

Neutral Grounding Resistor







Kato Engineering Neutral Grounding Resistors (NGR)

Kato Engineering generators can be provided with Kato Engineering Neutral Grounding Resistors (NGR) designed to provide added safety to the electrical distribution systems by limiting the ground fault current during a ground fault in the electrical system.

Among other benefits, the Neutral Grounding Resistor may reduce significantly the possible 3rd harmonic currents flowing to the ground during normal operation. The NGR also allows the use of an optimized generator winding pitch which maximizes the generator efficiency, and avoids oversizing due to a 2/3rd winding pitch.

The generator can be grounded through the primary winding of a voltage transformer to limit the ground fault current typically between 5 to 15 Amperes (Fig. 1), or directly with the resistor located between neutral and earth resulting in a ground fault current typically between 15 to 400 Amperes (Fig. 2).

The NGR can be provided with accessories: transformer, disconnecting switch, space heater, etc.

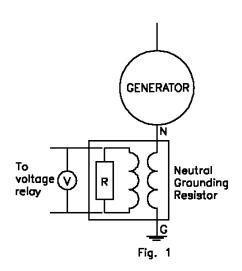
Each model of Kato Engineering NGR is tested in our facility under transient fault voltage and continuous rated current to verify the temperature rise per IEEE C57.32-2015 and CSA C22.2 No.295-15 standards.

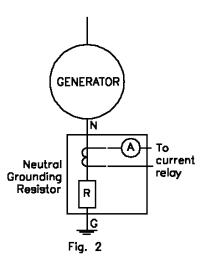


The enclosure can be provided with a protection rating from IP23 to IP56 depending on the NGR amperage rating, and made of painted steel or 316 stainless steel for highly corrosive environments.

The NGR resistance value must be verified by the customer to ensure the compatibility with the protection scheme of the entire electrical installation (This verification is not the responsibility of Kato Engineering).

Please consult Kato Engineering for your Neutral Grounding Resistor needs.







KATO ENGINEERING

2075 Howard Drive West North Mankato, MN 56003, USA Phone: 507-625-4011 Fax: 507-345-2798

Email: katoengineering@mail.nidec.com

www.katoengineering.com