

NEW ELEC



MOTOR PROTECTION & CONTROL TECHNOLOGY

GA Earth Leakage Module...

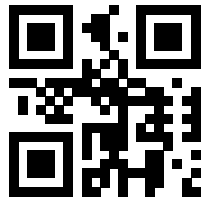


A South African Company to be Proud of



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Innovative solutions from South Africa's Leading Motor Protection Specialists

About NewElec

NewElec designs and manufactures a wide range of superior electronic motor protection relays for both local and International markets. NewElec's goal, for the past 38 years, has been to exceed the expectations of every client by OFFERING quality products, outstanding customer service and greater value, thus optimizing system functionality and improved operational efficiency.

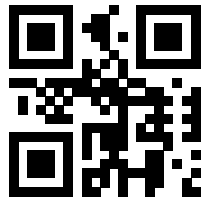
As experts in motor protection, NewElec is involved in every stage of the client's selection of the required protection relay offering ongoing functional and technical support. Our R&D division is continually designing the most up to date motor protection products to meet customer requirements.

NewElec's electronic motor protection relays can be found in refineries, mining, steel, petrochemical, pulp and paper, sugar mills, agriculture and material handling industries to name a few, both locally and internationally. The NewElec product range includes software programmable LV motor protection relays for process control applications, protection relays for LV and MV motors, relays for pump motor protection, as well as earth leakage protection relays.

NewElec is continually expanding and has recently installed a manufacturing division for its relay housings. This ensures that the final product meets NewElec's precise requirements.

With headquarters in Pretoria West, Gauteng, South Africa, NewElec was established in May 1978 and is accredited with ISO 9002.

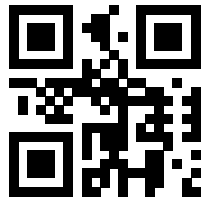




Why was it designed?

To meet the market challenges for a more reliable and stable form of earth leakage protection for use on VSD / Soft Starter and D.O.L applications involving large kW motors without sacrificing earth leakage sensitivity OR trip delay rapidity.

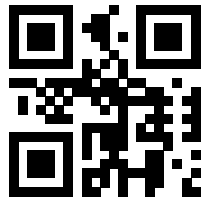




Feature Highlights

- *High inrush current transient stability*
- *Stable operation on VSD or soft starters*
- *Selectable IDMT or instantaneous trip*
- *Trip delay grading*
- *Auxiliary power supply 110 or 220 Volt a.c*
- *LED indication for healthy, tripped, as well as selected trip curve characteristic*
- *Attractive front panel descriptive interface*
- *Compact door-mounted housing (146 X 63 mm cut out)*
- *Main trip contact can be factory set as latching OR non-latching configuration*

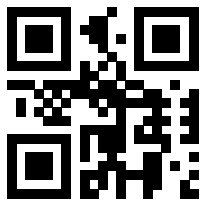




Benefits

- *Stable operation during high inrush current conditions irrespective of starting method User-selectable terminal block IDMT or Instantaneous (0,1 sec) trip delay characteristic.*
- *Ease of trip grading for same sensitivity level*
- *One screened core balance current transformer (available in different I.Ds) for both IDMT and Instantaneous trip curve selection*
- *Inventory reduction*



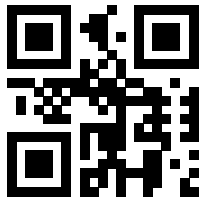


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Typical Applications

*Variable Speed Drive, Soft Start and DOL start applications
Trip time grading*





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Specifications

CORE BALANCE CURRENT TRANSFORMER

| | |
|-------------------|---------------------|
| <i>NewElec</i> | : C.B.C.T |
| <i>Material</i> | : MHO |
| <i>Ratio</i> | : 1000:1 |
| <i>Insulation</i> | : 600 Volt to earth |

Overload Withstand Ratings

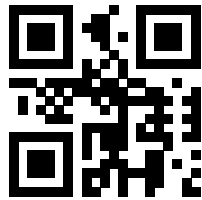
Calibration Levels

| | |
|----------|----------------|
| GA 30 | : 30mA ± 10% |
| GA 250 | : 250mA ± 5% |
| GA 375 | : 375mA ± 5% |
| GA 500 | : 500mA ± 5% |
| GA 1 000 | : 1 000mA ± 5% |

Primary Current

| | |
|----------|--------------|
| 50 Amps | : Continuous |
| 500 Amps | : 1 second |





Specifications Contd.

Measurement Filter

Cut-off Frequency : 50Hz
Attenuation : -24 db/octave

Output Relays Main Trip

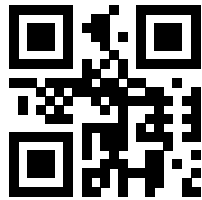
Contacts : 1 x set Changeover
Rating : 6 Amps 250V A.C.
Operation : 3 Amps 250V A.C.

Trip Delay Curves

Instantaneous
Minimum Time : 0,150 seconds
Accuracy : $\pm 0,010$ seconds

IDMT : GA-CRV.CDR
Accuracy : $\pm 5\%$
Characteristic : Standard inverse
Time Multiplier : 0,1





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Specifications Contd.

Auxiliary Supply

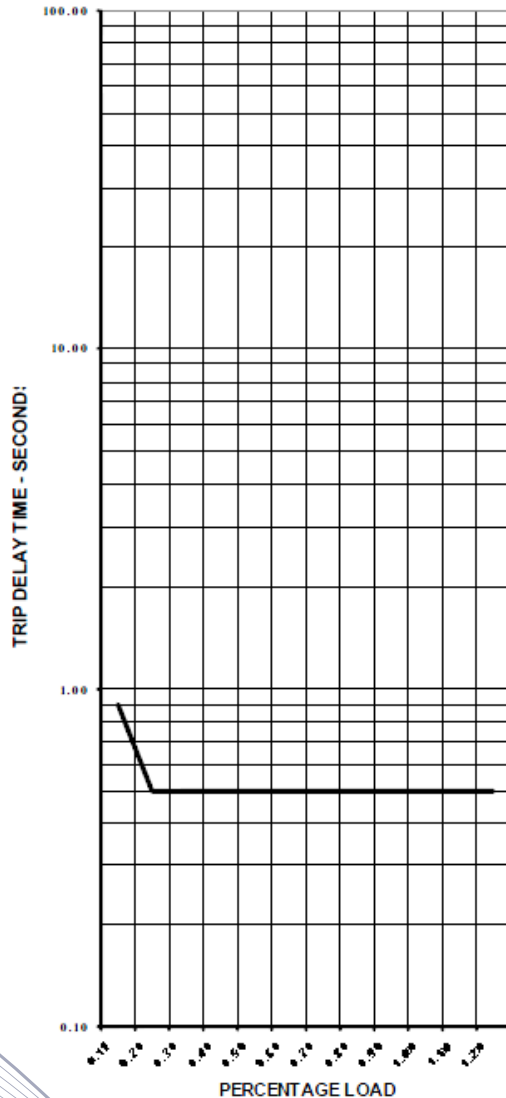
- Range : 110 or 220V A.C.
: 380 or 525V A.C.
- Tolerance : 85 to 120% of range
- Burden : 2VA
- Frequency : 45 to 65Hz

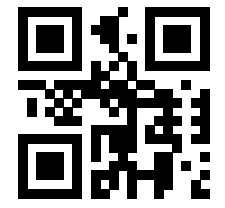
Impulse

- To IEC 255-5 App D
Transient 2,5kV between separate circuits

Isolation

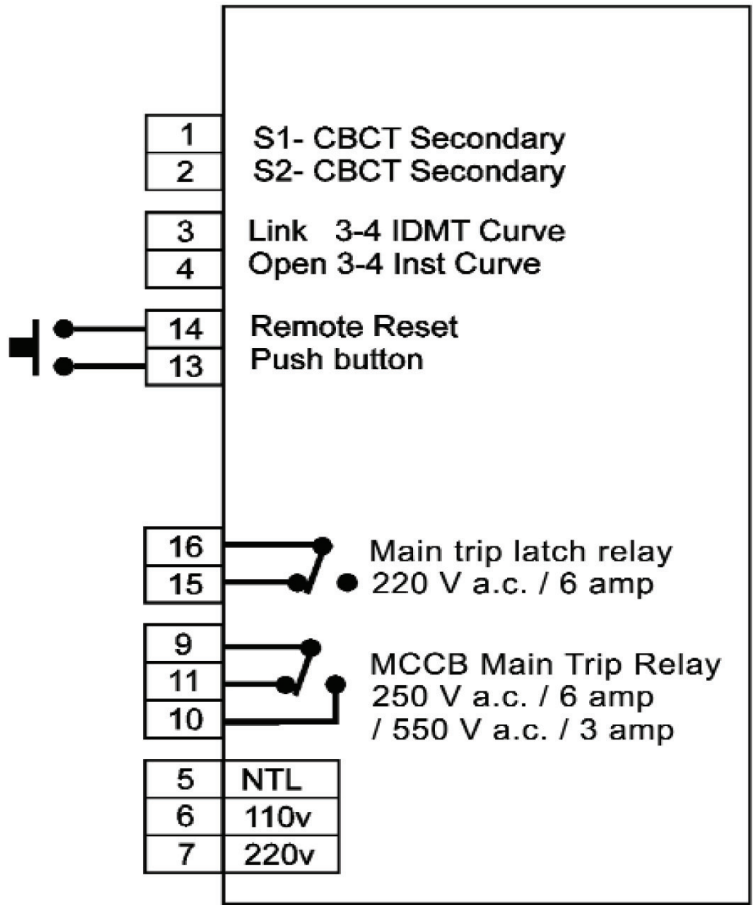
- To IEC 255-5 App A
2kV between separate circuits
1kV across N/O contacts





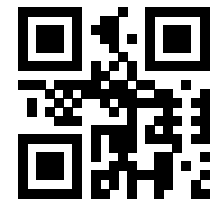
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Electrical Connection Diagram



NEWELEC
GA EARTH LEAKAGE RELAY
GA-ECD.CDR

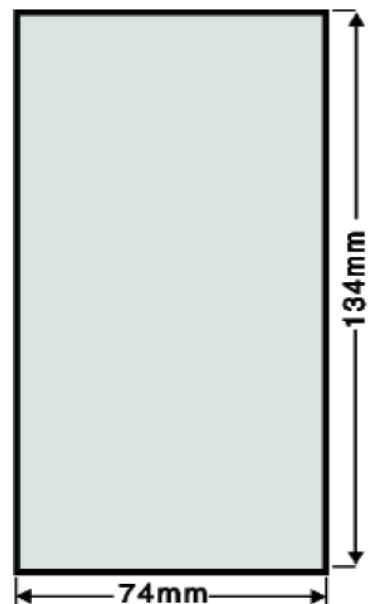




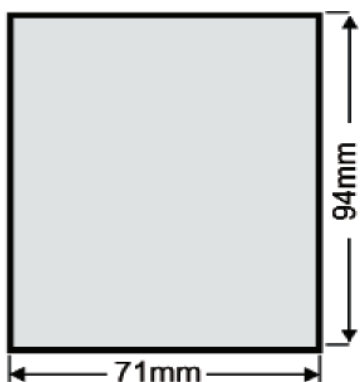
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Dimensional Diagram

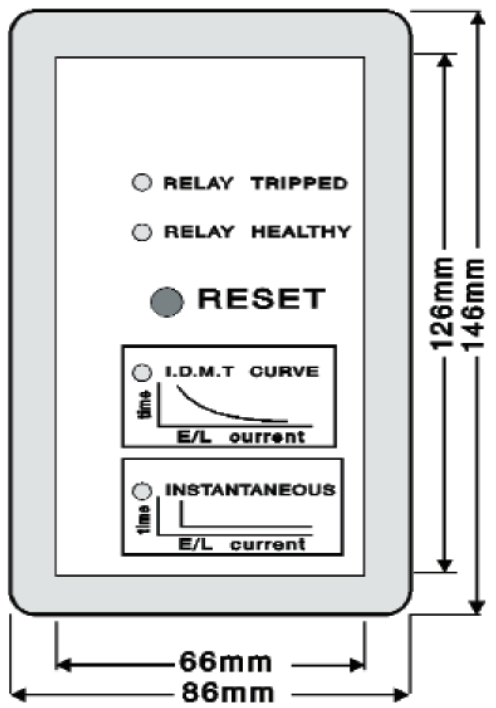
PANEL CUT OUTS



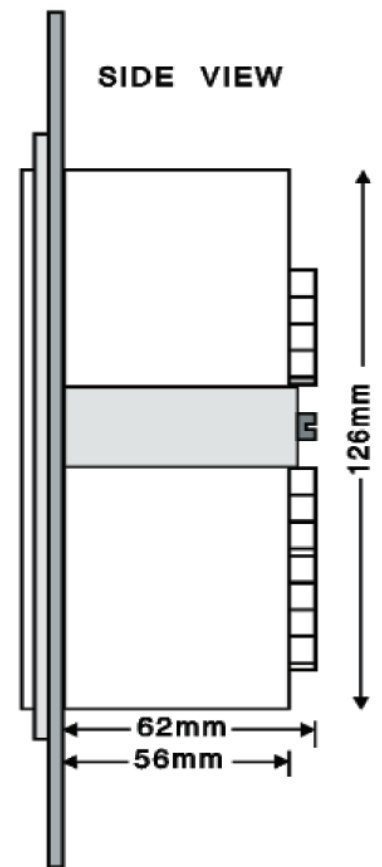
The GA-ELX retrofits into panel cut out below

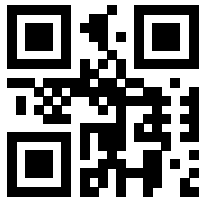


FRONT VIEW



SIDE VIEW

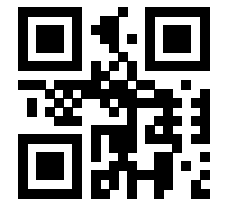




Ordering Information

| | |
|----------------|--|
| <i>GA 250</i> | <i>250 mA earth leakage sensing threshold</i> |
| <i>GA 375</i> | <i>375 mA earth leakage sensing threshold</i> |
| <i>GA 500</i> | <i>500 mA earth leakage sensing threshold</i> |
| <i>GA 1000</i> | <i>1000 mA earth leakage sensing threshold</i> |





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We provide a 1 year renewable guarantee

We repair products out of guarantee for 50% of their list price and renew the guarantee

Local support



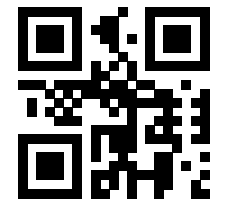
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-25.752984, 28.162957

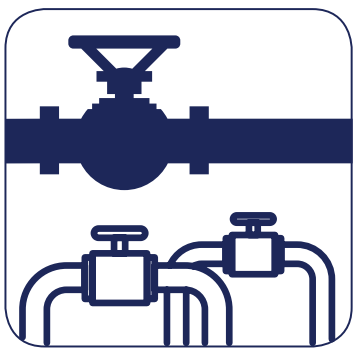


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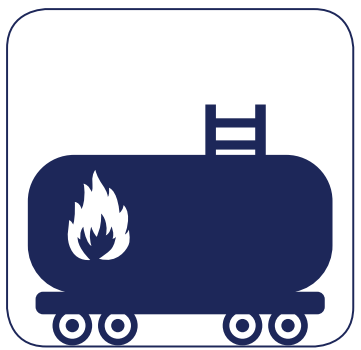
Applications particularly well suited for use in conjunction with the NewElec range of electronic motor protection relays.



Mining



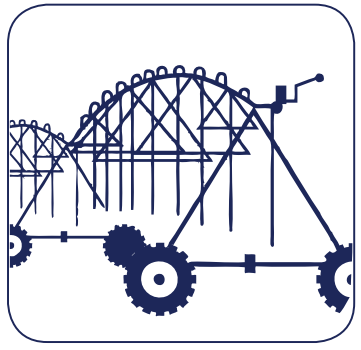
Water Affairs



Petro Chemical



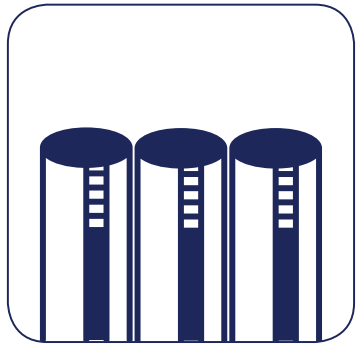
Refineries



Agriculture



Material Handling



Mills



Cable Theft Detection



Pulp & Paper



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