



Medium Voltage NER



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.

Neutral Earthing Resistors (or NGR) are a key component in earth fault protection of medium voltage electricity generation and distribution systems.

Nepean NERs limit the current that would flow through the neutral point of a transformer or generator in the event of an earth fault. For the majority of ratings the most suitable element type is Nickel-Chromium Stainless Steel AISI430.

Nepean resistors are manufactured from a continuous stainless steel strip, (or wire depending on rating) wound into oval coils. Each coil is supported by ridged ceramic insulators with stainless steel terminals welded at each end. This arrangement allows free expansion and contraction at operating temperatures up to 1100°C without imposing strain on the assembly.

The resistance alloys used are high temperature stainless steels capable of withstanding temperature excursions to 1100°C whilst retaining their strength, unlike 304 or other structural grade stainless steels which are limited to much lower temperatures.

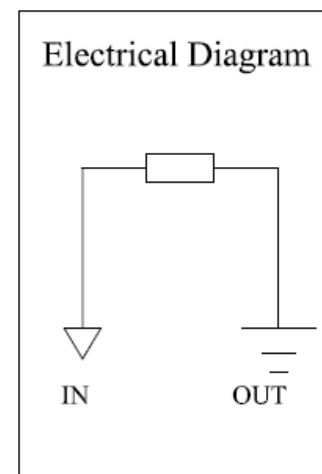
NERs designed for operation to higher temperatures require less active mass, resulting in more compact and economical designs.

Features:

- Compliant with AS/NZS Standards
- Any current or voltage rating
- Stainless steel resistors and enclosures as standard, IP23.
- Type tested standard designs

Options include:

- Supply of resistor banks only for incorporation into customer's own enclosures
- Higher IP rating up to IP56
- Shock-tested marine designs
- Provision for CTs, heaters, special cabling, etc.
- Interlocked off-load by-pass isolators
- Single or multiple vacuum contactors
- High resistance grounding resistors (for use where regulations permit, e.g. some offshore installations)



Medium Voltage NER

Part Number Generator
(For Custom Orders)

6.6/3.81_10_30_E

6.6	Phase/Phase Voltage
11	
22	

3.81	Phase/Earth Voltage
6.35	
12.7	

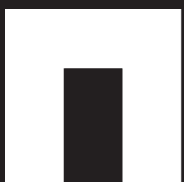
5	Current Amps
10	
50	

E	Enclosure
R	Resistor only

30	Time
C	Continuous

Ordering Information

Part Number	Description	Phase Voltage	Earth Voltage	Amps	Rated Fault Time
6.6/3.81-10-30-E	3.81kV 10A 30s NER C/W Enclosure	6.6	3.81	10	30s
11/6.35-5-30-E	6.35kV 5A 30s NER C/W Enclosure	11	6.35	5	30s
11/6.35-5-C-E	6.35kV 5A continuous NER C/W Enclosure	11	6.35	5	Continuous
11/6.35-10-30-E	6.35kV 10A 30s NER C/W Enclosure	11	6.35	10	30s
11/6.35-10-10-R	6.35kV 10A 10s NER C/W Resistor	11	6.35	10	10s
22/12.7-50-30-E	22/12.7kV 50A 30s NER C/W Enclosure	22	12.7	50	30s



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Power

www.nepeanpower.com

For more information please contact:

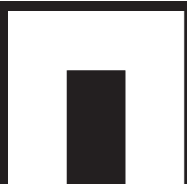
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Medium Voltage NER

Example Quotation Request Form

Electrical Data					
	Technical Data		Required		
System Voltage (Ur)	11				KV
Rated Voltage ($U_n=U_r/\sqrt{3}$)	6.35				KV
Resistance @ 20°C	635				Ω
Rated Fault Current	10				A
Rated Fault Time	30				Sec
Rated Continuous Current	-				A
Insultation Level	12				KV
Power Frequency Withstand Voltage	42				KV
Impulse Withstand Voltage (BIL)	75				KV _{peak}
Max Temperature Rise	400				°C
Resistance Material: Nickel-Chromium Stainless Steel AISI430					
Terminal					
	Top	Bottom	Direct on Grid	On Isulator	On Bush
In					
Out					
Enclosure					
Painted		Galvanized		Stainless Steel	
Colour - Painted			<input type="checkbox"/> Yes		<input type="checkbox"/> No
Protection Degree					
Dimension				MM	
Approx. Net Weight				KG	
Accessories					
Standard: IEEE 32 Dimension Tolerance: ±5mm					



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