

# **GRID RESISTORS**

NGR

# Reliable Neutral Grounding Resistors (NGR), High-Current Grid Resistors



## **KEY BENEFITS**

- Neutral ground resistors offer line-neutral voltage to 8 kV and operating temperatures to +760 °C
- Tied live design ensures there are no floating voltages in the assembly
- Rugged, shock-resistant, IP23-rated enclosures available for environmental protection
- Lifting eyes allow safe and easy installation
- Stainless steel resistive elements
- High-thermal-capacity to absorb high currents
- Can be designed for specific applications

## **APPLICATIONS**

- Industrial power systems
- Transformers
- Generators

## RESOURCES

- Datasheet: NGR <u>www.vishay.com/doc?31873</u>
- For technical questions contact <u>vishaymilwaukeeresistor@vishay.com</u>
- Material categorization: For definitions please see <u>www.vishay.com/doc?99912</u>

One of the World's Largest Manufacturers of Discrete Semiconductors and Passive Components

VMN-PT0441-1412



PRODUCT SHEET



# GRID RESISTORS

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#### **APPLICATIONS OF NEUTRAL GROUNDING (NEUTRAL EARTHING)**

Vishay Milwaukee offers a complete line of custom and standard neutral grounding resistors (NGRs), also known as neutral earthing resistors (NERs). Vishay Milwaukee devices are designed to absorb a large amount of energy without exceeding temperature limitations as defined in IEEE-32. These resistors are used for the grounding of generators and transformers in wye configurations for ground fault, overvoltage, and short circuit protection.

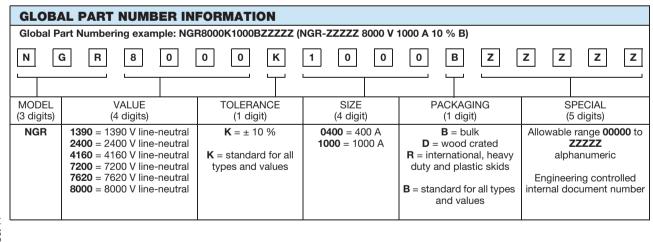
### CONTACT THE FACTORY FOR CUSTOM DESIGN AND OPTIONS FOR STANDARD DESIGNS

Options include: current transformers, enclosure style and entrance location, enclosure stands, disconnects, bushings, etc. For custom designs please include: system voltage, line-neutral voltage, max. on-time, current rating.

STANDARD ELECTRICAL SPECIFICATIONS					
MODEL	SYSTEM VOLTAGE (kV)	LINE-NEUTRAL VOLTAGE (kV)	CURRENT (A)	RESISTANCE VALUE Ø	TOLERANCE ± %
NGR1390	2.4	1.39	100 to 1000	1.39 to 13.9	10
NGR2400	4.16	2.4	100 to 1000	2.40 to 24.00	10
NGR4160	7.20	4.16	100 to 1000	4.16 to 41.60	10
NGR7200	12.47	7.2	100 to 1000	7.2 to 72	10
NGR7620	13.2	7.62	100 to 1000	7.6 to 76	10
NGR8000	13.8	8	100 to 1000	8 to 80	10

#### Note

• Per IEEE-32, standard NGRs are designed for a maximum on-time of 10 s and a maximum temperature rise of 760 °C.



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#### **CONTACT INFORMATION**

For design assistance, contact: vishaymilwaukeeresistor@vishay.com or +1-888-616-6666

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