

PGN SERIES

Pulsing High-Resistance-Grounding System



Description

The PGN Pulsing High-Resistance-Grounding Systems are used to ground power systems by inserting a resistor between system neutral and ground to lower the ground-fault current to a predetermined value.

Properly sized Resistance Grounding Systems solve two problems of ungrounded systems—transient overvoltages and the difficulty of locating ground faults. They also significantly reduce damage caused by ground faults on solidly grounded systems. The current limitation eliminates the Arc-Flash Hazards associated with the first ground fault. The hazards associated with phase-to-phase electrical faults must still be mitigated by using current-limiting fuses and other methods. High-Resistance Grounding Systems include all necessary components to convert to a resistance grounded system.

Options include a pulsing circuit and SE-701 Ground-Fault Monitors to provide a method for locating ground faults.

Applications

High-resistance grounding is typically applied on transformers and generators where safety and continuity of service are paramount. Since the ground-fault current is typically 5 A or less, there is no Arc-Flash Hazard associated with the first ground fault and the faulted feeder can remain in operation until it is safe to repair the fault, when allowed by the electrical code.

Benefits

- Eliminate phase-to-ground arc-flash incidents
- Eliminate transient overvoltages
- Reduced point-of-fault damage
- Pulsing ground-fault current to aid in fault location

Features

- Pulsing current 5 A above the selected resistor current is standard; other pulsing options available upon request
- All PGN systems include resistor monitoring, ground-fault detection, and integrated pulsing control with the SE-330 NGR Monitor
- ER-series Sensing Resistor and Current Transformer required for NGR monitoring come pre-installed inside the enclosure
- Optional test circuit to simulate a ground fault
- Continuous-rated resistors
- Stainless steel resistor elements prevent corrosion

Ordering Information

	CONFIGURATION	SYS. VOLTAGE	RES. CURRENT		ENCLOSURE TYPE	# OF FEEDERS		CUSTOM
PGN-3	X	X	X	-	X	X	-	XXX
	0 = Other	0 = Other	0 = Other		0 = Other	0 = 0		000 = Standard
	W = Wye	1 = 240 V	1 = 5 A		N = No Enclosure	1 = 1		XXX = Drawing #
	D = Delta	2 = 480/277 V	2 = 10 A		F = Outdoor Free Standing	2 = 2		
		3 = 600/347 V	3 = 15 A		W = Outdoor Wall Mount	3 = 3		
		4 = 2400/1390 V	4 = 20 A			4 = 4		
		5 = 4160/2400 V	5 = 25 A			5 = 5		
						6 = 6		
						7 = 7		
						8 = 8		
						9 = Other		