

APTRANS CO
Vidyut Soudha
Hyderabad
500082

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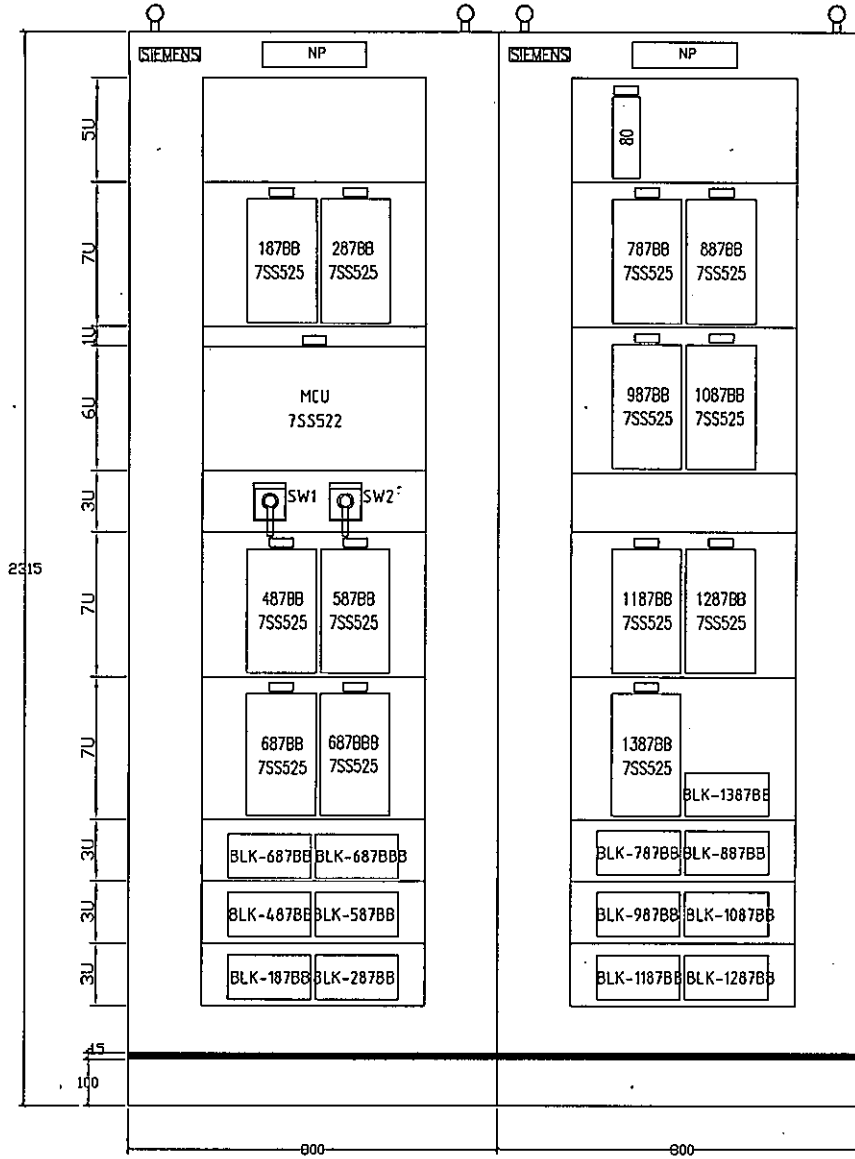
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A	REVISED	06.09.11	SH	Appr.
				MS

Date: 12.08.11
Client: APTRANS CO
Substation Name: 220/132KV ERRAGADDA
Contractor: SIEMENS LTD.
Rep./Ref. etc.

SIEMENS

220KV BUSBAR
FRONT VIEW
Circuit Diagram

Sales Reference No.: 3002660707
Project Name: 220/132KV ERRAGADDA
Revision-A
(4)G719EA-BG9141-F200
Page 01/03



ITEM. NO.		ITEM. NO.	
PANEL TYPE	=200RA	PANEL TYPE	=200RB
NAME PLATE	PROTECTION PANEL 220KV BUS BAR	NAME PLATE	PROTECTION PANEL 220KV BUS BAR

Standardised Drawings for 220 kV Busbar panel with BCU for
GISS (M/s. Siemens Ltd. make) (4) G719EA-BG9141-F200 (1-3)
Revision-A
STD/DWG/Approval No. 261.3 Revision No. 0
Prepared & Approved during January - 2012

RELAY REF.	DESCRIPTION	TYPE	MAKE
MCU	MASTER CONTROL UNIT	7SS522	SIEMENS
SW1, SW2	BUS-1/2 IN-OUT RELAY	-	SWITRON
187BB, 287BB, 487BB, 587BB, 687BB, 887BB	BUSBAR BAY UNITS	7SS525	SIEMENS
BLK-187BB	TEST BLOCK FOR 187BB RELAY	MPG	AREVA
BLK-287BB	TEST BLOCK FOR 287BB RELAY	MPG	AREVA
BLK-487BB	TEST BLOCK FOR 487BB RELAY	MPG	AREVA
BLK-587BB	TEST BLOCK FOR 587BB RELAY	MPG	AREVA
BLK-687BB	TEST BLOCK FOR 687BB RELAY	MPG	AREVA
BLK-887BB	TEST BLOCK FOR 887BB RELAY	MPG	AREVA

RELAY REF.	DESCRIPTION	TYPE	MAKE
80	DC SUPVN RELAY	AR121T3	EASUN
787BB, 887BB, 987BB, 1087BB, 1187BB, 1287BB, 1387BB	BUSBAR BAY UNITS	7SS525	SIEMENS
BLK-787BB	TEST BLOCK FOR 787BB RELAY	MPG	AREVA
BLK-887BB	TEST BLOCK FOR 887BB RELAY	MPG	AREVA
BLK-987BB	TEST BLOCK FOR 987BB RELAY	MPG	AREVA
BLK-1087BB	TEST BLOCK FOR 1087BB RELAY	MPG	AREVA
BLK-1187BB	TEST BLOCK FOR 1187BB RELAY	MPG	AREVA
BLK-1287BB	TEST BLOCK FOR 1287BB RELAY	MPG	AREVA
BLK-1387BB	TEST BLOCK FOR 1387BB RELAY	MPG	AREVA

SI NO	SUBSTATION	QTY	BAY NO
1	ERRAGADDA	1	200
2	OSHANIYA UNIVERSITY	1	200

NOTE: THIS DRAWING IS ALSO APPLICABLE FOR OSHANIA UNIVERSITY.

NOTE: THIS DRAWING IS ALSO APPLICABLE FOR OSHANIA UNIVERSITY.

Chief Engineer / Construction-1
APTRANS CO, Vidyut Soudha,
Hyderabad - 500082.

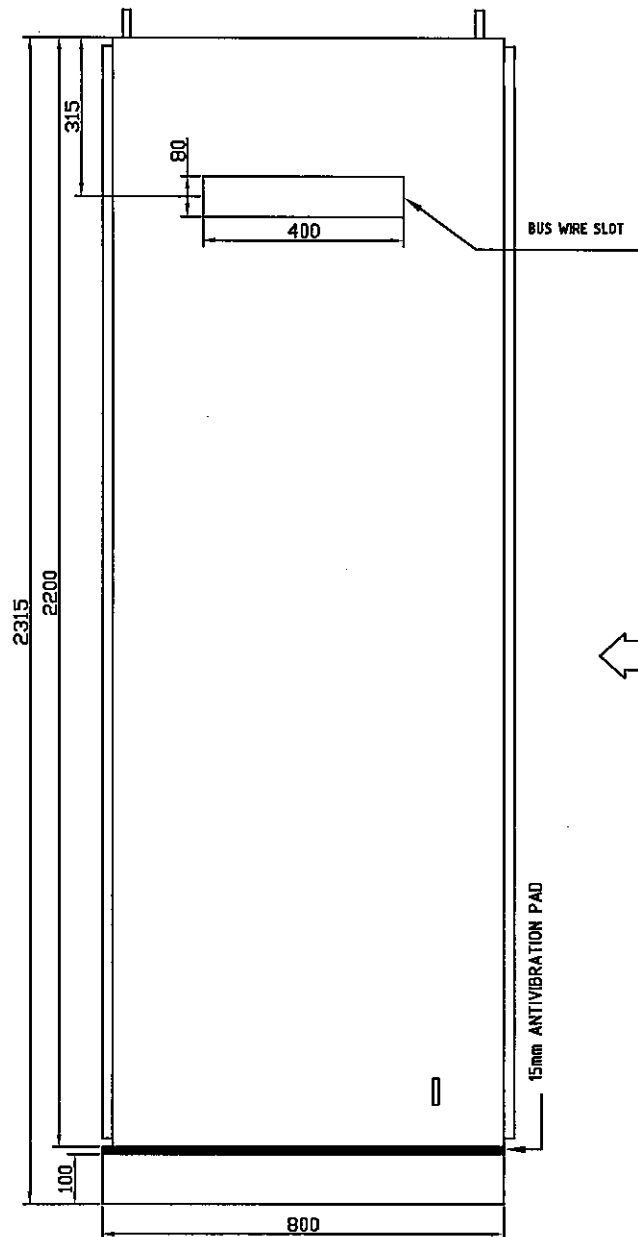
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A	REVISED	06.09.11	SM	Appr.	MS	Substation Name: 220/132KV ERRAGADDA Contractor: SIEMENS LTD.	Project Name: 220/132KV ERRAGADDA		=200	
					Repl./Ref./etc.	Circuit Diagram	Revision-A		(4)G719EA-BG9141-F200	

FRONT VIEW



REAR VIEW

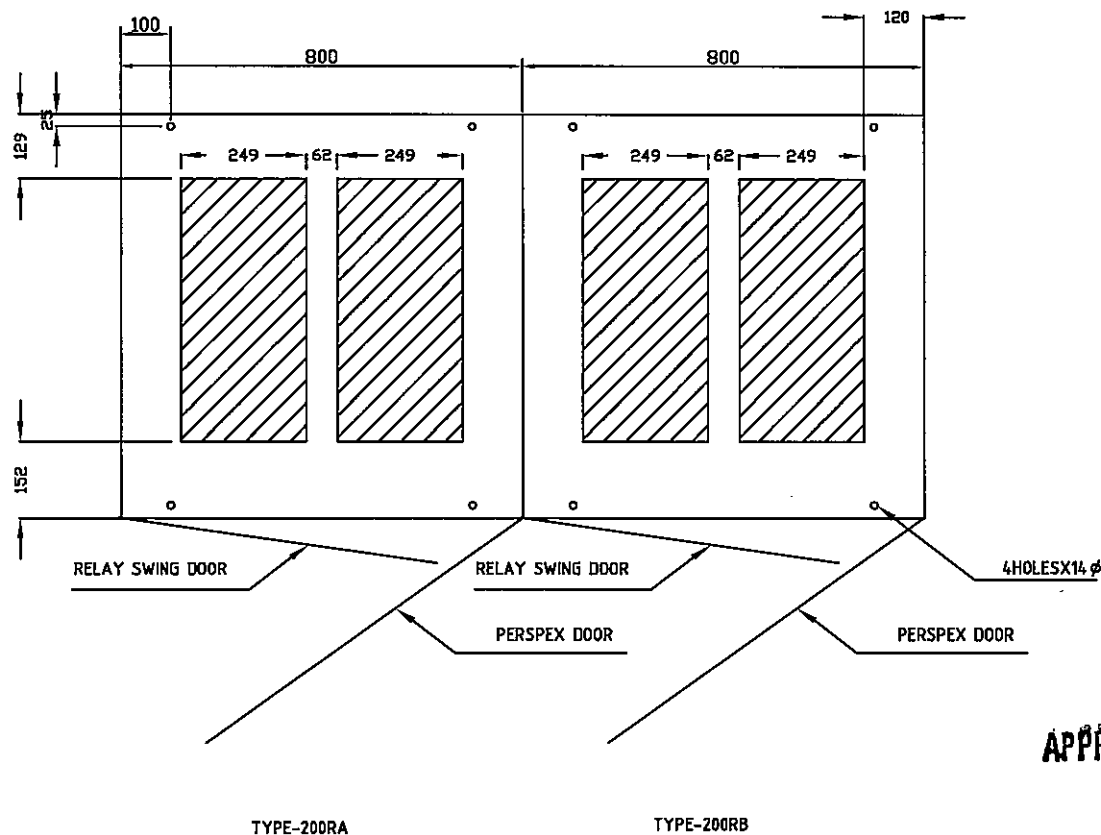
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18/11/2011
 CHIEF ENGINEER / CONSTRUCTION-6
 APTRANSCO/VIDYUTH SOUDHARMO.

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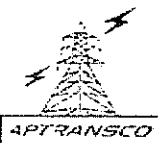
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 CHIEF ENGINEER / CONSTRUCTION
 APTRANSCO/VIDYUTH SOUDHA

Note:
 ALL DIMENSION
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Version	Remarks	Date	Name	Norm.	Client: APTRANSCO Substation Name: 220/132KV ERRAGADDA Contractor: SIEMENS LTD. Repl./Ref./etc.	SIEMENS 220KV BUSBAR FOUNDATION DETAILS Circuit Diagram	Sales Reference No.: 3002660707 Project Name: 220/132KV ERRAGADDA Revision-A	CKT 220KV BUSBAR =200 (4)G719EA-BG9141-F200	Page.03/03
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220 BUSBAR PANEL FOR 2 BUS SYSTEM (12 BAYS)

[illegible]

Standardised Drawings for 220 kV Busbar panel **with BCU for GISS (M/s.Siemens Ltd. make)** (4) G719EA-BG9141-E200-A (RA 1-2) Revision-A

STD/DWG/Approval No. **261.3** Revision No. 0

Prepared & Approved during January - 2012

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[Signature]

CHIEF ENGINEER / CONSTRUCTION-1

APTRANSO/WOYUTH SQUADRA/HND.

220V BUSBAR PANEL FOR 2 BUS SYSTEM (12 BAYS)

1	2	3	4	5	6	7	8
Fun. Ref	Description	Specification	Dis	Make	Type	Qty/ Panel	
INTERNALLY MOUNTED EQUIPMENTS							
HT	Space heater	100W,240V AC	1	APT		1	
HTS	ON/OFF switch	15 A	1	CONTROL Anchor		1	
PsandPSS	Power socket with ON/OFF Switch	5/15A, 3Pin	1	Anchor		1	
TH	Thermostat	30-90 deg cent	1	APT CONTROL		1	
CILS	Cubicle door operated switch	Limit Switch(1No+2NC) -3SE30230A	1	SIEMENS		1	
CFL	Compact Flourescent Lamp	240 V AC, 18W	1	Phillips		1	
F-11	DC MCB Double Pole Aux contact:1NC	16A, 220V DC	3	SIEMENS		2	
F-12,F-13,F-14,F-15 F-16,F-17,F-18	DC MCB Double Pole Aux contact:1NC	4A, 220V DC	3	SIEMENS		7	
F-31	AC MCB Single Pole & Neutral Aux contact:1NC	16A, 240V AC	3	SIEMENS		1	
Fuse	Control fuses with fuse carrier and holder	4A 3NW20NNSF+3NWNS4	1	SIEMENS		AS PER REQUIREMENT	
LK	Link Base + Link	Links 3NW20NNSF+3NWNS4	1	SIEMENS		AS PER REQUIREMENT	
	FO Cables for Bus Bar Protection Bay Unit 187BB	CABLE TYPE: MULTIMODE DUPLEX, 1300nm, GLASS FIBRE, 62.5/125µm, CONNECTOR: ST-ST; LOSS: <0.2dB LENGTH: 3m LENGTH: 5m				6 7	
Dis: 1- W Stock, 2- W Non stock, 3- Boughtouts, 4- Project Supply, 5- Loose Supply							
	Date	12.08.11	PROJECT: 220/132kV ERRAGADDA	SIEMENS		SALES REF:3002660707	
	Created	MC	CLIENT:APTRANSCO				
A	REVISED	06.09.11	SM	Appr.	MS	CIRCUIT:220kV BUSBAR	
Rev.	Remarks	Date	Name	Norm	Orig./Repl./Replby		
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						4	
						5	
						6	
						7	
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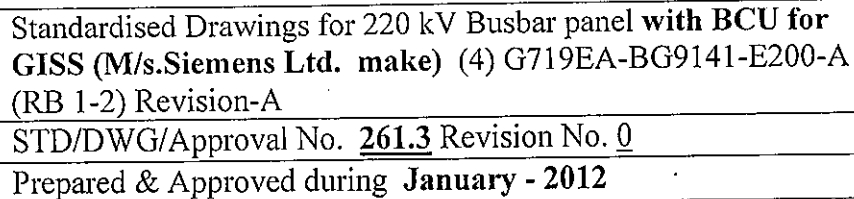
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CHIEF ENGINEER / CONSTRUCTION-1
APTRANSCO/VIDYUTH SOUDHA/HYD.

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CHIEF ENGINEER / CONSTRUCTION-1

220

A

CHIEF ENGINEER / CONSTRUCTION-
APTRANSCO/VIDYUTH SOUDHA/HYD.

220 BUSBAR PANEL FOR 2 BUS SYSTEM (12 BAYS)

1	2	3	4	5	6	7	8
Fun. Ref	Description	Specification	Dis	Make	Type	Qty/ Panel	
INTERNALLY MOUNTED EQUIPMENTS							
HT	Space heater	100W,240V AC	1	APT		1	
HTS	ON/OFF switch	15 A	1	CONTROL Anchor		1	
PsandPSS	Power socket with ON/OFF Switch	5/15A, 3Pin	1	Anchor		1	
TH	Thermostat	30-90 deg cent	1	APT CONTROL		1	
CILS	Cubicle door operated switch	Limit Switch(1No+2NC) -3SE30230A	1	SIEMENS		1	
CFL	Compact Flourescent Lamp	240 V AC, 18W	1	Phillps		1	
F-22,F-23,F-24 F-25,F-26,F-21,F-27	DC MCB Double Pole Aux contact:1NC	4A, 220V DC	3	SIEMENS		7	
F-32	AC MCB Single Pole & Neutral Aux contact:1NC	16A, 240V AC	3	SIEMENS		1	
Fuse	Control fuses with fuse carrier and holder	4A 3NW20NNSF+3NWNS4	1	SIEMENS		AS PER REQUIREMENT	
LK	Link Base + Link	Links 3NW20NNSF+3NWNS4	1	SIEMENS		AS PER REQUIREMENT	
	FO Cables for Bus Bar Protection Bay Unit 187BB	CABLE TYPE: MULTIMODE DUPLEX, 1300nM, GLASS FIBRE, 62.5/125µM, CONNECTOR: ST-ST; LOSS: <0.2dB LENGTH: 3m LENGTH: 5m				6 7	
Dis: 1- W Stock, 2- W Non stock, 3- Boughtouts, 4- Project Supply, 5- Loose Supply							
		Date Created 12.08.11 MC	PROJECT: 220/132kV ERRAGADDA CLIENT:APTRANSCO		SALES REF:3002660707		
A	REVISED	06.09.11	SM	Appr.	MS		
Rev.	Remarks	Date	Name	Norm	Orig./Repl./Reply		
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1	2	3	4	5	6	7	

SIEMENS

EQUIPMENT LIST FOR 200RB

REV-A

(4)-G719EA-BG9141-E200-A

Sheet 2+
2Sh.

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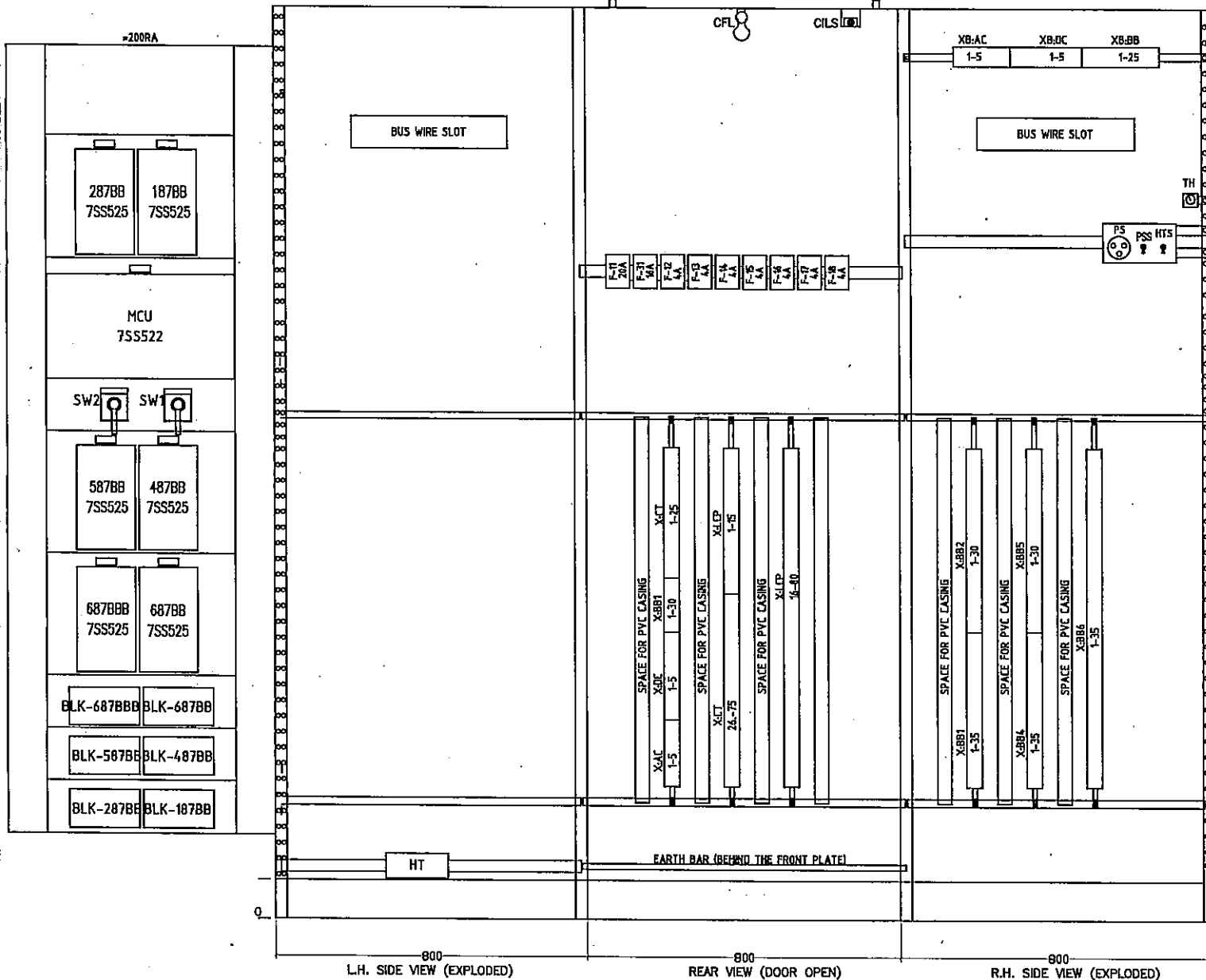
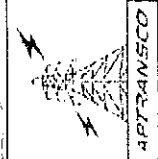
CHIEF ENGINEER / CONSTRUCTION-4
APTRANSCO/VIDYUTH SOUDHA/HYD.

Standardised Drawings for 220 kV Busbar panel with BCU for GISS (M/s.Siemens Ltd. make) (4) G719EA-BG9141-V200(1-2)

Revision-A

STD/DWG/Approval No. 261.3 Revision No. 0

Prepared & Approved during January - 2012



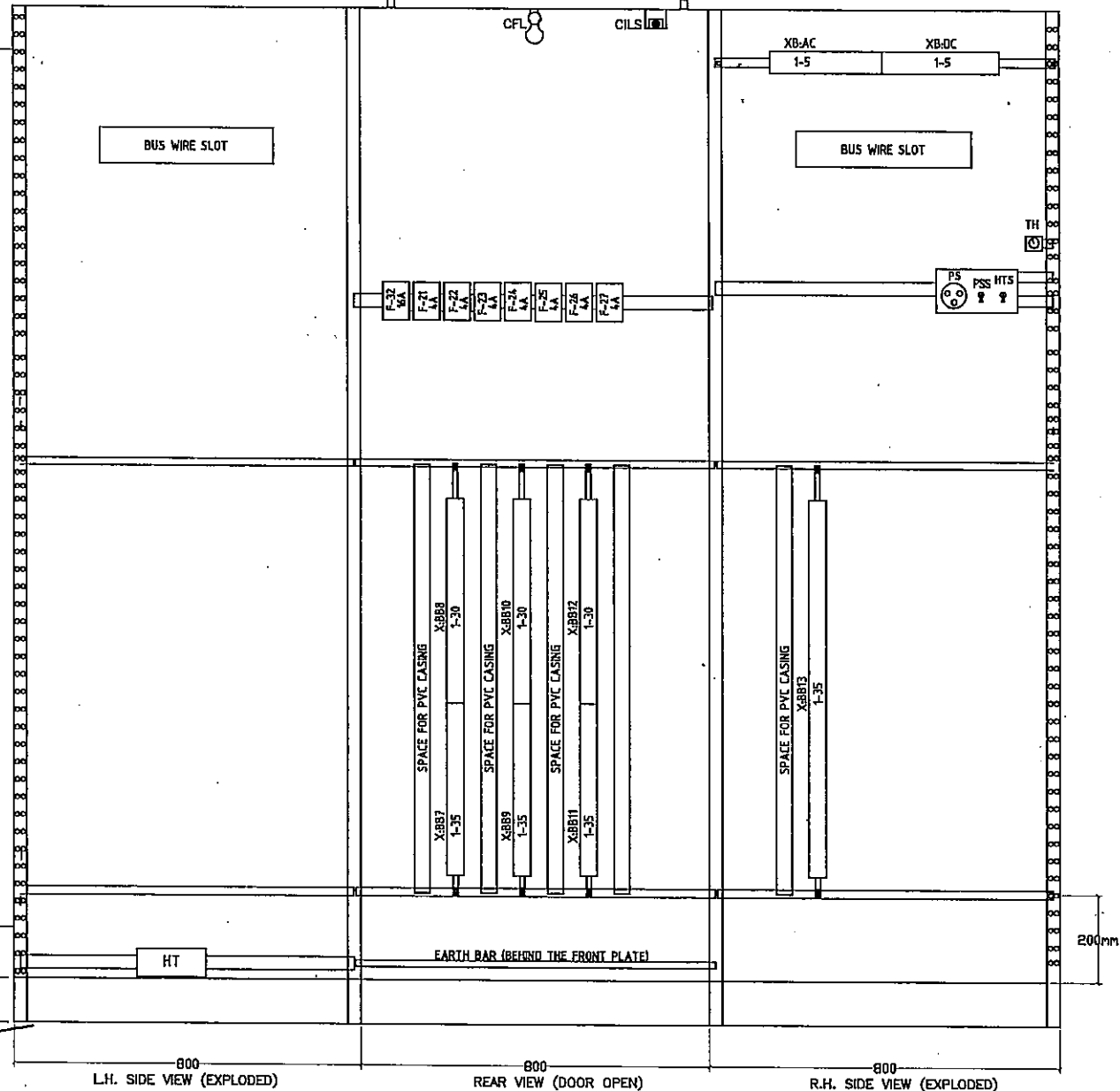
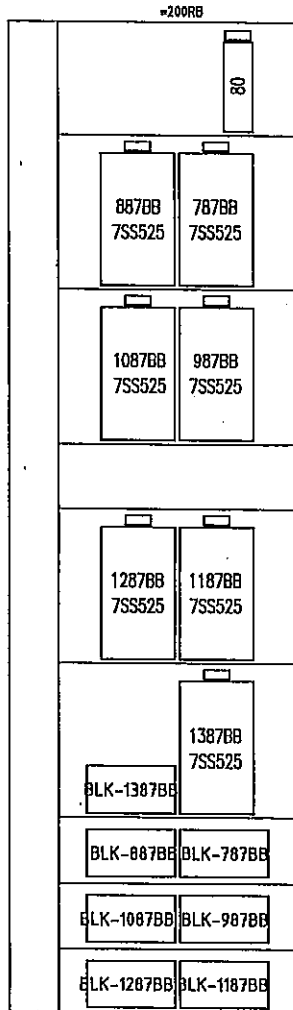
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CHIEF ENGINEER CONSTRUCTION-1
 APTRANSCO, IDIYUTH SOUDHA/HYD.

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####	####	####	####	Drawn	MC	Substation Name: 220/132KV ERRAGADDA	INTERNAL VIEW-RA	Project Name: 220/132KV ERRAGADDA		n200	
A	Revised	11.11.09	KRK	Appr.	MS	Contractor: SIEMENS LTD.		Revision----		(4)G719EA-BG9141-V200	
Version	Remarks	Date	Name	Norm.		Rep./Ref./etc.	Circuit Diagram				

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CHIEF ENGINEER / CONSTRUCTION
APTRANSCO/VIDYUTH SOUDHA/HYD



####	####	####	####	Date	07.10.11	Client: APTRANSCO	220KV BUSBAR	Sales Reference No.: 3002660707	CKT	220KV BUSBAR	Page.02/02
####	####	####	####	Drawn	MC	Substation Name: 220/132KV ERRAGADDA	INTERNAL VIEW-RB	Project Name: 220/132KV ERRAGADDA		=200	
A	Revised	11.11.09	KRK	Appr.	MS	Contractor: SIEMENS LTD.		Revision----		(4)G719EA-BG9141-V200	
Version	Remarks	Date	Name	Norm.		Rep./Ref./etc.	Circuit Diagram				

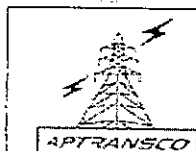
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Sheet Number	Sheet Title	Revision
00	LIST OF DRAWING SHEETS	A
01	LIST OF REFERENCE DRAWINGS	A
02	LEGENDS	A
03	SYSTEM SLD	A
04	DC DISTRIBUTION CIRCUIT	A
05	AC DISTRIBUTION CIRCUIT	A
06	CIRCUIT FOR MCU	A
07	FO CONNECTION TO MCU RELAY CIRCUIT	A
08	BINARY INPUT CIRCUIT FOR MCU	A
09	CIRCUIT FOR 187BB RELAY	A
10	CIRCUIT FOR 287BB RELAY	A
11	CIRCUIT FOR 487BB RELAY	A
12	CIRCUIT FOR 587BB RELAY	A
13	CIRCUIT FOR 687BB RELAY	A
14	CIRCUIT FOR 687BBB RELAY	A
15	CIRCUIT FOR 787BB RELAY	A
16	CIRCUIT FOR 887BB RELAY	A
17	CIRCUIT FOR 987BB RELAY	A
18	CIRCUIT FOR 1087BB RELAY	A
19	CIRCUIT FOR 1187BB RELAY	A
20	CIRCUIT FOR 1287BB RELAY	A
21	CIRCUIT FOR 1387BB RELAY	A
22	SWITCH & BLOCK CONTACT DISTRIBUTION	A
23	SWITCH & BLOCK CONTACT DISTRIBUTION	A



Standardised Drawings for 220 kV Busbar panel with BCU for
 GISS (M/s.Siemens Ltd. make) (4) G719EA-BG9141-W200-A
 (0-23) Revision-A

STD/DWG/Approval No. 261.3 Revision No. 0

Prepared & Approved during **January - 2012**

APPROVED FOR TURNKEY PROJECTS

[Signature]

**CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.**

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Remarks									Substation Name:	220/132KV ERRAGADDA			Project Name: 220/132KV ERRAGADDA			=200	
									Contractor:	SIEMENS LTD.	Circuit Diagram		Revision-A		(4)G719EA-BG9141-W200-A		
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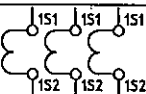
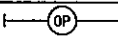
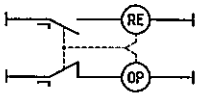
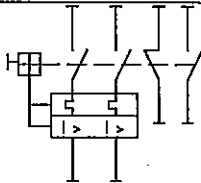
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CHIEF ENGINEER / CONSTRUCTION

APTRANSO/VIDYUTH SOUNDERARAJU

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SYMBOLS & DESCRIPTION	
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LINK	
DISCONNECTING TERMINAL	
NON DISCONNECTING TERMINAL	
TERMINALS	
RELAY TEST BLOCK	
CURRENT COIL	
VOLTAGE COIL	
LATCHED CONTACT-NO	
UNLATCHED CONTACT-NO	
LATCHED CONTACT-NC	
UNLATCHED CONTACT-NC	
SPACE HEATER	
FLUORESCENT LAMP	
BELL	
HOOTER	
PUSH BUTTON	
STABILIZING RESISTOR	
VARIATOR	

SYMBOLS & DESCRIPTION			
			
SWITCH CONTACT			
			
POWER SOCKET			
			
CURRENT TRANSFORMER SECONDARY			
			
OPERATING COIL			
			
OPERATING/RESET COIL			
			
MCB			
XX		SIPROTEC DESCRIPTION	XX
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CHIEF ENGINEER APTRANS/CO/V			

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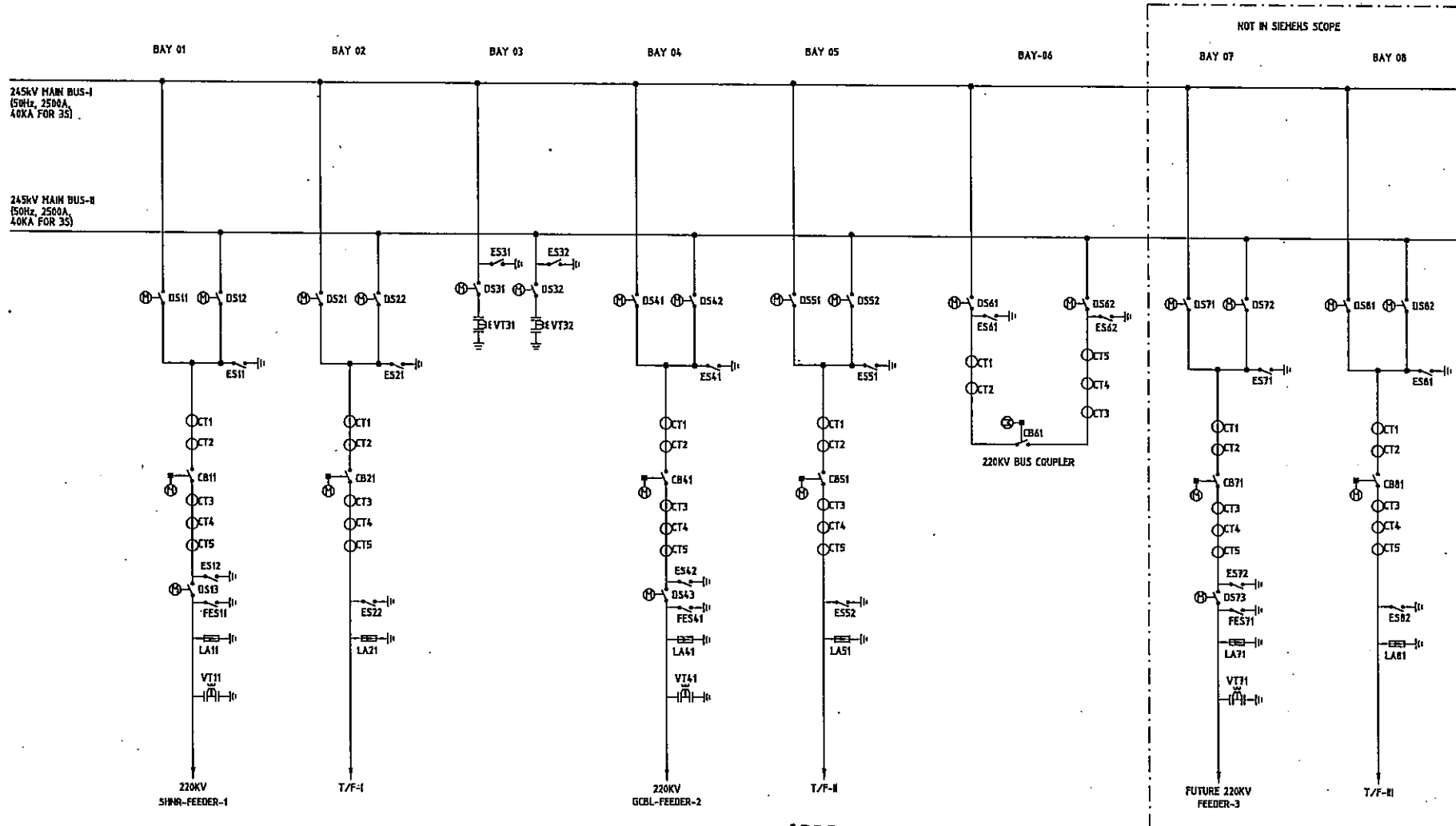
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X:DC1
DIRECT CURRENT-1
X:DC2
DIRECT CURRENT-2
X:CB
CIRCUIT BREAKER
X:CB-T1
CIRCUIT BREAKER FOR TRIP COIL-01
X:CB-T2
CIRCUIT BREAKER FOR TRIP COIL-02
X:CT
CT INPUT
X:VT
VT INPUT
X:IS-01
ISOLATOR-01
X:IS-02
ISOLATOR-02
X:IS-09
ISOLATOR-09
X:LCP
LCP PANEL
X:PLCC-1
POWER LINE CARRIER COMMUNICATION-1
X:PLCC-2
POWER LINE CARRIER COMMUNICATION-2
X:PLCC-3
POWER LINE CARRIER COMMUNICATION-3
X:RT
REACTOR
X:TRF
TRANSFORMER
X:ES-Q8
EARTH SWITCH-Q8
XB:DC
BUS WIRING INCOMING DC
XB:BB
BUS WIRING FROM/TO BB
X:BB
BUS WIRING /CABLE FROM/TO BB

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CHIEF ENGINEER CONSTRUCTION-1
APTRANSCO/VIDYUTH SODHA/HYO

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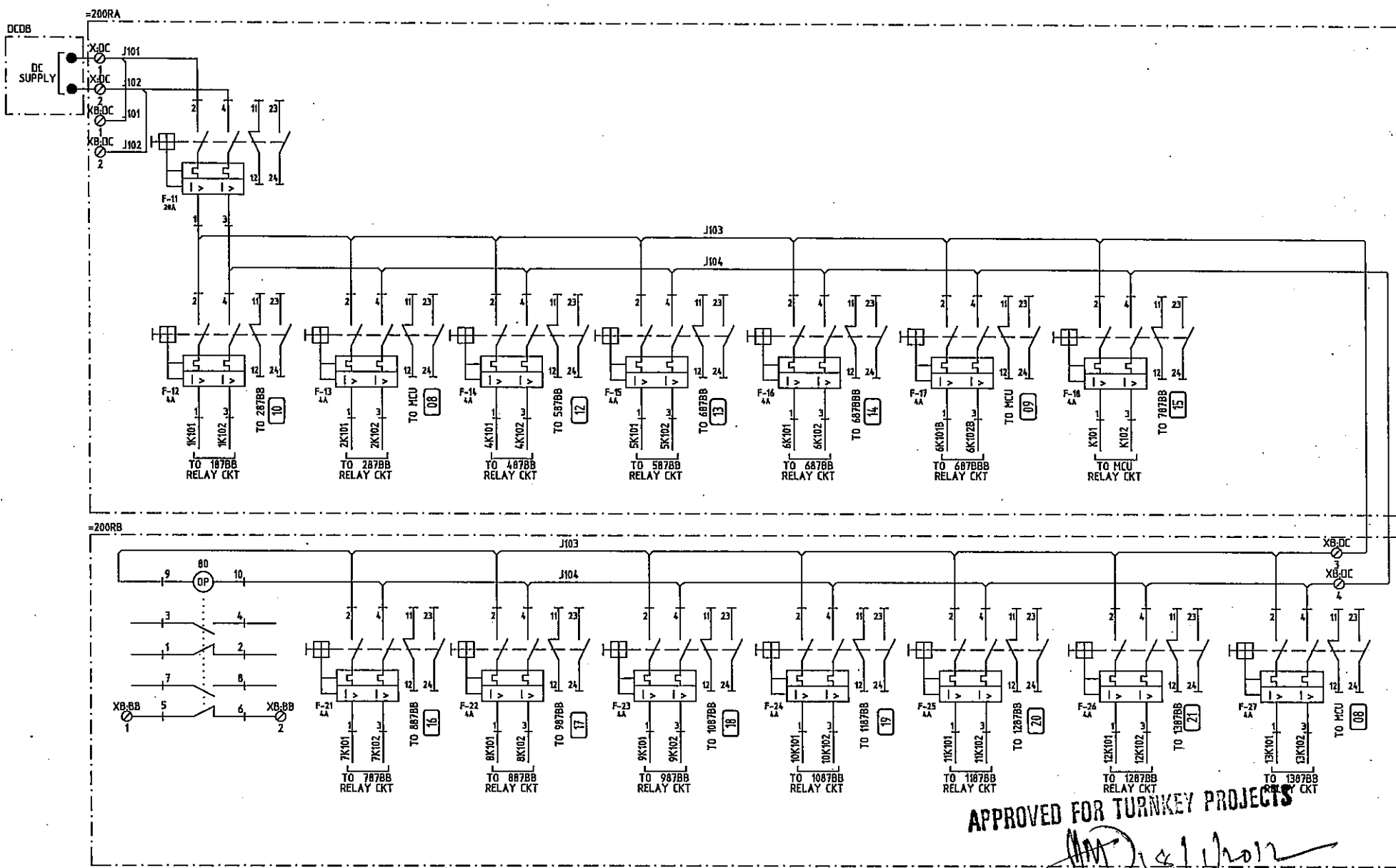


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[Signature]
 CHIEF ENGINEER / CONSTRUCTION
 APTRANSCO/VIDYUTH SODHA/HYDRA

Version		Remarks	Date	Name	Norm.	Client: APTRANSCO		220KV BUSBAR SYSTEM SLD		Sales Reference No.: XXXX		CKT	220KV BUSBAR	Page: 03/23
A		REVISED	06.09.11	SM	Appr.	Substation Name: 220/132KV ERRAGADDA		SYSTEM SLD		Project Name: 220/132KV ERRAGADDA		=200		
						Contractor: SIEMENS LTD.		Circuit Diagram		Revision: A		(4)G719EA-BG9141-W200-A		
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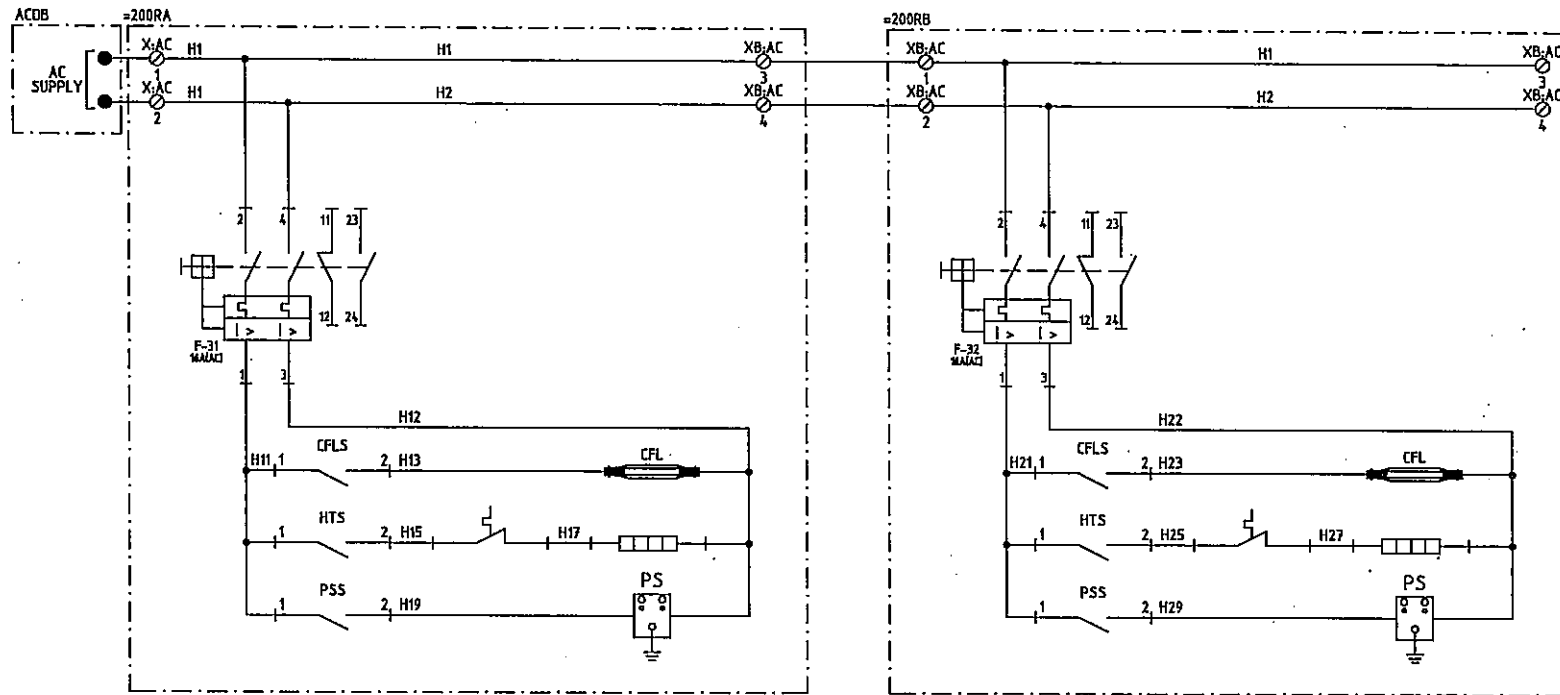
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 APTRANS/VIDYUTH SOUDHA/HYD.

Version		Remarks	Date	Name	Norm.	Client: APTRANS		220KV BUSBAR		Sales Reference No.: XXXX		CKT	220KV BUSBAR	Page 04/23
A		REVISED	06.09.11	SM	Appr.	Substation Name: 220/132KV ERRAGADDA		DC DISTRIBUTION CIRCUIT		Project Name: 220/132KV ERRAGADDA		=200		
						Contractor: SIEMENS LTD.		Circuit Diagram		Revision-A		(4)G719EA-8G9141-W200-A		
						Rev./Ref./etc.								

AC Distribution BUS
 Version: 1.0
 File Name: 220/132KV BUS BAR SCHEMATIC DISTRIBUTION CIRCUIT.DWG
 File Size: 10.2KB

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 Created Date: 12.10.2011
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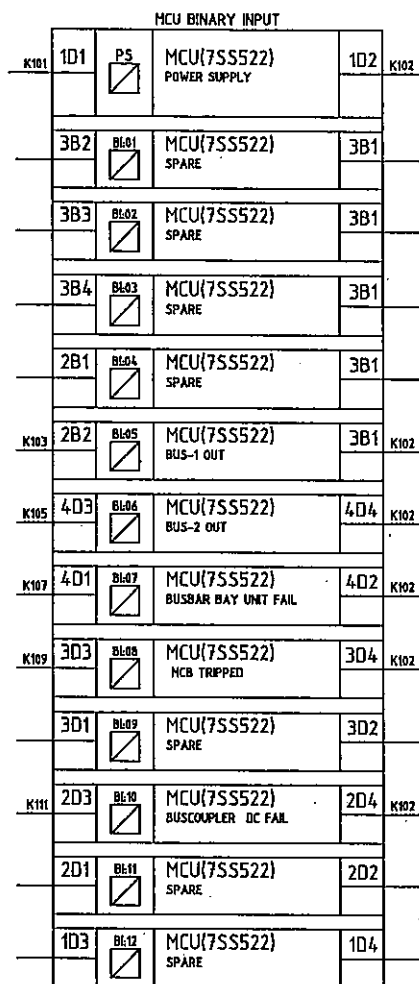


APPROVED FOR TURNKEY PROJECTS

CHIEF ENGINEER / CONSTRUCTION
 APTRANSCO/VIDYUTH SOUDHA

				Date	12.08.11	Client: APTRANSCO	SIEMENS	220KV BUSBAR	Sales Reference No: XXXX	CKT	220KV BUSBAR	Page.05/23
				Drawn	MC	Substation Name: 220/132KV ERRAGA00DA		AC DISTRIBUTION CIRCUIT	Project Name: 220/132KV ERRAGA00DA		=200	
A	REVISED	06.09.11	SM	Appr.	MS	Contractor: SIEMENS LTD.						
Version	Remarks	Date	Name	Norm.		Ref./Rev./etc.		Circuit Diagram	Revision-A	(41G719EA-BG9141-W200-A)		

200RA

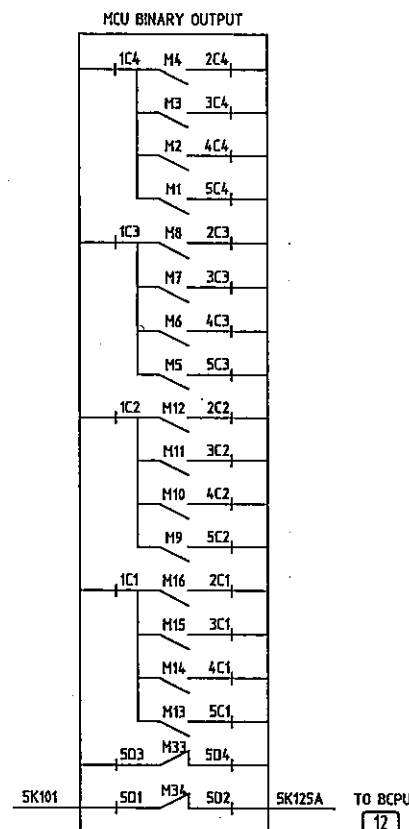


TO BINARY INPUT CIRCUIT (PS)

08

TO BINARY INPUT CIRCUIT

08



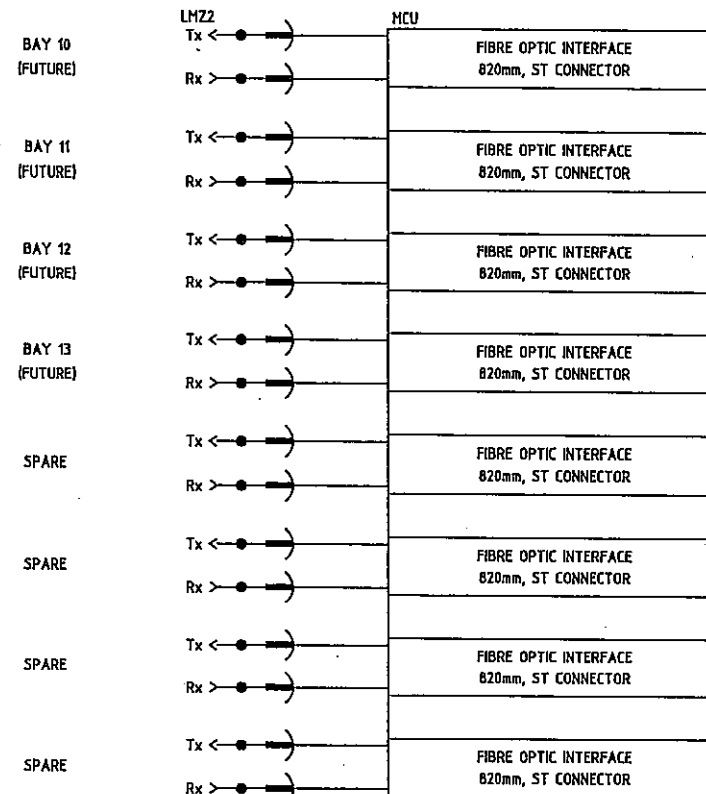
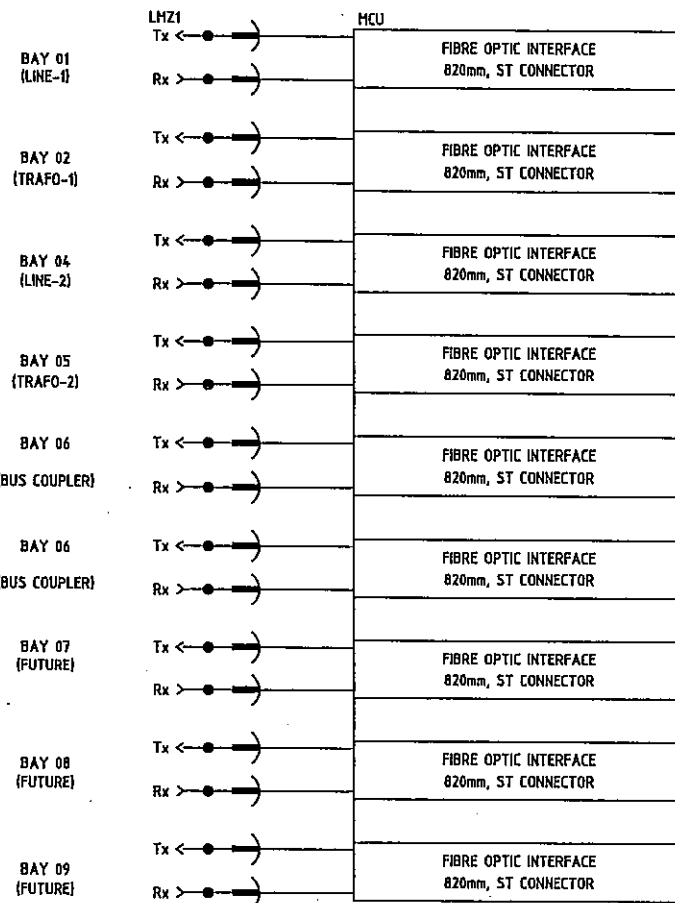
APPROVED FOR TURNKEY PROJECTS

[Signature]

CHIEF ENGINEER / CONSTRUCTION-I
APTRANSCO/VIDYUTH SOUDHA/HYD.

				Date	12.08.11	Client: APTRANSCO		220KV BUSBAR	Sales Reference No: XXXX	CKT	220KV BUSBAR	Page 06/23
A	REVISED	06.09.11	SH	Drawn	MC	Substation Name: 220/132KV ERRAGADDA		CIRCUIT FOR MCU	Project Name: 220/132KV ERRAGADDA		=200	
				Appr.	MS	Contractor: SIEMENS LTD.						
Version	Remarks	Date	Name	Norm.		Repl./Ref./etc.		Circuit Diagram	Revision-A	(4)G719EA-BG9141-W200-A		

=200RA



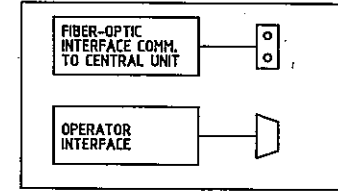
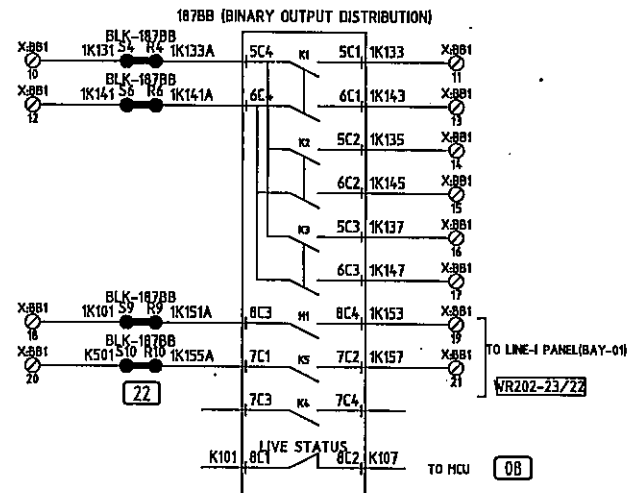
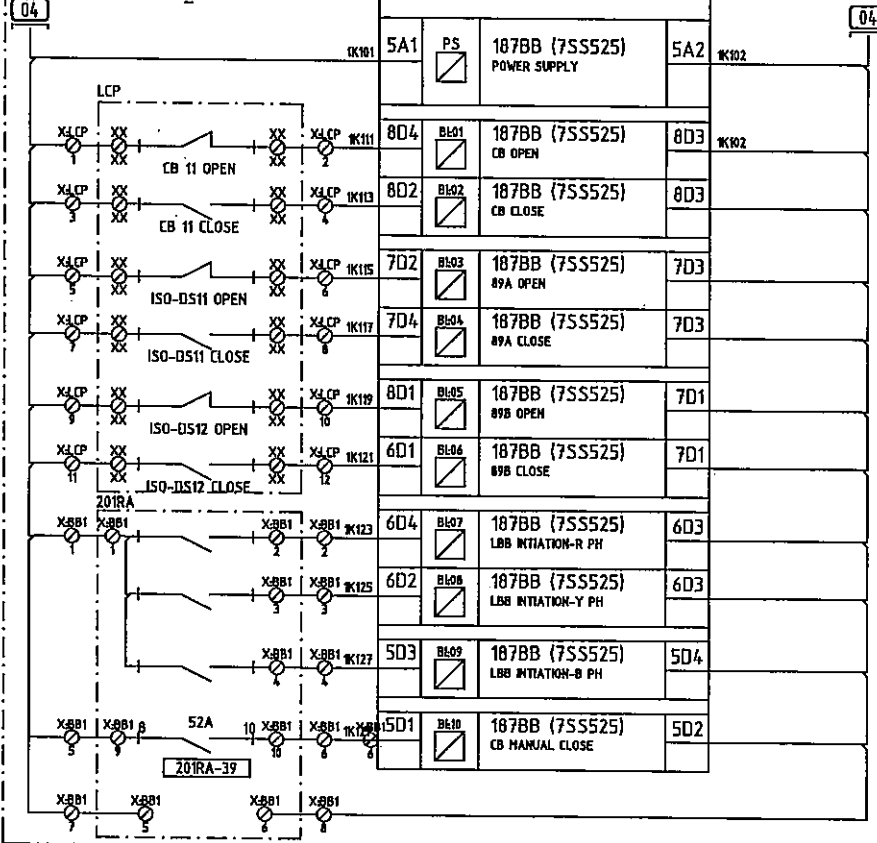
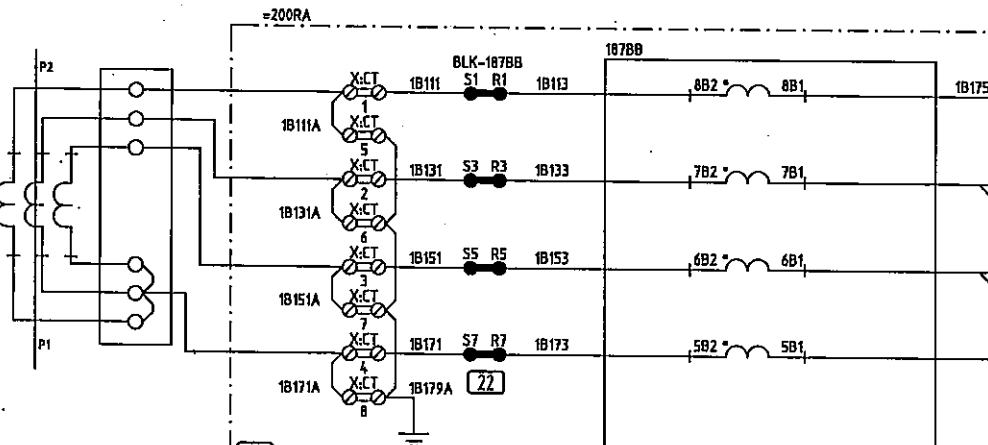
APPROVED FOR TURNKEY PROJECTS

CHIEF ENGINEER / CONSTRUCTION
 APTRANSCO/VIDYUTH SOUDHA/HYD.

SIEMENS

Circuit Diagram

220KV LINE CT (BAY-01)
 CT CORE-4
 RATIO: 600-600-400/1A
 CLASS: PS
 KVP: >80(Rct>3)



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M. Dignition
 CHIEF ENGINEER / CONSTRUCTION-6
 APTRANSCO/VIDYUTH SOUDHA/HYD.

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 Version: 14.05
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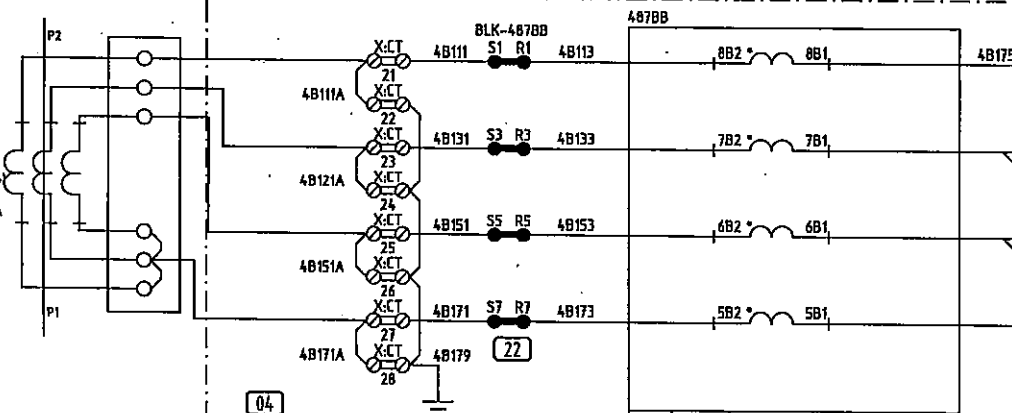
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220KV LINE CT (RAY-04)
 CT CORE-4
 RATIO: 800-400-400/1A
 CLASS: PS
 KVP: >80(Rct+3)

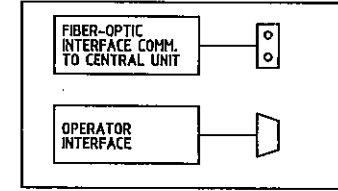
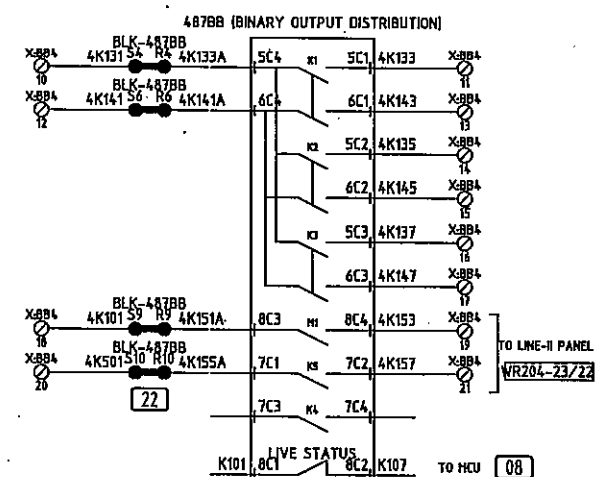
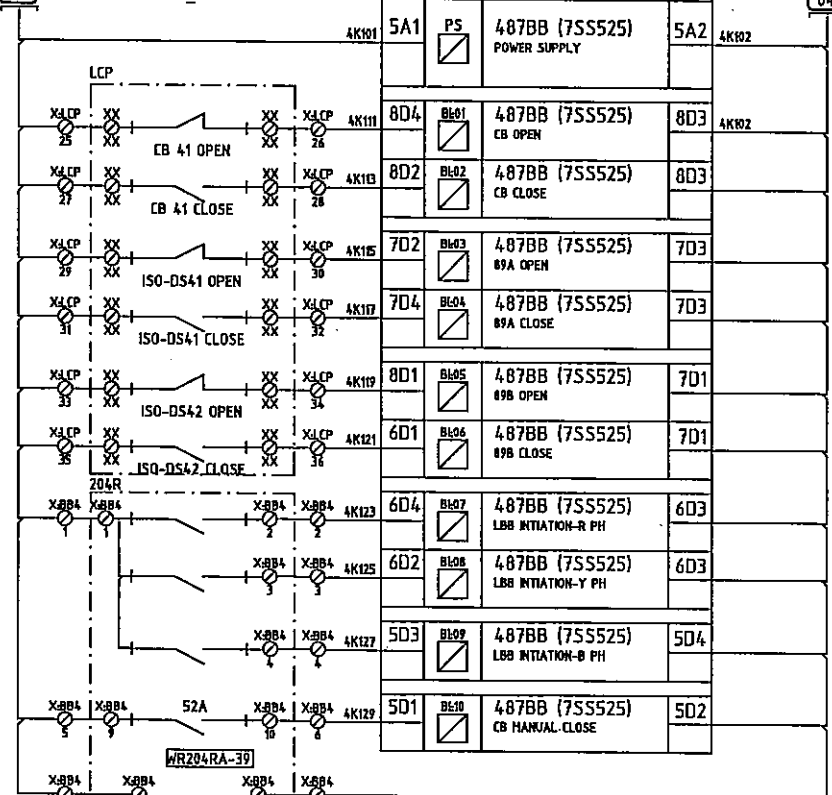
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Version Remarks Date Name Norm.

=200RA



04



APPROVED FOR TURNKEY PROJECTS

CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.

Client: APTRANSCO
 Substation Name: 220/132KV ERRAGADDA
 Contractor: SIEMENS LTD.
 Ref./Ref./etc.

SIEMENS

220KV BUSBAR
 CIRCUIT FOR 487BB RELAY
 Circuit Diagram

Sales Reference No: XXXX
 Project Name: 220/132KV ERRAGADDA
 Revision-A
 (4)G719EA-BG9141-W200-A
 CKT 220KV BUSBAR
 =200
 Page.11/23

AutoCAD Version: 12.0 (MS) 12.0
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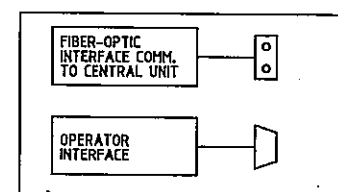
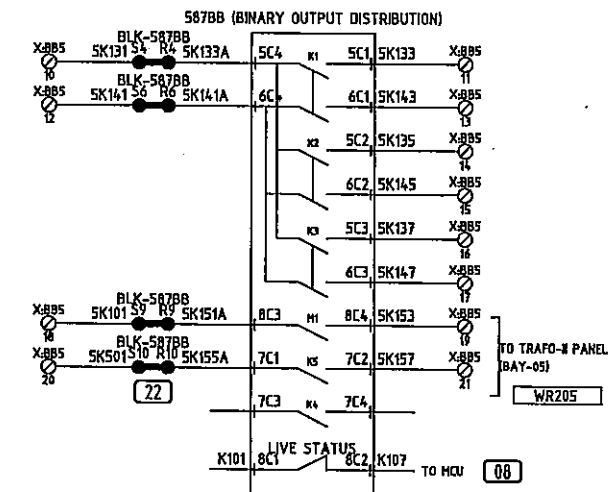
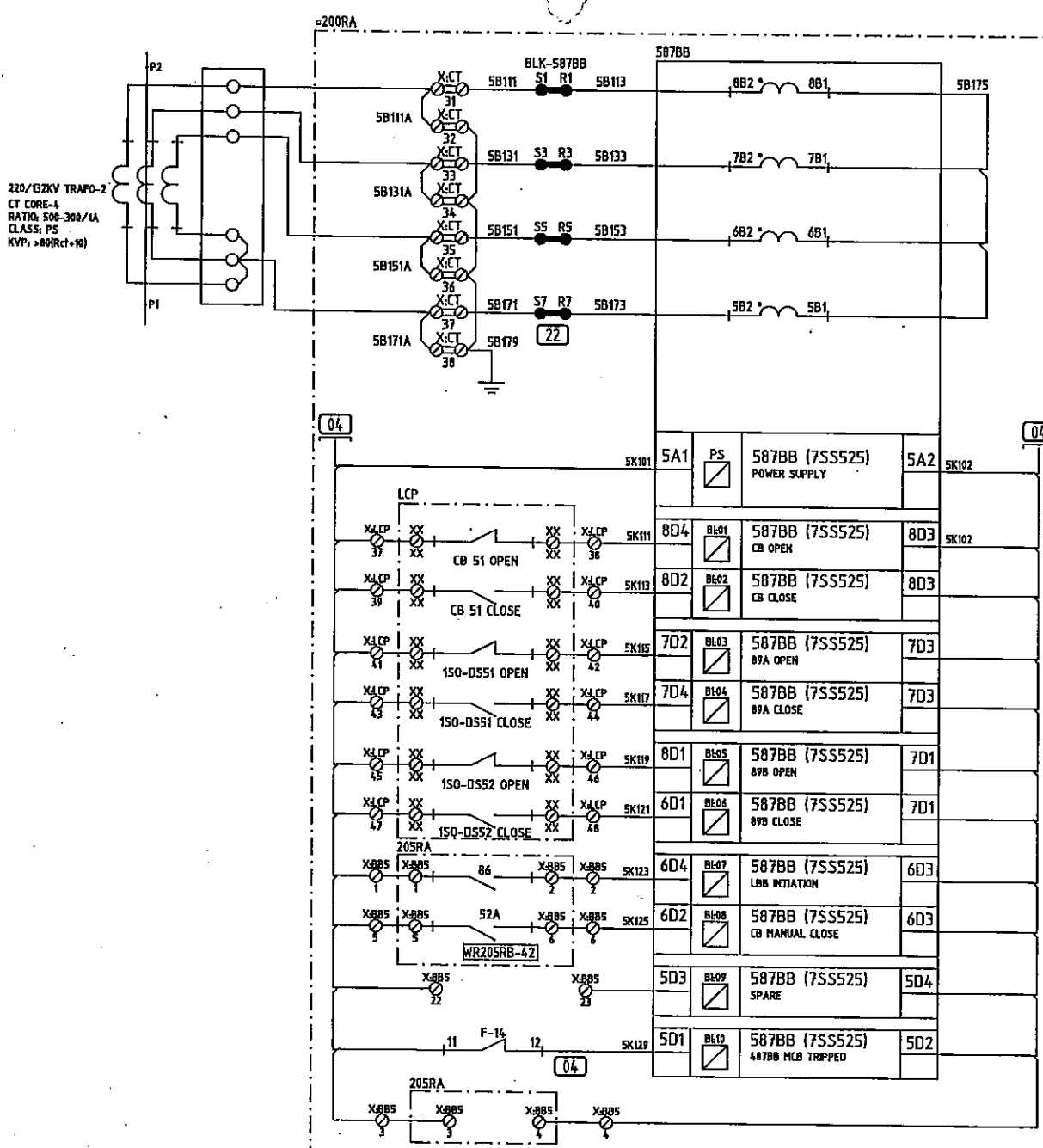
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220/132KV TRAFO-2
 CT CORE-4
 RATIO: 500-300/1A
 CLASS: PS
 KVP: >80(Rct+10)

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 Printed in India
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220/132KV TRAFO-2
 CT CORE-4
 RATIO: 500-300/1A
 CLASS: PS
 KVP: >80(Rct+10)

220/132KV TRAFO-2
 CT CORE-4
 RATIO: 500-300/1A
 CLASS: PS
 KVP: >80(Rct+10)



APPROVED FOR TENDER/ PROJECTS

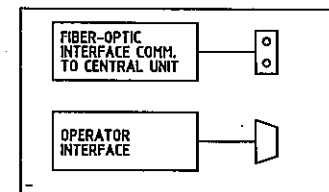
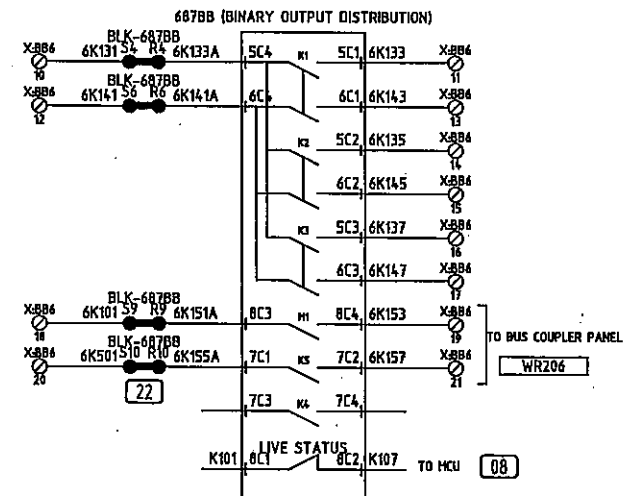
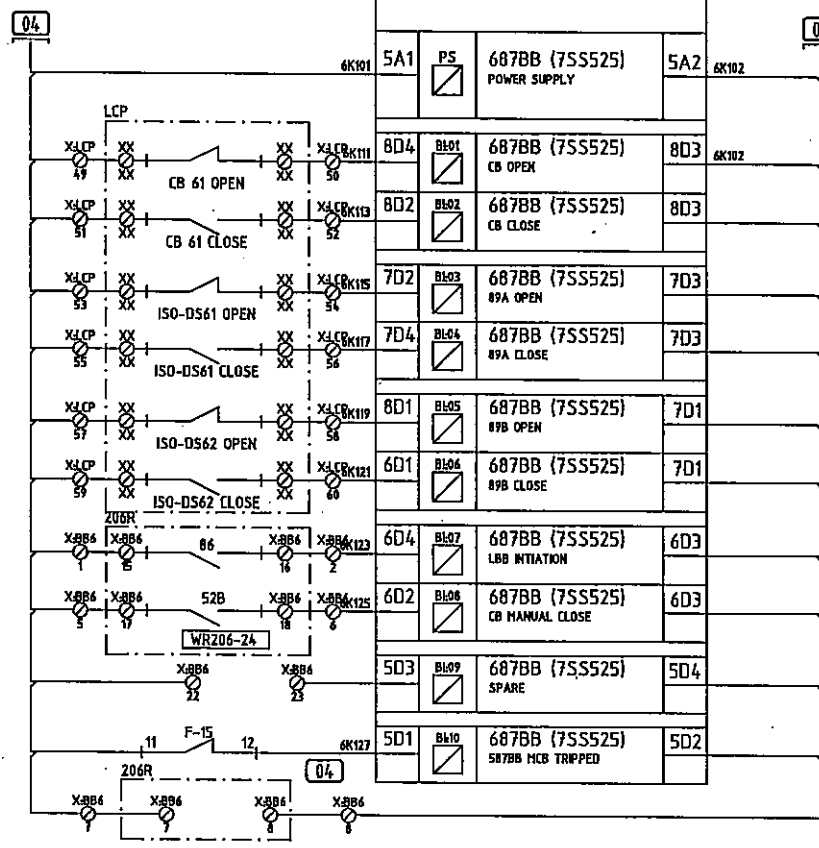
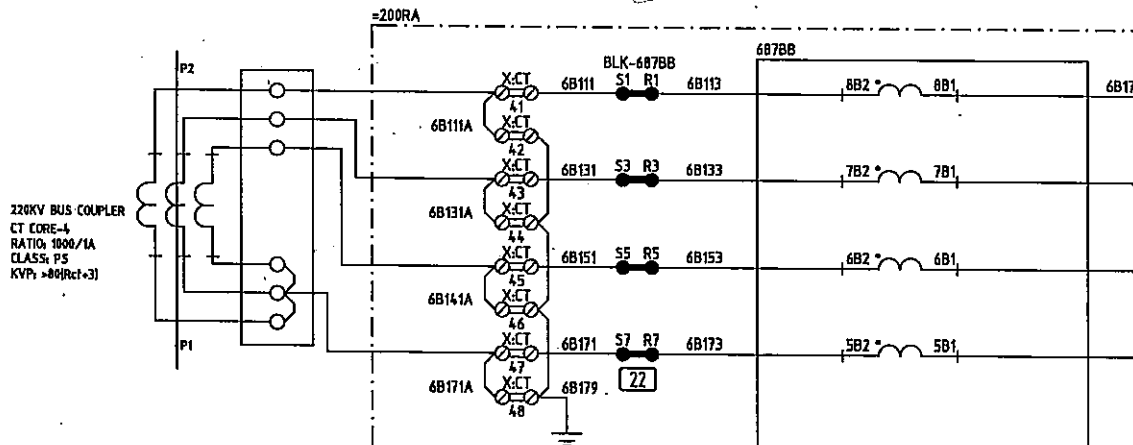
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 APTRANSCO/VIDYUTH SOUDHA/HYD.

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 File Name: 220KV BUS COUPLER.dwg
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 Save Date: 12.10.2011

Last Saved By: jn9292
 Created Date: 12.10.2011
 Saved Date: 12.10.2011

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APPROVED FOR TURNKEY PROJECTS
 CHIEF ENGINEER / CONSTRUCTION-4
 APTRANSCO/VIDYUTH SODHA/HYD.

Version		Remarks	Date	Name	Norm.	Client: APTRANSCO		Substation Name: 220/132KV ERRAGADDA		Contractor: SIEMENS LTD.		Repl./Ref./etc.		220KV BUSBAR		Circuit for 687BB RELAY		Sales Reference No.: XXXX		Project Name: 220/132KV ERRAGADDA		Revision-A		(4)G719EA-8G9141-W200-A		Page 13/23	
A		REVISED	06.09.11	SH	MS	Date: 12.08.11		Drawn: MS		Appr.: MS		Client: APTRANSCO		Substation Name: 220/132KV ERRAGADDA		Contractor: SIEMENS LTD.		Sales Reference No.: XXXX		Project Name: 220/132KV ERRAGADDA		Revision-A		(4)G719EA-8G9141-W200-A		Page 13/23	

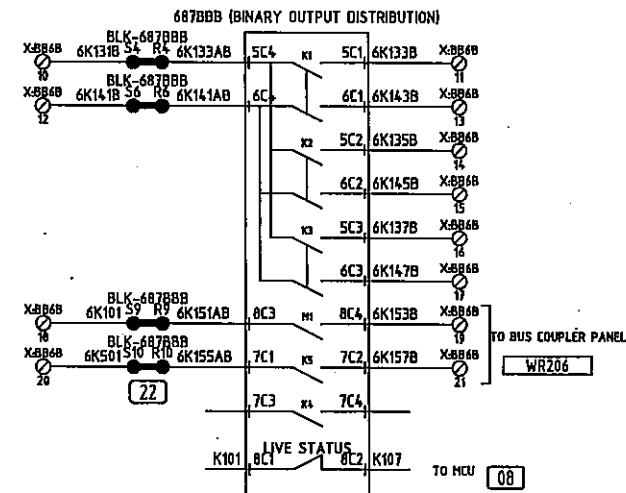
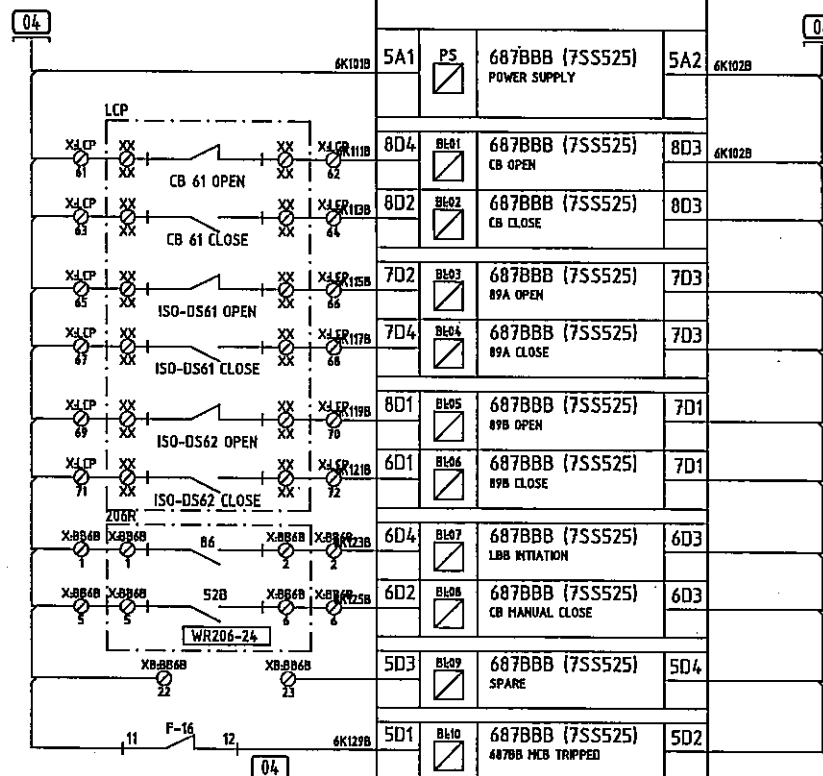
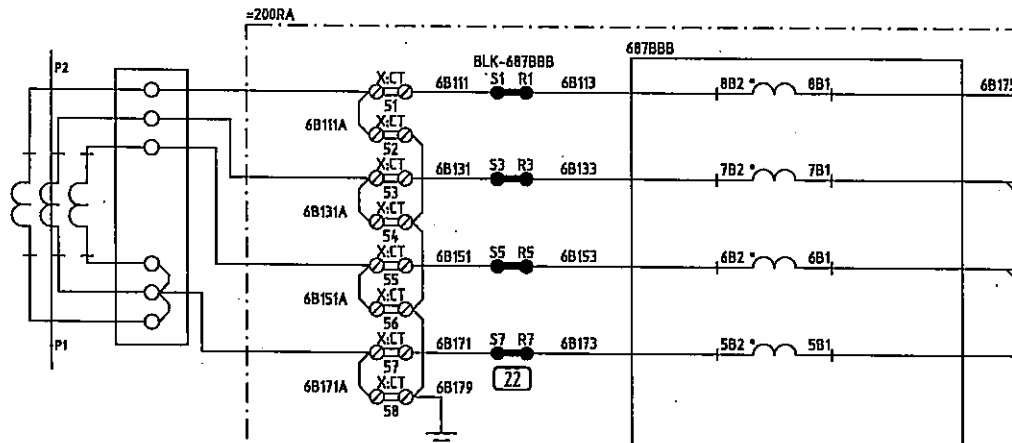
220KV BUS COUPLER
 CT CORE-2
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 KVP: =80(Rct+3)

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 Created Date: 12/01/11
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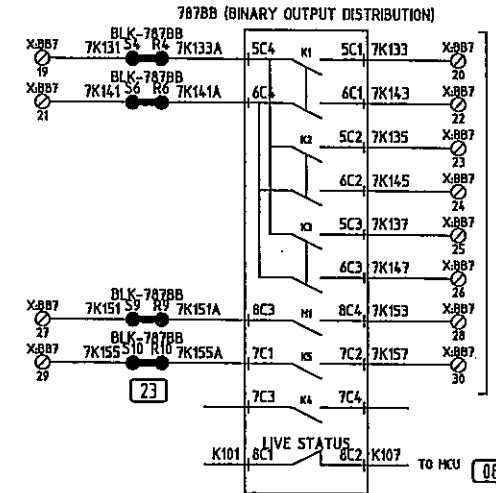
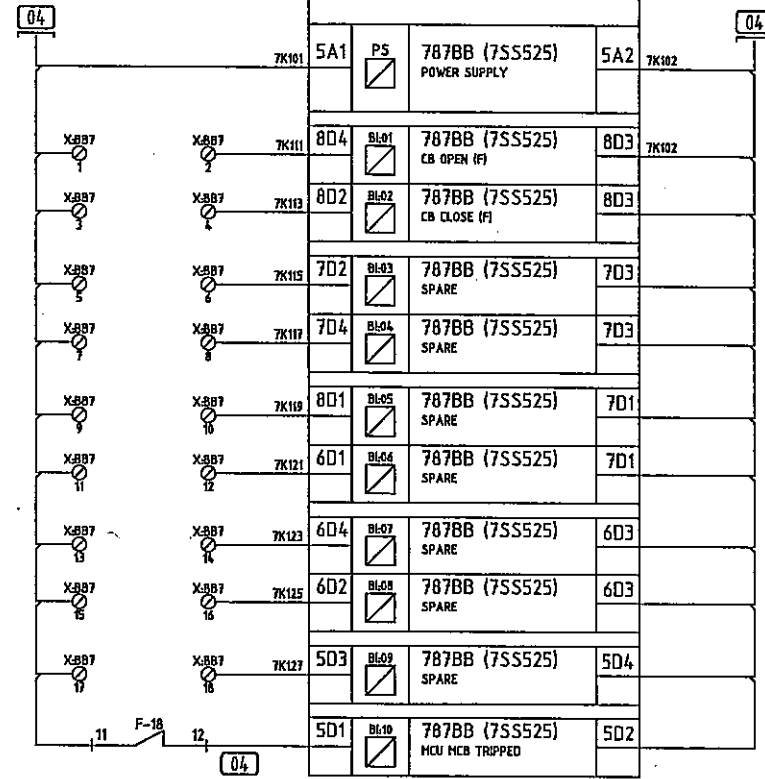
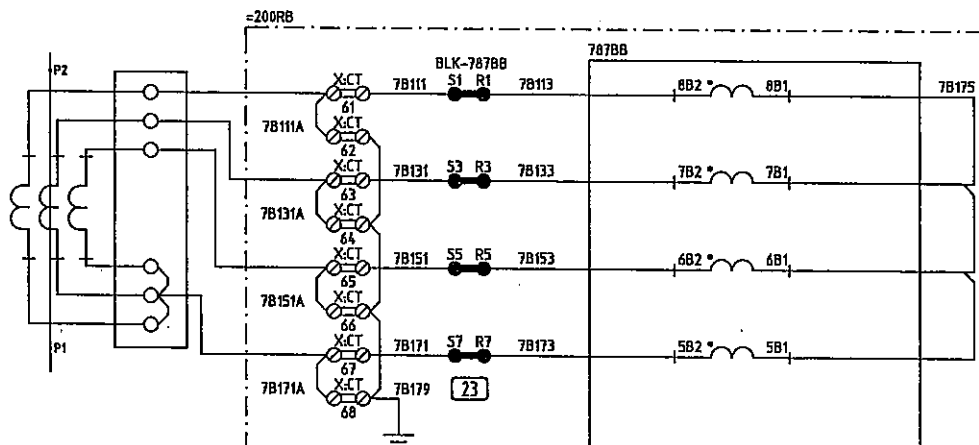
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220KV BUS COUPLER
 CT CORE-2
 RATIO: 1000/1A
 CLASS: PS
 KVP: =80(Rct+3)

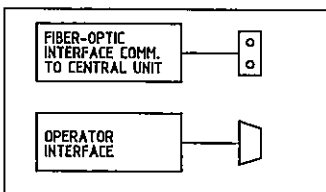


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FUTURE BAY-47 CT



SPARE (FOR FUTURE USE)

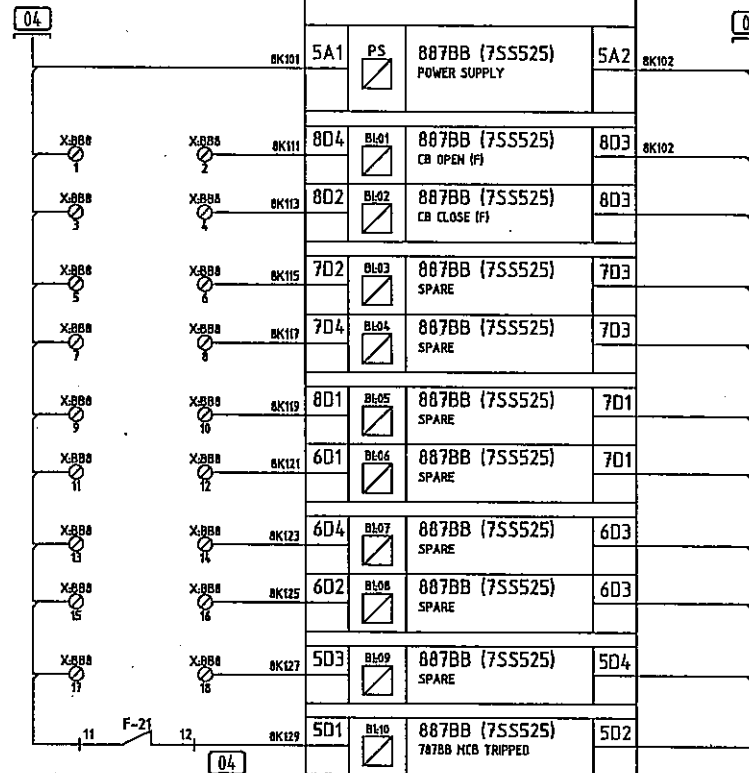
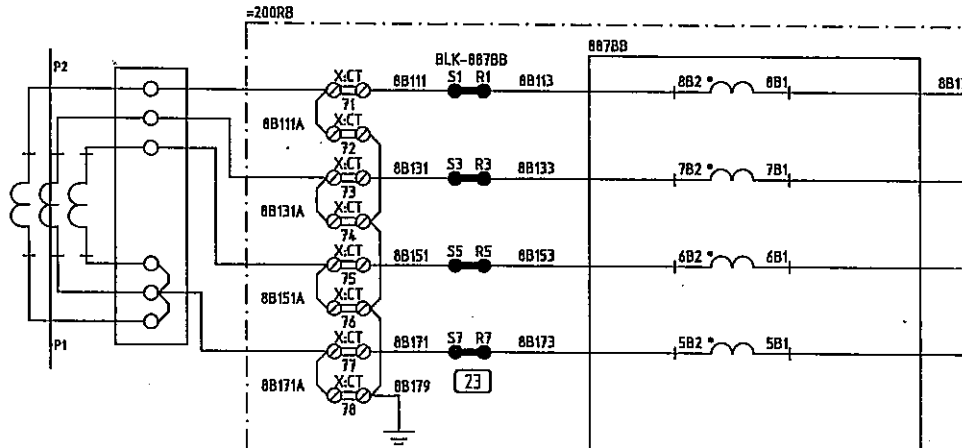


APPROVED FOR TURNKEY PROJECTS

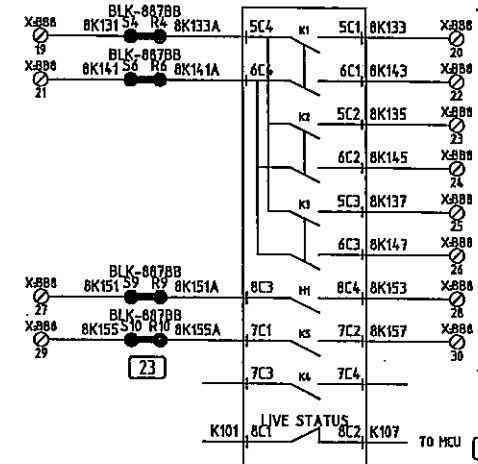
CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.

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 Author: ACS
 Date: 12.10.2011
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FUTURE BAY-08 CT



887BB (BINARY OUTPUT DISTRIBUTION)

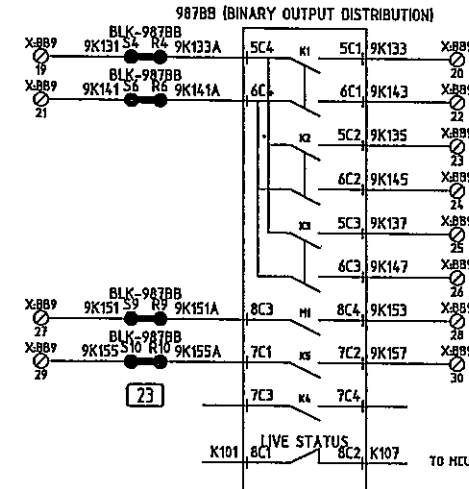
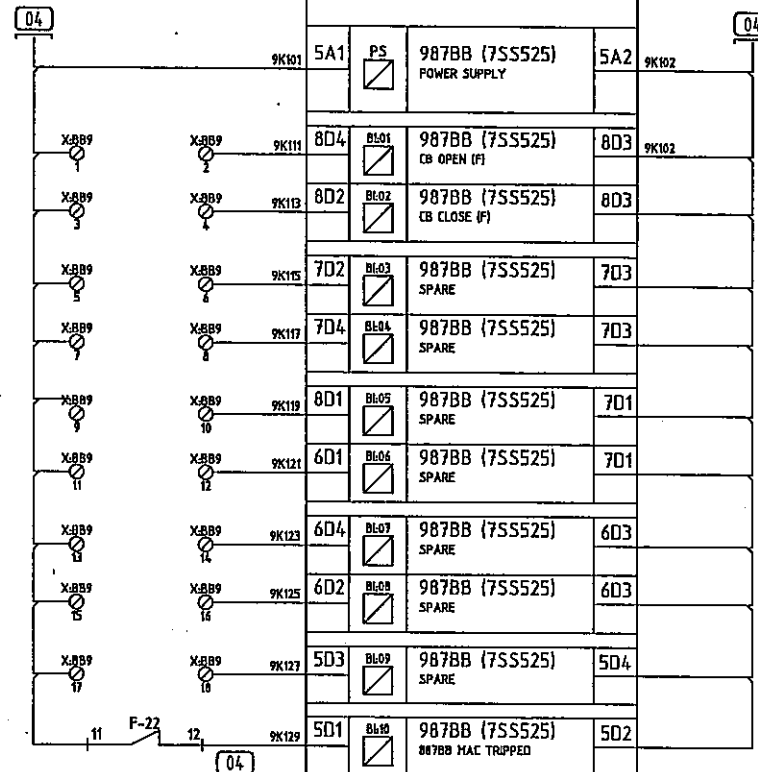
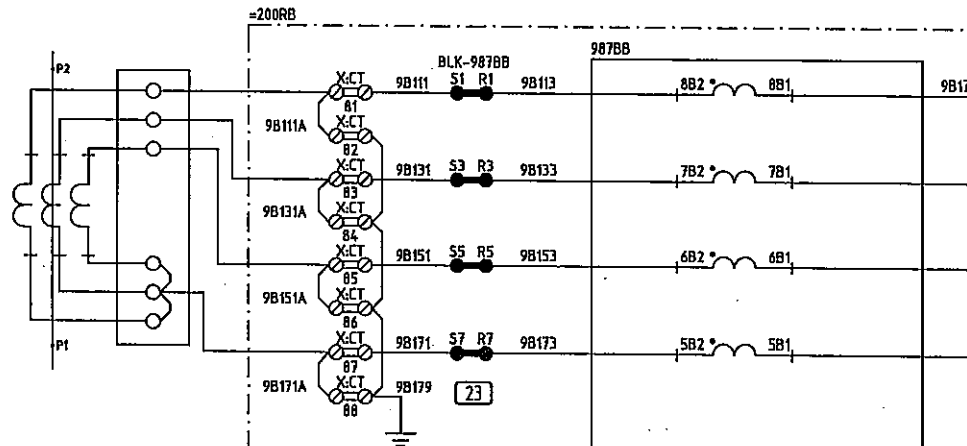


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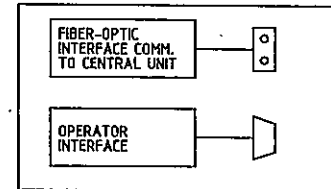
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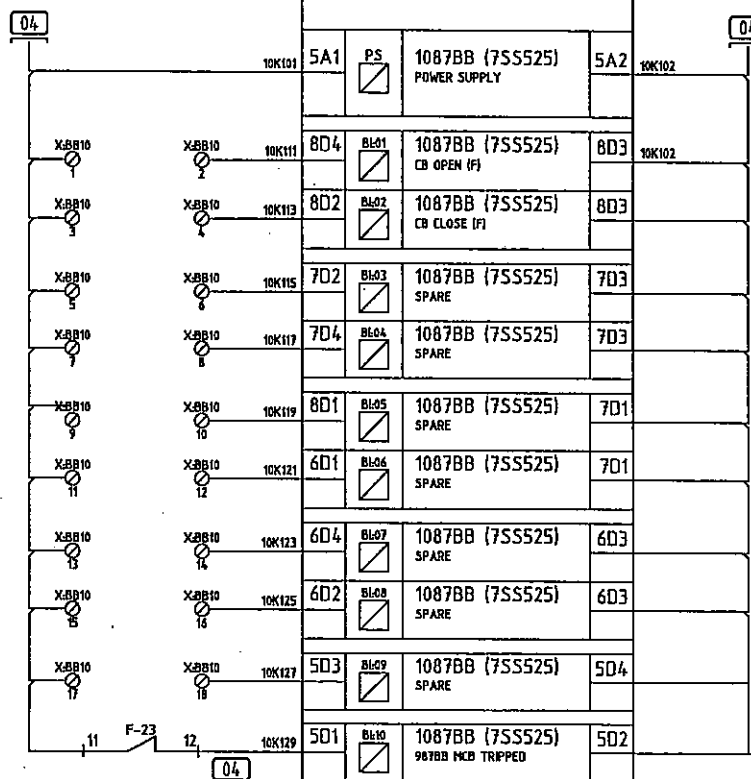
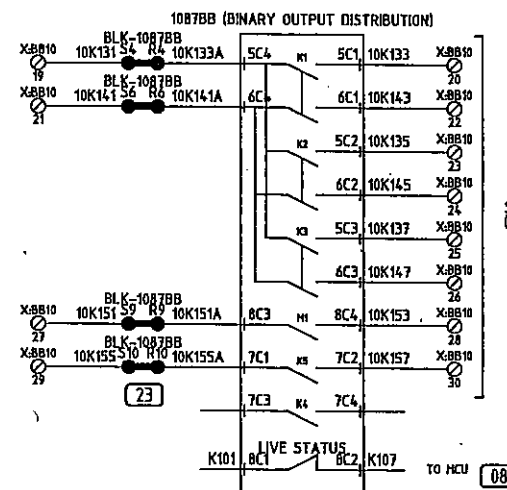
FUTURE BAY-09 CT



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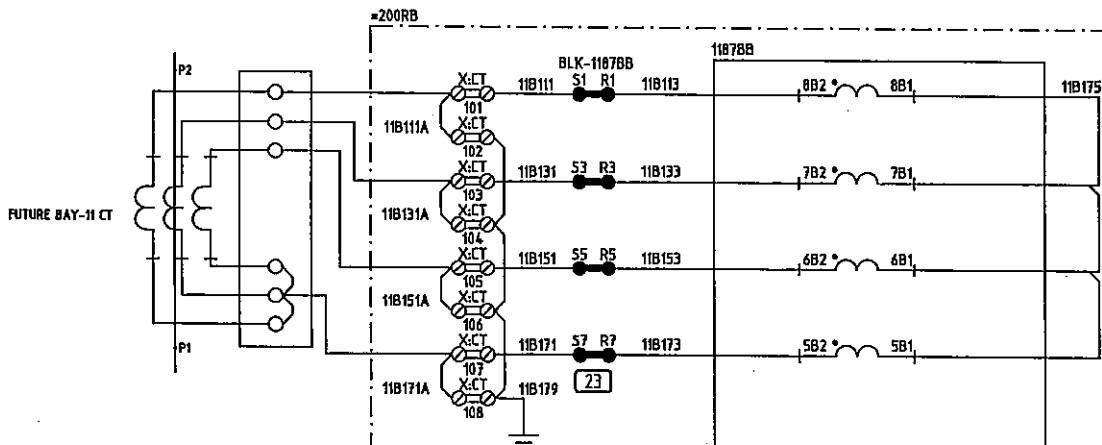


APPROVED FOR TURNKEY PROJECTS
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUT: SUDHA/HYO.

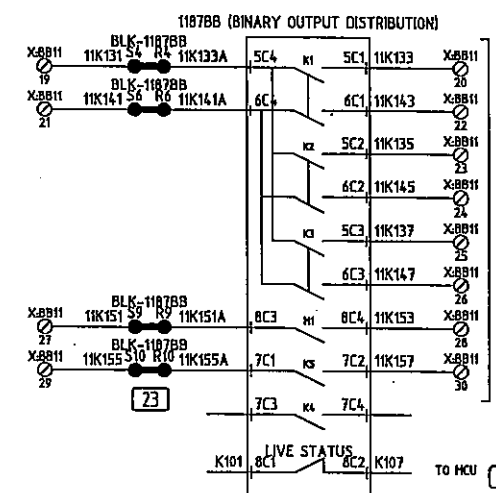


CHIEF ENGINEER / CONSTRUCTION-1
APTRANSCO/VIDYUTH SOUDHA/HYD.

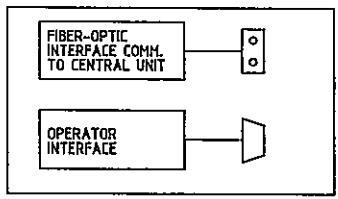
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 PLS: 3005110209



04	1K101	5A1	☒	P5	1187BB (7SS525)	5A2	1K102
					POWER SUPPLY		
X-BB11	1K111	8D4	☒	BL01	1187BB (7SS525)	8D3	1K102
X-BB11	1K113	8D2	☒	BL02	1187BB (7SS525)	8D3	
					CB OPEN (F)		
X-BB11	1K115	7D2	☒	BL03	1187BB (7SS525)	7D3	
X-BB11	1K117	7D4	☒	BL04	1187BB (7SS525)	7D3	
					SPARE		
X-BB11	1K119	8D1	☒	BL05	1187BB (7SS525)	7D1	
X-BB11	1K121	6D1	☒	BL06	1187BB (7SS525)	7D1	
					SPARE		
X-BB11	1K123	6D4	☒	BL07	1187BB (7SS525)	6D3	
X-BB11	1K125	6D2	☒	BL08	1187BB (7SS525)	6D3	
					SPARE		
X-BB11	1K127	5D3	☒	BL09	1187BB (7SS525)	5D4	
					SPARE		
11	F-24	12	☒	BL10	1187BB (7SS525)	5D2	
					1087BB HCB TRIPPED		



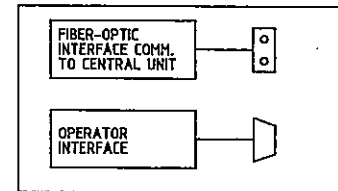
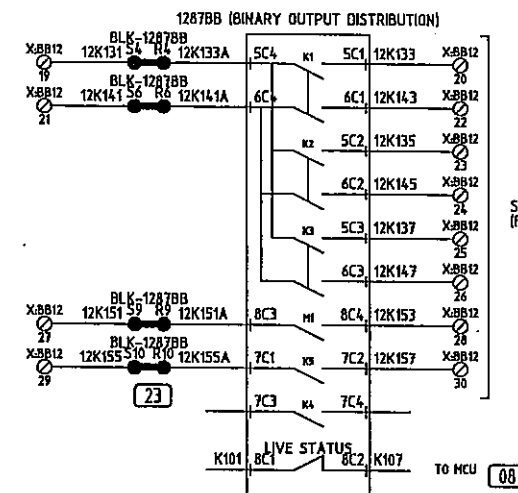
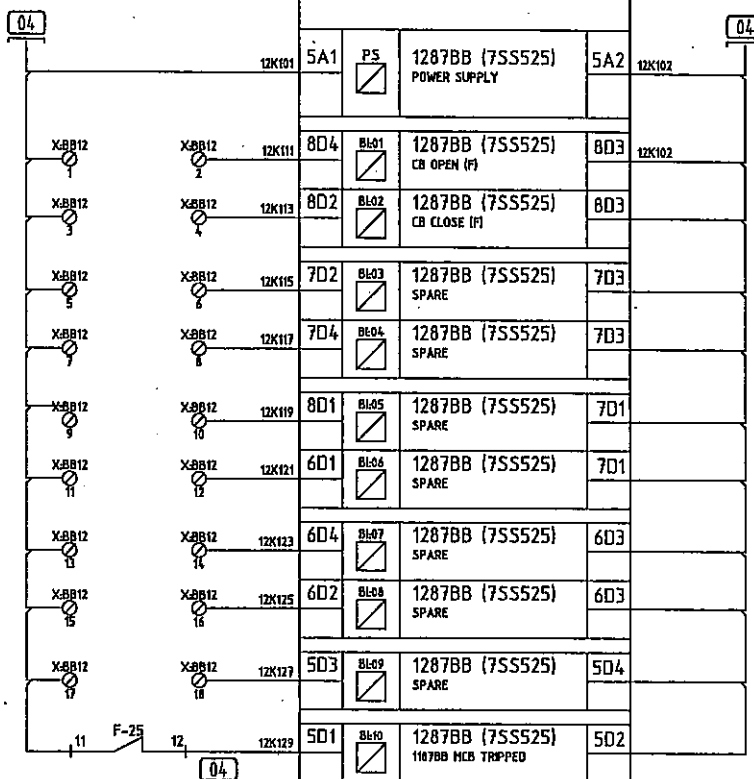
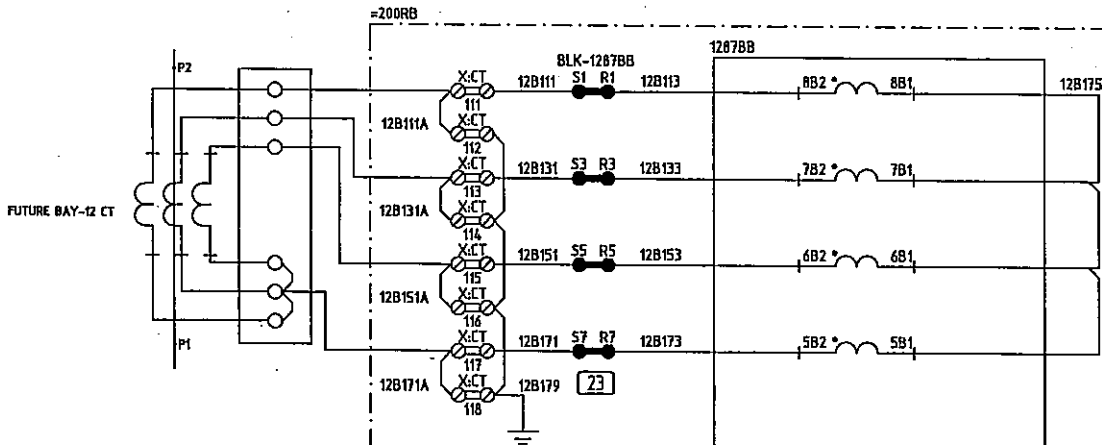
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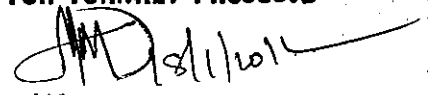


APPROVED FOR TURNKEY PROJECTS

[Signature]
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.

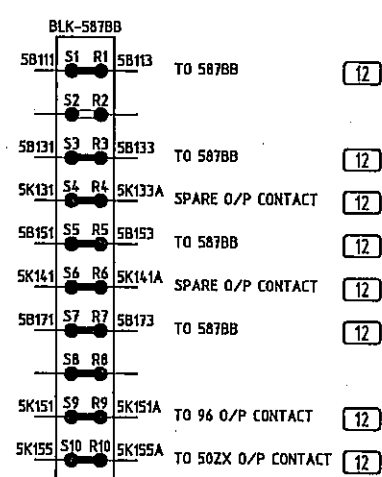
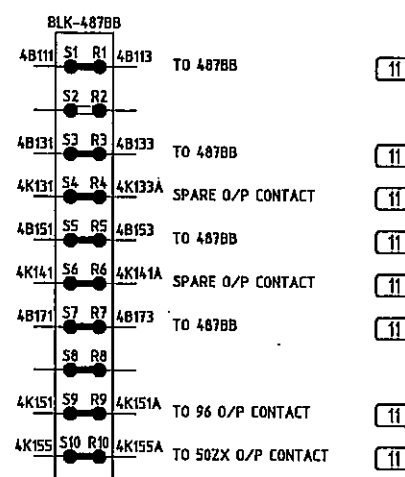
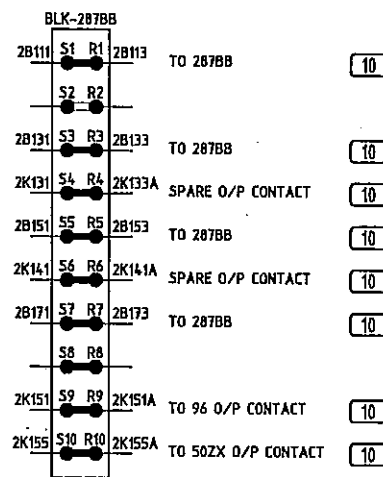
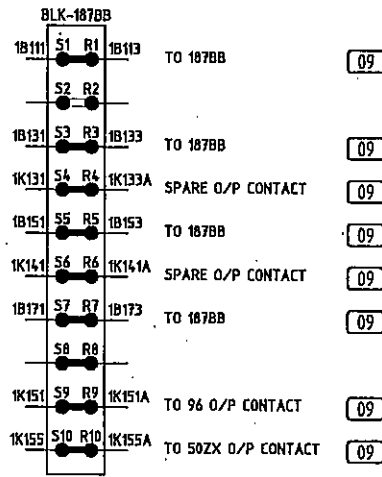
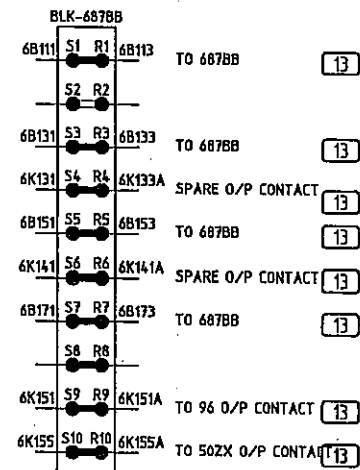
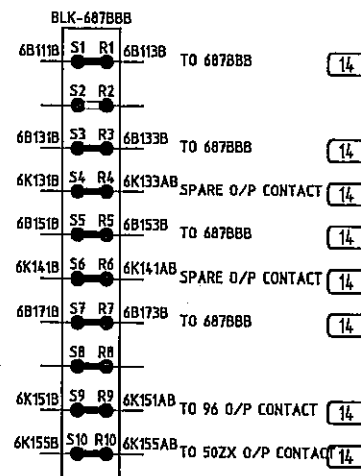
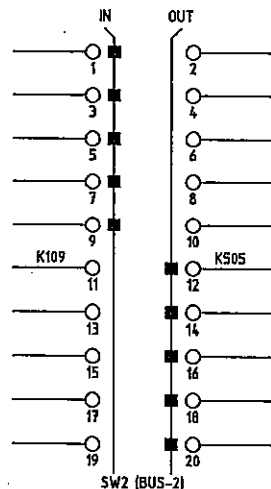
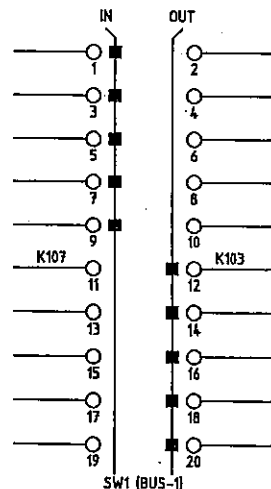
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[Signature]

CHIEF ENGINEER / CONSTRUCTION-1

Version Remarks Date Name Norm.	Date: 12.08.11 Drawn: HC Appr.: MS	Client: APTRANS CO Substation Name: 220/132KV ERRAGADDA Contractor: SIEMENS LTD. Rep./Ref./etc.	SIEMENS 220KV BUSBAR SWITCH & BLOCK CONTACT DISTRIBUTION Circuit Diagram	Project Name: 220/132KV ERRAGADDA Revision: A 141679EA-BG9141-W200-A Page: 22/23
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