



220KV GIS LAYOUT - PLAN VIEW

Notes:

- Each gas compartments is equipped with Static Filter, Filling Valve with NRV, Density Monitors & Safety Diaphragm rupture discs.
- Civil design details for GIS and busducts will be furnished separately after the approval of this primary GIS layout.
- Earthing proposal drawing for GIS and busducts will be submitted separately after the approval of primary GIS layout.
- Based on the mechanical calculation after approval of primary layout, lateral compensators may be added in the busduct. Details of the same, if reqd, will be shared separately.
- Location of PD sensors specially for outdoor busducts are tentative and shall be finalised based on final GIS configuration.

Reference Drawing:

(1)	TB-0-404-316-002	PLAN & SECTION LAYOUT DRAWING FOR 400/220/132kV GIS SUB STATION
(2)	TB-1-404-607-671-1	220KV GIS BUILDING-ARCHITECTURAL FIRST FLOOR PLAN & SCHEDULE OF DOORS & WINDOWS
(3)	(1)-G71770-AD309-S005	220KV GIS - GAS SINGLE LINE DIAGRAM
(4)	(1)-G71770-AD309-V023	220KV GIS LAYOUT - SECTION VIEWS

MINIMUM CLEARANCES IN AIR				
acc. to IEC 61936-1				
at a max. altitude above mean sea level: 1000 m				
Conductor - Conductor (mm)	Conductor - Earth (mm)	Rated Voltage:	245	kV
2100	2100	Rated Lightning Impulse Withstand Voltage:	1050	kV
		Rated Power Frequency Withstand Voltage:	460	kV

Phase assignment		
Client designation		
L1	=	A = B
L2	=	B = Y
L3	=	C = R

GAS INSULATED BUS DUCT LENGTHS (METER)				
BAY	PHASE	INDOOR	OUTDOOR	TOTAL
D02	R-phase	5.38	30.45	35.83
	Y-phase	5.38	24.45	29.83
	B-phase	5.38	23.70	29.08
D10	R-phase	5.38	39.45	44.83
	Y-phase	5.38	33.85	39.23
	B-phase	5.38	28.25	33.63
D05	R-phase	6.01	18.56	24.56
	Y-phase	6.01	21.38	27.39
	B-phase	6.01	24.98	30.99
D09	R-phase	6.01	27.53	33.54
	Y-phase	6.01	23.93	29.94
	B-phase	6.01	20.33	26.34
Total Lengths		68.28	316.86	385.14

FOR APPROVAL

DO NOT SCALE WORKING DIMENSIONS

R0	FIRST SUBMISSION	29.08.2019	GQ	GQ	SM
REV	DESCRIPTION	DATE	DRN.	CHD.	APD.

	UTTAR PRADESH POWER TRANSMISSION CORP. LTD. 400/220/132KV GIS at RASRA BALLIA LOI No: 336/ESD-765KV/10 RASRA/vol-3 dated 03.07.2018
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	BHARAT HEAVY ELECTRICALS LTD. P.O. NUMBER P.O. DATE
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DOCUMENT NO.-	(1)-G71770-AD309-V021 - SH 01 OF 01
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TITLE :	220KV GIS LAYOUT - PLAN VIEW	REV. R0
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SCALE: 1 : 100

GIS MANUFACTURER:
SIEMENS LTD.
AURANGABAD, INDIA

In accordance with the standard IEC 61936-1 chapter 3.2.1 it is obligatory for the user to comply with all requirements which concern an enclosed electrical operating area.

For ventilation of SF6 switchgear hall pay attention to IEC 61936-1, section 8.8.2 and to national valid instructions off accident preventions at SF6 switchgear.