

Neutral Link Monitor Model NLM3

**Suitable to be used on
Transformers feeding
Variable Speed Drives**

Leaders in Innovative Protection Systems, Bramco's NLM3 is compliant to the latest statutory and industry standards. The Bramco Neutral Link Monitor relay (NLM3) is a NER integrity protection device designed to continuously monitor the current limitation system on the secondary star point to earth connection of a supply transformer. The unit can also be utilized to monitor a direct connection to earth from the star point. The NLM3 monitors the NER Resistance integrity, excess phase voltage rise, neutral earth leakage current, with the ability to adjust trip times for protection coordination.

Features

- The NLM4 connects directly to AC supply systems with line voltages up to 1100 Volt without any additional barrier assembly.
- It can also be utilized on systems with line voltages up to 4160 Volt with the addition of a barrier assembly.
- Earth Leakage Current is monitored in the neutral to earth circuit using and external EL toroid. (Toroid not included)
- LED indication of Power On, NER integrity, Excess Voltage and Earth Leakage current.
- The unit is configured as fail safe and latch on fault.
- Back up protection is provided by detecting voltage rise across the NER.
- Trip Delay Times are individually adjustable for Earth leakage, NER integrity, and Over - voltage.
- Adjustable earth leakage current trip
- Adjustable excess voltage trip
- Adjustable NER resistance limits
- Earth leakage frequency response range selectable, 50 - 60Hz or 5 - 100Hz, when used on transformers feeding Variable Frequency Drives.
- Open circuit toroid protection
- Reset push button input provided
- Time - stamped log of trip events
- Password protection for setting all parameters.

Specifications

Mounting	DIN Rail mounting with screw terminals
Communications	RS485 serial port Modbus ASCII / RTU
Instrumentation output	4 - 20mA or 2 - 10 Volt
Power input	110 - 240vAC 50/60Hz 24 - 48v AC/DC
Operating Temperature	0 - 60°C
Enclosure Dimensions	150mmW x 75mmH x 110mmD
Weight	900 gram
NER Resistance Values	NER 24 to 650 ohms depending on system voltage and limiting current required
Earth Leakage System Voltages	415/1100V - 240/635V phase 3.3kV/4.16kV - 1900/2500V phase
NER trip value Adjustment	-50% to +100%
Trip Tolerance	(As required in AS/NZS 2081:2011) -10% to +0%
Trip Delay Timer	50 to 500 milliseconds for over-voltage and earth leakage 2 to 10 seconds for NER integrity
Excess Voltage Relay Contacts	5 - 50% phase voltage trip 2 pole changeover 5A 240vAC for earth leakage 2 pole changeover 5A 240vAC for over-voltage and NER integrity

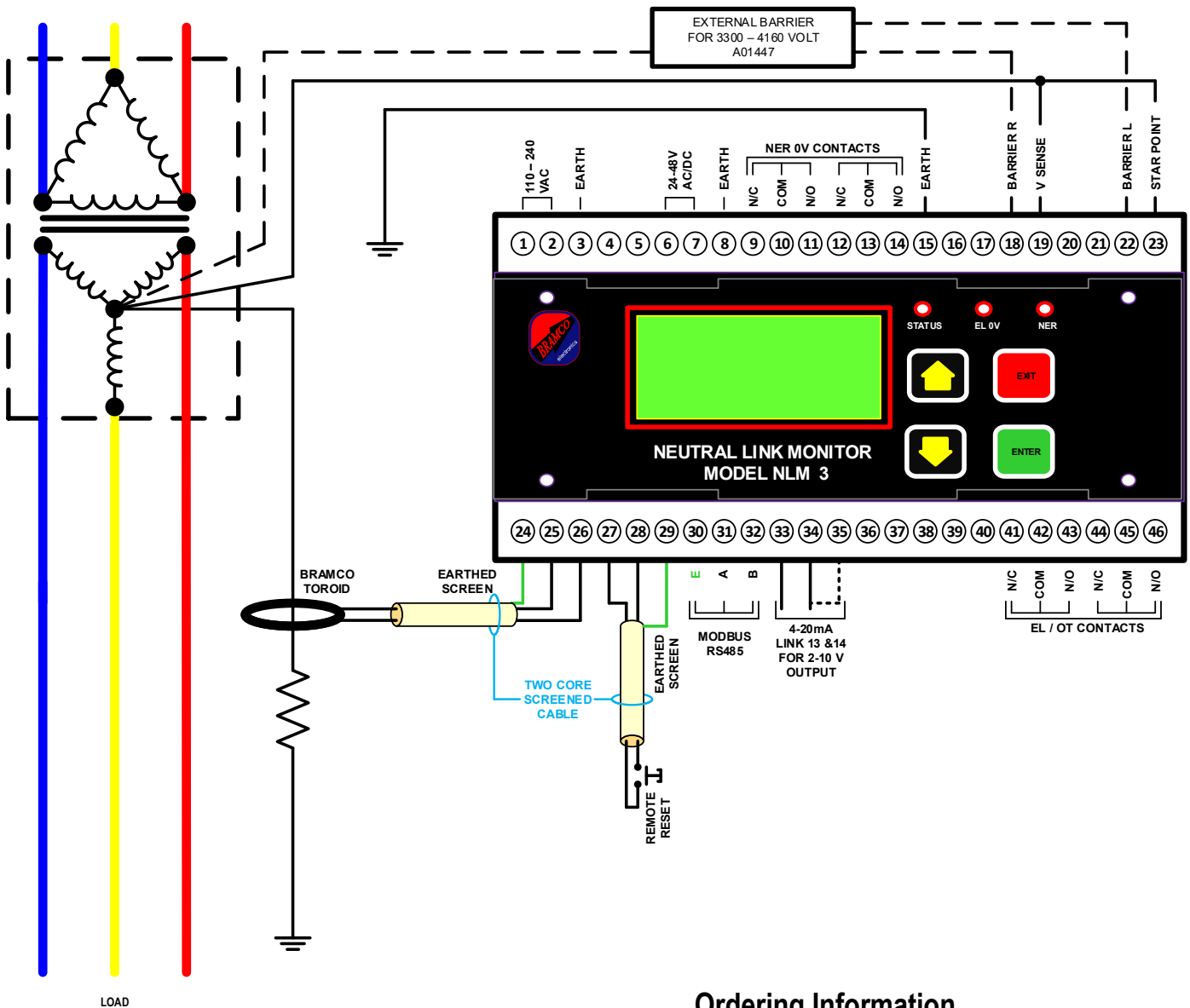


Bramco Electronics (Pty) Ltd
No 3 Hospitaal Street
Ext 2
Delmas
2210
South Africa
www.bramco.co.za

Contact Details
Tel: +27 13 665 5288 / 1376 / 1591
Mob: +27 82 852 5933
Fax to E-mail: +27 86 502 4267
E-mail: sales@bramco.co.za
E-mail: info@bramco.co.za

Neutral Link Monitor Model NLM3

Wiring Diagram



Compliance:
AS/NZS 2081:2011

- Electrical Equipment for Mines
- Electrical Protection Devices.

Ordering Information
Equipment
Neutral Link Monitor - NLM3
40mm Toroid 1000:T
Nlm3 Isolation Barrier 3.3kV

Part no
A01243
A01334
A01447

Bramco Electronics (Pty) Ltd
No 3 Hospitaal Street
Ext 2
Delmas
2210
South Africa
www.bramco.co.za

Contact Details
Tel: +27 13 665 5288 / 1376 / 1591
Mob: +27 82 852 5933
Fax to E-mail: +27 86 502 4267
E-mail: sales@bramco.co.za
E-mail: info@bramco.co.za