



NEPEAN
Power

Indoor HV Vacuum Circuit Breaker



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.

Nepean Power's range of vacuum circuit breakers are designed for applications ranging from infrastructure, industrial plants, large commercial buildings to power grid substations and custom switchgear.

Our breakers are compact, highly reliable, easy to maintain and can be used as a fixed install unit or be equipped for withdrawable applications.

Nepean Power's range of vacuum circuit breakers can be incorporated in new installations as well as repair, retrofit and upgrade projects.

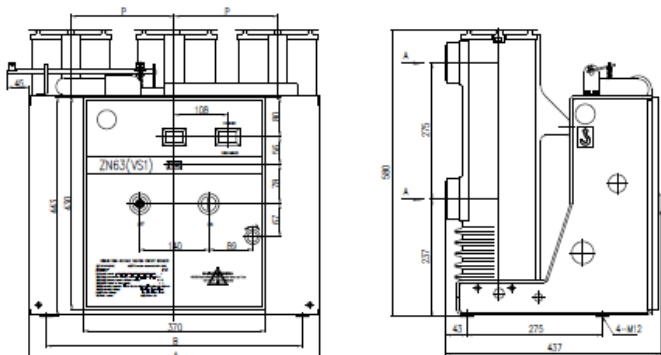
NEPEAN Advantage

- 630A and 1250A stocked locally
- Retrofit kits available for existing switchgear
- Full range available - to 5000A-50kA
- IEC type tested 25kA, 75kVB11
- Compact -150mm phase centre
- Mechanical interlock capability - external
- Easily maintained & cost competitive

Ordering Information

Part Number	Description
ZN63-12/T630-25*	630A Fixed 650mm pole, distance 150mm, 48VDC shunt trip, 110VAC motor charge, 110VAC undervolt (non-capacitor type), 110VAC close coil
ZN63-12/T1250-25*	1250A Fixed 800mm pole, distance 210mm, 48VDC shunt trip, 110VAC motor charge, 110VAC undervolt (non-capacitor type), 110VAC close coil
ZN63-ST24VDC*	24V DC Shunt Trip
ZN63-ST48VDC*	48VDC Shunt trip
ZN63-ST110VAC*	110VAC Shunt Trip
ZN63-CC24VDC*	24VDC Close coil
ZN63-CC110VAC*	110VAC Close coil
ZN63-UV24VDC*	24VDC Undervolt (Non Capacitor)
ZN63-UV48VDC*	48VDC Undervolt (Non Capacitor)
ZN63-UV110VAC*	110VAC Undervolt (Non Capacitor)
ZN63-MC110VAC*	110VAC Motor charge

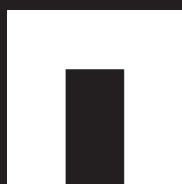
*Stocked



HV Vacuum Circuit Breaker

Specifications

Product	Unit	Parameter				
Parameters of voltage, current, life						
Rated voltage	kV	12				
Rated short time power frequency withstand voltage (1min)	kV	42				
Rated lightning impulse withstand voltage (peak)	kV	75				
Rated frequency	Hz	50				
Rated Current	A	630 1250	1250 1600 2000 2500	1250 1600 2000 2500 3150 4000	4000 5000	
Rated short-circuit breaking current	kA	20	25	31.5	40	50
Rated short-time withstand current (RMS)	kA	20	25	31.5	40	50
Rated peak withstand current	kA	50	63	80	100	125
Rated short-circuit closing current	kA	50	63	80	100	125
Rated single / back-to-back capacitor bank breaking current	A	630/400				
Rated short-circuit current duration	S	4				
Rated short-circuit current breaking times	times	50			30	
Rated operating sequence		O-t-CO-180s-CO rated short-circuit breaking current less than 31.5kA, t=0.3s rated short-circuit breaking current 40kA, t=180s				
The main galvanic circle resistance	$\mu\Omega$	≤ 50 (less than 1250A); ≤ 40 (less than 1600~2000A); ≤ 30 (more than 2500A);				
Rated operation voltage		UR 220/110				
Mechanical life	times	≥ 10000				
Mechanical property parameters						
Open clearance between contacts	mm	11 \pm 1				
Overtravel	mm	3.0 \pm 0.5				
Contact closing bounce time	ms	2			3	
Three-phase, switching in different period	ms	≤ 2				
Average opening speed	m/s	0.9~1.3				
Average closing speed	m/s	0.5~0.8				
Opening time (rated voltage)	ms	≤ 50				
Closing time (rated voltage)	ms	≤ 70				



NEPEAN
Power

www.nepeanpower.com

For more information please contact:

P: +61 2 4088 2790

E: power@nepean.com