

NGRM-ENC SERIES

Simplified Circuit Diagram

NGRM-ENC





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.



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-toground resistance.



EL3100 Ground-Fault & Phase-Voltage Indicator

Three panel-mounted LEDs indicate the groundfaulted 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.



NGR Assembly

(ordered separately)

ER SERIES

CT

NGR

Ordering Information

The following options are available with a faster shipping time:

SE-330 SERIES

NGRM-ENC

(SE-330 with voltage indication shown)

L1

0 1			11 0		
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 mounted	None	None	CPT
NGRM-ENC-200-01	SE-330 (K4=N0)	Surface mounted	None	None	CPT
NGRM-ENC-201-01	SE-330 (K4=N0)	Panel mounted	None	None	CPT
NGRM-ENC-201-11	SE-330 (K4=N0)	Panel mounted	Ammeter	None	CPT
NGRM-ENC-230-01	SE-330 (K4=N0)	Surface mounted	None	Ethernet/2 RJ45 ports	CPT
NGRM-ENC-231-01	SE-330 (K4=N0)	Panel mounted	None	Ethernet/2 RJ45 ports	CPT

EL3100

Protection Relays & Controls

Neutral Grounding Resistor Monitoring



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NGRM-ENC



Ordering Information

	PROTECTION RELAY OPTION	NETWORK COMMUNICATIONS OPTION	NGR MONITOR MOUNTING OPTION		AMMETER & PULSE CONTROL OPTION	CONTROL-POWER TRANSFORMER OPTION
NGRM-ENC-	Х	X	Х	_	Х	Χ
	0=SE-325 1=SE-325 & voltage indication ⁽¹⁾ 2=SE-330 (N.O. K4) & voltage indication ⁽¹⁾ 4=SE-330 (N.C. K4) & voltage indication ⁽¹⁾ 6=SE-330 (N.C. K4) & voltage indication ⁽¹⁾ 6=SE-330HV (N.O. K4) 7=SE-330HV (N.O. K4) & voltage indication ⁽¹⁾ 8=SE-330HV (N.C. K4) & voltage indication ⁽¹⁾	0=No network communications 1=DeviceNet ^[2] 3=Ethernet, dual RJ45 ^[2] 4=Ethernet, 1 RJ45 & 1 fiber ^[2] 5=Ethernet, dual fiber ^[2] 6=IEC 61850, dual RJ45 ^[2] 7=IEC 61850, 1 RJ45 & 1 fiber ^[2] 8=IEC 61850, dual fiber ^[2]	0=Surface-mounted NGR monitor ⁽⁴⁾ 1=Panel-mounted NGR monitor ⁽⁵⁾		0=No ammeter 1=Earth-leakage panel meter ⁽²⁾ 2=Earth-leakage panel meter & pulse-enable switch ⁽³⁾	0=No CPT 1=480/600-V CPT ⁽¹⁾

Note (1) - Includes fuses, (2) - SE-330 models only, (3) - SE-330 models only, excluding SE-330HV models, (4) - Includes panel-mounted indication & reset, and USB connector for SE-330 models, (5) - SE-330 models only; includes IP65 hinged transparent cover

Specifications

Enclosure Polyester, Lockable. SE-330 panel-mount options are

rated to IP65. All other options are rated to Type 4X.

Dimensions H 454 mm (17.9")

W 406 mm (16") **D** 264 mm (10.4")

Clearance required to open SE-IP65CVR-G 112 mm (4.4")

 $\begin{array}{ll} \textbf{Approvals} & \text{ cCSAus} \\ \textbf{Warranty} & 1 \text{ year} \end{array}$