

NEW ELEC

MOTOR PROTECTION & CONTROL TECHNOLOGY

330M Series Electronic Motor Protection Relay



A South African Company to be Proud of

About

The NewElec 330 Series Low Voltage Electronic Motor Protection Relay is designed to protect wound rotor motors used on winches or overhead cranes. The motor duty class, starting class, cyclic duration factor, power and load current value are of fundamental importance and permit accurate full load protection and adjustment, along with an inverse thermal curve which caters for cyclic duration factor that offers both stator and rotor protection. This will allow the motor to be used to its full duty class and C.D.F., but still maintain accurate, repeatable protection on small or marginal loads. Maximum load threshold is adjustable between 30% to 100% of the C.T. primary current. Latched trip LEDs indicate overload and unbalance detection and trip, with a separate trip and thermal lock-out period in process indication. Available for chassis or flush door mount, the relay has a test facility and may be fitted with a manual or auto reset facility. A thermal trip state indicator is also available as an extra option.

Features Include:

- Thermal Overload Protection
- Unbalanced Current Protection
- Single Phasing Protection
- Calculates True RMS Load Patterns
- Calculates Heating and Cooling Rates
- Full Thermal Memory



Ordering Information

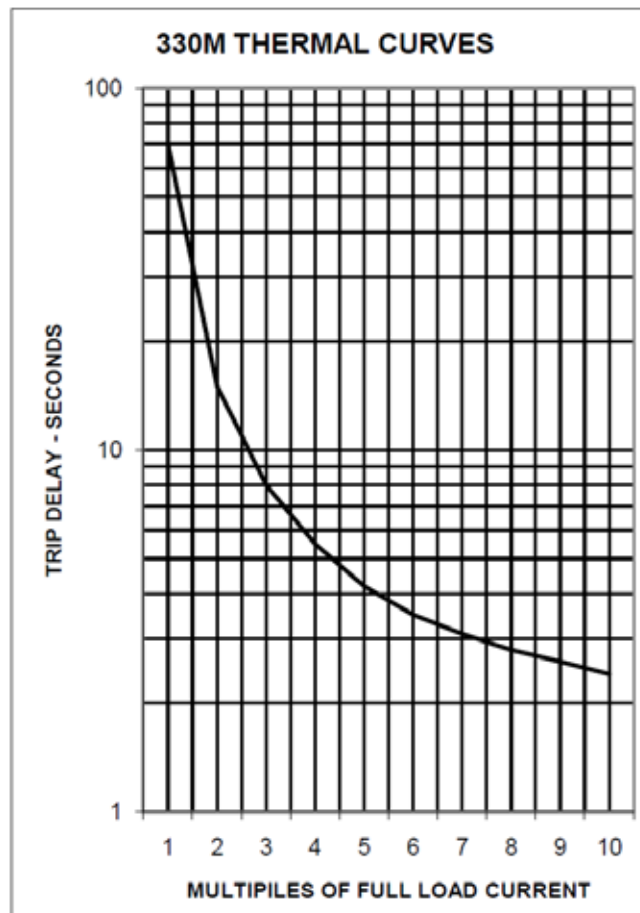
Model	Mounting	Control Supply	Thermal Rating
330M	F: Flush	110: 110V A.C. 5VA	S3: Intermittent periodic operation
	C: Chassis	220: 220V A.C. 5VA	S4: As S3 but with starting
			S5: As S3 but with electric breaking

Code	Cyclic Duration Factor
150: 150 Completestarts/hour	25: 25% C.D.F.
300: 300 Completestarts/hour	40: 40% C.D.F.
	60: 60% C.D.F.

Example: **330M F 110 S4 / 150 / 40**

Please refer to S-Ratings and Cyclic Duration Factors (C.D.F.) for graphic illustrations referred to in the above

Thermal Curves



Product Specifications

Input Converter

Overload capacity : 6 x In for 5 min
 Frequency Response : 42 to 66 Hz

Maximum Unbalance Ratio Setting

Calibration : 2 to 42% Ie
 Accuracy : ± 5% ratio
 Trip Delay : 5s ± 1s
 Recommended setting : 8 to 15% of dial setting

Control Supply

110 or 220V A.C. : 90 to 115% of specified voltage

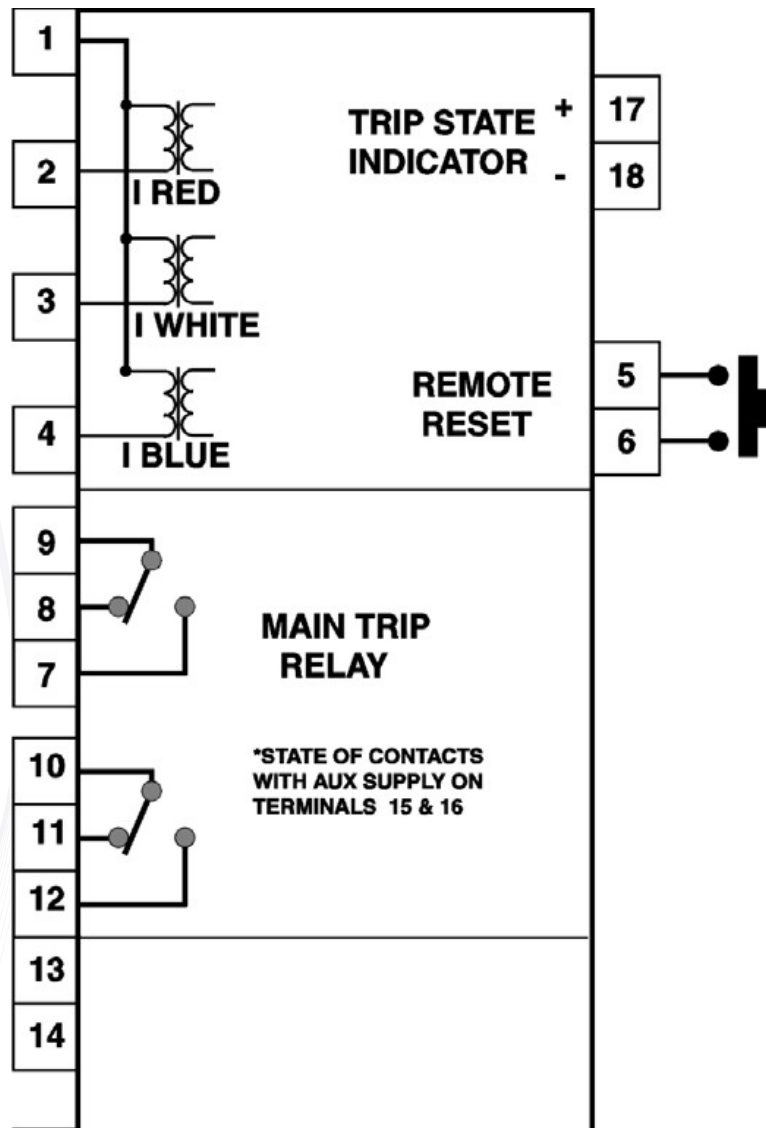
Maximum Load Current Setting

Linearity : ± 4%
 Repeatability : ± 1%
 Detection Level : ± 1%
 Calibration : 30 to 100% of Current
 Transformer

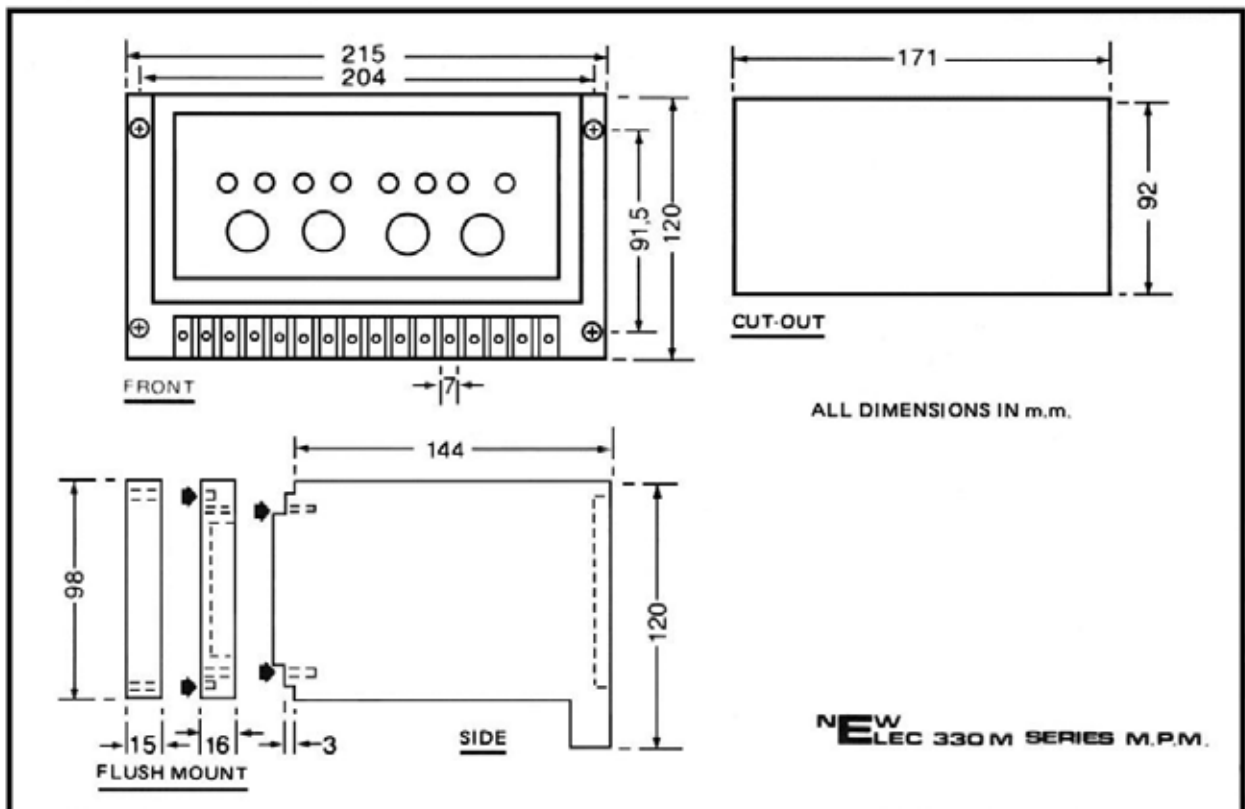
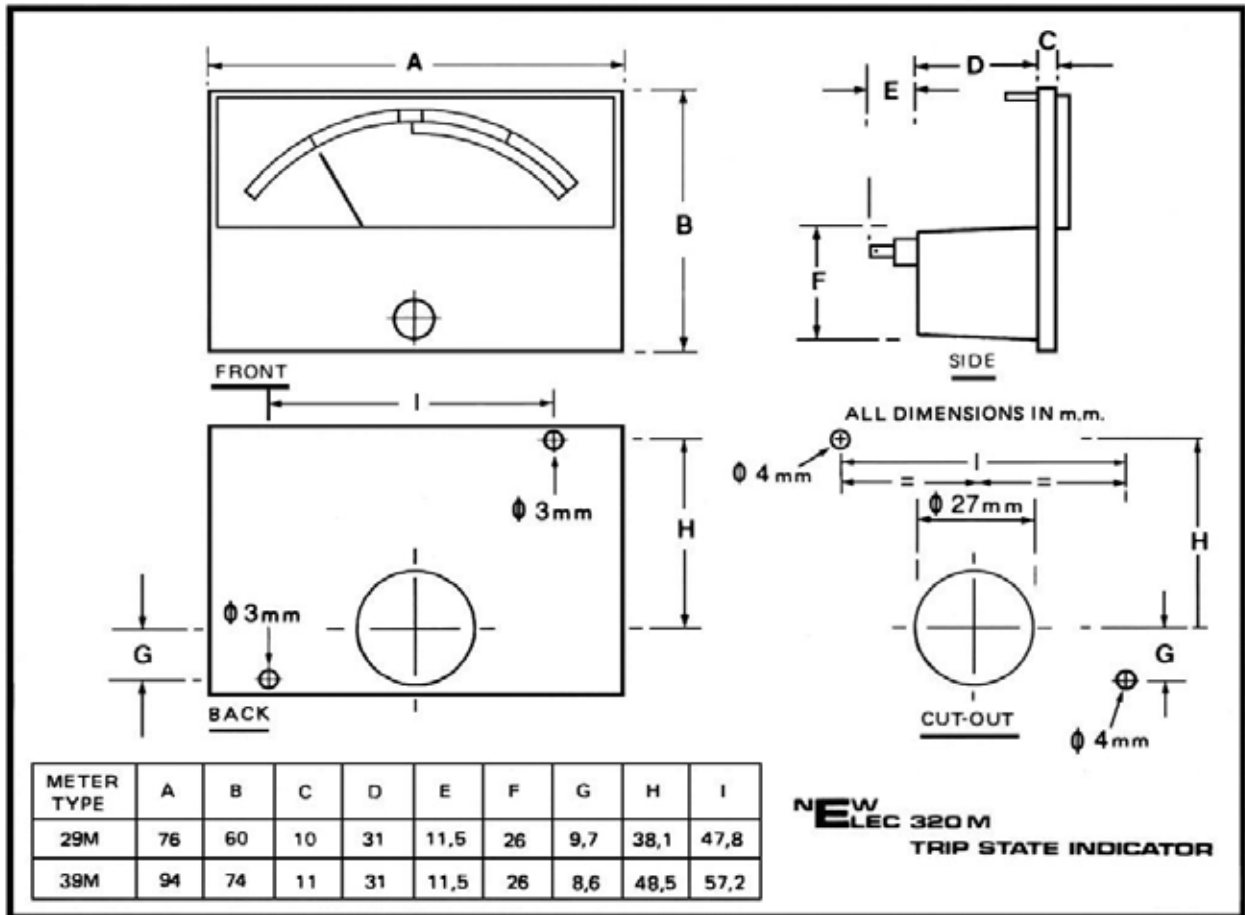
Fail Safe Operation

Trips on loss of supply

Wiring Diagram



330M Series Dimensions



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