NEW ELEC

MOTOR PROTECTION & CONTROL TECHNOLOGY

GA MS0

Earth Leakage Protection Relay

A South African Company to be Proud of

About

Pioneers of the harmonic suppression circuit characteristics, the GA MS0 Earth Leakage protection relay with Integrated CBCT enables more sensitive earth leakage protection of high kilowatt motors started direct-on-line as well as variable speed drive applications without nuisance tripping.

Available in diverse configuration options, including Latched or Non-latching main trip contact, Fail-safe or Non Fail-safe options, as well as 110V-220V or 380V-525V A.C. auxiliary supply voltages.

The trip contact current rating is a sturdy 6A at 220V and 3A at 525V A.C. A latched 'contactor trip' change-over contact can only be reset by pressing the control panel mounted pushbutton.

Sensitivities range from 30mA to 1000mA with user selectable instantaneous or IDMT curve.

Features Include:

- Fail-safe or non fail-safe option
- Earth Leakage Protection
- Earth Fault Protection
- 110V / 220V A.C.or 380V / 525V A.C. supply
- Latching or non-latching trip contact
- Instantaneous or IDMT curve selection
- Latched 'contactor trip' C/O contact
- Harmonic Suppression
- Adaptor plate to fit 71 x 94mm cut-out

Ordering Details GA-MS0

1 - Range

0030	= 030mA sensitivity
0250	= 250mA sensitivity
0375	= 375mA sensitivity
0500	= 500mA sensitivity
1000	= 1000mA sensitivity

2 - Main Trip Contact

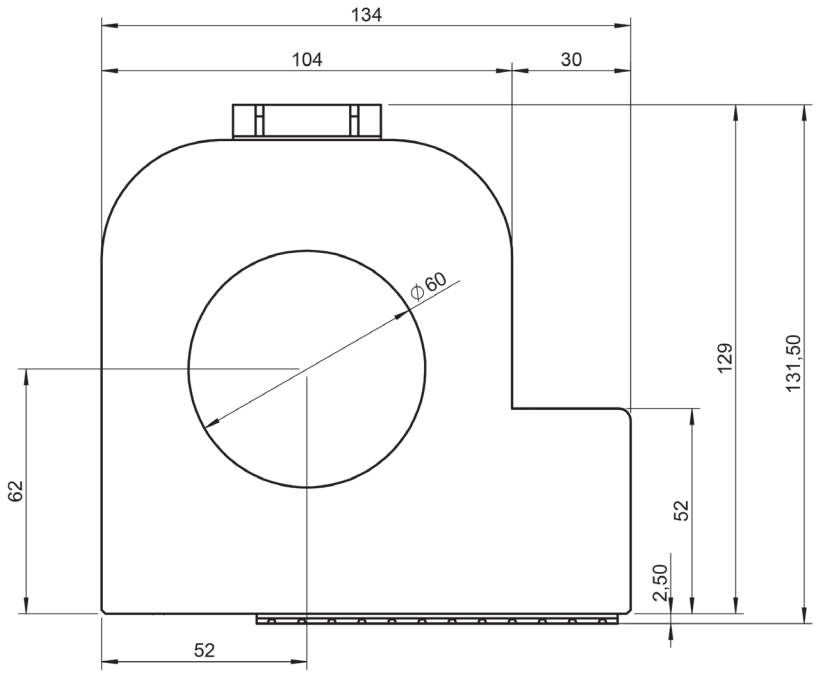
Non fail-safe	= 0
Fail-safe	= B

3 - Latching or Non-Latching Main Trip

Non-latching	= 0
Latching	= C

4 - Auxiliary Supply Voltage

110V / 220V A.C. = 0



Technical Specifications

Overload Withstand Ratings

Primary Current	
50 Amps	*: Continuous*
500 Amps	*: 1 second*
Calibration Levels	
GA 30	*: 30mA ± 10%*
GA 250	*: 250mA ± 5%*
GA 375	*: 375mA ± 5%*
GA 500	*: 500mA ± 5%*
GA 1 000	*: 1 000mA ± 5%*
Trip Delay Curves	
Instantaneous	
Minimum Time	*: 0,150 seconds*
Accuracy	*: ± 0,010 seconds*
	As per Trip Curves
IDMT	*: GA-CRV.CDR*
Accuracy	*: ± 5%*
Characteristic	*: Standard inverse*
Time Multiplier	*: 0,1*

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*
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 Latch	*: 1 x set Changeover*
Rating	*: 6 Amps 220V A.C.*

Environmental Specifications

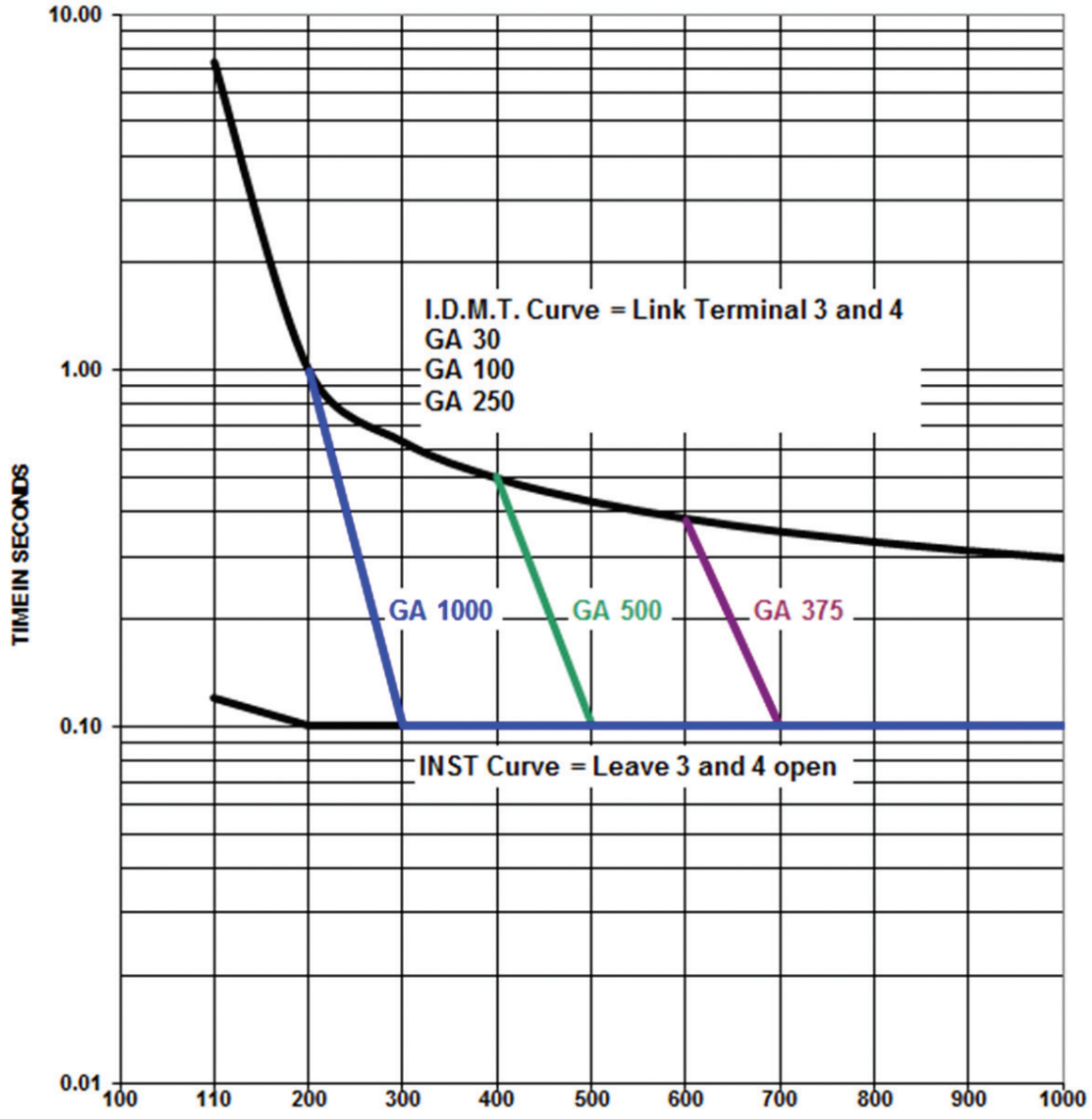
Isolation
To IEC 60255-5 App A

2kV between separate circuits
1kV across N/O contacts

Impulse

To IEC 60255-5 App D
Transient 2,5kV between separate circuits

Thermal Curves



GA 30	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.30
GA 100	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
GA 250	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50
GA 375	0.37	0.75	1.12	1.50	1.87	2.25	2.62	3.00	3.37	3.75
GA 500	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
GA 1000	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.0

PERCENTAGE EARTH LEAKAGE MODEL

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