPLANE SUPPLY	00607
		3		#62	SPARE	-
B5(MLK)		4		#62	SPARE	-

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B12(MLK-ISO)	M1L5	1		#71	B12 ISOLATOR SUPPLY	00604
		2		#66	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		3		#66	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		4		#66	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		5		#66	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		6		#66	TCC 82 ISOLATOR-I1 SUPPLY	00081
		7		#66	TCC 82 ISOLATOR-I2 SUPPLY	00079
		8		#66	SPARE	-
B12(MLK-ISO)		9		#66	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-INT)	M1K7	1		#71	N24 MLK INTERNAL SUPPLY	00604
		2		#62	TO A START	00580
		3		#62	TO B START	00580
		4		#62	TO A SYSON	00580
		5		#62	TO B SYSON	00580
		6		#62	TO A DIG	00580
		7		#62	TO B DIG	00580
		8		#62	SPARE	-
N24(MLK-INT)		9		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N24(MLK-COM)	M1K8	1		#71	N24(MLK - COM) SUPPLY	00604
		2		#62	TO S1.E1 EDS SUPPLY	00075
		3		#62	TO S1.E1 EDS SUPPLY	00075
		4		#62	TO S2.E2 EDS SUPPLY	00075
		5		#62	TO S2.E2 EDS SUPPLY	00075
		6		#62	SPARE	-
N24(MLK-COM)		7		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N5(MLK)	M1L2	1		#62	FROM 5V CONVERTER	00607
		2		#62	TO M1A1 CARDFILE BACKPLANE SUPPLY	00607
		3		#62	SPARE	-
N5(MLK)		4		#62	DATA LOGGER ANALOG INPUT	00608

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N5(MLK)	M1L4	1		#62	FROM 5V CONVERTER	00607
		2		#62	TO M1B1 CARDFILE BACKPLANE SUPPLY	00607
		3		#62	SPARE	-
N5(MLK)		4		#62	SPARE	-

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N12(MLK-ISO)	M1L6	1		#71	N12 ISOLATOR SUPPLY	00604
		2		#62	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		3		#62	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		4		#62	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		5		#62	TO 12/5V DC-DC CONVERTER SUPPLY	00607
		6		#62	TCC 82 ISOLATOR-I1 SUPPLY	00081
		7		#62	TCC 82 ISOLATOR-I2 SUPPLY	00079
		8		#62	SPARE	-
N12(MLK-ISO)		9		#62	DATA LOGGER ANALOG INPUT	00608

NOTE:
NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.
#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.
#66 PHOENIX FUSE TERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).
#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

IPU.2107B/3	REVISION	CHK.	TITLE: M1 RACK FUSE & TERMINAL CHART (ROWS - J & K)	
	JE/Drg		REF.SIG.PLAN.No.	द म रेलवे आरेख सं
</				

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B110(MLK)	WMCA1	1	•T	#71	110V MLK SUPPLY FROM PSB/IPS	00600

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B110(MLK)	WMCA3	1	•T	#71	110V MLK SUPPLY FROM PSB/IPS	00600

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
B110(MLK)	WMCA7	1	10	HRC	B110V MLK SUPPLY	00600
	2	10	HRC		B110V MLK SUPPLY	00600
	3	T	#62		TO 12V DC-DC CONVERTER - A SYSTEM	00600
	4	T	#62		TO 12V DC-DC CONVERTER - A SYSTEM	00600
	5	T	#62		TO 12V DC-DC CONVERTER - B SYSTEM	00600
	6	T	#62		TO 12V DC-DC CONVERTER - B SYSTEM	00600
	7	T	#62		TO 12V DC-DC CONVERTER - MLK ISO SUPPLY	00600
	8	T	#62		TO 12V DC-DC CONVERTER - MLK ISO SUPPLY	00600
	9	T	#62		TO 24V DC-DC CONVERTER - MLK I/O SUPPLY	00600
	10	T	#62		TO 24V DC-DC CONVERTER - MLK I/O SUPPLY	00600
B110(MLK)	11	2	#66		TO DATALOGGER ANALOG INPUT	00600

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
B12(MLK-A)	WMCA9	1	•T	#65	FROM 12V DC-DC CONVERTER (A SYSTEM)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
B12(MLK-B)	WMCA11	1	•T	#65	FROM 12V DC-DC CONVERTER (B SYSTEM)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
B24(MLK)	WMCA13	1	•T	#65	FROM 12V DC-DC CONVERTER (MLK ISO)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
B24(MLK)	WMCA15	1	•T	#71	FROM 12V DC-DC CONVERTER (MLK I/O)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N110(MLK)	WMCA2	1	•T	#71	110V MLK SUPPLY FROM PSB/IPS	00600

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N110(MLK)	WMCA4	1	•T	#71	110V MLK SUPPLY FROM PSB/IPS	00600

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHT
N110(MLK)	WMCA8	1	•T	#71	N110V MLK SUPPLY	00600
	2	•T	#62		TO 12V DC-DC CONVERTER - A SYSTEM	00600
	3	•T	#62		TO 12V DC-DC CONVERTER - A SYSTEM	00600
	4	•T	#62		TO 12V DC-DC CONVERTER - B SYSTEM	00600
	5	•T	#62		TO 12V DC-DC CONVERTER - B SYSTEM	00600
	6	•T	#62		TO 12V DC-DC CONVERTER - MLK ISO SUPPLY	00600
	7	•T	#62		TO 12V DC-DC CONVERTER - MLK ISO SUPPLY	00600
	8	•T	#62		TO 24V DC-DC CONVERTER - MLK I/O SUPPLY	00600
	9	•T	#62		TO 24V DC-DC CONVERTER - MLK I/O SUPPLY	00600
	10	•T	#62		SPARE	-
N110(MLK)	11	•T	#62		TO DATALOGGER ANALOG INPUT	00600

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
N12(MLK-A)	WMCA10	1	•T	#65	FROM 12V DC-DC CONVERTER (A SYSTEM)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
N12(MLK-B)	WMCA12	1	•T	#65	FROM 12V DC-DC CONVERTER (B SYSTEM)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
N24(MLK)	WMCA14	1	•T	#65	FROM 12V DC-DC CONVERTER (MLK ISO)	00601

BUSBAR	ROW	TERMINAL	FUSE/LINK	TYPE	FUNCTION	SHEET NO.
N24(MLK)	WMCA16	1	•T	#71	FROM 12V DC-DC CONVERTER (MLK I/O)	00601

NOTE:

NUMBERS IN FUSE/LINK COLUMN DENOTES THE FUSE RATING IN AMPERE.

#62 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

#65 SINGLE DECK PHOENIX DISCONNECT TERMINAL TYPE URTK/S.

#66 PHOENIX FUSE TERMINAL TYPE UK5-HESI LED24
(SUITABLE FOR 3V, 12V & 24V APPLICATION).

#71 SINGLE DECK PHOENIX TERMINAL TYPE OTTA-25T.

					TVM Signalling & Transportation Systems Pvt. Ltd.	
					#610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in	
00	16.07.15	PR	RS	RSS	ASMADE	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012	

	IPU.2107B/3	REVISION		TITLE: M1 RACK FUSE & TERMINAL CHART (ROW - Q)		
		JE/Drg		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	
		SE/SSE/Drg		IPU.2107B/3	S.C.RLY.DRG.NO	
		ASTE/D		वि B		
		SSTE/P & P		शीट SHEET	कुल शीट SHEETS	
		f CSTE		00634	00065	
		APP.		CONT'D ON: 0700		

सिग्नल व दूर संचार
SIGNAL & TELECOMMUNICATIONS
तातिचेर्ला
TATICHERLA
SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL
(MICROLOK-II WARM STANDBY)

	M1G1-VITAL OUTPUT		
	ROW	FUNCTION	SHEET NUMBER
N24 (MLKM-0)	101	S1D_DR	00201
	301	401	
	102	S1D_HHR	00201
	302	402	
	103	S1DR	00201
	303	403	
	104	S1HR	00201
	304	404	
	105	S1UGR_1	00201
	305	405	
	106	S1UGR_2	00201
	306	406	
	107	S1A_COHR	00201
	307	407	
	108	SH2HR	00201
	308	408	
	109	S15DR	00202
	309	409	
	110	S16HR	00202
	310	410	
	111	S17HR	00202
	311	411	
	112	S18DR	00202
	312	412	
	113	S18HR	00202
	313	413	
	114	7N_RWLR	00202
	314	414	
	115	8N_RWLR	00202
	315	415	
	116	SPARE	00202
	316	416	

	M1G2-VITAL OUTPUT		
	ROW	FUNCTION	SHEET NUMBER
N24 (MLKM-0)	101	7NWR_IN	00203
	301	401	
	102	7RWR_IN	00203
	302	402	
	103	8NWR_IN	00203
	303	403	
	104	8RWR_IN	00203
	304	404	
	105	PCR_S	00203
	305	405	
	106	CH1YR_IN	00203
	306	406	
	107	ATP_AS.RR	00203
	307	407	
	108	ATP_HS.RR	00203
	308	408	
	109	S1_HS.GNCR	00204
	309	409	
	110	S15_AS.GNCR	00204
	310	410	
	111	SPARE	00204
	311	411	
	112	SPARE	00204
	312	412	
	113	SPARE	00204
	313	413	
	114	SPARE	00204
	314	414	
	115	SPARE	00204
	315	415	
	116	SPARE	00204
	316	416	

	M1H1-VITAL OUTPUT		
	ROW	FUNCTION	SHEET NUMBER
N24 (MLKM-0)	101	S20D_DR	00205
	301	401	
	102	S20D_HHR	00205
	302	402	
	103	S20DR	00205
	303	403	
	104	S20HR	00205
	304	404	
	105	S20UGR_1	00205
	305	405	
	106	S20UGR_2	00205
	306	406	
	107	S20A_COHR	00205
	307	407	
	108	SH19HR	00205
	308	408	
	109	S3DR	00206
	309	409	
	110	S3HR	00206
	310	410	
	111	S4HR	00206
	311	411	
	112	S5HR	00206
	312	412	
	113	S6DR	00206
	313	413	
	114	13N_RWLR	00206
	314	414	
	115	14N_RWLR	00206
	315	415	
	116	SPARE	00206
	316	416	

	M1H2-VITAL OUTPUT		
	ROW	FUNCTION	SHEET NUMBER
N24 (MLKM-0)	101	13NWR_IN	00207
	301	401	
	102	13RWR_IN	00207
	302	402	
	103	14NWR_IN	00207
	303	403	
	104	14RWR_IN	00207
	304	404	
	105	12LXYR_IN	00207
	305	405	
	106	CH2YR_IN	00207
	306	406	
	107	PCR_N	00207
	307	407	
	108	GDE_AS.RR	00207
	308	408	
	109	GDE_HS.RR	00208
	309	409	
	110	S20_HS.GNCR	00208
	310	410	
	111	S6_AS.GNCR	00208
	311	411	
	112	SPARE	00208
	312	412	
	113	SPARE	00208
	313	413	
	114	SPARE	00208
	314	414	
	115	SPARE	00208
	315	415	
	116	SPARE	00208
	316	416	

NOTE:
401-416 DOUBLE DECK PHOENIX TERMINAL TYPE UKK5-D10/UL-UR HAVING
INBUILT DIODES IN4007 WITH COMMON CATHODE.
17-32 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5N.

					TVM Signalling & Transportation Systems Pvt. Ltd.
					#610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012
					MODIFICATION

CHK.	TITLE:	M1-RACK TERMINAL CHART		CONT'D ON:
		REF.SIG.PLAN.No.	IPU.2107B/3	
		IPU.2107B/3	REVISION	
		SE/SSE/Drg	J/E/Drg	
		ASTE/D		
		SSTE/P & P		
		f CSTE	APP.	00701
		00700		00065
		शीट SHEET	कुल शीट SHEETS	

सिग्नल व दूर संचार
SIGNAL & TELECOMMUNICATIONS
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TATICHERLA
SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL
(MICROLOK-II WARM STANDBY)

	R1A1-VITAL INPUT		
	ROW	FUNCTION	SHE
M1A1 SLOT7 MIB1 SLOT7	101	201	S1D__DECR
	301		
	102	202	0020
	302		
	103	203	0020
	303		
	104	204	0020
	304		
	105	205	0020
	305		
	106	206	0020
	306		
	107	207	0020
	307		
	108	208	0020
	308		
	109	209	0020
	309		
	110	210	0020
	310		
	111	211	0020
	311		
	112	212	0020
	312		
	113	213	0020
	313		
	114	214	0020
	314		
	115	215	0020
	315		
	116	216	0020
	316		
	117	217	0020
	317		
	118	218	0020
	318		
	119	219	0020
	319		
	120	220	0020
	320		
	121	221	0020
	321		
	122	222	0020
	322		
	123	223	0020
	323		
	124	224	0020
	324		
	125	225	0020
	325		
	126	226	0020
	326		
	127	227	0020
	327		
	128	228	0020
	328		
	129	229	0020
	329		
	130	230	0020
	330		
	131	231	0020
	331		
	132	232	0020
	332		

		R1A2-VITAL INPUT		
ROW		FUNCTION		SHEET
M1A1 SLOT8 M1B1 SLOT8	101	201	S17HECR	00211
	301			
	102	202		
	302		S17RECR	00211
	103	203		
	303			
	104	204		
	304		S18DECR	00211
	105	205		
	305			
	106	206		
	306		S18HECR	00211
	107	207		
	307			
	108	208		
	308		S18RECR	00211
	109	209		
	309			
	110	210		
	310		7NWKR	00211
	111	211		
	311			
	112	212		
	312		7RWKR	00211
	113	213		
	313			
	114	214		
	314		8NWKR	00211
	115	215		
	315			
	116	216		
	316		8RWKR	00212
	117	217		
	317			
	118	218		
	318		SPARE	00212
	119	219		
	319			
	120	220		
	320		CH1CR	00212
	121	221		
	321			
	122	222		
	322		SPARE	00212
	123	223		
	323			
	124	224		
	324		LVR	00212
	125	225		
	325			
	126	226		
	326		SMCR	00212
	127	227		
	327			
	128	228		
	328		SPARE	00212
	129	229		
	329			
	130	230		
	330		SPARE	00212
	131	231		
	331			
	132	232		
	332			

	R3A1-VITAL INPUT		
	ROW	FUNCTION	SHEET
M1A1 SL0 T9 MB1 SL0 T9	101	201	1A_TPR
	301		
	102	202	1TPR
	302		
	103	203	00213
	303		
	104	204	7A_TPR
	304		
	105	205	00213
	305		
	106	206	7B_TPR
	306		
	107	207	00213
	307		
	108	208	8A_TPR
	308		
	109	209	00213
	309		
	110	210	8B_TPR
	310		
	111	211	00213
	311		
	112	212	15TPR
	312		
	113	213	00213
	313		
	114	214	SPARE
	314		
	115	215	00213
	315		
	116	216	ATP_ASCR
	316		00214
	117	217	GDE_ASCR
	317		
	118	218	SPARE
	318		00214
	119	219	00214
	319		
	120	220	SPARE
	320		00214
	121	221	00214
	321		
	122	222	SPARE
	322		00214
	123	223	00214
	323		
	124	224	SPARE
	324		00214
	125	225	00214
	325		
	126	226	SPARE
	326		00214
	127	227	00214
	327		
	128	228	TAC_ATP_VPR
	328		00214
	129	229	TAC_GDE_VPR
	329		
	130	230	00214
	330		
	131	231	00214
	331		
	132	232	TAC_GDE_VPR
	332		

	R2A1-VITAL INPUT		
	ROW	FUNCTION	SHEET
M1A1 SLOT10 M1B1 SLOT10	101	201	S20D_DECR
	301		
	102	202	
	302		
	103	203	S20D_HHECR
	303		
	104	204	
	304		
	105	205	S20D_HECR
	305		
	106	206	
	306		
	107	207	S20DECR
	307		
	108	208	
	308		
	109	209	S20HECR
	309		
	110	210	
	310		
	111	211	S20RECR
	311		
	112	212	
	312		
	113	213	S20UECPR
	313		
	114	214	
	314		
	115	215	S20A_COHECR
	315		
	116	216	
	316		
	117	217	SH19_OFFECR
	317		
	118	218	
	318		
	119	219	SH19_ONECR
	319		
	120	220	
	320		
	121	221	S3DECR
	321		
	122	222	
	322		
	123	223	S3HECR
	323		
	124	224	
	324		
	125	225	S3RECR
	325		
	126	226	
	326		
	127	227	S4HECR
	327		
	128	228	
	328		
	129	229	S4RECR
	329		
	130	230	
	330		
	131	231	SPARE
	331		
	132	232	
	332		

NOTE:

201-232 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5-TWIN.

 TVM Signalling & Transportation Systems Pvt. Ltd.

CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

	IPU.2107B/3	REVISION	CHK.	TITLE: R1-RACK TERMINAL CHART (ROW-A)	सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS		
		JE/Drg					
		SE/SSE/Drg					
		ASTE/D					
		SSTE/P & P					
	f CSTE						
REF.SIG.PLAN.No.		द. म. रेलवे आरक्ष नं.	बि B				
IPU.2107B/3		S.C.RLY.DRG.NO					
शीट SHEET	कुल शीट SHEETS	CONT'D ON:		00702			
00701	00065						
APP.		TATICHERLA		SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL			

	R2A2-VITAL INPUT			
	ROW		FUNCTION	SHEET
101	201			
301			S5HECR	00217
102	202			
302				
103	203		S5RECR	00217
303				
104	204			
304				
105	205		S6DECR	00217
305				
106	206			
306				
107	207		S6RECR	00217
307				
108	208			
308				
109	209		SPARE	00217
309				
110	210			
310				
111	211		13NWKR	00217
311				
112	212			
312				
113	213		13RWKR	00217
313				
114	214			
314				
115	215		14NWKR	00217
315				
116	216			
316				
117	217		14RWKR	00218
317				
118	218			
318				
119	219		CH2CR	00218
319				
120	220			
320				
121	221		12LXCR	00218
321				
122	222			
322				
123	223		SPARE	00218
323				
124	224			
324				
125	225		SPARE	00218
325				
126	226			
326				
127	227		SPARE	00218
327				
128	228			
328				
129	229		DIG_ON	00218
330	230			
131	231			
332	232			
133	233		DIG_OFF	00218
334	234			
135	235			
336	236			

R3A2-VITAL INPUT			
ROW		FUNCTION	SHEET
M1A1	SL012	101	201
M1B1	SL012	301	20A_TPR
		102	202
		302	
		103	
		303	203
		104	204
		304	
		105	205
		305	
		106	206
		306	
		107	207
		307	
		108	208
		308	
		109	209
		309	
		110	210
		310	
		111	211
		311	
		112	212
		312	
		113	213
		313	
		114	214
		314	
		115	215
		315	
		116	216
		316	
		117	217
		317	
		118	218
		318	
		119	219
		319	
		120	220
		320	
		121	221
		321	
		122	222
		322	
		123	223
		323	
		124	224
		324	
		125	225
		325	
		126	226
		326	
		127	227
		327	
		128	228
		328	
		129	229
		130	
		131	230
		132	
		133	231
		134	
		135	232
		136	

NOTE:
201-232 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5-TWIN.
* SINGLE DECK PHOENIX TERMINAL TYPE UK5N.

							 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781, 82, 83 E-mail : info@tsts.in
				R.			
00	16.07.15	PR	RS	RSS	ASMADE		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

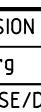
IPU.2107B/3	REVISION	CHK.	TITLE: R2-RACK TERMINAL CHART (ROW-A)			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS	
	JE/Drg						
	SE/SSE/Drg						
	ASTE/D						
	SSTE/P & P						
	f CSTE	APP.	REF.SIG.PLAN.No.	द. म. रेलवे आरेक्य सं.	b		TATICHERLA
			IPU.2107B/3	S.C.RLY.DRG.NO			00703
		शीट SHEET	कुल शीट SHEETS	CONT'D ON:			
		00702	00065				

R1B1-NON-VITAL INPUT		
ROW	FUNCTION	SHEET
101 301	201 S1D_DR_F	00101
102 302	202 S1D_HHR_F	00101
103 303	203 S1DR_F	00101
104 304	204 S1HR_F	00101
105 305	205 S1UGR_1_F	00101
106 306	206 S1UGR_2_F	00101
107 307	207 S1A_COHR_F	00101
108 308	208 SH2HR_F	00101
109 309	209 S15DR_F	00101
110 310	210 S16HR_F	00101
111 311	211 S17HR_F	00101
112 312	212 S18DR_F	00101
113 313	213 S18HR_F	00101
114 314	214 S20D_DR_F	00101
115 315	215 S20D_HHR_F	00101
116 316	216 S20DR_F	00101
117 317	217 S20HR_F	00102
118 318	218 S20_UGR1_F	00102
119 319	219 S20_UGR2_F	00102
120 320	220 S20A_COHR_F	00102
121 321	221 SH19HR_F	00102
122 322	222 S3DR_F	00102
123 323	223 S3HR_F	00102
124 324	224 S4HR_F	00102
125 325	225 S5HR_F	00102
126 326	226 S6DR_F	00102
127 327	227 R.ROOM_DOOR	00102
128 328	228 A.SYSON	00102
129 329	229 B.SYSON	00102
130 330	230 DC.DC.FAIL	00102
131 331	231 GEYR	00102
132 332	232 SPARE	00102

R1B2-NON-VITAL OUTPUT		
ROW	FUNCTION	SHEET
101 301	201 DNRT_CANC_CNT	00103
102 302	202 UPRT_CANC_CNT	00103
103 303	203 DNCORT_CANC_CNT	00103
104 304	204 UPCORT_CANC_CNT	00103
105 305	205 S1A_CNT	00103
106 306	206 S20A_CNT	00103
107 307	207 SPARE	00103
108 308	208 SPARE	00103
109 309	209 SPARE	00103
110 310	210 SPARE	00103
111 311	211 SPARE	00103
112 312	212 SPARE	00103
113 313	213 SPARE	00103
114 314	214 SPARE	00103
115 315	215 SPARE	00103
116 316	216 SPARE	00103
117 317	217 SPARE	00104
118 318	218 SPARE	00104
119 319	219 SPARE	00104
120 320	220 SPARE	00104
121 321	221 SPARE	00104
122 322	222 SPARE	00104
123 323	223 SPARE	00104
124 324	224 SPARE	00104
125 325	225 SPARE	00104
126 326	226 SPARE	00104
127 327	227 SPARE	00104
128 328	228 SPARE	00104
129 329	229 SPARE	00104
130 330	230 SPARE	00104
131 331	231 SPARE	00104
132 332	232 SPARE	00104

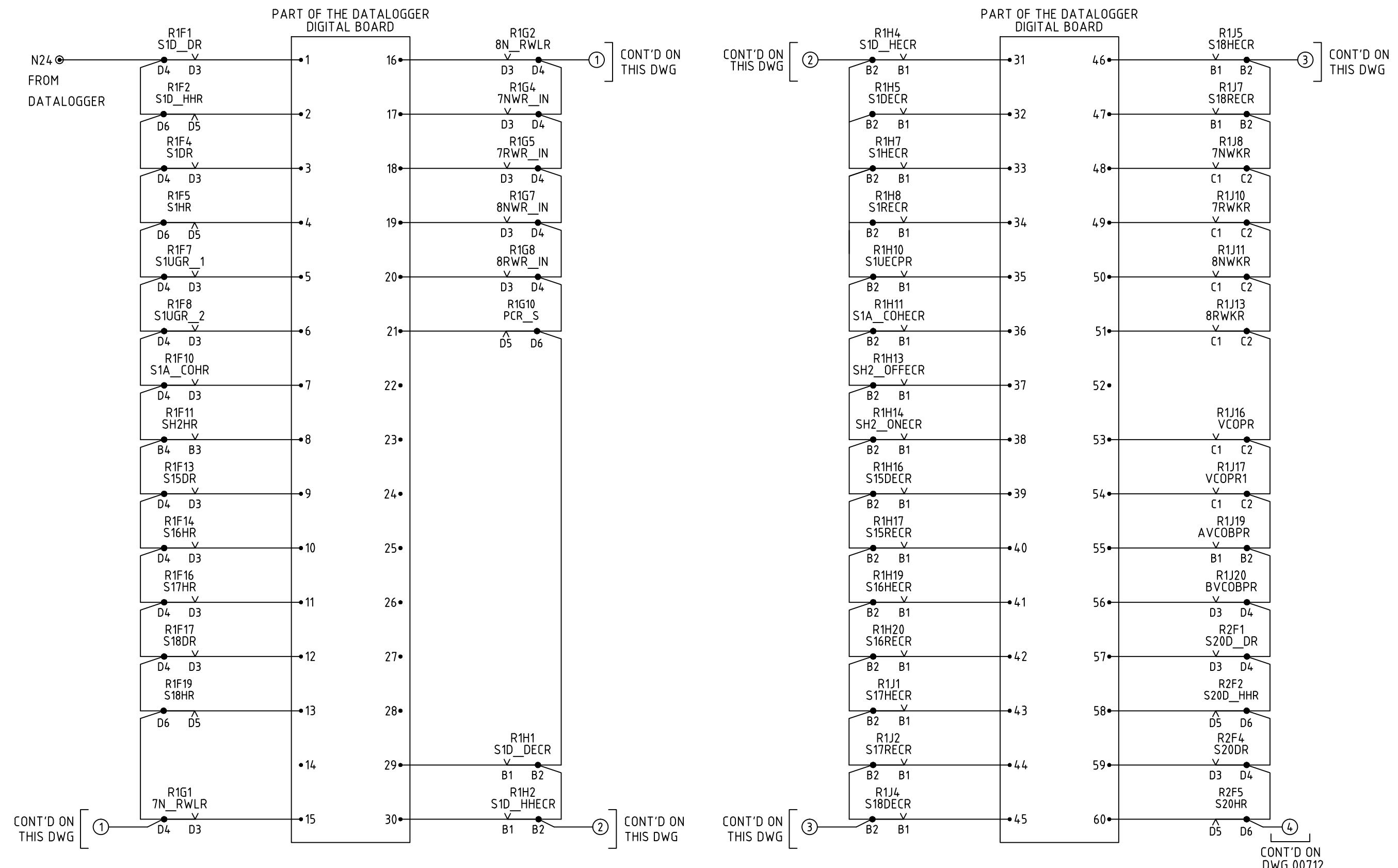
00	16.07.15	PR	RS	RSS		ASMADE					
REV	DATE	DESIGNED	CHECKED	APPROVED		MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012				

 TVM Signalling & Transportation Systems Pvt. Ltd.
#610, "NARAYANA", 1st Floor, 15th Cross,
100 Feet Road, J.P.Nagar, 6th Phase,
Bengaluru - 560 078
Tel: +91 80 2654 0781,82,83
E-mail : info@tsts.in

	TITLE: R1-RACK TERMINAL CHART (ROW-B)				
	REF.SIG.PLAN.No.	IPU.2107B/3	REVISION	द म रेलवे आरेक सं	
	IPU.2107B/3	JE/Drg	SC.RLY.DRG.NO	बि B	
	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00711	
	00703	00065			

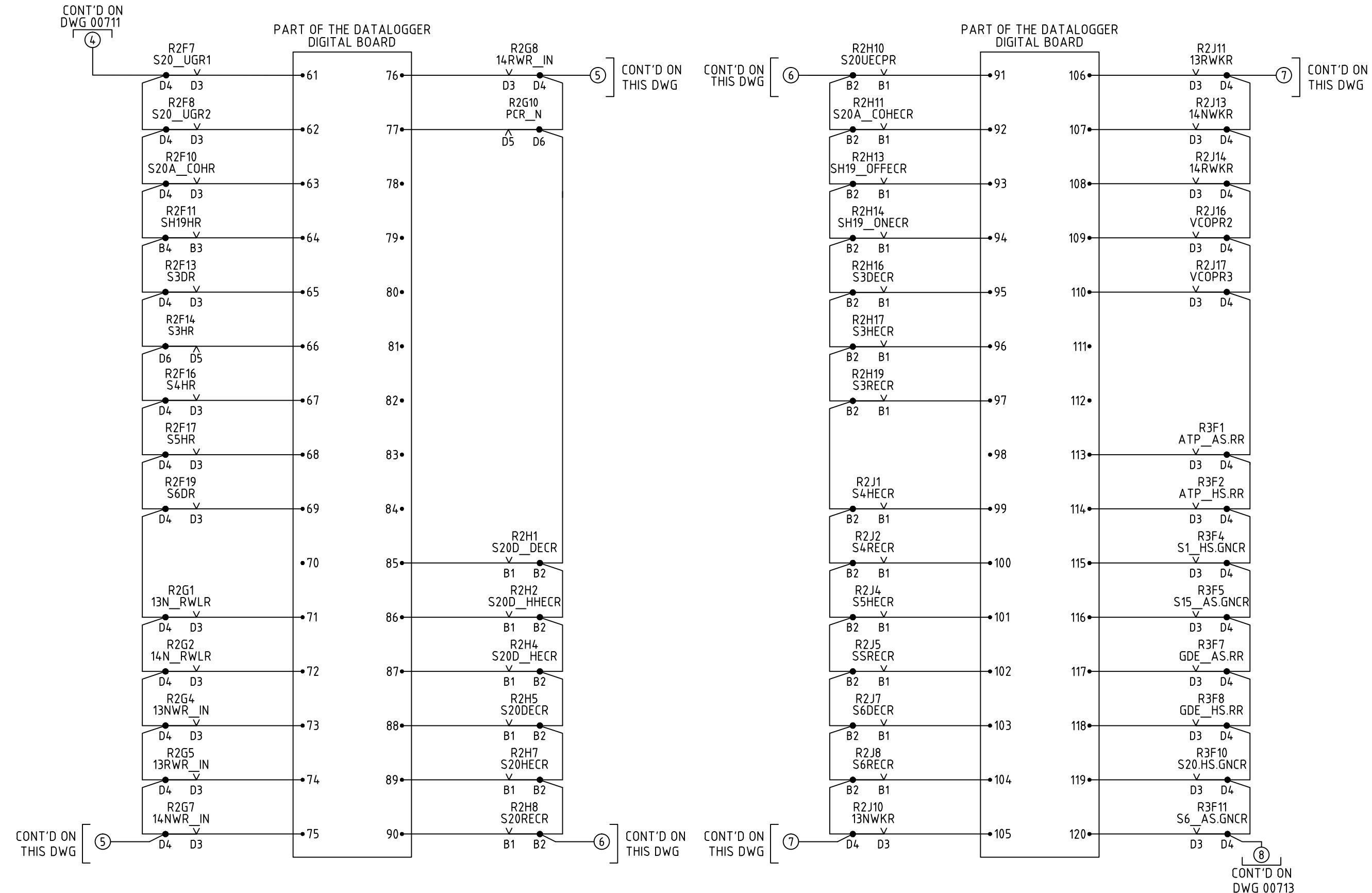
सिग्नल व दूर संचार
SIGNAL & TELECOMMUNICATIONS
तातिचेर्ला
TATICHERLA
SOUTH CENTRAL RAILWAY
DIVISION: GUNTAKAL
FILE: 512_TAC_IC_00703_R00.DWG
(MICROLOK-II WARM STANDBY)

NOTE:
201-232 SINGLE DECK PHOENIX NON-DISCONNECT TERMINAL TYPE UK5-TWIN.



					TVM Signalling & Transportation Systems Pvt. Ltd.
					4610, "NARA ANA", 1st Floor, 15th Cross, 100 -feet Road, J. Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@stsl.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

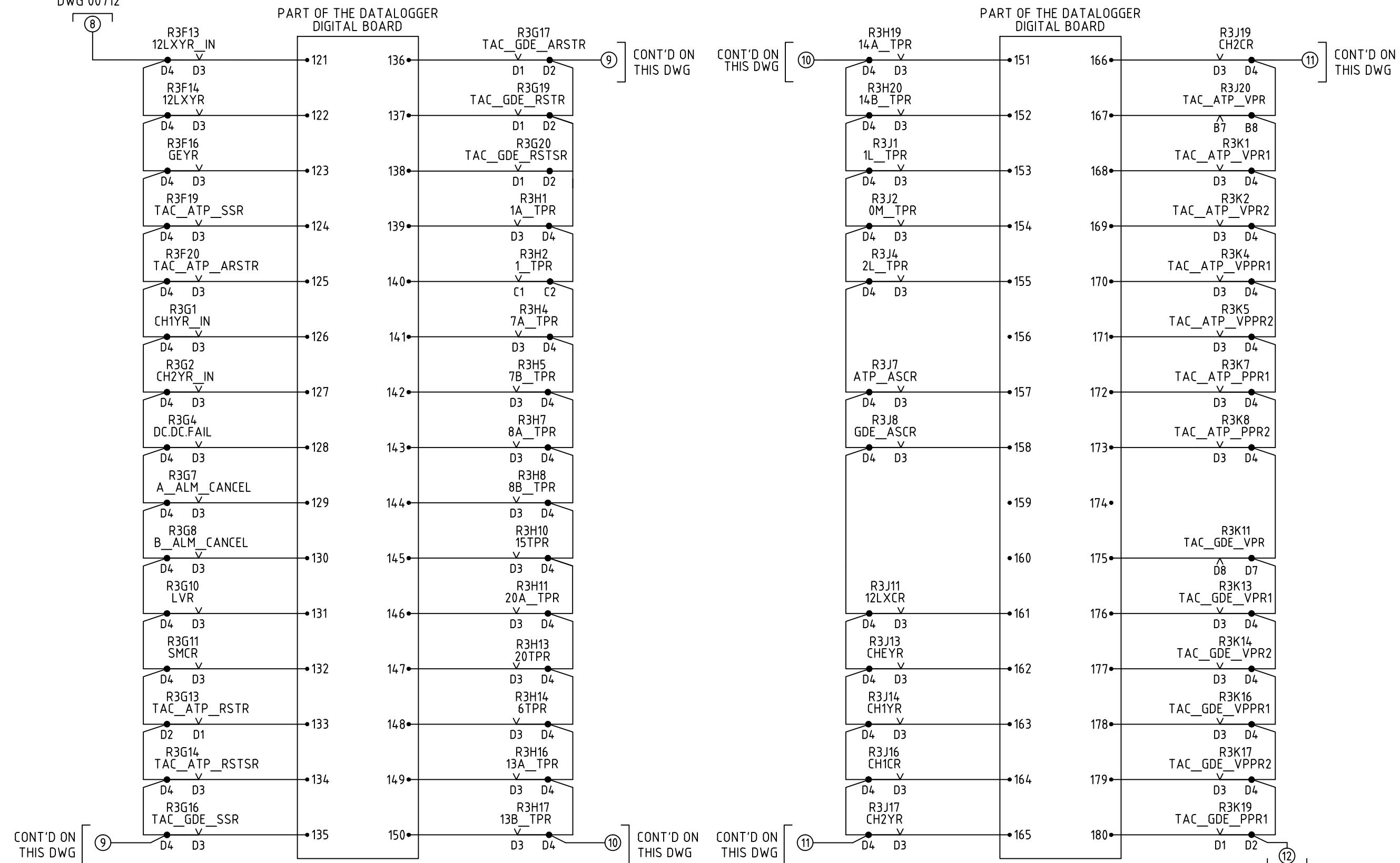
IPU.2107B/3	REVISION	TITLE:	COVER SHEET		SIGNAL & TELECOMMUNICATIONS
			JE/Drg	SE/SSE/Drg	
			ASTE/D		
			SSTE/P & P		
			f CSTE		
			00711	00065	ताटिचेर्ला TATICHERLA
			CONTD ON:	00712	SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL



					TVM Signalling & Transportation Systems Pvt. Ltd.
					/610, "NARA ANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bangalore - 560 078 Tel: +91 80 2654 0781, 82, 83 E-mail : info@tssts.in
00	16.07.15	PR	RS	RSS	ASMADE
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION
					CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012

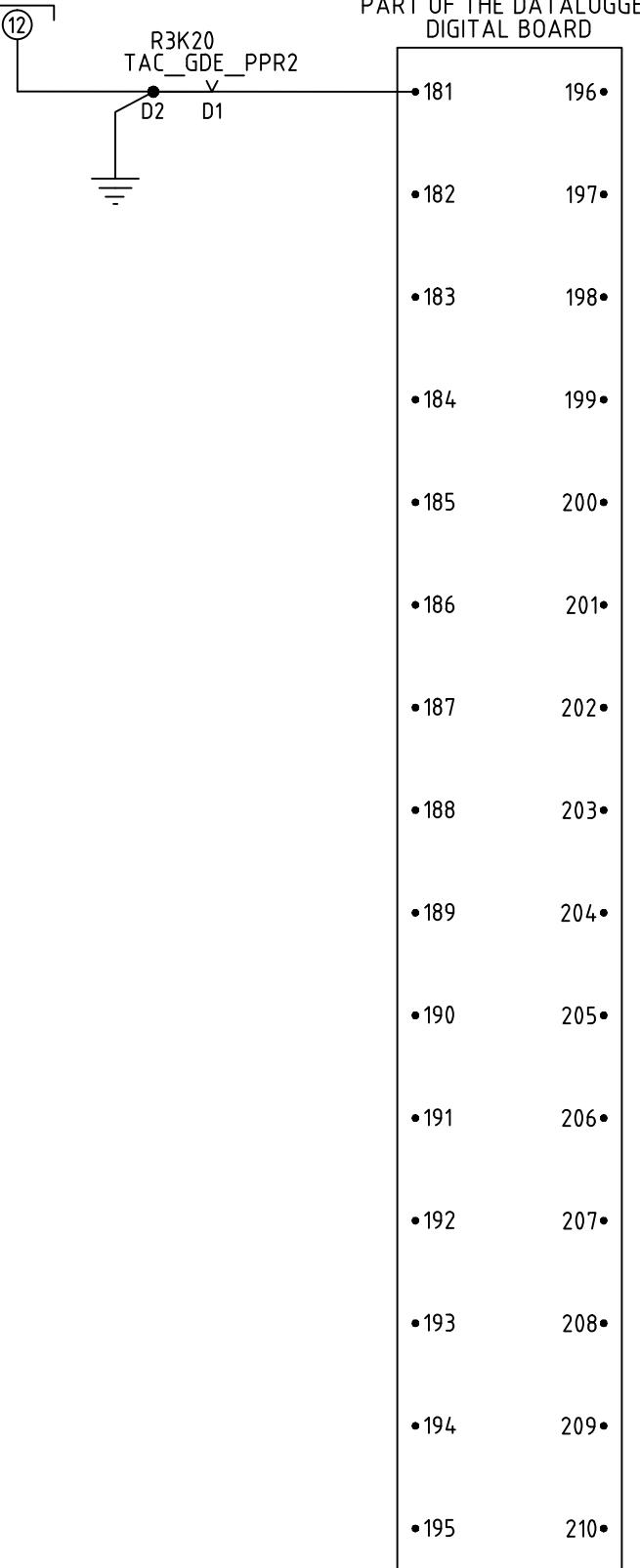
IPU.2107B/3	REVISION	TITLE:	COVER SHEET		SIGNAL & TELECOMMUNICATIONS
			REF.SIG-P-No.	द म रेलवे आरक्ष सं	
	JE/Drg	IPU.2107B/3	S.C.R.120.QN.0	बि B	
	SE/SSE/Drg				
	ASTE/D				
	SSTE/P & P				
	f CSTE				
		शीट SHEET	कुल शीट SHEETS	CONT'D ON:	SOUTH CENTRAL RAILWAY
		00712	00065	00713	DIVISION: GUNTAKAL

CONT'D ON
DWG 00712



					TVM Signalling & Transportation Systems Pvt. Ltd.		IPU.2107B/3	REVISION		C/H. SHEET NO. REV.	TITLE: COVER SHEET		SIGNAL & TELECOMMUNICATIONS
								JE/Drg			R.D.SIG. / LAN. NO.	द म रेलवे आरेख सं	B
								SE/SSE/Drg			I.PU.2107B/3	S.C.R.L.D.R.C.NO	
								ASTE/D					
								SSTE/P & P			शीट SHEET	कुल शीट SHEETS	CONT'D ON:
								f CSTE			00713	00065	00714
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012							SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL
REV	DATE	DESIGNED	CHECKED	APPROVED		MODIFICATION							(MICROLOK-II WARM STANDBY)

CONT'D ON
DWG 00713



						 TVM Signalling & Transportation Systems Pvt. Ltd.
				R. <i>[Signature]</i>		<i>[Address]</i> #610, "NARA ANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bangalore - 560 079 Tel: +91 80 2654 0781, 82, 83 E-mail : info@tsls.in
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	

I.P.U.2107B/3	REVISION	TITLE:	COVER SHEET		SIGNAL & TELECOMMUNICATIONS
			REF.SIG-P-No.	द म रेलवे आरेक सं	
	JE/Drg	IPU.2107B/3	S.C.R.107B/3		
	SE/SSE/Drg				
	ASTE/D				
	SSTE/P & P				
	f CSTE				
			शीट SHEET	कुल शीट SHEETS	CONT'D ON:
			00714	00065	00750

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@sts.in		IPU.2107B/3	REVISION	C.R.	TITLE: R1 RACK CONTACT ANALYSIS (ROW-G & H)			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS				
								JE/Drg										
								SE/SSE/Drg										
								ASTE/D										
								SSTE/P & P										
								f CSTE										
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		REF.SIG.PLAN.No.	द म रेलवे आरेख सं	S.C.RLY.DRG.NO.	बि B		शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00752	ताटिचेर्ला TATICHERLA	SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION			00751	00065									

RELAY			COILS		CONTACTS																																
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	A	B			F	A	A	B			F	A	A	B			F	A	A	B			F	A	A	B				
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	
S1HECR	QECX-61	4F-4B	R1H7	1	00302	1	2	00209	1	1	00302	1					1	00711	2													1	00209	2	1	00302	1
S1RECR	QECX-61	4F-4B	R1H8	1	00302	1	2	00209	1					1	00711	2																1	00209	2			

RELAY			COILS		CONTACTS																																			
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8			
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	F	A	A	B	A	B	F	A	F	A	B	A	B	F	A	F	A	B	A	B	F	A	F	A	B	F	A	F	A	B			
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	
S1UECPR	QNA1	8F-8B	R1H10	1	00302	1	2	00209	1						1	00711	2																1	00209	2					

RELAY			COILS		CONTACTS																																			
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8			
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	A	B			F	A	A	B			F	A	A	B			F	A	A	B			F	A	A	B							
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W				
S1A_COHECR	QECX-61	4F-4B	R1H11	1	00302	1	2	00209	1						1	00711	2																1	00209	2					

					 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru – 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in		IPU.2107B/3 REVISION 		TITLE: R1 RACK CONTACT ANALYSIS (ROW-H)	REF.SIG.PLAN.No. IPU.2107B/3 S.C.RLY.DRG.NO.		शीट SHEET कुल शीट SHEETS		CONT'D ON: 00753 00065		SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA						
00	16.07.15	PR	RS	RSS																		
REV	DATE	DESIGNED	CHECKED	APPROVED														ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012			
										SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		(MICROLOK-II WARM STANDBY)										

RELAY				COILS		CONTACTS																																					
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8						
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	A	B					F	A	A	B					F	A	A	B					F	A	A	B										
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W							
SH2_OFFECR	QECX-61	4F-4B	R1H13	2	00303	1	2	00210	1						1	00711	2															1	00210	2									
SH2_ONECR	QECX-61	4F-4B	R1H14	2	00303	1	2	00210	1							1	00711	2															1	00210	2								
S15DECR	QECX-61	4F-4B	R1H16	1	00304	1	2	00210	1	1	00304	1				1	00711	2																1	00210	2	1	00304	1				
S15RECR	QECX-61	4F-4B	R1H17	1	00304	1	2	00210	1							1	00711	2																1	00210	2							
S16HECR	QECX-61	4F-4B	R1H19	1	00305	1	2	00210	1	1	00305	1					1	00711	2																	1	00210	2	1	00305	1		
S16RECR	QECX-61	4F-4B	R1H20	1	00305	1	2	00210	1							1	00711	2																	1	00210	2						
S17HECR	QECX-61	4F-4B	R1J1	1	00306	1	2	00211	1							1	00711	2	1	00306	1															1	00211	2					
S17RECR	QECX-61	4F-4B	R1J2	1	00306	1	2	00211	1							1	00711	2																		1	00211	2					
S18DECR	QECX-61	4F-4B	R1J4	1	00307	1	2	00211	1	1	00307	1					1	00711	2	1	00307	1													1	00211	2	1	00307	1			
S18HECR	QECX-61	4F-4B	R1J5	1	00307	1	2	00211	1	1	00307	1					1	00711	2																1	00211	2	1	00307	1			
S18RECR	QECX-61	4F-4B	R1J7	1	00307	1	2	00211	1								1	00711	2																	1	00211	2					

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in		C.R.C.	IPU.2107B/3	REVISION	AP.	TITLE: R1 RACK CONTACT ANALYSIS (ROW-H & J)			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS	
									J/E/Drg							
									SE/SSE/Drg							
									ASTE/D							
									SSTE/P & P							
									f CSTE							
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012			REF.SIG.PLAN.NO.	द म रेलवे आरेख सं	बि	B		ताटिचेर्ला TATICHERLA		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION				IPU.2107B/3	S.C.RLY.DRG.NO						
									शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00754		SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		
									00753	00065						

RELAY			COILS		CONTACTS																																										
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8										
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B										
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W											
S20D_DR	QN1	8F-8B	R2F1	2	00205	2	1	00308	1	1	00308	1					1	00308	1																1	00308	1	1	00711	2							
S20D_HHR	QN1	8F-8B	R2F2	2	00205	2	1	00308	2	1	00308	1					1	00308	1	1	00308	1													2	00308	1	1	00308	1	1	00711	2				
S20DR	QN1	8F-8B	R2F4	2	00205	2	1	00309	2	1	00309	1					1	00309	1																	2	00309	1	1	00711	2						
S20HR	QN1	8F-8B	R2F5	2	00205	2	1	00309	2	1	00309	1					1	00309	1	1	00309	1													2	00309	1	1	00309	1	1	00711	2				
S20_UGR1	QN1	8F-8B	R2F7	2	00205	2	1	00309	2																											2	00309	1	1	00712	2						
S20_UGR2	QN1	8F-8B	R2F8	2	00205	2	1	00309	1																										1	00309	1	1	00712	2							
S20A_COHR	QN1	8F-8B	R2F10	2	00205	2	1	00309	1								1	00309	1																1	00309	1	1	00712	2							
SH19HR	QN1	8F-8B	R2F11	2	00205	2	1	00310	1	2	00310	1	1	00310	1	1	00310	2	2	00310	2	1	00712	2										1	00310	1	1	00310	2	1	00310	1	1	00310	1		
S3DR	QN1	8F-8B	R2F13	2	00206	2	1	00311	2	1	00311	1					1	00311	1															2	00311	1	1	00712	2								
S3HR	QN1	8F-8B	R2F14	2	00206	2	1	00311	1	1	00311	1					1	00311	1	1	00311	1											1	00311	1	1	00311	1	1	00712	2						
S4HR	QN1	8F-8B	R2F16	2	00206	2	1	00312	1	1	00312	1					1	00312	1														1	00312	1	1	00712	2									
S5HR	QN1	8F-8B	R2F17	2	00206	2	1	00313	1	1	00313	1					1	00313	1														1	00313	1	1	00712	2									
S6DR	QN1	8F-8B	R2F19	2	00206	2	1	00314	1	1	00314	1					1	00314	1														1	00314	1	1	00712	2									
13N_RWLR	QN1	8F-8B	R2G1	2	00206	2	1	00405	1																									1	00405	1	1	00712	2								
14N_RWLR	QN1	8F-8B	R2G2	2	00206	2	1	00407	1																										1	00407	1	1	00712	2							
13NWR_IN	QN1	8F-8B	R2G4	2	00207	2	1	00405	2					1	00405	1	1	00405	1															2	00405	1	1	00712	2	1	00405	1	2	00405	2		
13RWR_IN	QN1	8F-8B	R2G5	2	00207	2	1	00405	1					1	00405	1	1	00405	1																1	00405	1	1	00712	2	1	00405	1	2	00405	2	
14NWR_IN	QN1	8F-8B	R2G7	2	00207	2	1	00407	2					1	00407	1	1	00407	1																	2	00407	1	1	00712	2	1	00407	1	2	00407	2
14RWR_IN	QN1	8F-8B	R2G8	2	00207	2	1	00407	1					1	00407	1	1	00407	1																	1	00407	1	1	00712	2	1	00407	1	2	00407	2

RELAY			COILS		CONTACTS																												
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1/C2</											

RELAY			COILS		CONTACTS																																		
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8		
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	A	B					F	A	A	B					F	A	A	B					F	A	A	B						
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W		
S20D_DECER	QECX-61	4F-4B	R2H1	1	00308	1	2	00215	1	1	00308	1					1	00712	2	1	00308	1					1	00308	1			1	00215	2	1	00308	1		
S20D_HHECR	QECX-61	4F-4B	R2H2	1	00308	1	2	00215	1						1	00712	2																		1	00215	2		
S20D_HECR	QECX-61	4F-4B	R2H4	1	00308	1	2	00215	1						1	00712	2																		1	00215	2		
S20DECER	QECX-61	4F-4B	R2H5	1	00309	1	2	00215	1	1	00309	1				1	00712	2	1	00309	1					1	00309	1			1	00215	2	1	00309	1			
S20HECR	QECX-61	4F-4B	R2H7	1	00309	1	2	00215	1	1	00309	1				1	00712	2																1	00215	2	1	00309	1
S20RECR	QECX-61	4F-4B	R2H8	1	00309	1	2	00215	1						1	00712	2																	1	00215	2			

RELAY			COILS		CONTACTS																																	
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8	
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	F	A	A	B			F	A	F	A	A	B			F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	
S20UECPR	QNA1	8F-8B	R2H10	1	00309	1	2	00215	1						1	00712	2																	1	00215	2		

RELAY			COILS		CONTACTS																																							
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8							
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	A	B					F	A	A	B					F	A	A	B			F	A	A	B			F	A	A	B			F	A	A	B	
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W				
S20A_COHECR	QECX-61	4F-4B	R2H11	1	00309	1	2	00215	1						1	00712	2																	1	00215	2								
SH19_OFFECR	QECX-61	4F-4B	R2H13	2	00310	1	2	00216	1						1	00712	2																1	00216	2									
SH19_ONECR	QECX-61	4F-4B	R2H14	2	00310	1	2	00216	1						1	00712	2																1	00216	2									
S3DECER	QECX-61	4F-4B	R2H16	1	00311	1	2	00216	1	1	00311	1			1	00712	2	1	00311	1					2	00586	1	1	00311	1				1	00216	2	1	00311	1					

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@sts.in		IPU.2107B/3	REVISION	C.R.	TITLE: R2 RACK CONTACT ANALYSIS (ROW-J)			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA	
					JE/Drg										
					SE/SSE/Drg										
					ASTE/D										
					SSTE/P & P										
					f CSTE										
00	16.07.15	PR	RS	RSS	ASMADE		CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012	REF.SIG.PLAN.No.	द म रेलवे आरेख सं	S.C.RLY.DRG.NO	बि B		SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION			IPU.2107B/3			00756	00065	CONT'D ON:	00757	

RELAY				COILS		CONTACTS																																				
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8					
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B					
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W			
1LA_TPR	QNA1	8F-8B	R2K4	1	00502	1	1	00502	2				2	00502	2																			1	00502	2						
OMA_TPR	QNA1	8F-8B	R2K10	1	00502	1	1	00502	2				2	00502	2																				1	00502	2					
2LA_TPR	QNA1	8F-8B	R2K16	1	00502	1	1	00502	2				2	00502	2																					1	00502	2				
1LB_1LC_TPR	QN1	8F-8B	R2K5	1	00502	1	1	00502	1				2	00502	2																					1	00502	1				
OMB_OMC_TPR	QN1	8F-8B	R2K11	1	00502	1	1	00502	1				2	00502	2																					1	00502	1				
2LB_2LC_TPR	QN1	8F-8B	R2K17	1	00502	1	1	00502	1				2	00502	2																					1	00502	1				

RELAY			COILS		CONTACTS																																									
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8									
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	A	B					F	A	A	B					F	A	A	B					F	A	A	B													
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W							
1LB_TR	UTA2	4F-2B	R2K7	1	00502	1	1	00502	1					2	00502	2																					1	00502	1							
1LC_TR	UTA2	4F-2B	R2K8	1	00502	1	1	00502	1					2	00502	2																							1	00502	1					
OMB_TR	UTA2	4F-2B	R2K13	1	00502	1	1	00502	1					2	00502	2																									1	00502	1			
OMC_TR	UTA2	4F-2B	R2K14	1	00502	1	1	00502	1					2	00502	2																									1	00502	1			
2LB_TR	UTA2	4F-2B	R2K19	1	00502	1	1	00502	1					2	00502	2																									1	00502	1			
2LC_TR	UTA2	4F-2B	R2K20	1	00502	1	1	00502	1					2	00502	2																									1	00502	1			

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781, 82, 83 E-mail : info@tsts.in		IPU.2107B/3	REVISION	CHK.	TITLE: R3 RACK CONTACT ANALYSIS (ROW-F & G)			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS	
								JE/Drg							
								SE/SSE/Drg							
								ASTE/D							
								SSTE/P & P							
								f CSTE							
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		REF.SIG.PLAN.NO.	द म रेलवे आरेव सं	बि B			S.C.RLY.DRG.NO		
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION			IPU.2107B/3							
								शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00758		SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		
								00757	00065				(MISROLOK II) MADM STANDBY		

RELAY			COILS		CONTACTS																																												
TITLE	STYLE		POSITION			A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8												
	TYPE	CONTACTS CONFIG.		R1	R2	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B	F	A	F	A	A	B	A	B												
				W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W	W	SH	W										
TAC_GDE_RSTR	QNA1	8F-8B	R3G19	1	00584	1	2	00584	1	1	00583	1			1	00585	2	1	00582	1	1	00584	1				1	00582	1	1	00584	1				1	00713	2	1	00583	1								
TAC_GDE_RSTSR	QNA1	8F-8B	R3G20	1	00584	2	1	00584	1					1	00585	1																			1	00713	2	1	00584	1									
1A_TPR	QSPA1	8F-4B	R3H1	1	00501	1	2	00213	1																												1	00213	2	1	00713	2							
1TPR	QSPA1	8F-4B	R3H2	1	00501	1	2	00213	1																														1	00213	2								
7A_TPR	QNA1	8F-4B	R3H4	1	00501	1	2	00213	1																													1	00213	2	1	00713	2						
7B_TPR	QNA1	8F-4B	R3H5	1	00501	1	2	00213	1																												1	00213	2	1	00713	2							
8A_TPR	QNA1	8F-4B	R3H7	1	00501	1	2	00213	1																											1	00213	2	1	00713	2								
8B_TPR	QNA1	8F-4B	R3H8	1	00501	1	2	00213	1																											1	00213	2	1	00713	2								
15TPR	QSPA1	8F-4B	R3H10	1	00501	1	2	00213	1																																	1	00579	1					
20A_TPR	QSPA1	8F-4B	R3H11	1	00501	1	2	00219	1																																	1	00219	2	1	00713	2		
20TPR	QSPA1	8F-4B	R3H13	1	00501	1	2	00219	1																																1	00219	2	1	00713	2			
6TPR	QSPA1	8F-4B	R3H14	1	00501	1	2	00219	1																																	1	00219	2	1	00713	2		
13A_TPR	QNA1	8F-4B	R3H16	1	00501	1	2	00219	1																																	1	00219	2	1	00713	2		
13B_TPR	QNA1	8F-4B	R3H17	1	00501	1	2	00219	1																																	1	00219	2	1	00713	2		
14A_TPR	QNA1	8F-4B	R3H19	1	00501	1	2	00219	1																																	1	00219	2	1	00713	2		
14B_TPR	QNA1	8F-4B	R3H20	1	00501	1	2	00219	1																																	1	00219	2	1	00713	2		
1L_TPR	QSPA1	8F-4B	R3J1	1	00502	1	2	00220	1																																	1	00220	2	1	00713	2		
0M_TPR	QSPA1	8F-4B	R3J2	1	00502	1	2	00219	1																																	1	00219	2	1	00713	2		
2L_TPR	QSPA1	8F-4B	R3J4	1	00502	1	2	00220	1																																	1	00220	2	1	00713	2		
ATP_ASCR	QN1	8F-8B	R3J7	1	00581	1	2	00214	1																																	1	00214	2	1	00713	2		
GDE_ASCR	QN1	8F-8B	R3J8	1	00586	1	2	00214	1																																	1	00214	2	1	00713	2		
12LXCR	QNA1	8F-8B	R3J11	1	00550	1	2	00218	1																																	1	00218	2	1	00713	2		

					TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in		IPU.2107B/3	REVISION	C.R. AP.	TITLE: R3 RACK CONTACT ANALYSIS (ROW-H & J)			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS
					JE/Drg				ताटिचेर्ला TATICHERLA				
					SE/SSE/Drg								
					ASTE/D	REF.SIG.PLAN.NO.	द म रेलवे आरेख सं	बि B					
					SSTE/P & P	IPU.2107B/3	S.C.RLY.DRG.NO						
					f CSTE	शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00759				
					00758	00065							
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012						SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL	
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION								

						 TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781,82,83 E-mail : info@tsts.in		IPU.2107B/3	REVISION	C.R. APP.	TITLE: R3 RACK CONTACT ANALYSIS (ROW-J & K)			SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA
								JE/Drg						
							SE/SSE/Drg							
							ASTE/D							
							SSTE/P & P							
							f CSTE							
								REF.SIG.PLAN.No.	द म रेलवे आग्रह सं	S.C.RLY.DRG.NO	बि B			
00	16.07.15	PR	RS	RSS	ASMADE		IPU.2107B/3							
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		शीट SHEET	कुल शीट SHEETS	CONT'D ON:	00760	SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL		

			COILS		CONTACTS						
TITLE	CONTACTS	POSITION	A1	A2	18	15	16	28	25	26	
					F	A	B	F	A	B	
			W	SH	W	SH	W	SH	W	SH	W
A TIMER	2F/B	M1D1									
			1	00580	2	00580	2	00580	2	00580	
B TIMER	2F/B	M1D2									
			1	00580	2	00580	2	00580	2	00580	

						 <p>TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781, 82, 83 E-mail : info@tsts.in</p>		IPU.2107B/3	REVISION	CHK.	TITLE: MLK RACK CONTACT ANALYSIS			सिंगल व दूर संचार SIGNAL & TELECOMMUNICATIONS ताटिचेर्ला TATICHERLA		
								JE/Drg								
								SE/SSE/Drg								
								ASTE/D								
								SSTE/P & P								
								f CSTE								
00	16.07.15	PR	RS	RSS	ASMADE	CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012		REF.SIG.PLAN.NO.	द म रेलवे आरेख सं	ि B			SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL			
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION			IPU.2107B/3	S.C.RLY.DRG.NO				CONT'D ON:	00761		
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						<p> TVM Signalling & Transportation Systems Pvt. Ltd. #610, "NARAYANA", 1st Floor, 15th Cross, 100 Feet Road, J.P.Nagar, 6th Phase, Bengaluru - 560 078 Tel: +91 80 2654 0781, 82, 83 E-mail : info@tsts.in</p>		CH.	IPU.2107B/3	REVISION	APP.	TITLE: MLK RACK CONTACT ANALYSIS			सिग्नल व दूर संचार SIGNAL & TELECOMMUNICATIONS	
									JE/Drg	ताटिचेर्ला TATICHERLA						
									SE/SSE/Drg							
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00	16.07.15	PR	RS	RSS	ASMADE	<p>CONTRACT No:06/S&T/01/2012 Dtd:23.04.2012</p>			REF.SIG.PLAN.NO.	द म रेलवे आरेख सं	बि B		<p>SOUTH CENTRAL RAILWAY DIVISION: GUNTAKAL</p>			
REV	DATE	DESIGNED	CHECKED	APPROVED	MODIFICATION				IPU.2107B/3	S.C.RLY.DRG.NO.	शीट SHEET	कुल शीट SHEETS	CONT'D ON:			
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