## **EATON** Application Note: Protection for Pricey Pumps





The Slimline SP-123 Current Window Comparator, manufactured by Rhomberg Electronics, is particularly beneficial to the farming sector for the protection of submersible pumps in the event of current fluctuations. This 11-pin, plug-in unit is simple to set-up and provides a completely fail-safe operation by detecting potentially harmful current changes.

Where borehole pumps are used for land irrigation, there is always the danger that the borehole could run dry, or silt could clog the pipe and restrict the water flow. The SP-123 is a precision monitor for AC applications that detects both under-current and over-current conditions and will efficiently monitor the current flow to the submersible pump. When either the underload or overload thresholds are reached, the SP-123 automatically turns the pump off and the appropriate LED on the unit illuminates, indicating the relevant fault condition. Underload represents the borehole running dry, whereas overload represents a clogged pipe.

The undercurrent and overcurrent parameters are programmed and set separately against calibrated percentage scales. This programming is done by means of simple adjustments to the positional control knobs on the face of the unit. The control knobs can be replaced by tamperproof buttons provided with the unit, thus preventing unauthorised changes to the settings.

The SP-123 has been designed to monitor up to 5 Amps without the need for a current transformer. For currents over 5 Amps, a suitable current transformer should be incorporated.



## EAT-N Eaton Electric Systems

**ADELAIDE/DARWIN** Tel (08) 8354 0588 Fax (08) 8352 7755

**SYDNEY** Tel (02) 9693 9333 Fax (02) 9693 1258 **BRISBANE** Tel (07) 3391 8311 Fax (07) 3891 5603

**ROCKHAMPTON** Tel (07) 4921 3523 Fax (07) 4921 3013 **MELBOURNE** Tel (03) 9751 8860 Fax (03) 9751 8861

**TOWNSVILLE** Tel (07) 4779 1732 Fax (07) 4779 1301 **NEWCASTLE** Tel (02) 4952 3586 Fax (03) 4952 3862

**WOLLONGONG** Tel (02) 4271 5588 Fax (02) 4271 6377 **PERTH** Tel (08) 9446 0500 Fax (08) 9244 7466

**AUCKLAND - NZ** Tel +64 (09) 828 1101 Fax +64 (09) 828 1301 **QUEANBEYAN** Tel (02) 4271 5588 Fax (02) 4271 6377

**CHRISTCHURCH - NZ** Tel +64 (03) 365 9500 Fax +64 (03) 365 9501