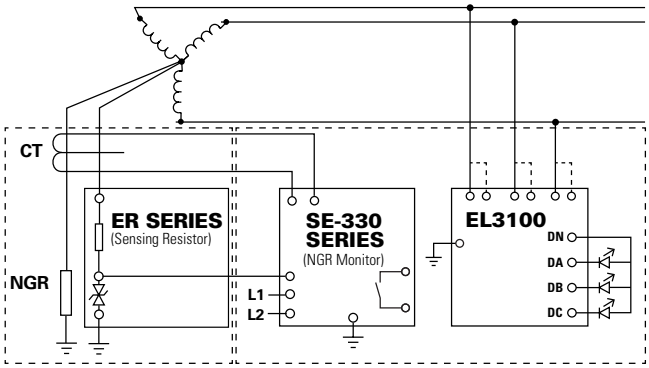
Protection Relays
NEUTRAL-GROUNDING-RESISTOR MONITORING

NGRM-ENC SERIES

Simplified Circuit Diagram



NGR Assembly
(ordered separately)

NGRM-ENC
(SE-330 with voltage indication shown)

Description

The NGRM-ENC Enclosed Neutral-Grounding-Resistor (NGR) Monitor series is a Type 4X enclosure housing a Littelfuse Startco SE-325 or SE-330 Neutral-Grounding-Resistor Monitor and optional accessories that include a 480/600-V control power transformer (CPT), faulted-phase indication (FPI; implemented with an EL3100 Ground-Fault & Phase-Voltage Indicator), earth-leakage panel meter, pulse-enable control, and mounting options. Appropriate fusing is included and field wiring is to terminal blocks.

Options

SE-325 Neutral-Grounding-Resistor Monitor
Measures current and voltage in a transformer or generator neutral-to-ground connection and continuity of the neutral-grounding resistor. For applications in Canada use the SE-330 to meet 2018 CEC 22.1 requirements.

SE-330 Neutral-Grounding-Resistor Monitor
Advanced ground-fault and neutral-grounding resistor monitoring relay that measures neutral current, neutral-to-ground voltage, and neutral-to-ground resistance.

EL3100 Ground-Fault & Phase-Voltage Indicator
Three panel-mounted LEDs indicate the ground-faulted phase.

Panel Meter
Panel-mounted meter displays earth leakage current as a percentage of the ground-fault-CT-primary rating.

RK-332/RK-302 Remote Indication and Reset
Panel-mounted remote indication and reset assemblies are included with SE-325 and surface-mounted SE-330 configurations.

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Ordering Information

The following options are available with a faster delivery time and are commonly stock items:

ORDERING NUMBER	PROTECTION RELAY OPTION	NGR MONITOR MOUNTING OPTION	AMMETER & PULSE CONTROL OPTION	COMMS	CONTROL-POWER TRANSFORMER OPTION
NGRM-ENC-000-00	SE-325	Surface Mount	None	None	None
NGRM-ENC-200-00	SE-330 (N.O. K4)	Surface Mount	None	None	None

The following options are built to order:

ORDERING NUMBER	PROTECTION RELAY OPTION	NGR MONITOR MOUNTING OPTION	AMMETER & PULSE CONTROL OPTION	COMMS	CONTROL-POWER TRANSFORMER OPTION
NGRM-ENC-000-01	SE-325	Surface Mount	None	None	CPT
NGRM-ENC-200-01	SE-330 (N.O. K4)	Surface Mount	None	None	CPT
NGRM-ENC-200-10	SE-330 (N.O. K4)	Surface Mount	Earth leakage Panel Meter	None	None
NGRM-ENC-200-20	SE-330 (N.O. K4)	Surface Mount	Earth leakage Panel Meter & Pulse Enable Switch	None	None
NGRM-ENC-201-00	SE-330 (N.O. K4)	Panel Mount	None	None	None
NGRM-ENC-201-10	SE-330 (N.O. K4)	Panel Mount	Earth leakage Panel Meter	None	None
NGRM-ENC-201-20	SE-330 (N.O. K4)	Panel Mount	Earth leakage Panel Meter & Pulse Enable Switch	None	None
NGRM-ENC-201-21	SE-330 (N.O. K4)	Panel Mount	Earth leakage Panel Meter & Pulse Enable Switch	None	CPT
NGRM-ENC-230-00	SE-330 (N.O. K4)	Surface Mount	None	Ethernet, dual RJ45	None
NGRM-ENC-231-01	SE-330 (N.O. K4)	Panel Mount	None	Ethernet, dual RJ45	CPT
NGRM-ENC-241-00	SE-330 (N.O. K4)	Panel Mount	None	Ethernet, 1 RJ45 & 1 Fiber	None
NGRM-ENC-331-01	SE-330 (N.O. K4) & Voltage Indication	Panel Mount	None	Ethernet, dual RJ45	CPT
NGRM-ENC-401-00	SE-330 (N.C. K4)	Panel Mount	None	None	None
NGRM-ENC-401-20	SE-330 (N.C. K4)	Panel Mount	Earth leakage Panel Meter & Pulse Enable Switch	None	None
NGRM-ENC-430-00	SE-330 (N.C. K4)	Surface Mount	None	Ethernet, dual RJ45	None
NGRM-ENC-431-21	SE-330 (N.C. K4)	Panel Mount	Earth leakage Panel Meter & Pulse Enable Switch	Ethernet, dual RJ45	CPT
NGRM-ENC-530-11	SE-330 (N.C. K4) & Voltage Indication	Surface Mount	Earth leakage Panel Meter	Ethernet, dual RJ45	CPT
NGRM-ENC-540-00	SE-330 (N.C. K4) & Voltage Indication	Surface Mount	None	Ethernet, 1 RJ45 & 1 Fiber	None
NGRM-ENC-540-10	SE-330 (N.C. K4) & Voltage Indication	Surface Mount	Earth leakage Panel Meter	Ethernet, 1 RJ45 & 1 Fiber	None

Disclaimer Notice – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at **www.littelfuse.com/product-disclaimer.**

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