

TECHNICAL SPECIFICATIONS

MEDIUM VOLTAGE SWITCHGEAR



Disclaimer:

STELCO reserves the right to revise this document and make changes without prior notice.

Document version:

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Medium Voltage Switchgear

1.2 Specification for 11kV Switchgear

STANDARD: IEC 60076

1.2.1 630A Feeder switchgear with Earthing Switch

1	Nominal System Voltage	11kV
2	Busbar Rating	630A
3	Maximum Continuous System Voltage	12kV
4	Short time withstand (3s)	21kA
5	Internal Arc	16/21kA
6	Normal Rated BIL	75/95kV

Switchgear shall be integrated with:

- Mechanical ON/OFF indicator
- All mechanical/pushbutton type switches shall have lockout features
- Mechanical earth/main indicator
- Gas/Oil indicator (where applicable)
- Independent Earthing switch shall be there with indicator.

1.2.2 Transformer switchgear with Earthing switch

Rating of circuit breaker depend on current rating of the transformer (+20% of transformer rating)

1	Nominal System Voltage	11kV
2	Maximum Continuous System Voltage	12kV
3	Lighting Impulse Withstand Voltage (Up)	75/95kV
4	Power frequency voltage withstand (Ud)	38kV
5	System Frequency	50Hz
6	Rated Short Circuit Current	21kA
7	Duration of Short Circuit Current	3s
8	Peak Making Current (Ip)	53kA
9	Busbar Nominal Current (Ir)	630A
10	With Over Current and Earth Fault Protection	YES

1.2.3 Metering Unit

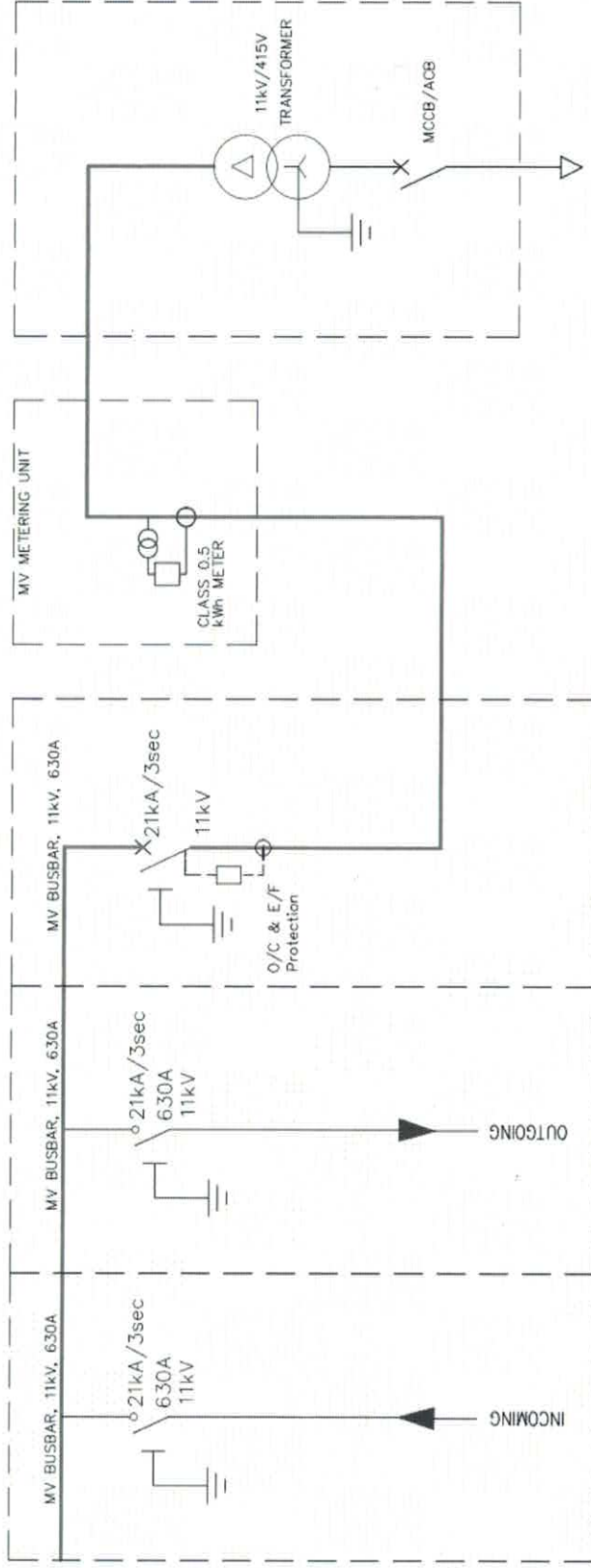
kWh meter should be MEA & STELCO approved

Provisions for sealing kWh meter should be there

1	CT	x 3 per phase
2	CT Class	CL 0.5s
3	VT Class	CL 0.5s
4	CT Standard	IEC61869-1 and IEC61869-2
5	VT Standard	IEC61869-3
6	System Frequency	50Hz
7	System Voltage	11kV



1.3 General Design of Substation (Option 1)

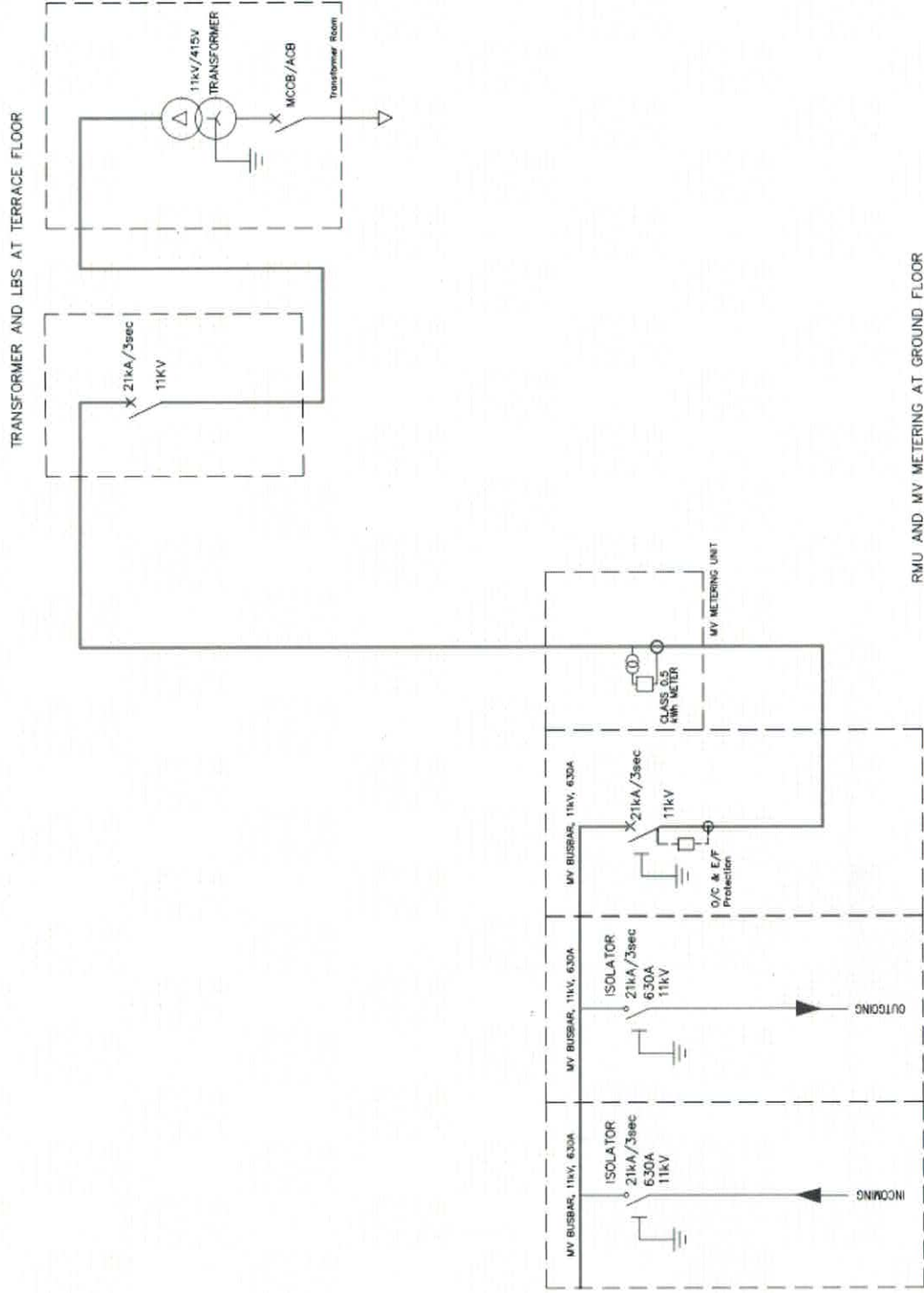


RMU, MV METERING AND TRANSFORMER AT GROUND FLOOR

Transformer switchgear circuit breaker rating shall depend on the size/rating of transformer.



1.4 General Design of Substation (Option 2)



RMU AND MV METERING AT GROUND FLOOR

Transformer switchgear circuit breaker rating shall depend on the size/rating of transformer.

