

**LV System Component (Measuring and Indicating instruments)**

S.NO.	Make	Type	Specification	Model	Population
1	DUCATI	MFM	415V, CL-01/0.5	M-20	153
2	SCHNEIDER	VAF METER	415V, CL-01/0.5	EM645930002008	32
3	DUCATI	AMMETER	415V, CL-01/0.5	-	34
4	SCHNEIDER		415V, CL-01/0.5	DM311030002385	66
5	DUCATI	VOLTMETER	415V, CL-01/0.5	NA	34
6	SCHNEIDER		415V, CL-01/0.5	DM321030002386	50
7	AE	Summation CT	CTR-5-5/5A,15VA`	-	306
8	AE	CT	125-1000/5; CLS-1;15 VA	-	663
9	GNM		10-60/5;10/15VA	WPLRC	86
10	GNM		100-250/5;10VA	BPL ROUND RC	53
11	GNM		400-5000/5	BPLRERC	127
12	L&T-ESBEE	INDICATING LIGHTS (RED)	240V AC	EILR240A	1814
13	L&T-ESBEE	INDICATING LIGHTS (AMBER/YELLOW)	240V AC	EILA240A	1934
14	L&T-ESBEE	INDICATING LIGHTS (GREEN)	240V AC	EILG240A	1246
15	L&T-ESBEE	INDICATING LIGHTS (BLUE)	240V AC	EILB240A	266
16	SCHNEIDER	INDICATING LIGHTS (RED)	240V AC	XA2EVM4LC	348
17	SCHNEIDER	INDICATING LIGHTS (YELLOW/AMBER)	240V AC	XA2EVM5LC	163
18	SCHNEIDER	INDICATING LIGHTS (GREEN)	240V AC	XA2EVM3LC	126
19	SCHNEIDER	INDICATING LIGHTS (BLUE)	240V AC	XA2EVM6LC	54
20	L&T-ESBEE	PUSH BUTTON YELLOW	3/5 NO	EMNYFD1	361
21	L&T-ESBEE	PUSH BUTTON (RED)	1 NC	EMNRFD1	181
22	L&T-ESBEE	PUSH BUTTON (GREEN)	1 NO	EMNGFD1	232
23	L&T-ESBEE	MUSHROOM HEAD PUSH BUTTON	5NC	LOCKABLE TYPE	95

**LV System Component (ACB,MCCB,MCB,RCCB)**

S.NO.	Make	Type	Specification	Model	Population
1	ABB	ACB	5000 A, 415V, 70/100kA, 4P	SACE EMAX E6H Series	6
2	ABB		3200 A, 415V, 65kA, 4P	SACE EMAX E4H Series	12
3	ABB		800A-2500A, 415V, 65kA, 4P	SACE EMAX E3N Series	24
4	ABB		1600A-3200 A, 415V, 65kA, 3P		7
5	ABB		800A-1250 A, 415V, 65kA, 3P	SACE EMAX E2S Series	42
6	L&T		1000-3200 A,50 KA TP/FP EDO	UW1_MTX3.5	60
7	SCHNEIDER		800-5000 A,65/70 KA	NW Series	29
8	ABB	MCCB	100A TP/FP LSI/LI-ICS-36-70KA	SACE Tmax Series	440
9	ABB		160A FP LSI-ICS-36KA	T2S Series	43
10	ABB		250/400A TP/FP LSI/LSIG-ICS 36-70KA	T4H Series	61
11	ABB		400A TP LSI/LSIG-ICS-36KA	T2N Series	28
12	ABB		400A/630A TP LSI/LSIG-ICS-50/70KA	T5H Series	60
13	L&T		400 A, 35 KA	DN3-400D_R400	102
14	L&T		40-250 A 35 KA	DN2-250D_R40-250 Series	3178
15	SCHNEIDER		250A-630A,TP,50/70KA	NS Series	214
16	SCHNEIDER		100A-630 A,FP,36-70KA	NSXLV429780	28
17	SCHNEIDER		MPCB	1.6-32A; 100KA	GV2ME/GV2P SERIES07
18	ABB	4-25A		MS132 6.3-25	79
19	ABB	MCB	2P 6-16A 440V AC/DC	C SERIES	250
20	ABB		6-40A DP/SP/FP-10KA-C-Curve	SH-201M Series	1973
21	ABB		40 Amp/63A	S 203	180
22	L&T		6-40A, 10/15KA ,SP/DP/FP, C Curve	BB Series	6122
23	SCHNEIDER		6-25A;SP; C CURVE,10 KA	A9N1P Series	504
24	SCHNEIDER		6-55A;DP/FP,C CURVE,10KA	A9N2P Series	253
25	SCHNEIDER		2/6 A; 2P	MGN, MGN 61502	160
26	SCHNEIDER	RCCB	25-40A,DP/4P,30-100 mA	A9N Series, 602165	239

**LV System Component (Control & Others)**

S.NO.	Make	Type	Specification	Model	Population
1	SCHNEIDER	OVER LOAD RELEASE	2.5-80 A;SPP	LRD SERIES	48
2	ABB	OVERLOAD RELEASE	15-45 A	1SAX211001R1102	35
3	GIC	TIMER STAR DELTA	1NO(S)+1NC(D), 0.3-120S	2ASDT0	109
4	L&T-GIC		2C/O	12SDTO	168
5	GIC	TIMER MULTI FUNCTION SIGNAL	0.1 S-10 H;1CO	2ANDT0	16
6	GIC	PHASE AND VOLTAGE MONITORING RELAY	230 V AC	SM500MG73VH	9
7	MINILEC	VMR	415VAC 2C/O	VMRD2	235
8	L&T	CAPACITOR	5/12.5/25/37.5 KVAR	MO C SERIES	153
9	Neptune-Ducati	Capacitor bank	25 KVAr	Duca Power	60
10	OMRON	ON DELAY TIMER	230 VAC	NA	137
11	L&T-GIC	ON DELAY TIMER	230 VAC	12ODT4	301
12	MINILEC	WATER LEVEL CONTROLLER	240 V AC 1C/O	WLCD1	34
13	MINILEC	ANNUNCIATOR 8 WINDOWS	90-270 V AC/DC	26B2SP0	6
14	ABB	ATS	ATS -40/100/160/250/400 A	ATS -022	66

**LV System Component (Relays and Contactors)**

S.NO.	Make	Type	Specification	Model	Population
1	ABB	MASTER TRIP RELAY	CLASS B+C	OVRT23N40	35
2	ABB	POWER CONTACTOR	25A-50,TP	A26, A40, A50	167
3	L&T		9-32A,TP	M0 9/32	104
4	L&T		200-400 A 35 KA,FP	MCX 33	202
5	SCHEIDER		18A,TP,1NO+1NC	LC1D Series	44
6	SCHEIDER	20A,FP	20		
7	SCHEIDER	25A,TP	36		
8	SCHEIDER	40A,TP	20		
9	SCHEIDER	80A,TP	25		
10	SCHEIDER	115A,TP	18		
11	SCHEIDER	125A,4P	22		
12	SCHEIDER	150A,TP	16		
13	SCHEIDER	185A,TP	LC1F185+LXIFG220		12
14	SCHEIDER	110 Volt DC Contactor	CA3KN40-43		400
15	SCHEIDER	110 Volt DC MC Contactor	LC1D50AFD	80	
16	ABB	Capacitor Duty Contactor	25 KVAR;415 VAC;1 NO 1NC	UA-30-30-10	60
17	DUCATI	APFC RELAY	8 Stage	NA	17
18	Neptune		12 Stage	NA	17
19	L&T	AUXILIARY CONTACTOR	230V AC	2NO+4NC/2NC (MX0 22E)	536
20	OMRON	Relay	240 V AC 2C/O	S2WTR1	86
21	OMRON		110 volt Ac	MY4-CR	504
22	OMRON	RELAY (8/14 PIN)	-	PYF8AN/PYF14AN	2074
23	OMRON	AUXILLIARY RELAY WITH SURGE SUPPRESSOR 2C/O;4C/O	-	MY2N/4N-CR	546
24	SCHEIDER	PLC	8DO RELAY	TM2DRA8RT	23
25	SCHEIDER		8DI & 8DO RELAY	TM2DMM16DRTN	18
26	SCHEIDER		4DI & 4DO RELAY	TM2DMM8DRT	12
27	MINILEC	WINDING PROTECTION RELAY	Relay	MY4-CR	540
28	ABB	RESTRICTED EARTH FAULT RELAY	CLASS A	OVRT23N80	20

**Elevators**

S.NO.	Make	Type	Specification	Model	Population
1	KDS	Brake Rectifier	AC 230 Volt	WTY1-1088-125	80
2		Motor	9.4/15 kw	WTY1-1088-125	80
3	FERMATOR	Door Drive	230 volt	VCI-VO5P001000000	80
4		Door Motor	106 Volt AC	106A5006001500HP0EF40E0000	80
5	FUJI	Main Drive	11&15 Kw	FRN-11LM1S-4AA	80
6		Regenerative Drive/Convertor	11&15 Kw	RHC11-4C	80
7		Charging CKT Box	11&15 Kw	CU15-4C-Fuji	80
8		Regenerative Filter Resistor	11&15 Kw	GRZG150-FUJI	80
9		Regenerative Filter Capacitor	11&15 Kw	CF4-15C-FUJI	80
10		Regenerative Filter Reactor	11&15 Kw	LFC4-15C-FIJI	80
11	JOHNSON	Master Board	24 Volt	SP2	80
12		CPC Board	24 Volt	SP2	80
13		FCB Board	24 Volt	SP2	80
14		IDO Board	24 Volt	SP2	80
15		RMS Board	24 Volt	SP2	80
16		286 Board	24 Volt	SP2	240
17		Display Board	24 Volt	BVH330	240
18		Announcement card	24 Volt	SP2	80
19		ARD Logic Board	50 Ac	SP2	80
20		ARD Power card	48 DC	SP2	80
21	AVIRE LTD	Pana 40 Card	230 volt	STANDARD SET	80
22	ELECTRO TECH	SMPS	12Volt / 24 Volt	DPS35-3015ACDC/29449	80
23	EXIDE/AMARON	ARD battery	12 Volt 18 Ah	Dry Type	320
24		CT battery	12 Volt 7.2 Ah	Dry Type	80
25	JAYANTHI	CT Transformer	800 VA	2 ph, B-TYPE Insulation	80
26	PROCON	ARD transormer	2500 VA	VERSA RESQ 2500	80
27	TC	BK Contactor	110 Volt DC	TP1D1210	80
28	TELE HAASE	Single Phase preventor	250 volt, 1250 VA	E3PF400VSY02-TELE	80
29	PHOENIX	Surge Protection Device	480 Volt	VAL-MS-320/3+0	80
30	ICD	Energy meter	3*240 volt	SEM9514	80
31	BCH	CC & BP Relay	24 Volt DC	DRM570024L	160
32		LR Relay	12 Volt DC	DRM570012L	160
33		UP/DN Relay	110 Volt DC	DRM570110L	160
34	PFB	Proximity Sensor	12 volt	Standard	80
35	MINILEC	Water Level	240 volt	M18-NPN -NO	80
36	BST	Master Intercom	12 Volt	BH202-M	80
37		Read Switch	12 volt	BL102	400
38		Slave Intercom	12 Volt	BH202-Z	80
39		Mic cum Speak	12 Volt	BH202-K	80

**Escalators**

<b>S.NO.</b>	<b>Make</b>	<b>Type</b>	<b>Specification</b>	<b>Model</b>	<b>Population</b>
1	<b>Tianshui</b>	RCCB	100 mA	BSG2-63L	90
2		Energy Meter	3 phase	GPCS3690(DHT-150386E/8)	90
3	<b>Monarch</b>	V3F drive	15-22 kw	MD280	90
4	<b>Jiali</b>	Motor	15-22 kw	GPPS0071	90
5	<b>Ningbo Dianzi</b>	Phase relay	415 volt	SW11	180
6	<b>Shezhen junyeda</b>	Panel Exhaust fan	230 volt	GPCS3606	180
7	<b>Jinam qi chen</b>	Pit Lamp	230 volt	GPCS3602	180
8	<b>Yueqing cooper</b>	2D sensor	24 Volt	GPCS3584/85	180
9	<b>BLT</b>	Safety Card	24 Volt	GPCS1336D001	90
10		Audio card	24 Volt	GPCS1336D001	90
11		Display Card	24 Volt	GPCS3730	90
12		Handrail Sensor	24 Volt	GPCR0008D003	180
13		Speed Sensor	24 Volt	GPCR0008D002	180
14		Step Missing Sensor	24 Volt	GPCR0008D0	180
15	<b>Changshu Fuji</b>	Contactora	415 Volt	SC-E04	450
16	<b>Shanghai Chi Tai</b>	Emergency Brake Assembly	10Volt	(DHT-150386E)GPPS0133	90
17	<b>Dongguan Desong</b>	Emergency stop switch	110 Volt AC	GPCS3284	540
18	<b>Tianjin Jiali</b>	Service Brake coil Assembly	240V AC	S00800000063	90
19	<b>Shenyang Jingcheng</b>	Control Transformer	630VA	GPCS3549	90
20	<b>Shenzhen Tongan</b>	Smoke Detector	24 Volt	DHT-150386E/1	270
21	<b>Mean Well</b>	SMPS	24 Volt	NES-50-24	360

### List of 220KV GIS Component

S. No.	Make	Model/Type	Rating	Population
1	MEIDEN	220 KV GIS Lightning Arrester , Y20WF-198	198KV	9
2	KENDRION	220 KV GIS Trip Coil , 8S000346-A04	110/125V DC	54
3	KENDRION	220 KV GIS Closing Coil , 5SS.613.026-A05	110/125V DC	27
4	Sieyuan	220 KV GIS PT , JZQFXH-220	PRIMARY- 220/ $\sqrt{3}$ KV SECONDARY 1- 0.11/ $\sqrt{3}$ KV, 200VA SECONDARY 2- 0.11/ $\sqrt{3}$ KV, 100VA	12
5	MTK	220 KV GIS Surge Counter , JCQ-5F	0-10mA	12
6	Sieyuan	220 KV GIS CT Incomer Bay , SSTA01	CORE 1- 600-300-150/1A, 0.2, 15-15-15 VA CORE 2- 600-300-150/1A, 0.2, 15-15-15 VA CORE 3- 600-300/1A, 5P20, 20-15 VA CORE 4- 600-300/1A, 5P20, 20-15 VA CORE 5- 600-300/1A, 5P20, 20-15 VA	9
7	Sieyuan	220 KV GIS CT Outgoing Bay , SSTA01	CORE 1- 600-300/1A, 5P20, 50-50 VA CORE 2- 600-300/1A, 5P20, 50-50 VA CORE 3- 600-300/1A, 5P20, 50-50 VA	12
8	Sieyuan	220 KV GIS CT Bus Coupling Bay , SSTA01	CORE 1- 600-300/1A, 5P20, 20-20 VA CORE 2- 600-300/1A, 5P20, 50-50 VA	6
9	Sieyuan	220 KV GIS Circuit Breaker , SSCB01	252KV 3150A 50KA/3S	27
10	VIFAN MOTOR CO.LTD	220 KV GIS spring charging motor , HDZ-17207B	110V AC/DC	27
11	Sieyuan	220 KV GIS Fast Earth Switch , SSFES01	252KV 50KA/3S	9
12		220 KV GIS Fast Earth Switch Motor ,	DC110 V	3
13	Sieyuan	220 KV GIS Disconnecter , SSDS01	252KV 3150A 50KA/3S	9
14		220 KV GIS Disconnecter Motor ,	DC110 V	3
15	Sieyuan	220 KV GIS Disconnecter with Earthing Switch , SSEDES01	252KV 3150A 50KA/3S	27
16		220 KV GIS Disconnecter with Earthing Switch Motor ,	DC110 V	18
17	Sieyuan	220 KV GIS Disconnecter with Earthing Switch , SSDS01	252KV 3150A 50KA/3S	27
18		220 KV GIS Disconnecter with Earthing Switch Motor ,	DC110 V	18
19	Sieyuan	220 KV GIS Disconnecter with Earthing Switch , SSDS01	252KV 3150A 50KA/3S	9
20		220 KV GIS Disconnecter with Earthing Switch Motor ,	DC110 V	6

21	Xy-ps	220 KV GIS Pressure Gauge , MTK-O1	-0.1 TO 0.9 MPA, U max=250v Pmax= 30W/50VA, CLASS 1.5	119
22	Xy-ps	220 KV GIS Pressure Gauge CB (Oil Filled) , MTK-O1	-0.1 TO 0.9 MPA, U max=250v Pmax= 30W/50VA, CLASS 1.5	27
23	Qiuqing Qingdao	220 KV GIS CB Counter , J114C		27
24	Schneider Electric	220 KV GIS Contactor FCB , LP1-K0901FD	110 V AC 20A	18
25	Weidmullar	220 KV GIS Auxiliary Relay B , DRM570110LT	110 V DC 10mA	475
26	ADA	220 KV GIS CB Operation Switch , LW38D- 203B6612/6	110 V DC 20A	18
27	ADA	220 KV GIS CB Normal/Maintenance , LW38D-209C5938/3YS	110 V DC 20A	9
28	ADA	220 KV GIS Interlock/Release Switch , LW38D-209C2702/7Y	110 V DC 20A	9
29	ADA	220 KV GIS CB Local/ Remote Switch , LW38D-209C6352/5Y	110 V DC 20A	9
30	ADA	220 KV GIS Reset Switch , LW38D- 203A5395/2	110 V DC 20A	9
31	Schneider Electric	220 KV GIS Contactor DBJ , LP1- K0901FD+LA1 KN22	110 V DC 20A	27
32	Schneider Electric	220 KV GIS Contactor DFJ , LP1-K0901FD	110 V DC 20A	18
33	Changjiang electric	CB Indicator , AD11-22/22-W2A(DC110V)	110V DC 15mA	1
34	Schneider Electric	220 KV GIS Contactor FTJ , LP1- K0901FD+LA1 KN22	110V DC 20A	27
35	Schneider Electric	220 KV GIS Contactor HJ , LP1- K0901FD+LA1 KN25	110V DC 20A	10
36	Schneider Electric	220 KV GIS Contactor TJ , LP1- K0901FD+LA1 KN22	110V DC 20A	10
37	Schneider Electric	220 KV GIS Contactor ZLC , LC1-D32FDC	110V DC 40A	27
38	Weidmullar	220 KV GIS Auxiliary Relay ZJB , DRM570110LT	110V DC 5.2mA	27
39	Moeller	220 KV GIS Time Relay SJ , ETR4-70-A	110V DC 6A	9
40	Moeller	220 KV GIS Time Relay SJ , ETR4-11-A	110V DC 6A	36
41	ODES	220 KV GIS Contactor LSJ & QBJ , UEG/F- 4DPDT110VDC	110V DC 8A	45
42	ADA	Changeover switch , LW38D-209C2702/7Y	110VDC 20A	5
43	ADA	Changeover switch , LW38D-209C6352/5Y	110VDC 20A	6
44	ADA	Changeover switch , LW38D-209C5938/3YS	110VDC 20A	5
45	ABB	220 KV GIS Relay REC 670 , REC670*2.0- B30X00	14xI/O, 1xTRM, 1A, 0- 340V,50/60 Hz,110-125V DC, 90-250V DC	9
46	ABB	220 KV GIS Test Switch , RXP18	20A	9
47	Schneider Electric	223 KV GIS Contactor TJ , LP1-K0901FD+LA KN22	220V DC 20A	1
48	ODES	221 KV GIS Contactor KZJ , UEG/C- 6H(220VDC,6NO)	220V DC 5.2mA	7
49	Yuanzheng Xi'an	Temperature and Humidity Controller , WSK- HS(TH)	230V AC 3A	10



50	Tayee	220 KV GIS Door Limit Switch , X42A-S11/1Z	230V AC 4A	10
51	Weidmullar	220 KV GIS Auxiliary Relay B , DRM 570730LT	230V AC 6.1mA	9
52	Schneider Electric	220 KV GIS Air Switch DK , C65H-DC C10A/2P(A9)+A9N OF	250 V DC 10A	20
53	Schneider Electric	220 KV GIS Air Switch DK , C65H-DC C6A/2P (A9)+A9N OF	250 V DC 6A	132
54	Schneider Electric	220 KV GIS Air Switch DK , iC65H C10/2P+iOF(iC65H)	400 V AC 10A	40
55	Schneider Electric	220 KV GIS Air Switch DK , iC65H C4/1P+iOF(iC65H)	400 V AC 4A	24
56	Schneider Electric	220 KV GIS Air Switch DK , C65H-DC C6A/2P(A9)+A9N OF	400 V AC 6A	24
57		220 KV GIS Strike Fuse FD , JBO-0.5	500V AC	10
58	RUILIAN CHENGDU	Transfer strip , RSH2.5-2A	660V DC	10
59	Changjiang Electric	220 KV GIS CB Position Indicator , AD11-22/22-W2A	AC/DC 110V	9
60	RISHAB	Digital Ammeter 110V DC , YN1M302645-ME	I/P:4-20mA, RANGE: 0-150/300/600A, CL-0.2	3
61	RISHAB	Digital Voltmeter 110V DC , YN1M302645-MI	I/P:4-20mA, RANGE: 0-245KV, CL-0.2	5
62	ABB	220 KV GIS Relay RED 670 , RED670*2.0-B32X00	8xI/O,1xTRM, OPTICAL BUDGET 23dB,1310nm, 1A, 0-340V,50/60 Hz, 110-125V DC, 50mA,90-25V DC	3
63	ABB	220 KV GIS Relay RET 670 , RET670*2.0-B40X00	5xI/O, 2xTRM 1A, 0-340V, 50/60Hz 110-125VDC, 50ma, 90-250VDC	5
64	ABB	220 KV GIS Relay REB 670 , RET670*2.0-B21X02	11xI/O, 2xTRM 1A, 50/60Hz, 110-125VDC, 50ma 90-250VDC	3
65	Switron	220 KV GIS Ammeter Selector Switch , SPA 136 AM	440/250V, 10A	3
66	Switron	220 KV GIS Voltmeter Selector switch , SPA 135 VM	10A, 3WIRE	5
67	Reputed	220 KV GIS Toggle Switch , IN5399-3002-1	230V AC,5A	11
68	Kaycee	220 KV GIS Door Limit Switch , IIN5374-3001-1	230V AC,5A	11
69	SPECTRUM	LED Light for Panel Area Illumination , 3BYN591500-001	240V AC,11W	11
70	ABB	Fuse, 2A/415V AC , 1SCA107786R1@1 1SYN833001R2009	2A,32A	90
71	ABB	Neutral Link ,	15A-32A	26
72	RISHCON	Current Transducer , YN1M302645-MB	CTR:600-300-150/1A, CTR:300A, CL0.5, 4-20mA	3
73	RISHCON	Voltage Transducer , YN1M302645-MH	PTR:220KV/110V AC, CL:0.2	5
74	ABB	MCB , C16	2P 16A 440V AC/DC	23
75	ABB	MCB , C10	2P 10A 440V AC/DC	10
76	ABB	MCB , C6	2P 6A 440V AC/DC	69
77	C&S	MCB , C16	2P 16A 110/220 V DC	8
78	ABB	MCB , C16	2P 16A 230V AC	11

79	ABB	220 KV GIS 86 Relay , RXMVB4	110/220V DC	18
80	ABB	Reset Push Button , IN5396-3001-AC		18
81	ABB	220 KV GIS Trip Circuit Supervision Relay , IN352-001-AS	110/220V DC	22
82	ABB	220 KV GIS Trip Circuit Supervision Relay , IN352-001-AS	110/220V DC	66
83	ABB	220 KV GIS Trip Circuit Supervision Relay , IN352-001-AS	110/220V DC	22
84	ABB	220 KV GIS Test Switch , RK926-115-CL	20A	11
85	ABB	220 KV GIS DC Changeover Relay , RK223069-AN	110-125V DC	22

## List of 220KV Traction Transformer Components

S.No.	Make	Model/Type	Rating	Population
1	NEOPITX/ LUMASMART	FIBER OPTIC DEVICE ,	24-240V AC/DC	2
2	VILECO	THERMOSTAT ,	230V,2AC,0-60 deg C Range	6
3	SCHNEIDER	HEATER & Lightening supply MCB DOUBLE POLE ,	20A,240 AC	6
4	SCHNEIDER	HEATER SUPPLY MCB ,	1P,2A,240V	6
5	PERFECT CONTROL	Winding Temperature Indicator-HV ,	5A,240V AC/250 VDC	2
6	PERFECT CONTROL	Winding Temperature Indicator-LV ,	5A,240V AC/250 VDC	2
7	PERFECT CONTROL	Oil Temperature Indicator ,	5A,240V AC/250 VDC	2
8	SCHNEIDER	Control supply MCB ,	6A,240V AC	2
9	SCHNEIDER	CONTACTOR FOR DC VOLTAGE MONITOR ,	9A,415VAC,110VDC,COIL	2
10	SCHNEIDER	MPCB ,	440AC,17-23A OLR	2
11	ASHE CONTROL	TRANSMITER FOR TAP POSITION ,	85-230V AC/DC/ O/P-4- 20Amp	2
12	ASHE CONTROL	TRANSMITER FOR HV WIN TEMP ,	85-230V AC/DC/ O/P-4- 20Amp	2
13	ASHE CONTROL	TRANSMITTER FOR LV WIN TEMP ,	85-230V AC/DC/ O/P-4- 20Amp	2
14	ASHE CONTROL	TRANSMITTER FOR OIL ,	85-230V AC/DC/ O/P-4- 20Amp	2
15	WAGO	AUTOMATIC VOLTAGE REGULATION ,		2
16	BHARANI/MINLEC	ANNUCIATOR ,	90-250VAC/DC,6 WINDOW FACIA	4
17	BHARANI/ALLEN	Buzzer for TC in progress ,	100-240AC/DC	2
18	BHARANI/ALLEN	Buzzer for Annunciator ,	2.5 W,42-240AC/DC	2
19	Schneider	Contactora Raise Tap ,	9A,415 AC,24 DC Coil	2
20	Schneider	Contactora Lower Trap ,	9A,415 AC,24 DC Coil	2
21	Schneider	Contactora supply for PT monitoring ,	9A,415 VAC,110 V AC Coil	2
22	Schneider	ALARAM CANCELLATION ,	9A,415 VAC,110 V AC Coil	2
23	Schneider	Contactora for Lamp Test , Contactora for TC in Remote , Contactora for TC in Local , Contactora for upper Limit reached , Contactora for lower limit reached , Timer for Tap changer incomplete , Contactora for TC in MCB Trip , Contactora for OLTC Aux supply fail , Contactora Auto mode , Contactora manual mode	9A,415 V DC COIL,	20
33	EMCO	Digital Remote HV WDGTEMP INDICATOR , Digital Remote HV WDGTEMP INDICATOR , Digital Remote LV WDGTEMP INDICATOR , Digital Remote OIL TEMP INDICATOR	90-260V,AC/DC,4-20 mA O/P	8
37	SALZER	Rotary switch ,	16A,110V AC	2

## List of 220KV Auxiliary Transformer Components

S. No.	Make	Model/Type	Rating	Population
1	CTR	ON LOAD TAP CHANGER ,	SN/500 L2/1050/400/15 O	2
2	VIAT	BUCHHOLZ RELAY WITH ALARM & TRIP CONTACT ,		2
3	CTR	OIL SURGE RELAY FOR OLTC ,		2
4	PRECIMEASURE/PERFECT CONTROL	OTI DIAL METER ,	ALARM,TRIP CONTACTS 5AMP,220V AC & 0.5 AMP,220V DC	2
5	PRECIMEASURE/PERFECT CONTROL	WTI DIAL METER ,	ALARM,TRIP CONTACTS 5AMP,220V AC & 0.5 AMP,220V DC	2
6	FISO/LUXTRON	FIBRE OPTIC SENSOR CONTROLLER, ,	4 CHANNEL, 4 PROBE	2
7	SIEMENS	HRC FUSE LINK ,	2A,415V AC	4
8	ELCON	THERMOSTAT ,	230/250V AC,15A,2 TO 85'C	6
9	PRADEEP	TAP POSITION INDICATOR ,	230V AC,4-20mA OUTPUT	2
10	PE-SYSTEM	AUTOMATIC VOLTAGE REGULATING RELAY ,	AVR-102,INPUT SUPPLY 240V AC,PT SUPPLY 110V AC	2
11	KAYCEE	CONTROL SELECTOR SWITCH ,	6A,250V AC,4POLE,2WAY	2
12	L&T	TIME DELAY RELAY ,	24-240V AC/DC,0.1 Sec to 10 hr	2
13	L&T	AUXILIARY CONTACTOR ,	110V DC	2
14	VAISHNO	BUZZER ,	230V AC/DC	4
15	GE	HRC FUSE ,	2A,415V AC	4

### List of 132KV GIS Components

S. No.	Make	Model/Type	Rating	Population
1	Sieyuan	132 KV GIS Fast Earth Switch , SSFES02	145KV 40KA/4S	3
2		132 KV GIS Fast Earth Switch Motor , SSCT31-A	110 V DC , 280 W	3
3	MEIDEN	132 KV GIS Lightning Arrester , Y20WF-120/320S	120 KV	3
4	Sieyuan	132 KV GIS Disconnecter , SSDS02	145KV 3150A 40KA/4S	3
5		132 KV GIS Disconnecter Motor ,	110 V DC , 280 W	3
6	Sieyuan	132 KV GIS PT , JSQXFH-132	PRIMARY- 132/√3 KV SECONDARY 1- 0.11/√3 KV, 100VA SECONDARY 2- 0.11/√3 KV, 100VA	5
7	MTK	132 KV GIS Surge Counter , JQC-5F	0-10mA	9
8	Sieyuan	132 KV GIS Disconnecter with Earthing Switch , SDES02	145KV 3150A 40KA/4S	3
9		132 KV GIS Disconnecter with Earthing Switch Motor ,	110 V DC , 280 W	6
10	Sieyuan	132 KV GIS CT Incomer Bay , SSTA02	CORE 1- 600-300/1A, 5P20, 20VA CORE 2- 600-300-150/1A, 0.2, 15VA CORE 3- 600-300-150/1A, 0.2, 15VA CORE 4- 600-300/1A, 5P20, 20VA CORE 5- 600-300/1A, 5P20, 20VA	3
11	Sieyuan	132 KV GIS CT Outgoing Bay , SSTA02	CORE 1- 600-300/1A, 5P20, 50VA CORE 2- 600-300/1A, 5P20, 20VA CORE 3- 600-300/1A, 5P20, 50VA	5
12	Sieyuan	133 KV GIS CT Bus Coupler Bay , SSTA03	CORE 1- 600-300/1A, 5P20, 50VA CORE 2- 600-300/1A, 5P20, 20VA	2
13	Sieyuan	132 KV GIS Circuit Breaker , SSCB02	145KV 3150A 40KA/4S	9
14		132 KV GIS spring charging motor ,	230 V AC 720 W	9
15		132 KV GIS Trip Coil ,	110V DC	18
16		132 KV GIS Closing Coil ,	110V DC	9
17	Sieyuan	132 KV GIS Disconnecter with Earthing Switch , SDES02	145KV 3150A 40KA/4S	9
18		132 KV GIS Disconnecter with Earthing Switch Motor ,	110 V DC , 280 W	18
19	Sieyuan	132 KV GIS Disconnecter with Earthing Switch , SDES02	145KV 3150A 40KA/4S	9
20		132 KV GIS Disconnecter with Earthing Switch Motor ,	110 V DC , 280 W	18
21	Xy-ps	132 KV GIS Pressure Gauge , MTK-O1	-0.1 TO 0.9 MPA, U max=250v Pmax= 30W/50VA, CLASS 1.5	36
22	Xy-ps	132 KV GIS Pressure Gauge CB (Oil Filled) , MTK-O1	-0.1 TO 0.9 MPA, U max=250v Pmax= 30W/50VA, CLASS 1.5	9
23	Qiuqing Qingdao	132 KV GIS CB Counter , 404	110V DC	9
24	ADA	132 KV GIS CB Normal/Maintenance , 9A016-3L SV	110V DC , 0.4A	9
25	ADA	132 KV GIS CB Local/ Remote Switch , 9A176-5L SV	110V DC , 0.4A	9
26	ADA	132 KV GIS Interlock/Release Switch , 9A 335-10LSV/F	110V DC , 0.4A	9
27	ADA	132 KV GIS Reset Switch , 3A410-2L	110V DC , 0.4A	9
28	ABB	132 KV GIS BCU , REC 670	8xI/O, 1xTRM,0-20, 4-20, ±20mA, 1A, 0-340V, 50/60Hz 110-125VDC ,	9
29	ADA	Reset Switch , 3a410-2l	110V DC , 0.4 A	9
30	ABB	AC contactor , AF-30-30-00-14	250-500V AC , 35A	18
31	Weidmuller	132 KV GIS Auxiliary Relay B , DRM570110LT	110V DC , 5.2 mA	198
32	Tian'yi	Door Switch , X42A-S11/1Z	230V AC , 4A	10
33	ADA	CB Operate Switch , 3A240-1(2)L/F	110V DC , 0.4A	10
34	Moeller	Time Relay , ETR4-70-A	240V DC , 6A	10
35	Schneider Electric	Contactur , LP1-K0901FD+LA1-KN22	110V DC , 10A	10
36	Schneider Electric	132 KV GIS Air Switch DK , C65N-DC C10/2P(A9)+A9N OF	250V DC , 10 Amp	20
37	Schneider Electric	132 KV GIS Air Switch DK , iC65N C6/2P+iOF(iC65H)	400V AC , 6 Amp	9
38	Schneider Electric	132 KV GIS Air Switch DK , C65N-DC C6/2P(A9)+A9N OF	250V DC , 6A	9
39	Schneider Electric	132 KV GIS Air Switch DK , iC65N C10/2P+iOF(iC65H)	400V AC , 10A	20
40	Schneider Electric	132 KV GIS Air Switch DK , C65N-DC C6/2P(A9)+A9N OF	250V DC , 6A	18
41	Schneider Electric	132 KV GIS Air Switch DK , iC65N C4/1P+iOF(iC65H)	400V AC , 4A	24
42	Schneider Electric	132 KV GIS Air Switch DK , C65N-DC C6/2P(A9)+A9N OF	250V DC , 6A	40
43	Schneider Electric	132 KV GIS Air Switch DK , C65N-DC C6/2P(A9)+A9N OF	250V DC , 6A	21
44	Schneider Electric	132 KV GIS Air Switch DK , iC65N C20/4P+iOF(iC65H)	440V AC , 20A	18
45	Schneider Electric	132 KV GIS Air Switch DK , C65N-DC C6/2P(A9)+2A9N OF	250V DC , 6A	55
46	ABB	132 KV GIS Contactur QA , AF30-30-00-13	100~250V , 65A	27
47	Schneider Electric	132 KV GIS Contactur LSJ , LP1-K0901FD	110V DC , 20A	26

48	ODES	133 KV GIS Contactor KZJ1 , UEG/C-6H(DC110V)	220V DC , 5.2mA	3
49	Qiujiang Qingdao	CB Counter , 404 DC(110V)	110VDC ,	9
50	Changjiang Electric	132 KV GIS CB Position Indicator , AD11-22/22-W2A(DC220V)	220V DC , 15mA	9
51	Schneider Electric	132 KV GIS Contactor ZLC , LC1-D32FDC	110V DC , 40A	9
52	Schneider Electric	132 KV GIS Contactor TJ , LP1-K0901FD+LA1-KN22	110V DC , 20A	31
53	Moeller	132 KV GIS Time Relay SJ , ETR4-11-A	230~240V , 6A	9
54	Moeller	132 KV GIS Time Relay SJ , ETR4-70-A	240V DC , 6A	9
55	ABB	132 KV GIS Strike Fuse FD , JBO-0.5	500V AC ,	22
56	Yuanzheng Xi'an	Temperature and Humidity Controller , WSK-HS(TH)	230V AC , 3A	10
57	Weidmullar	132 KV GIS Auxiliary Relay B , DRM570110LT	110V DC , 5.2 mA	9
58	ADA	Changeover switch , 9A016-3L SV	110V DC , 0.4 A	9
59	ADA	Changeover switch , 9A335-10LSV/F	220V DC , 0.4A	3
60	ADA	Changeover switch , 9A176-5L SV	110V DC , 0.4A	10
61	Schneider Electric	Contactor , LC1-D32FDC	110V DC , 40A	9
62	Weidmullar	132 KV GIS Auxiliary Relay B , DRM570730LT	230V AC , 6.1 mA	10
63	RISHAB	Digital Ammeter 110V DC , YN1M302645-ME	I/P:4-20mA, Range : 0-150/300/600A (Adopted), CL:0.5	3
64	RISHAB	Digital Voltmeter 110V DC , YN1M302645-MF	I/P : 4-20mA, Range : 0-145kV CL:0.5	5
65	ABB	132 KV GIS Distance/Differential protection relay , RED670	8xI/O, 1xTRM, Optical budget 23dB, 1310nm 1A, 0-340V, 50/60Hz, 110-125VDC, 50ma 90-250VDC	3
66	ABB	133 KV GIS Trafo Differential protection relay , RET670	5xI/O, 2xTRM, 0-340V, 50/60Hz, 110-125VDC, 50ma 90-250VDC	5
67	ABB	134 KV GIS Bus Bar Differential protection relay , REB670	11xI/O, 2xTRM, 1A, 50/60Hz 110-125VDC, 50ma 90-250VDC	3
68	Switron	132 KV GIS ASS , 1MYN533015-001	440/250V	3
69	Switron	132 KV GIS VSS , 1MYN533015-002	440V AC	5
70	Reputed	132 KV GIS Toggle Switch ,	230V AC	2
71	Kaycee	132 KV GIS Door Limit Switch ,		10
72	ABB	Fuse, 2A/415V AC , 1SCA107786R1001	415V AC	84
73	ABB	132 KV GIS Neutral Link ,	15-32 Amp	26
74	RISHAB	Current Transducer 300/1A ,	600-300-150/1A	3
75	RISHAB	Voltage Transducer 132 KV/110V ,	132kV/110VAC	5
76	ABB	MCB 2P 16A 110V DC , 2CDS272061R0467	440VAC/440VDC	20
77	ABB	MCB 2P 10A 110V DC , 2CDS272061R0427	440VAC/440VDC	9
78	ABB	MCB 2P 6A 110V DC , 2CDS272061R0377	440VAC/440VDC	71
79	ABB	MCB 2P 16A 230V AC , 2CDS272001R0164	440AC/125V DC	11
80	ABB	132 KV GIS 86 Relay , IN 352-001-AS	110/220V DC	16
81	ABB	Reset Push Button , IN5396-3001-AC	110/220V DC	16
82	ABB	132 KV GIS Circuit Supervision Relay , IN352-001-AS	110/220V DC	24
83	ABB	132 KV GIS Test Switch , RK926-115-CL		8
84	ABB	132 KV GIS DC Changeover Relay , RK 223069-AN	110-125V DC	22

### List of 132KV Auxiliary Transformer Components

S. No.	Make	Model/Type	Rating	Population
1	CTR	ON LOAD TAP CHANGER ,	SN/500 L2/750/400/15 O	2
2	VIAT	BUCHHOLZ RELAY WITH ALARM & TRIP CONTACT		2
3	CTR	OIL SURGE RELAY FOR OLTC ,		2
4	PRECIMEASURE/PERFECT CONTROL	OTI DIAL METER ,	150mm dial type with ALARM, TRIP CONTACTS 5AMP,220V AC & 0.5 AMP, 220V DC	2
5	PRECIMEASURE/PERFECT CONTROL	WTI DIAL METER ,	150mm dial type with ALARM, TRIP CONTACTS 5AMP,220V AC & 0.5 AMP, 220V DC	2
6	FISO/LUXTRON	FIBRE OPTIC SENSOR CONTROLLER, ,	4 CHANNEL, 4 PROBE	2
7	PE-SYSTEM	AUTOMATIC VOLTAGE REGULATING RELAY ,	AVR-102,INPUT SUPPLY 240V AC,PT SUPPLY 110V AC	2
8	KAYCEE	CONTROL SELECTOR SWITCH ,	6A,250V AC,4POLE,2WAY	2
9	L&T	TIME DELAY RELAY ,	24-240V AC/DC,0.1 Sec to 10 hr	2
10	L&T	AUXILIARY CONTACTOR ,	110V DC	2
11	VAISHNO	BUZZER ,	230V AC/DC	4
12	GE	HRC FUSE ,	2A,415V AC	4

## List of 132KV Traction Transformer Components

S. No.	Make	Model/Type	Rating	Population
1	EASUN MR	OLTC OIL Surge relay ,		2
2	Leader /GG	Bypass relay for Bucholtz relay ,	50 dia bore	2
3	SUKRUT	MOLG with LOLA Contact for OLTC Conservator ,	150 mm	2
4	ABB	Tank earthing external CT ,		2
5	RWTI-HV PRECIMEASURE	Remote HV winding Temp Indicator ,	90-260V AC/DC,5 amp,14.2 mm Digital 3.5	2
6	RWTI-LV PRECIMEASURE	Remote LV winding Temp Indicator ,	90-260V AC/DC,5 amp,14.2 mm Digital 3.5	2
7	ROTI-OIL PRECIMEASURE	Remote Oil Temp Indicator ,	90-260V AC/DC,5 amp,14.2 mm Digital 3.5	2
8	TPI PRADEEP	Tap position indicator digital type ,	110 V DC/1 KOHM/STEP with 2 no's of 4-20 mA	2
9	HMI/SIEMENS	HMI for PLC system ,	24 V DC AUX supply	2
10	INTELEC	FACIA Annunciator ,	90-260V Ac/DC	2
11	SIEMENS	Remote Emergency push button ,	110 VDC,1 NO+NC	2
12	KEYCEE	OLTC operation Mode selector switch ,	Rotary cam switch,110V DC,16A,3P,3 ways with off, lockable	2
13	SIEMENS	Lower off raise Tap returning switch spring type ,	110 V DC,5A,4NO	4
14	NSQUARE	Thermostat ,	240 AC,50 HZ,15A	6
15	VAISHNO	Buzzer for DC supply fail ,	240 AC	2
16	VAISHNO	Tap changer buzzer ,	110 VDC	2
17	SIEMENS	Aux relay for DC Supply ON ,	110 V DC,10/16A,3NO+1NC	2
18	SIEMENS	Aux contactor for tap stuck up,OLTC Control supply,OLTC ,	110 V DC,10/16A,2NO+2NC	12
19	SIEMENS	AUX contactor for OLTC upper/lower limit reached ,	110 V DC,10/16A,4 NO	4
20	SIEMENS	MCB for Indication CKT, Annunciator ,OLTC Control supply ,	110 V DC,4A , 2Poles	6
21	90-270 AC/DC	Hooter for FACIA Annunciator ,	INTELEC	2
22	SIEMENS	MCB for AUX supply To PLC system ,	110 VDC ,6A ,2 Poles, With Aux 1NO+1NC Contact	2
23	CANOPIUS	Voltage Transducer ,	150 VAC/10VDC Transducer	2
24	PHENOEIX	Power supply unit for PLC SYSTEM ,	Power supply,110VDC/24 DC,5A	2
25	SIEMENS	PLC system for Voltage regulation ,	24 DC supply	2



### List of 33KV GIS Components

S. No.	Make	Model/Type	Rating	Population
1	L&T TAMCO	VACUUM CIRCUIT BREAKER	RATED VOLTAGE : 33 kV RATED CURRENT : 1250 Amp CLOSING COIL : 110 V DC TRIPPING COIL : 110 V DC SPRING CHARGING MOTOR : 110 V DC AUX. CONTACT : 6 NO + 6 NC BIL : 36 kV/70 kV/170 kVp STC : 25 kA/3 Sec FREQUENCY : 50 Hz	30
2	L&T TAMCO	DISCONNECTING SWITCH ,	THREE POSITION POSITIONS : ON, OFF RATED VOLTAGE : 33 kV RATED CURRENT: 1250 Amp CONTROL CARD VOLT : 110 V DC DS Position CONTACT : 7 NO + 7 NC Earth Position CONTACT : 4 NO SWITCHING CONTACTS : 1 NO + 1 NC BIL : 36 kV/70 WII 70 wp STC : 25 kA,3 Sec	8
3	L&T TAMCO	DISCONNECTING SWITCH ,	THREE POSITION POSITIONS : ON, OFF & EARTH RATED VOLTAGE : 33 kV RATED CURRENT: 1250 Amp CONTROL CARD VOLT : 110 V DC DS Position CONTACT : 7 NO + 7 NC Earth Position CONTACT : 4 NO SWITCHING CONTACTS : 1 NO + 1NC BIL : 36 kV/70 kV/170 kVp STC : 25 kA/3 Sec FREQUENCY : 50 Hz WITH 3 LIMIT SWITCHES: L4, L5 & L7 WITH PE & POE INTERLOCK	14
4	WIKI	SF6 GAS PRESSURE GAUGE ,	2 LIMIT SWITCHES EACH FOR ALARM & TRIP.	38
5	KRIES ENERGIET ECHNIK	VOIS R+ VOLTAGE INDICATING SYSTEM , ART NO.. CONSISTING OF ART NUMBERS 2502063(1QTY.) 3500061 (3QTY) & 3503305(1QTY)	AUX VOLTAGE : 110 V DC RELAY OUTPUT CONTACTS : 1 CO KONDENSATOR 1.000 PF RM 7.5; 630V MKPIO.5% INTEGRATED CAPACITOR MODULE : C2m SYSTEM VOLTAGE : 33 Kv COUPLING CAPACITY CI: 1.6 PF	30
6	KRIES ENERGIET ECHNIK	ADAPTE R SET for NKT 36_630 , Art-No : 2500161_NKT	(INCLUSIVE OF FLAT GASKET, WASHER, REDUCER, CAP, SLEEVE, COVER CAP & CONNECTING LEAD AK4 WTH SEAL)	30
7	NKT CABLES	POWER CABLE ADAPTER , MODEL NO.: CB 36-630 (1250)	WITH CAPACITIVE MEASURING POINT.SUITABLE TO TERMINATE POWER CABLE OF SIZE 400(AL) Sq.mm ON TYPE-CBUSHING.	132

8	NKT CABLES	POWER CABLE ADAPTER , MODEL NO.: CB 36- 630	WITH CAPACITIVE MEASURING POINT. SUITABLE TO TERMINATE POWER CABLE OF SIZE 120 Sq-mm ON TYPE-C BUSHING.	48
9	ERICON	3 CORE CURRENT TRANSFORMER ,	3 CORE RING TYPE CT CT RATIO : 1200-600-300/1-1-1 Amp CORE-1 PROTECTION CORE CLASS : 5P15 BURDEN: 10VA CORE-2 METERING CORE CLASS: 0.5 BURDEN; 10VA CORE-3 DIFFRENTIAL CORE CLASS : 5P20 BURDEN: 5VA BIL : 0.72/ 3 kV STC: 25KA/3 Sec FREQUENCY : 50 Hz INSULATION MATERIAL : RESIN CAST INSULATION CLASS: E APPLICABLE STANDARD : IEC61869-2 DRAWING NUMBER : ET-653, REV- 0. TYPE-3	48
10	ERICON	2 CORE CURRENT TRANSFORMER ,	2 CORE RING TYPE CT CT RATIO : 1200-600-300/1-1-1 Amp CORE-1 PROTECTION CORE CLASS : 5P15 BURDEN: 10VA CORE-2 METERING CORE CLASS: 0.5 BURDEN; 10VA BIL : 0.72/ 3 kV STC: 25KA/3 Sec FREQUENCY : 50 Hz INSULATION MATERIAL : RESIN CAST INSULATION CLASS: E APPLICABLE STANDARD : IEC61869-2 DRAWING NUMBER : ET-653, REV- 0. TYPE-1	18

11	ERICON	3 CORE CURRENT TRANSFORMER ,	<p>3 CORE RING TYPE CT  CT RATIO : 100/1-1-1 Amp  CORE-1 DIFFRENTIAL CORE  CLASS: PS, <math>V_k \leq 35V</math>, <math>R_{ct} \leq 0.6</math>  Ohm, <math>I_{mag} \leq 85mA</math> @ <math>V_k/2</math>  CORE-2 PROTECTION CORE  CLASS: 5P15  BURDEN; 7.5VA  CORE-2 METERING CORE  CLASS: 0.5  BURDEN; 5VA  BIL : 0.72/ 3 kV  STC: 25KA/3 Sec  FREQUENCY : 50 Hz  INSULATION MATERIAL : RESIN  CAST  INSULATION CLASS: E  APPLICABLE STANDARD :  IEC61869-2  DRAWING NUMBER : ET-653, REV-  0, TYPE-2</p>	24
12	RITZ	POTENTIAL TRANSFORMER ,	<p>METAL CLAD PLUG IN TYPE  VOLT RATIO :  33KV/R3//110/R3//110/R3  CORE-1: CLASS:0.5/3P,30VA  CORE-2: CLASS:3P, 25VA  OVF : 1.2 CONTINUOUS &amp; 1.9 FOR  8 HOURS  BIL : 36kV/70kV/170kVp  FREQUENCY : 50 Hz  INSULATION MATERIAL : RESIN  CAST  INSULATION CLASS : E  APPLICABLE STANDARD : IEC  60044-2  DRAWING NO.: MB3.11098  MODEL NO.: GBEAN 36T2</p>	72
13	SIEMENS	<p>O/C &amp;  E/F  NUMERI  CAL  PROTEC  TION , PART  NUMBER  :  7SR11033GA12  2CA0  PART NUMBER  7SR24222AA12  0AA0</p>	<p>CT , 1/5 A, 50/60 Hz WITH SEF  INPUT  AUX SUPPLY:- 80-250VDC / 115  VAC  BINARY INPUT/OUTPUT:- 6BI/8BO  COMMUNICATION PORT:- RS485  PROTOCOL:- IEC-60870-5-103</p>	14
14	SIEMENS	<p>TRANSF ORMER  DIFFERE  NTIAL  PROTEC  TION  RELAY(7  SR2422) , PART  NUMBER  7SR24222AA12  0AA0  PART NUMBER  7SR12062GA12  2CA0</p>	<p>6 CT , 1/5 A, 50/60 Hz  AUX SUPPLY:- 80-250VDC / 115  VAC  BINARY INPUT/OUTPUT:- 9BU6BO  COMMUNICATION PORT:- RS485  PROTOCOL:- IEC-60870-5-103</p>	8

15	SIEMENS	O/C & E/F NUMERICAL PROTECTION RELAY (7SR12) , PART NUMBER 7SR12062GA12 2CAO PART NUMBER 7SD80115EB20 IFAO	4 CT, 3VT , 1/5A, 50/60 Hz AUX SUPPLY:- 80-250VDC / 115 VAC BINARY INPUT/OUTPUT:- 6BU8BO COMMUNICATION PORT:- RS485 PROTOCOL:- IEC-60870-5-103	16
16	SIEMENS	CABLE DIFFERENTIAL PROTECTION RELAY(7SD) , PART NUMBER 7SD80115EB20 IF-AO MODEL: JRV192	4CT, 1/5 A, AUX SUPPLY:- 60-250VDC / 115 VAC /230VAC BINARY INPUT/OUTPUT:- 3BU5BO COMMUNICATION PORT:- RS485 PROTOCOL:- IEC-60870-5-103	16
17	JVS	ELECTRICAL RESET MASTER TRIP RELAY , MODEL: JRV192 3TH30	AUX VOLTAGE: 110V DC	30
18	SIEMENS	AUXILIARY CONTACTOR , 3TH30 3TH30	MAIN CONTACTS: 4NO,CONTROL VOLTAGE: 110V DC	54
19	SIEMENS	AUXILIARY CONTACTOR , 3TH30	MAIN CONTACTS: 3NO+1NO,CONTROL VOLTAGE: 110V DC	8
20	SIEMENS	AUXILIARY CONTACTOR , 3TH30 3TH30	MAIN CONTACTS: 2NO+2NO,CONTROL VOLTAGE: 110V DC ADD ON CONTACT: 1NC	22
21	SIEMENS	AUXILIARY CONTACTOR , 3TH30 3TH30	MAIN CONTACTS. 2NO+2NC,CONTROL VOLTAGE: 110V DC ADD ON CONTACT: 2NO+2NC	24
22	SIEMENS	AUXILIARY CONTACTOR , 3TH30 3TH30	MAIN CONTACTS: 2NO+2NC,CONTROL VOLTAGE 110VDC	148
23	SIEMENS	AUXILIARY CONTACTOR , 3TH30 RISH DPM96x96-PGD3V20mm	MAIN CONTACTS. 2NO+2NC,CONTROL VOLTAGE: 110V DC ADD ON CONTACT: 1NO+1NC	8

24	RISHABH	DIGITAL VOLTME TER , RISH DPM96x96-PGD3V20mm RISH DPM96x96—PG D3A— 20mm	INBUILT SELECTOR SWITCH. PTR : 33 KWR3 // 110V/R3 ACCURACY CLASS : 0.5 SIZE : 96X96 mm PROGRAMMABLE	24
25	RISHABH	DIGITAL AMMETER , RISH DPM96x96-PGD3A20mm MODEL NO.RISH CON V	INBUILT SELECTOR SWITCH. CT INPUT: 1 Amp, (CT PRIMARY IS PROGRAMMABLE) ACCURACY CLASS : 0.5 SIZE : 96x96mm PROGRAMMABLE	30
26	RISHABH	VOLTAGE TRANSDUCER , MODEL NO.RISH CON V	ACCURACY:-0.2 AUX. VOLTAGE: - 60-300V AC/DC I/P RATING:-0-10V AC (L-L) OUTPUT 1 4-20 mA. OUTPUT 2 4-20 mA. BASEPLATE MOUNTED FREQUENCY-50HZ	72
27	JVS	TRANSFORMER FAULT AUXILIARY RELAY ,	AUX SUPPLY: 110V DC, CONTACTS: 4 C/O H/R PER POLE NUMBER OF POLES : 2	8
28	SALZER	TRIP-NEUTRAL-CLOSE SWITCH ,	FLUSH MOUNTING OPERABLE FROM DOOR CONTROL VOLTAGE : 25A, VOLTAGE RATING : 220V DC OPERATIONAL VOLTAGE : 110 V DC SPRING RETURN TO NEUTRAL 4- POLE, 3-POSITION	30
29	SALZER	OPEN-NEUTRAL-CLOSE SWITCH ,	FLUSH MOUNTING OPERABLE FROM DOOR CONTROL VOLTAGE : 25A, VOLTAGE RATING : 220V DC OPERATIONAL VOLTAGE : 110 V DC SPRING RETURN TO NEUTRAL 2- POLE, 3-POSITION NAME PLATE WITH ENGRAVING:"DS OPEN-NEUTRAL-DS CLOSE	30
30	SALZER	LOCAL-REMOTE SWITCH ,	FLUSH MOUNTING OPERABLE FROM DOOR 6 POLE 2 POSITION CURRENT RATING : 16A VOLTAGE RATING : 220V DC OPERATIONAL VOLTAGE : 110 V DC 90 Deg SWITCHING ANGLE KEY OPERATED KEY LOCKABLE & REMOVABLE IN ALL POSITION	30
31	KIYOSH	DAMPING RESISTOR ,	RATING : 56 OHM & 250 WATTS	24
32	ESBEE	MUSHROOMM PUSH BUTTON , TYPE : GEN NEXT LED (EL)	CONTACT: 2N0 + INC	20
33	KIYOSH	REGISTER FOR TRIP CKT. , TYPE: DOMESTIC	VALUE: 3 K Ohm WATTAGE: 25W	60

34	KIYOSHK	STABILISING RESISTOR , MODEL: MET1088	RATING:0-1000 OHM, 200W	8
35	ALSTOM	METROSIL RESISTOR ,	CT:1A	8
36	KAYCEE	DOOR LIMIT SWITCH ,	RATING : 15 Amp	30
37	L&T	DP MCB ,	25A, 110V DC	8
38	L&T	DP MCB ,	16A, 110V DC	30
39	L&T	DP MCB ,	6A, 110V DC	180
40	L&T	DP MCB ,	10A, 110V DC	30
41	L&T	DP MCB ,	25A,415V AC	4
42	L&T	DP MCB ,	6A,415V AC	30
43	L&T	DP MCB ,	6A,415V AC, 1NO+1NC Aux. contact	24

### List of 33KV AIS Components

S. No.	Make	Model/Type	Rating	Population
1	Narayan Powertech	33 KV AIS Potential Transformer , TPT33KV(EPOXY CAST RESIN)	SINGLE PHASE WITH EXTERNAL PRIMARY FUSE 3/3.15A PTR:33KV/√3/110/√3 110V/3(OPEN DELTA), CORE 1- 33KV/RT3/110/RT3,CL:0.5/3P, 60VA CORE 2- 33KV/RT3/110/3, CL:3P,30VA VF: 1.2 CONT/1.9 FOR 8 HOURS, BIL: 36/70/170 KVP NON GUN TYPE PT	258
2	Narayan Powertech	33 KV AIS Tie Breaker CT , TCT1200-600-3003C-1-1-1A (EPOXY CAST RESIN WOUND TYPE)	RATED VOLTAGE: 33KV,50HZ, SHORT TIME CURRENT: 25KA FOR 1SEC BIL: 36/70/170 KVP CTR:1200-600-300/1-1-1A CORE 1 - CTR: 1200-600-300/1A, BURDEN:20VA, CLASS:5P15 CORE 2 - CTR: 1200-600-300/1A, BURDEN:15VA, CLASS:0.5 CORE 3 - CTR: 1200-600-300/1A, BURDEN:5VA, CLASS:5P20	246
3	Narayan Powertech	33 KV AIS Trafo Breaker CT , TCT252C-1-1A (EPOXY CAST RESIN WOUND TYPE)	RATED VOLTAGE: 33KV,50HZ, SHORT TIME CURRENT: 12.5KA FOR 3SEC BIL: 36/70/170 KVP CTR:25/1-1A CORE 1 - CTR: 25/1A, BURDEN:10VA, CLASS:5P15 CORE 2 - CTR: 25/1A, BURDEN:10VA, CLASS:0.5	117
4	Narayan Powertech	33 KV AIS BUS COUPLER Breaker CT , TCT1200-600-3002C-1-1-1A (EPOXY CAST RESIN WOUND TYPE)	RATED VOLTAGE: 33KV,50HZ, SHORT TIME CURRENT: 25KA FOR 1SEC BIL: 36/70/170 KVP CTR:1200-600-300/1-1-1A CORE 1 - CTR: 1200-600-300/1A, BURDEN:20VA, CLASS:5P15 CORE 2 - CTR: 1200-600-300/1A, BURDEN:15VA, CLASS:0.5	15
5	Narayan Powertech	Summation CT , CAST RESIN WOUND TYPE	INSULATION: 0.66KV, RATIO: 1+1/1A ACCURACY CLASS: 0.5, BURDEN: 15VA	6
6	SIEMENS	33KV Master Trip Relay , 7PJ1212- 6EB01-0AA0	1P TRIP RELAY 7PJ12,COIL SUPERVISION BURDEN: HIGH AUXILARY VOLTAGE, VOLTAGE:110V DC CONTACT COMBINATION: 4NO+1NC HR WITH FLAG	119
7	SIEMENS	Master Trip Relay (MSPA RSS) , 7PJ1524-2GA12-1CA0	1P TRIP RELAY 7PJ15,COIL SUPERVISION BURDEN: HIGH AUXILARY VOLTAGE, VOLTAGE:110V DC CONTACT COMBINATION: 4NO+2NC HR/ER WITH FLAG CASE SIZE: E2	7
8	SIEMENS	VACCUM CIRCUIT BREAKER , 3AH0-3142-EEEV-AEF2	RATED VOLTAGE:36KV, BILL: 36/70/170 KVP,RATED CURRENT: 1250A, BREAKING CAPACITY: 26.3 KA FOR 3 SEC, PLUG SOCKET:64 PIN	87
9	SIEMENS	VACCUM CIRCUIT BREAKER , 3AH0-3141-EEEV-AEF2	RATED VOLTAGE:36KV, BILL: 36/70/170 KVP,RATED CURRENT: 800A, BREAKING CAPACITY: 26.3 KA FOR 3 SEC, PLUG SOCKET:64 PIN	39
10		33 KV AIS CB Counter ,		126
11	SIEMENS	33 KV AIS Earth Switch Assembly , BCEARTH SWITCH	36KV, 25KA FOR 1 SEC FAULT WITHSTAND TYPE WITH 4NO+4NC, BILL: 36/70/170 KVP	121
12	Agni Motors	33 KV AIS Spring Charge Motor ,	110V DC	126
13	Inspros	33 KV AIS Trip Coil ,	110VDC	252
14	Inspros	33 KV AIS Closing Coil ,	110V DC	126
15	ECS	CAPACITIVE VOLTAGE INDICATOR , VIU02	33KV	121
16	SIEMENS	33KV AIS TIE FEEDER , 7SR1205- 2GA12-1CA0	NUMERICAL O/C,E/F,U/V RELAY HAVING TRIP CIRCUIT SUPERVISION FACILITY WITH IEC-60870- 5-103, MODBUS RS485 PORT INPUT NOMINAL CURRENT: 1A, PT SUPPLY 110V AC, AUX SUPPLY: 110 VDC,BINARY INPUT-3,BINARY OUTPUT 5, MLFB NO. 7SR1205-2GA12- 1CA0,PROTECTION:50,51,50N,51N,27- 2.59,74TC,67.67N	82
17	SIEMENS	33KV AIS TRAF0 FEEDER , 7SR1102-3GA12-1CA0	NUMERICAL O/C,E/F RELAY HAVING TRIP CIRCUIT SUPERVISION FACILITY WITH IEC-60870- 5-103, MODBUS RS485 PORT INPUT NOMINAL CURRENT: 1A, PT SUPPLY 110V AC, AUX SUPPLY: 110 VDC,BINARY INPUT-3,BINARY OUTPUT 5, MLFB NO. 7SR1102-3GA12- 1CA0,PROTECTION:51,51N,50N,50,74TC	37

18	SIEMENS	33KV AIS LBCCB , 7SR2103-1AA77-0CA0	NUMERICAL O/C,E/FRELAY HAVING TRIP CIRCUIT SUPERVISION FACILITY WITH IEC-61850,ETHERNET PROTOCOL & 2 ELECTRICAL ETHERNET & RJ45 CONNECTOR, INPUT NOMINAL CURRENT: 1A, PT SUPPLY 110V AC, AUX SUPPLY: 110 VDC,BINARY INPUT-19,BINARY OUTPUT-16, MLFB NO. 7SR2103-1AA77-0CA0,PROTECTION:51,51N,50,50N,74TC,86	2
19	SIEMENS	33KV AIS MSPA RSS FEEDER , 7SR2203-2AA77-0CA0	NUMERICAL O/C,E/F,U/V RELAY HAVING TRIP CIRCUIT SUPERVISION FACILITY WITH IEC-61850, ETHERNET PROTOCOL & 2 ELECTRICAL ETHERNET & RJ45 CONNECTOR, INPUT NOMINAL CURRENT: 1A, PT SUPPLY 110V AC, AUX SUPPLY: 110 VDC,BINARY INPUT-13,BINARY OUTPUT-14, MLFB NO. 7SR2203-2AA77-0CA0,PROTECTION:50,51,50N,51N,27-2,59,74TC,67,67N,86	7
20	SIEMENS	33KV AIS TIE FEEDER , 7SD8011-5EB20-1FA0	LINE DIFF RELAY WITH IEC 60870-5-103, RS485 PORT WITH FO COMMUNICATION PORT, INPUT NOMINAL CURRENT: 1A, AUX SUPPLY: 110V DC,BINARY INPUT-3, BINARY OUPUT-5,MLFB NO.-7SD8011-5EB20-1FA0, PROTECTION: 87L	68
21	SIEMENS	33KV AIS RCCB FEEDER , 7SD8011-5EB90-1FA0-LOR	LINE DIFF RELAY WITH IEC 61850, RS485 PORT WITH RJ45 CONNECTOR FO COMMUNICATION PORT, INPUT NOMINAL CURRENT: 1A, AUX SUPPLY: 110V DC,BINARY INPUT-3, BINARY OUPUT-5,MLFB NO.-7SD8011-5EB90-1FA0-LOR, PROTECTION: 87L	12
22	ABB	U/V RELAY , VHxm22B	RATED VOLTAGE 110V AC,AUX SUPPLY: 110 V DC, CONTACTS: 3NO + 3NC, SETTING: 14-80% OF U/V WITH TIME DELAY	10
23	ABB	O/V RELAY , VHxm23B	RATED VOLTAGE 110V AC,AUX SUPPLY: 110 V DC, CONTACTS: 3NO + 3NC, SETTING: 80-140% OF O/V WITH TIME DELAY	10
24	Secure	Tri-vector Meter E3M054, 3PH, 4 Wire , premier 300	RS 485 PORT & MODBUS PROTOCOL, 3PH 4 WIRE(HT), SYSTEM CT RATIO:2400-1200-600/1A, PT RATIO:33KV/RT3/110V/RT3, ACCURACY CLASS: 0.5	2
25	SIEMENS	33 KV AIS Aux Switch for Test/Service Position , B3NZ331	4NO	126
26	SIEMENS	33KV AIS R,Y,B LED , 3SB5235/PLASTIC BODY IN 22.3 mm DIA	VOLTAGE: 42-240 V AC/DC	30
27	SWITRON	33 KV AIS L/R Switch , SBC 25P 559B/L	VOLTAGE: 250V AC/DC, CURRENT: 16A, NO OF POLES: 5, CUTOOUT TYPE H	126
28	SWITRON	33 KV AIS T/N/C Switch , SBC 25P 244R	CONTACT DISPOSITION 2 NO IN CLOSE, 2NO IN TRIP, CUTOOUT TYPE H	126
29	Automatic Electric	33 KV AIS Tie breaker Ammeter , TAMM1200-600-300A (FLUCH MOUNTING)	SCALE 90 DEGREE, ACURRACY CLASS: 1.0 CT RATIO: 1200-600-300/1A RANGE: 0-300A-600A-1200A SIZE 96X96 mm	91
30	Automatic Electric	33KV AIS Trafo Breaker Ammetr , TAMM25A	SCALE 90 DEGREE, ACURRACY CLASS: 1.0 CT RATIO: 25/1A RANGE: 0-15A SIZE 96X96 mm	35
31	Siemens	33 KV AIS Ammeter Selector Switch , 3ST1400-2RQ08	SWITCHING SEQUENCE O-L1-L2-L3 WITH BLACK KNOB	126
32	Automatic Electric	33 KV AIS Voltmeter , SCALE	SCALE-90 DEGREE, ACCURACY CLASS: 1.0 RANGE: 0-36KV,PT RATIO:33KV/110KV, SIZE 96X96 mm	131
33	Siemens	33 KV AIS Voltmeter Selector Switch , 3ST1 400-1RK08	SWITCHING SEQUENCE O-L1L2-L2L3-L3L1 WITH BLACK KNOB	131
34	Siemens	33 KV AIS PB Emergency Trip , 3SB5000-0UC01	MUSHROOM LATCH TYPE WITH HOLDER FOR REAR CONNECTION, MUSHROOM ACTUATOR COLOR RED.	126
35	Siemens	MCB , C16	2P 16A 440V DC	136
36	Siemens	MCB , C16	2P 16A 415V AC	136
37	Siemens	MCB , C4	1P 4A 240/415V AC	136
38	Siemens	MCB , C6	2P 6A 440V DC	136
39	Siemens	MCB , C6	2P 6A 440V DC	136
40	Siemens	MCB , C6	2P 6A 440V DC	136
41	Siemens	MCB , C2	4P 2A 415V AC	94
42	Siemens	MCB , C6	2P 6A 440V DC	136
43	Siemens	MCB , C6	2P 6A 440V DC	136
44	Siemens	MCB , C2	1P 2A 240/415V AC	136
45	Siemens	MCB , C2	2P 2A 440V DC	136
46		33 KV AIS Control Link ,	20A	136



47	Jyothi Ltd.	33 KV AIS Auxiliary Contactor , RE300	110VDC, 2 NO	
48	Siemens	33 KV AIS Contactor 4NO , 3TH3040-OBF4	110V DC	126
49	Siemens	33 KV AIS Contactor 4NO , 3TH3040-OBF4	110V DC	126
50	Siemens	33 KV AIS Contactor 2NO, 2NC , 3TH3022-OBF4	110V DC	580
51	Siemens	33 KV AIS Contactor 4NO , 3TH3040-OBF4	110V DC	380
52		33 KV AIS Thermostat ,	25-75 D.CELCIUS	272
53	Automatic Electric	33 KV AIS Voltage Transducer , 11/17/330537/21	PTR: 33KV/110V, 110VDC, 4-20mA	
54	Automatic Electric	33 KV AIS Voltage Transducer , 11/17/330537/01	4-20mA	
55	Automatic Electric	33 KV AIS Voltage Transducer , 11/17/330537/07	4-20mA	
56		33 KV AIS Door Limit Switch ,	1N0+1NC	136
57		33 KV AIS Damping Resistor 75Ohms/220W ,	75 OHM,200WATT	92
58		33 KV AIS Resistor 3.3KOhms ,	3.3K OHM	252
59	Eaton Power	HRC Fuse 36KV , 36ABQNA3-15BI	3.15A	246

## List of 25KV GIS Components

S. No.	Make	Model/Type	Rating	Population
1	Schneider	DIGITAL AMMETER , DM1110	90-300VAC, 96SQMM SIZE, ACCURACY CLASS 0.5, PROGRAMMABLE, DM1110, 90300VAC/DC, SINGLE PHASE	13
2	Schneider	RXM Miniature relay , ORDER CODE:RXM4 AB2FD,RXZE2M114 FOR SOCKET,MODEL FOR RETAINING CLAMP:RXZ 400	RXM MINIATURE RELAY, 4 CHANGE OVER CONTACTS, AUX SUPPLY: 110 VDC, WITH LED, 6A	40
3	Schneider	Bus PT , BPT	2 CHANGE OVER CONTACTS, AUX SUPPLY : 120VAC, WITH LED. 12A	2
4	Schneider	RXM Miniature relay , ORDER CODE:RXM2 AB2FD,RXZE2M114 FOR SOCKET,MODEL FOR RETAINING	RXM MINIATURE RELAY, 2 CHANGE OVER CONTACTS, AUX SUPPLY: 110 V DC, WITH LED, 12A	59
5	Schneider	RXM Miniature relay , ORDER CODE:RXM4 AB2F7,RXZE2M114 FOR SOCKET,MODEL FOR RETAINING CLAMP:RXZ 400	RXM MINIATURE RELAY, 4 CHANGE OVER CONTACTS, AUX SUPPLY: 120 VAC, WITH LED, 6A	2
6	Schneider	contactor , CA3KN40-FD,IS-6875	4N0, 110VDC, 10A,	4
7	Schneider	Bay control processing unit contactor , CA3KN40+L AI KN40-FD,IS-6875	8N0, 1 110V DC, K MODEL AUX.CONTACTOR,8NO,(4NO BASE BLOCK 4NO ADDON), 10A	12
8	Schneider	DC to DC converter , ABL4RSM24035	110V-220DC TO 24V DC, 3.5A. 85WATT, % REGULATION <=2%,	4
9	Schneider	MTR (Master Trip relay) , RELBAXBL4110	AUX SUPPLY: 110VDC, CONTACT: 4 CHANGEOVER, LOW BURDEN, LOCK OUT RELAY, Hand & electrical reset trip relay with following flag.	14
10	Schneider	MCB , A9N61522	2A, DC, 2 P, MCB,TWO POLE,6KA, UPTO 500V DC,	15
11	Schneider	MCB , A9N61524	4A, DC, 2 P, MCB,TWO POLE,6KA, UPTO 500k/ DC	30
12	Schneider	MCB , A9N61526	6A, DC, 2 P, MCB,TWO POLE,6KA, UPTO 500V	47
13	Schneider	MCB , A9N2P16C	16A, AC, 2 P, MCB,TWO POLE, 10KA,	2
14	Schneider	MCB , A9N61535	32A, DC, 2 P, MCB,TWO POLE,6KA, UPTO 500V DC,	12
15	Schneider	MCB , A9N2P06C	6A, AC, 2 P, MCB,TWO POLE, 10KA	15
16	Schneider	MCB , A9N2P04C	4A, AC, 2 P, MCB,TWO POLE, 10KA,	34
17	Schneider	MCB , A9N61528	10A, DC, 2 P, MCB,TWO POLE,6KA	15
18		Change over Schneider contactor , A9N26924.	CHANGEOVER CONTACT INDICATING THE "OPEN" OR "CLOSED" POSITION	22
19	Schneider	Energy meter , EM6400NG	3p4w,CL.O.2, PT SEC: 110v AC, AUX.SUPPLY 44-277V ACIDC, RS485, BEZEL 96 SQ MM, CT SEC. PROGRAMMABLE, WITH ALL DEFAULT FEATURE.	13

20	Schneider	Micom P438 , p438-548021F0-308-415-616-463-947	1 MICOMP438/40T, CT I/P-1/5A, PT SEC-110V, DI-73V DC, 4DI-8DO- 73V. AUX SUPPLY:60-250V DC/100-230V AC, IEC 61850 + IEC103, DISTANCE CATENARY PROTC, CWT RING/DI/DO	5
21	Schneider	Micom P141 , E14131SA6 MOB38L	MICOMP141/40T, CT I/P-1/5A, PT UP-100-120AC, 8DI-7DO, 110250VDC, IEC61850-ETHERNET, IxRJ45,	2
22	Schneider	VAMP 300F RELAY , V300F-CGGIAADCA-B2	VAMP300, IA OR 5A, AUX SUPPLY:80-265VAC/DC, PROTOCOL : IEC61850, IxRJ45IOOMBPS + RS232, D1 VOLTAGE:110VDC, PT VOLTAGE:0-185VAC, Feeder Prot. 3L+4U+210 (1+0.2A), 28DI+19DO	7
23	Schneider	Power contractor , LCID09FD; TESYS-D	25A AC DUTY, AUX SUPPLY, 110 DC COIL, 3NO POWER CONTACT WITH 1NO+1NC	35
24	Schneider	Power contractor , LCID188FD	25A AC1 DUTY, AUX SUPPLY, 110 DC COIL. 2NO+2NC POWER CONTACT WITH 1NO+1NC	6
25	Essen/KA YCEE	Limit switch , PUSH ROD TYPE	CONTACTS: 1NO+1NC.	15
26	RECOM	BKR Control Switch , CATNO.BC401P244R1/SL	40A,SPRING RET.PISTOL GRIP HANDLE.NON-LOCKABLE, MAKE:RECOM, 1 EXTRA N/O IN BOTH TRIP &, CLOSE POS..SEQ.LOCK, ,LEGEND:WHITE LETTER ON BLACK BACKGROUND, IS:6875	15
27	RECOM	LOCAL-REMOTE SELECTOR SWITCH , PD10416A/L WTB3/L,	16A, 4POLE, 2WAYS, LOCKABLE ROTARY SWITCH, 95SQMM, LEGEND : 12 OCLOCK-"LOCAL" 3 OCLOCK-"REMOTE", BOTTOM: LR SWITCH	15
28	Schneider	VOLTMETER , DM 1210	AUX.SUPPLY 90-300VAC, 96 SQMM, CL-O.5, SCALE:AUTO, PT,SEC44480VAC, 90-300VAC/DC,1 -PH	6
29	RITZ/ZELISKO	CURRENT TRANSFORMER ,	1:1600-800/1 ,5VA;CL-O.5;2:1600-800/1;20VACL-5P15;3:1600-800/1,20VA,CL—5P15	13
30	RITZ ZELISKO	Potential Transformer (LVT) ,	27.5KV/110-110V SEC-I:10VA,CL-O.5 SEC-2;10VA;CL-3P	13
31	RITZ ZELISKO	Potential Transformer (BVT) ,	27.5KV/110-110V SEC-I:10VA,CL-o.5 SEC-2;10VA;CL-3P	4
32		Voltage sensing device ,	INTELLIGENT VOLTAGE INFORMATION SYSTEM WITH CONTACT, 24V DC WITH K1-SYSTEM VOLTAGE HEALTHY, K2-IVIS HEALTHY CONTACT	13
33	Schneider	Gas pressure Sensing device ,	INTELLIGENT DENSITY INFORMATION SYSTEM, 24V DC WITH PRESSURE LOW AND VERY LOW CONTACT	17
34	PFISTERER	Surge Arrester ,	42KV	9

## List of 24KV Neutral Ground Register Components

S.No.	Make	Model/Type	Rating	Population
1	A-BOND STRANDS	SINGLE POLE MANUALLY OPERATED OFF LOAD ISOLATOR ,	24kV, 1000A, 12.5KA, for 1 sec	4
2	PRAGATI	RESIN CAST CURRENT TRANSFORMER ,	24kV, SP, Ratio 1000/1A, Class 5P20, 15 AV, STC 22KA for 3 sec	8
3	OBLUM	PORCELAIN HOUSING SURGE ARRESTER ,	24kV,20KA, GAPLESS TYPE	4
4	LEGRAND	DP, AC, MCB ,	230V AC, 10A	4
5	KAYCEE	TOGGLE SWITCH ,		12

## List of Remote Terminal Unit Components

S. No.	Make	Model/Type	Rating	Population
1	ABB	K Contactor , BC7-40-00	48VDC-4NO	1558
2	ALAN ELECTRONICS	DC to DC Converter , APS-069-R	Input: 110VDC ; Output: 48VDC, 10A	31
3	ABB	RTU Rack , 1KGT022200R001-560SFR02-B1115	19"	40
4	OMRON	Power Supply Unit , S8VK-C06024	AC100-240V TO DC 24V	62
5	HIRSCHMANN	Media Converter , SPIDER-SL-40-06T1O6O699SY9HHHH	12-48VDC,0.35A ; 4 CU&1FO Ports	62
6	ABB	Communication Unit Card , 1KGT012600R0002-560CMU02-B1026	2 Serial ports, 2 Ethernet ports; Rel. 11 PLC license 5000DP	62
7	ABB	Analog Input Card , 1KGT012200R5001-23AE23-D1125	±40mA,0-20V ; 8 differential inputs	32
8	ABB	Digital Input Card , 1KGT012100R5001-23BE23-E1125	24-60VDC ; 16 inputs	285
9	ABB	Digital Output Card , GSNE000700R5312-23BA20-D1125	24-60VDC ; 16 outputs	94
10	ABB	Power Supply Card , 1KGT026500R0001-560PSR00-F-1016	24-60VDC ; Suitable for redundant power supply	80
11	ABB	RTU Local Remote Switch , ON4PBS24579	On/Off switch with 90 degree switching 1 normaly close contacts, 3 normally open contacts, 90 degree switching	31
12	ABB	MCB 2P 10A 440V DC , S202M C10 DC	10A ; 2 pole,440VDC,10kA	31
13	ABB	MCB 2P 4A 440V DC , S202M C4 DC	4A ; 2 pole,440VDC,10kA	62
14	ABB	MCB 2P 10A 400V AC , S202M C10 AC	10A ; 2 pole,440VDC,10kA	31
15	Syrotech	SFP Module , GOXC-1312-20D	20KM, 1310 TO 1560 nm	114
16	Syrotech/Preston	SC - LC Ptch cord , SC-LC Single mode		62
17	Star7	MCB 20 0.5A 230V AC ,	0.5A,10kA	34
18	RISHABH	Voltage Transducer , RISH CONV C	4-20mA	34
19		DOOR Auxilary contact ,	1NO, 1NC	31

## List of BCC Server Components

S. No.	Make	Model/Type	Rating	Population
1	HP	BASE Server , HPEDL380Gen9E5-2630v3SP1292IN Svr		2
2	HP	FE Server , HPEDL380Gen9E5-2630v3SP1292IN Svr		2
3	Norisys	MCB ,	MCB 1P 16A 240V AC	3
4	Hager	MCB , NCN2 16N C16	MCB 2P 16A 440V AC	2
5	OMRON	Power Supply Unit , S8VK-C06024		2
6	OMRON	Power supply unit , S8VK-C06024	AC100-240V TO DC 24V	2
7	HIRSCHMANN	Media Converter , SPIDER-SL-40-06T1O6O699SY9HHHH		2
8	Syrotech	SC - LC ,		4

## List of Ethernet Switch Components

S. No.	Make	Model/Type	Rating	Population
1	HIRSCHMANN	Ethernet Switch 10FO+10RJ45 , HIRSCHMANN	110/230 V AC DC, Dual PS	1
2	HIRSCHMANN	Ethernet Switch 12FO , HIRSCHMANN	110/230 V AC DC, Dual PS	4
3	HIRSCHMANN	Ethernet Switch 14FO , HIRSCHMANN	110/230 V AC DC, Dual PS	6
4	CISCO	Ethernet Switch 2FO 24 LAN , CISCO	230V AC	4
5	HIRSCHMANN	Ethernet Switch 2FO+6RJ45 , HIRSCHMANN	110/230 V AC DC, Dual PS	1
6	HIRSCHMANN	Ethernet Switch 6FO+10RJ45 , HIRSCHMANN	110/230 V AC DC, Dual PS	8
7	HIRSCHMANN	Ethernet Switch 6FO+14RJ45 , HIRSCHMANN	110/230 V AC DC, Dual PS	2
8	HIRSCHMANN	Ethernet Switch 8FO+11RJ45 , HIRSCHMANN	110/230 V AC DC, Dual PS	1

### List of Line Interface Unit Components

S.No.	Make	Model/Type	Rating	Population
1	BESTNET	Line Interface Unit , SC TYPE, 12 PORT		59
2	IVEONET/PRESTON	Line Interface Unit , ST TYPE, 12 PORT		79
3	IVEONET/PRESTON	Line Interface Unit , LC TYPE, 12 PORT		34



## List of Sub-Station Automation System Components

S. No.	Make	Model/Type	Rating	Population
1	ADVANTECH	DR Server , KV785141BA		1
2	ADVANTECH	SAS Server , KV785141BA		2
3	PORTWELL LAXONS	DR Server , PLX-500NC-MX		1
4	PORTWELL LAXONS	SAS Server , PLX-500NC-MX		2
5	DELL	21"Monitor HMI , FLAT PANEL P2217H		6
6	ATEN	KVM Local , CE750L		6
7	ATEN	KVM Remote , CE750R		6
8	ABB	DC supervision Relay , RK271019AN		2
9	HIRSCHMANN	Media Converter , SPIDER-SL-40-06T1O6O699SY9HHH		4
10	OMRON	Power supply unit , S8VK-C06024	AC100-240V TO DC 24V	4
11	EPSON	Dot Matrix Printer , LQ-1310		2
12	HP	A3 Size colour laser jet printer , F156400/LBP9100C		2
13		LC-LC Single mode ,		4
14	ABB	AC MCB 2P 6A , S202M C6	MCB 2P 6A 400V AC	2
15	ABB	DC MCB 2P 4A , S202M C16	MCB 2P 16A 400V AC	4
16	ABB	DC MCB 2P 4A , S202M K4A UC	MCB 2P 4A 440V AC/DC	11
17	ABB	AC MCB 2P 16A , S202M K16A UC	MCB 2P 16A 440V AC/DC	3
18	ABB	DC MCB 2P 6A , S202M K6A UC	MCB 2P 6A 440V AC/DC	4
19	ABB	DC MCB 2P 4A , S202M C4 DC	MCB 2P 4A 440V DC	1
20	ABB	AC MCB 2P 10A , SH202M C10	MCB 2P 10A 400V AC	5

### List of Emergency Trip System Components

S. No.	Make	Model/Type	Rating	Population
1	TEKNIC	MUSHROOM SWITCH WITH KEY , IEC 60947-5-1-CE		42
2	TEKNIC	NC ELEMENTS(RED)S2 , IEC 60947-5-1-CE		42
3	TEKNIC	NO ELEMENTS(GREEN)S1 , IEC 60947-5-1-CE		42
4	ELMEX	DIN RAIL END STOPPER , IEC 60947-7-1-CE		84
5	SEB	HAMMER FOR ETS , 55556 ISSUE-1		42
6	TEKNIC	110VDC RED LED , 3PLBRL-CE	110V DC	42
7	ORION COMPUTER	INDICATOR 110VDC FOR ETS ,	110V DC	42
8	CONNECTWELL	DIN RAIL TERMINAL WITH FUSE , CSFL-4U		84
9	CONNECTWELL	END PLATE FOR DIN RAIL TERMINAL WITH FUSE , EPCSFL4U		84
10	PROTECTRON	FUSE , 5X20MM	6&3A, 250V	84
11	ELMEX	DIN RAIL CONNECTOR , ELMEX KUT 2.5		84
12	ELMEX	END PLATE FOR DIN RAIL CONNECTOR , ELMEX KP NS GREY		42
13	ELMEX	SHORTING LINK 2,3,4 WAY ,		168

## List of Transformer Relay Components

S. No.	Make	Model/Type	Rating	Population
1	PECON ELECTRONICS	TRANSFORMER PROTECTION RELAY ,	Six channel temperature scanner. Temperature indication range: – 50 to 250 °C. Four relay outputs for Fault, Fan, High (Alarm) & Very High (Trip). Independent set of set points for 4th Channel. Fan exerciser function. RS485 output for remote temperature indication / Aux. Supply: 85-270 VAC/DC (Optionally 20-50 VAC/DC)	47
2	ABB	MCB , C6	2P,6A	47

### List of Solar Components

S. No.	Make	Model/Type	Rating	Population
1	WAREE	SOLAR MODULE OF CAPACITY 250WP , POLYCRYSTALLINE SOLAR PHOTO VOLTAIC MODULE	Each Module 250watt 60 cell	72
2	PHOENIX CONTACT	HRC FUSE	12A/15A/1000V	8
3		MOV	640V DC,16 DIA	6
4	ABB	DC DISCONNECTING SWITCH ,	4P,16A	2
5	DELTA/ABB/INGETEA/MEQ UIVALENT/RITTAL	INVERTER ,	10KVA,3 PHASE,415V	2

### List of Battery Charger Components

S.No.	Make	Model/Type	Rating	Population
1	STATCON	110V TRANSDUCER , CARD SPCL204V1	110V TRANSDUCER CARD VTD	30
2	RISHABH	AC VOLTMETER ,	DIGITAL METER 0-500V AC,M96, CL-0.1,3.5D, AUX- 86-270V DC	60
3	STANDARD	AC VOLTMETER FUSE ,	FUSE 2A/32A NS HRC	60
4	KAYCEE	AC VOLTMETER SELECTOR ,	AC SWITCH ROTARY 10A VSS PHASE TO PHASE	60
5	STATCON	ANNUNCIATION CARD , CARD SPCL-440V2		60
6	STANDARD	ANNUNCIATION I/P FUSE , CARD SPCL-458	GLASS FUSE 0.5AX3NO.	60
7	STATCON	ANNUNCIATION WINDOW ,	ANN. WINDOW 12VDC, DUAL	480
8	KAYCEE	AUTO / MANUAL SWITCH ,	SWITCH CAM 10A, 1P,2W	60
9	STATCON	BATTERY REVERSE CARD , CARD SPCL84V3		30
10	C&S	BATTERY REVERSE CONTACTOR ,	CONTACTOR DC 125A/AC1,1 POLE,110V DC	3
11	C&S	BATTERY REVERSE CONTACTOR ,	CONTACTOR DC 50A,1 POLE,110V DC	24
12	C&S	BATTERY REVERSE CONTACTOR ,	CONTACTOR DC 70A,1 POLE,110V DC	3
13		BATTERY SHUNT ,	SHUNT 100A/75MV	3
14		BATTERY SHUNT ,	SHUNT 50A/75MV	24
15		BATTERY SHUNT ,	SHUNT 75A/75MV	3
16		BATTERY TERMINAL ,	TERMINAL 70MM BUS BAR TYPE RED + BLACK	30
17		BLEEDER ,	W/W/R 250E, 250W, ± 10%	60
18		BLEEDER FOR DROPPER CARD , CARD SPCL236	RES 1K2/2W - 6NO.; 110V DROP RESISTANCE CARD	30
19	SEMIKRON	BLOCKING DIODE ,	DIODE 150A, 600V	6
20	SEMIKRON	BLOCKING DIODE ,	DIODE 55A, 400V	48
21	SEMIKRON	BLOCKING DIODE ,	DIODE 70A, 600V	6
22	PANKAJ	BOOST VOLT SET POT ,	POTENTIOMETER 10K/1W	60
23	KELTRON	BUZZER ,	BUZZER	60
24	PLA	CHARGER FAIL AUX RELAY ,	RELAY 5A, 3C/O, 12V	60
25	PLA	CHARGER FAIL RELAY ,	RELAY 12V, 3C/O, 5A	60
26	TEKNIK	CHARGER HEALTHY INDICATION , CARD SPCL48	RED LED, 12V	120
27		FLOAT BOOST DC ON LED ,	CARD SPCL161V1 ( R+R+R), LED CARD FOR 12V	60
28	STATCON	CONT. SNUBBER CARD ,	SNB-01(100E/10W, 0.1MF/1KV)	60
29	STANDARD	CONTROL FUSE ,	FUSE 6A/32A NS HRC	60
30	PANKAJ	CURRENT SET POT ,	POTENTIOMETER 10K/1W	60
31	RISHABH	DC AMMETER ,	DIGITAL METER ±100A/75MVDC, M96, CL-1.0 AUX 86-270VDC	6
32	RISHABH	DC AMMETER ,	DIGITAL METER ±50A/75MVDC, M96, CL-1.0 AUX 86-270VDC	24
33	RISHABH	DC AMMETER ,	DIGITAL METER ±75A/75MVDC, M96, CL-1.0 AUX 86-270VDC	6
34	KAYCEE	DC AMMETER SELECTOR ,	AC SWITCH CAM 10A, 2 POLE, 2 WAY NO-OFF	60
35	PEC	DC O/V DROP. RESISTANCE , CARD SPCL-236	(560E/2WX6NO.)	120
36	RISHABH	DC VOLTMETER ,	DIGITAL METER 0-200V DC,M96, CL-0.1,3.5D, AUX- 86-270V DC	60
37	STANDARD	DC VOLTMETER FUSE ,	FUSE 2A/32A NS HRC	60
38	KAYCEE	DC VOLTMETER SELECTOR ,	AC SWITCH CAM 10A, 2 POLE, 2 WAY NO-OFF	60
39	STATCON	DC-DC CARD , CARD SPCL-405	110V DC	60
40		DELIBERATE DISCHARGE SWITCH ,	AC SWITCH ROTARY 63A, 3 POLE, 2 WAY	30
41	STATCON	DIODE CARD , CARD SPCL422 (4007X4)		60
42	KAYCEE	DOOR PUSH BUTTON ,	PUSH BUTTON DOOR MICRO SPRING	60
43	SEMIKRON	DROPPER DIODE ,	DIODE DIODE MODULE 90A, 600V	4
44	SEMIKRON	DROPPER DIODE ,	DIODE DIODE MODULE 55A, 400V	54
45	C&S	DROPPER DIODE CONTACTOR ,	CONTACTOR DC 125A/AC1,1 POLE,110V DC	3
46	C&S	DROPPER DIODE CONTACTOR ,	CONTACTOR DC 50A,1 POLE,110V DC	24
47	C&S	DROPPER DIODE CONTACTOR ,	CONTACTOR DC 70A,1 POLE,110V DC	3
48	PLA	DROPPER DIODE RELAY ,	RELAY 5A, 3C/O, 110V	30
49		RFI COIL ,	RFI COIL 25A	6
50		RFI COIL ,	RFI COIL 12A	48

51		RFI COIL ,	RFI COIL 15A	6
52	PLA	EARTH FAULT RELAY ,	RELAY 5A, 3C/O, 48V	30
53		EARTH FAULT RESISTANCE ,	W/W/R 1K, 20W, ± 10%	60
54	STATCON	FEEDBACK CARD , CARD SPCL-236	110V DC	60
55	STATCON	FERRITE CORE ,	FERRITE CORE	120
56	RESCON	FILTER CAPACITOR ,	SELECTED BANK	60
57	STATCON	FILTER CHOKE ,	CHOKE 90A	6
58	STATCON	FILTER CHOKE ,	CHOKE 40A DC	48
59	STATCON	FILTER CHOKE ,	CHOKE 50A DC	6
60	STANDARD	FILTER FUSE ,	FUSE 32A/32A TIA HRC	6
61	STANDARD	FILTER FUSE ,	FUSE 16A/32A TIA HRC	48
62	STANDARD	FILTER FUSE ,	FUSE 20A/32A TIA HRC	6
63	DUMAG	FLOAT BOOST RELAY ,	RELAY 12V, 3C/O, 5A	60
64	PANKAJ	FLOAT VOLT SET POT ,	POTENTIOMETER 10K/1W	60
65	TEKNIK	FLOAT, BOOST, DC ON LED , CARD SPCL161V1	( Y,R,G) LED CARD FOR 110V DC	60
66	STANDARD	FUSE FOR SYNCH. TX. , CARD SPCL-458	(GLASS FUSE 0.5AX3NO.)	60
67		I/C TERMINALS STANDBY ,	TERMINAL 70MM BUS BAR TYPE RED + BLACK	60
68	PLA	I/P ,O/P MCB AUX. RELAY ,	RELAY 5A, 3C/O, 110V	120
69	SCHNEIDER	INPUT CONTACTOR ,	CONTACTOR 32A,3 POLE,415V AC+ 1NC AUX	4
70	SCHNEIDER	INPUT CONTACTOR ,	CONTACTOR 25A,3 POLE,415V AC + 1NC	54
71	SCHNEIDER	INPUT MCB ,	MCB 50A,4POLE	4
72	SCHNEIDER	INPUT MCB ,	MCB 25A,4POLE	54
73		INPUT TERMINAL ,	TERMINAL TPN-1, 4 WAY	60
74		LOAD TERMINAL ,	TERMINAL 70MM BUS BAR TYPE RED + BLACK	60
75	STATCON	MAIN CONTROL CARD ,	CARD SPCL-441V2	60
76	STATCON	MAIN TRANSFORMER ,	TXR I/P-415V, 15.0KV	4
77	STATCON	MAIN TRANSFORMER ,	TXR I/P-415V, 6.7KVA	48
78	STATCON	MAIN TRANSFORMER ,	TXR I/P-415V, 8.3KVA	6
79	STATCON	MAINS ON INDICATION , CARD SPCL161V1	( R, Y, B), MAIN INDICATION LED	60
80	PANKAJ	MANUAL VOLT SET POT ,	POTENTIOMETER 10K/1W	60
81	KAYCEE	MASTER SLAVE SELECTOR ,	SWITCH CAM 10A, 4 POLE, 2 WAY	29
82	KAYCEE	MODE SELECTOR SWITCH ,	SWITCH CAM 10A, 1P, 2W CENTER OFF	60
83	SCHNEIDER	OUTPUT MCB ,	MCB 63A,3POLE	54
84	SCHNEIDER	OUTPUT MCCB ,	MCCB 125A,3POLE + 1AUX. SWITCH	4
85		OUTPUT VOLTAGE TRANSDUCER , CARD SPCL204V1		60
86	PLA	OVER LOAD RELAY ,	RELAY 5A, 3C/O, 18V	60
87	EPCOS	PF CAPACITOR ,	SELECTED BANK	180
88	STANDARD	PF CAPACITOR FUSES ,	FUSE 32A/32ATIA TYPE	12
89	STANDARD	PF CAPACITOR FUSES ,	FUSE 16A/32A NS TYPE	162
90	STATCON	POWER SUPPLY CARD , CARD SPCL405	(48V-220V : ±12V)	60
91	STATCON	POWER SUPPLY TX. ,	TRANSFORMER-4083A	60
92	STANDARD	RECTIFIER FUSE ,	LINK 63A, TIS TYPE	24
93	STANDARD	RECTIFIER FUSE ,	FUSE LINK 32A, TIA TYPE	162
94	STATCON	REMOTE ALARM CARD , CARD SPCL568	(RELAY CARD) POT. FREE DOUBLE	120
95	EPCOS	RFI CAPACITOR CARD ,	RFI-2 FOR CAPACITOR	180
96		RFI COIL ,	RFI COIL 25A	180
97	SEMIKRON	SCR-SCR MODULE ,	SCR SCR MODULE 90A/800V	12
98	SEMIKRON	SCR-SCR MODULE ,	SCR SCR MODULE 57A/800V	162
99	SEMIKRON	SIGNAL DIODE ,	DIODE 4007	180
100	STATCON	SNUBBER CARD , CARD SNB-01	(50E/5W, 0.1MF/2KV)	180
101		SPACE HEATER ,	SPACE HEATER 230V/100W	60
102	STATCON	SUNCH. TXR I/P RESS. CARD , CARD SPCL458	(TXR I/P RESS.)	60
103	STATCON	SYNCH. TX. ,	TRANSFORMER-2988A	180
104		TERMINAL STRIP-2 ,	TERMINAL STRIP 5A, 10 WAY, OPEN TYPE	6
105		TERMINAL STRIP-2 ,	TERMINAL STRIP 5A, 8 WAY, OPEN TYPE	48
106		TOTAL CURRENT SHUNT ,	SHUNT 100A/75MV	6
107		TOTAL CURRENT SHUNT ,	SHUNT 50A/75MV	48
108		TOTAL CURRENT SHUNT ,	SHUNT 75A/75MV	6
109		TRANSDUCER O/P TERMINAL ,	TERMINAL STRIP 5A, 3 WAY	60

110	STATCON	TRANSDUCER POWER SUPPLY , CARD SPCL223V2	CARD SPCL223V2 (110V TRANSDUCER CARD)	5
111	STATCON	TRANSDUCER POWER SUPPLY , CARD SPCL223V3	CARD SPCL223V3 (110V TRANSDUCER CARD)	24
112	STATCON	TRANSDUCER RFI , CARD SPCL98		29
113	PLA	TRIP AUX RELAY ,	RELAY 5A, 3C/O, 12V	60
114	PLA	TRIP RELAY ,	RELAY 12V, 3C/O, 5A	60
115	STATCON	VOLTAGE SENSING CARD FOR DROPPER DIODE , CARD 5790V1		30
116	STATCON	WINDOW INTERPHASE CARD , CARD SPCL491		60

## List of UPS Components

S. No.	Make	Model/Type	Rating	Population
1	EPCOS/ELECTRONICON	AC CAPACITOR ,	50 $\mu$ F	12
2	EPCOS/ALCON/BHC-RIFA	DC CAPACITOR ,	3300 $\mu$ FD,350V	8
3	BUSSMANN/FERRAZ	RECTIFIER INPUT FUSES(FAST ACTING) ,	90A	16
4	BUSSMANN/FERRAZ	DC FUSE(FAST ACTING) ,	90A	8
5	BUSSMANN/FERRAZ	BATTERY FUSE(FAST ACTING) ,	90A	4
6	BUSSMANN/FERRAZ	BYPASS FUSE(FAST ACTING) ,	56A	6
7	IXYS/SEMIKRON/EUPEC	FREE WHEELING DIODE(CHARGER) ,	DD-46	4
8	IXYS/SEMIKRON/EUPEC	THYRISTOR(CHARGER) ,	TT-58	12
9	IXYS/SEMIKRON/EUPEC	THYRISTOR(STATIC SWITCH) ,	TT-27	12
10	SEMIKRON/EUPEC	IGBT ,	75A 600V	8
11	L&T/GE/SCHNEIDER	BATTERY MCCB , JIS C8201-2-1	100A	10
12		BYPASS MCCB ,		
13		OUTPUT MCCB ,		
14	KAYCEE	MANUAL BYPASS SWITCH(UPS-1 ONLY) ,	40A 2W 1P	2
15	HITACHI HI-REL	DC CHOKE ,	3.25mH 75A	4
16	HITACHI HI-REL	OUTPUT ISOLATION TRANSFORMER ,	5KVA 1PH-1PH	2
17	HITACHI HI-REL	RECTIFIER SNUBBER CARD ,	NIL	4
18	HITACHI HI-REL	STATIC SNUBBER CARD ,	NIL	4
19	HITACHI HI-REL	I4 POWER SUPPLY & FEEDBACK CARD ,	NIL	6
20	HITACHI HI-REL	I4 SYSTEM CONTROL CARD ,	NIL	6
21	HITACHI HI-REL	I4 GATE DRIVER CARD ,	NIL	6
22	HITACHI HI-REL	SMPS CARD ,	NIL	6
23	HITACHI HI-REL	I4 SYSTEM MANAGER CARD ,	NIL	6
24	HITACHI HI-REL	BYPASS SQUARE CARD ,	NIL	4
25	HITACHI HI-REL	CHARGER CONTROL CARD ,	NIL	4
26	HITACHI HI-REL	SWITCHER CARD ,	NIL	4
27	HITACHI HI-REL	BUFFER DRIVER CARD ,	NIL	4
28	HITACHI HI-REL	INPUT ISOLATION TRANSFORMER ,	25KVA 3PH3PH	2
29	L&T/GE/SCHNEIDER	I/P MCCB ,	63A 50KA	6



## **List of Battery bank Components**

<b>S. No.</b>	<b>Make</b>	<b>Model/Type</b>	<b>Rating</b>	<b>Population</b>
1	AMCO/HBL	Battery for UPS , VRNM250/266	250/266AH,220V DC, 1.2/ Cell voltage	352
2	AMCO/HBL	Battery for 90A Charger , VRNM355/357	355/357AH,110V DC, 1.2/ Cell voltage	340
3	AMCO	Battery for 50A Charger , VRNM233	255AH,110V DC, 1.2/ Cell voltage	255
4	AMCO/HBL	Battery for 40A Charger , VRNM183/190	183/190AH,110V DC, 1.2/ Cell voltage	2040

## List of Nitrogen injection fire protection system Components

S. No.	Make	Model/Type	Rating	Population
1	ORION	PRESSURE MONITORING SWITCH ,		8
2	TECKNIC	LIMIT SWITCH ,	GO2=2NO, GO3=2NO,GO4=1NO+1NC, GO5 2NO/1NC+1NO,GO6=2NO/1 NC+1NO	40
3	CTR	FIRE DETECTORS ,	QUARTZ BULB,HEAT SENSING,CONTACTS:2NO, TEMPRATURE:141'C	64
4	SIEMENS	AUXILIARY CONTACTOR ,	110V DC	144
5	SALZER	SELECTOR SWITCH ,	AC23A,415V,7.5KW	8
6	PROTON	ELECTRONIC HOOTER ,	90-270VA C/DC	16

## List of ACDB Components

S. No.	Make	Model/Type	Rating	Population
1	ANCHOR	SWITCH & SOCKET , 39996	15A-30A 3PIN 230VAC	6
2	ALSTOM	RELAY S/R U/V OR O/V INSTANTANEOUS , VAG11-415V AC	415V AC AUXILLIARY 1/4 N Vert	37
3	ESBEE	ILPB ,	110VDC AMBER	6
4	GIC	TIMER 225 SER. MULTIMODE , 2A5DT5	24-240VAC/DC 0.1SEC-10HRS. 2C/O	6
5	GIC	TIMER DIGITAL CRONO , 67DDT0	110-240V AC 0-24HRS.	6
6	GIC	TIMER STAR DELTA , 2ASDT0	225 SER. 230VAC	6
7	KAYCEE	BREAKER CONTROL SWITCH , BCA02P006K144	25A DP	6
8	KAYCEE	SELECTOR SWITCH , 2R26BO/GB	2P 2W WITH OFF 6A/10A	6
9	KAYCEE	TOGGLE SWITCH , 1021BY	SP ON/OFF 6A	6
10	L&T	ACB , SL960710000	630A FP EDO 50KA SR18G CPOWER S1 SPRING CHARGE MOTOR-230V AC,CLOSING COIL110V DC,SHUNT TRIP COIL-110V DC	6
11	L&T	AUX CONTACTOR , CS9402910000	MXO 22E 2NO + 2NC AUX110V DC	6
12	L&T	AUX CONTACTOR , CS94018B0000	MXO 40E 4NO AUX230V AC	6
13	L&T	PWR CONTACTOR , CS97076B000	70A TP TYPE MNX70 AC3 240V AC(ST190020000)	6
14	L&T	MCCB , CM92008OOK10 G	100A TP TMD TYPE DN2-250D 36KA	8
15	L&T	MCCB , CM92009OOPIOG	250A TP TMD TYPE DN2-250D 35KA	4
16	L&T	O/L RELAY , SS9413600GO	30.00-50.00A MN5 (DIR.MOUNTING)	6
17	L&T	O/L RELAY KIT FOR MOUNTING , SS946380000	MN5 RELAY ON MN80/95/110/140 CONT	6
18	L&T	ACB MICROSWITCH , SL927040000	COMMON INDICATION OF O/L & S/C (3) EACH C-POWER	6
19	L&T	ACB MICROSWITCH , ST426720000	SPRING CHARGING INDICATION	6
20	L&T	ACB U/V RELEASE , SL92720DOOO	415V AC C-POWER	4
21	L&T	PWR CONTACTOR AUX CONT BLOCK , CS941180000	1NO+1NC MNX UPTO 80A	6
22	L&T	AUX CONT BLOCK , CS940350000	2NO+2NC FOR MX - A1	6
23	L&T	MCCB AUX CONT. BLOCK , CM998010000	1C/O DN2/DN3/DN4	6
24	L&T	ACB MICROSWITCH , SL931420000	TEST OR ISOLATED POSITION CPOWER	6
25	L&T	ACB MICROSWITCH ,	SERVICE POSITION C-POWER	6
26	L&T	ACB MECHANICAL INTERLOCK , NIL	1LOCK+1KEY TYPE-A	6
27	L&T	ELCB ,	63A FP	27
28	L&T	MCB ,	16A SPN 10KA	216
29	LEGRAND	MCB , 408679	25A LEXIC TPN 10KA C-CURVE(6033 04)	68
30	LEGRAND	MCB , 408699	32A FP 10KA C- CURVE TYPE - DX	108
31	LEGRAND	MCB , 408702	63A DX3 FP 10KA C- CURVE(6033 25)	27
32	LEGRAND	MCB , 408683	63A TPN DX3 10KA C-CURVE	12
33	LEGRAND	MCB , 408680	32A TPN DX3 10KA C-CURVE	24
34	MATRIX	CT , NIL	CAST RESIN 600/1A-VA:10-CL:1.0 ID:105 X 40MM	12
35	MATRIX	CT , NIL	CAST RESIN WPL 1+1/1A-VA:10-CL:1.0 SUMMATION	2
36	SCHNEIDER	LOAD MONITOR , 30001999	EM6436 WITH RS-485 PORT CL-1.0	6
37	SCHNEIDER	VOLTMETER , 30002386	THREE PHASE DM3210 CL-1.0	8

## List of DCDB Components

S. No.	Make	Model/Type	Rating	Population
1	AREVA	RELAY DC UNDER VOLTAGE , VAG 11	60% SELF RESET AUX. CONTACT1NO+1NC 110V DC FLUSH MOUNTING VAG11	33
2	AREVA	BATTERY EARTH FAULT RELAY , CAEM21	100/125V DC	33
3	ESBEE	ILPB ,	110VDC RED GEN NEXT	31
4	ESBEE	ILPB ,	110VDC GREEN GEN NEXT	31
5	GIC	TIMER 225 SER. MULTIMODE , 2A5DT5	24-240VAC/DC 0.1SEC-10HRS. 2C/O	8
6	KAYCEE	TOGGLE SWITCH , 1021BY	SP ON/OFF 6A	4
7	KAYCEE	SELECTOR SWITCH , SRP126D/GB	2P 4W NO OFF 16A	2
8	KAYCEE	SELECTOR SWITCH ,	3P 3W WITHOUT OFF 16A	2
9	L&T	AUX CONTACTOR , CS9402910000	MXO 22E 2NO + 2NC AUX110V DC	1
10	L&T	AUX CONTACTOR , CS9402710000	MXO 40E 4NO AUX110V DC	1
11	L&T	PWR CONTACTOR AUX CONT BLOCK , CS940310000	1NO+1NC FOR MX - A1	2
12	L&T	PWR CONTACTOR AUX CONT BLOCK , CS940350000	2NO+2NC FOR MX - A1	2
13	L&T	PWR CONTACTOR AUX CONT BLOCK , CS940340000	3NO+1NC FOR MX - A1	2
14	L&T	PWR CONTACTOR , CS95052	225A TP TYPE MO 225 AC3 (2NO+2NC) 110V DC WITH INBUILT ELECTRONIC COIL	2
15	L&T	PWR CONTACTOR AUX CONT BLOCK , CS95033	1NO+NC FIRST LEFT MO 140- 300A	2
16	LEGRAND	MCB , 4088	25A DX3 DP 6KA UP TO 250V DC	124
17	LEGRAND	MCB , 4088	32A DX3 DP 6KA UP TO 250V DC	4
18	REPUTED	DIODE ,	6A,110V DC	4
19	SCHNEIDE R	DC VOLTMETER ,	0-150V CL-1 AUX 110V DC DIGITAL	4

### List of Interrupter Components

S. No.	Make	Model/Type	Rating	Population
1	MEGAWIN	INTERRUPTER , 25 KV, 1250 AMP, 20 KA/3 SEC	-	32
2	MEGAWIN	MAGNETIC ACTUATOR MECHANISM COILS , 25 KV, 1250 AMP, 20 KA/3 SEC, 8 NO , 8 NC, 110V DC	MSTV 32	32
3	MEGAWIN	BREAKER CONTROL UNIT , 110 V DC	NU 6	32
4	SCHNEIDER	AC & DC MCB , 2 POLE 10 A	MCB 2 P DC1	64
5	TEKNIC	CLOSE,TRIP PUSH BUTTON , 1 NO CONTACT DIA-22.5 MM CUTT OUT	PV CLOSED	64
6	L&T	DC FAIL CONTACTOR RELAY , 10 A DC , 4 NO , 4 NC	MX 0 DC 110 V DC	32
7	L&T	CLOSE,TRIP CONTACTOR , 2 NO , 2 NC , 10 A DC	MX 0 DC 110 V DC	64
8	KAYCEE	LOCAL/ REMOTE SELECTOR SWITCH , 25 A, 440 V AC, RATED 2 POSITION WITH 3 POCKET	SPC25P369R/L	32
9	SELEC	ELECTRONIC COUNTER , 110V DC	XC410	32
10	KENDIL	CAPACITOR , 4700 MFD, 250 V DC	-	160
11	MIC	BRIDGE RECTIFIER , 25A 240V AC	BRIDGE RECTIFIER- 3	32
12	MEGAWIN	CONTROL TRANSFORMER , 230V/110V BURDEN 500VA	TAPPED WOUND	32