

HV Switchgear RMU

AVAILABLE FROM
NEPEAN ELECTRONICS



Nepean Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

Product Information

NEPEAN Power RMU's offer a unique and customisable solution for medium and high voltage applications.

The RMU's are gas insulated, with MV components contained within a stainless-steel tank.

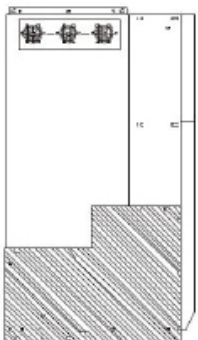
Standard switchgear options include

- Load Brake Switch (LBS)
- Circuit breaker (VCB)
- Fuse/s and busbar

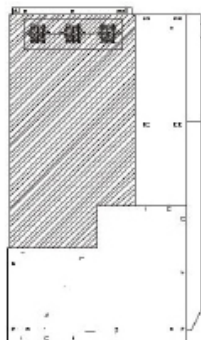
This equipment is suitable for rated frequency 50/60Hz and rated voltage 12kV distribution networks. It is designed for use in the following applications, but not limited to:

- Compact secondary substations
- Small industries
- Wind power plants
- Hotels
- Shopping and business centres
- Office buildings
- Airports
- Hospitals
- Underground railways

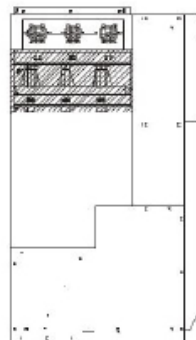
Possible Configurations



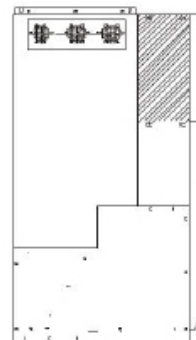
Bottom Compartment



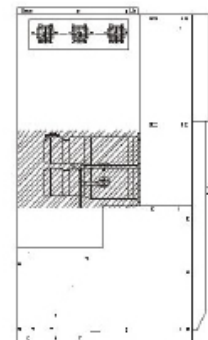
Gas Compartment



Load Break Switch



Operating Mechanism



Fuse

NEPEAN Power RMU's are type tested to IEC 62271-201 and IEC62271-304 ensure a compliant solution to your MV distribution needs.

Features

- Rated voltage (12kV)
- Rated frequency (50Hz)
- Rated current (LBS/ Combination Apparatus) (630/100A)
- 1min P.F withstand voltage (Phase to phase, phase to earth) (42kV)
- 1min P.F withstand voltage (Disconnect gap) (49kV)

Working Condition

- Ambient temperature: $-40^{\circ}\text{C} \sim +45^{\circ}\text{C}$ (average temperature $\leq 35^{\circ}\text{C}$)
- Altitude: $\leq 3000\text{m}$
- Humidity: Daily average $\leq 95\%$, daily average water vapor pressure $\leq 2,2\text{KPa}$, monthly average $\sim 90\%$, monthly average water vapor pressure $\leq 1.8\text{KPa}$
- The electromagnetic interference value in the second system will not exceed 1.6kV.

Note: Custom-built products are available.

HV Switchgear RMU

Item		Unit	Data	
Rated voltage		kV	12	
Rated frequency		Hz	50	
Rated current (LBS/Combination Apparatus)		A	630/100	
1min P.F withstand voltage	Phase to phase, Phase to earth	kV	42	
	Disconnect gap		49	
Lightning impulse withstand voltage	Phase to phase, Phase to earth	kV	75	
	Between gaps		85	
Rated short-time withstand current	LBS 4s	kA	20	
	ES 2s			
Rated peak withstand current	LBS	kA	50	
	ES			
	Earthing connection circuit		40	
Rated short-circuit making current (ppeak)	LBS	kA	50	Making 3 times
	ES			Making 2 times
LBS rated active load breaking current		A	630	Breaking 100 times
LBS rated closing ring breaking current			630	Breaking 20 times
LBS 5% rated active load breaking current			31.5	Breaking 20 times
LBS rated cable charging breaking current			10	Breaking 10 times
Combination Apparatus rated short circuit breaking current		kA	31.5	
Combination Apparatus rated transfer current		A	1500	
Rated line charging breaking current			1	Breaking 10 times
Earthing fault current breaking			30	Breaking 10 times
Line and cable charging current breaking under earthing fault condition			17.3	Breaking 10 times
Mechanical life	LBS	Times	5000	
	ES		2000	
SF6 Gas rated press(20 , Gage pressure)		MPa	0.03	
SF6 Gas leakage ratio		Annual	≤1%	
Opening, Closing devices and auxiliary circuit rated voltage (Ua)		V	DC110, DC220, AC220	
Operating mechanism			Spring (Manual/Motor)	
Outline dimension(WxDxH)		mm	1740 x 1100 x 1600	
Gross weight		kg	1100	

