



SYMBOL:- (220KV YARD)		
SL. NO.	ITEM DESCRIPTION	SYMBOL
1	CIRCUIT BREAKER (3 ph) 2000A, 40KA, 3 SEC.	
2	HDB ISOLATOR WITH 1 EARTH SWITCH 1600A, 40KA, 3 SEC.	
3	HDB ISOLATOR WITHOUT 1 EARTH SWITCH 1600A, 40KA, 3 SEC.	
4	TANDEM ISOLATOR WITHOUT EARTH SWITCH 1600A, 40KA, 3 SEC.	
5	220KV CURRENT TRANSFORMER (1-ph) 40KA, 3 SEC., 1200-600-300/1-1-1-1A	
6	220KV CURRENT TRANSFORMER (1-ph) 40KA, 3 SEC., 1500-1200-600/1-1-1-1-1A	
7	CAPACITOR VOLTAGE TRANSFORMER (1-ph) 4400 PF.	
8	220KV POTENTIAL TRANSFORMER 220V / 110V - 110V - 110V	
9	SURGE ARRESTOR (1-ph) 198KV, 10KA, CL-3	
10	WAVE TRAP (1-ph) 0.5mH 1250A	
11	POWER TRANSFORMER 220/66 KV 100MVA	
12	220KV, 25MVAR REACTOR	

SYMBOL:- (66KV YARD)		
SL. NO.	ITEM DESCRIPTION	SYMBOL
1	CIRCUIT BREAKER 1600A, 25KA, 3 SEC. (3-ph)	
2	HDB ISOLATOR WITH 1 EARTH SWITCH (3ph) 630A, 25KA, 3 SEC.	
3	HDB ISOLATOR WITHOUT EARTH SWITCH (3ph) 630A, 25KA, 3 SEC.	
4	HDB ISOLATOR WITHOUT EARTH SWITCH (3ph) 1250A, 25KA, 3 SEC.	
5	66KV CURRENT TRANSFORMER (1-ph) 31.5KA, 3 SEC., 1200-600/1-1-1	
6	66KV CURRENT TRANSFORMER (1-ph) 31.5KA, 3 SEC., 600-300/1-1-1	
7	66KV CURRENT TRANSFORMER (1-ph) 31.5KA, 3 SEC., 200-100/1-1-1	
8	66KV CURRENT TRANSFORMER (1-ph) 31.5KA, 3 SEC., 100-50/1-1-1	
9	66KV POTENTIAL TRANSFORMER 66KV / 110V - 110V	
10	LIGHTNING ARRESTOR (1-ph) 60KV, 10KA, CL-3	
11	HDB ISOLATOR WITHOUT EARTH SWITCH (3ph) 2000A, 25KA, 3 SEC.	
12	66KV CURRENT TRANSFORMER (1-ph) 31.5KA, 3 SEC., 1600-1200/1-1-1	

SYMBOLS:-		
A. 220KV SIDE		
SR NO.	ITEM DESCRIPTION	SYMBOL
01	HORIZONTAL DOUBLE BREAK ISOLATOR WITHOUT ES. 1600A, 40KA, 3 SEC	
02	CIRCUIT BREAKER 2000A, 40KA, 3 SEC.	
03	220KV CURRENT TRANSFORMER 40KA, 3 SEC., 1200-600-300/1-1-1-1A	
04	LIGHTNING ARRESTOR 198KV, 10KA, CL-3	
05	COUPLING TRANSFORMER	

B. MV SIDE (Ratings shall be as per STATCOM system design)		
SR NO.	ITEM DESCRIPTION	SYMBOL
01	HORIZONTAL DOUBLE BREAK ISOLATOR WITHOUT ES	
02	HORIZONTAL DOUBLE BREAK ISOLATOR WITH ES	
03	CURRENT TRANSFORMER	
04	POTENTIAL TRANSFORMER	
05	CAPACITOR	
06	VOLTAGE SOURCE CONVERTOR	

SYMBOL:- (66KV CAPACITOR BANK)		
SR NO.	ITEM DESCRIPTION	SYMBOL
1	CAPACITOR CELL 7.3KV, 200KVAR, 27.4A	
2	SERIES REACTOR 72.9KV, 4.8KVAR, 54.7A	
3	NCT 2C CT-R 1/1A, 15VA, 72.9KV	

LEGEND:-	
	EXISTING
	PROPOSED R3
	PROPOSED R4

NOTE:  
THIS DRAWING SHALL BE REFERRED FOR  
PROPOSED SCOPE ONLY.

		R4	PROP. 220KV STATCOM PROJECT ADDED
R4	LAYOUT PLAN DRG.NO. GETCO/E/2S-041/P-004,R7, DT.13.05.24	R3	PROP. 220/66kV TR NO-4,160 MVA BAY ADDED UNDER GEC PHASE-II
R3	LAYOUT PLAN DRG.NO. GETCO/E/2S-041/P-004,R6, DT.06.11.23	R2	25MVAR, 220KV REACTOR BAY ADDED.
2	LAYOUT PLAN DRG.NO. GETCO/E/2S-041/P-004,R5, DT.07.01.19	R1	220/66KV TR. NO.3 & PROPOSED OTHA & BECL LINE BAYS ARE REVISED.
1	LAYOUT PLAN DRG.NO. GETCO/E/2S-041/P-004,R3, DT.10.04.12	R0	FIRST PREPARATION BY FIELD.
<u>SR NO.</u>	<u>REFERENCE</u>	<u>REV.</u>	<u>DESCRIPTION</u>

**GUJARAT ENERGY TRANSMISSION CORPN.LTD.**  
S.P.VIDYUT BHAVAN, RACE COURSE,  
VADODARA - 390 007

**SINGLE LINE DIAGRAM OF 220KV SAGAPARA SUB-STATION**

DRAWN:  
DE (ENGG.)

CHECKED:  
EE (ENGG.) SE (ENGG.)

APPD:  
ACE (ENGG.)

SCALE:  
N.T.S

DATE:  
13.05.2024

DRG. NO:  
GETCO / E / 2S-041 / P-002

SHEET:  
1 OF 1

REV:  
R4