

Product Name :
Relay Control System

Product Code :
CSL0023



Description :

Relay Control System

Technical Specification :

Relay Control System Relay Control System System with electronic relay Adjustable hysteresis and dead zone Display phase plane diagram on CRO Stability study by describing function method Experiments : Study of the relay characteristics and display of the same on CRO for different values of hysteresis and dead zones. Hysteresis and dead zone of the built-in 3-position electronic relay are adjustable in the range 0-600mV and 0-500mV respectively. The transfer characteristics and output of the relay under various settings provide insight into the relay performance study of the effect of hysteresis on system stability. Sustained oscillations may occur in the system under various conditions, especially where hysteresis is present. The amplitude and frequency of such oscillations are predicted from a graphical analysis and then verified experimentally on the unit phase plane analysis of relay control system for various values of Hysteresis and Dead Zones. The nature of the singular point in the phase plane diagram has importance in the stability studies of nonlinear systems. phase plane analysis of relay control system for various values of Hysteresis and Dead Zones. The nature of the singular point in the phase plane diagram has importance in the stability studies of nonlinear systems. Here the phase trajectory is viewed on the CRO and the effect of changing hysteresis and dead zone observed Features and Specifications : Simulated electronic relay using high speed IC's Simulated 2nd order linear plant. Facility for displaying x and x signals Dead zone variable from 0-600mV app Hysteresis variable from 0-500mV app. Built in signal sources - sine and square Amplitude : 0-1V (min.) variable Frequency : 10, 20, 40, 80, 100, 200, 400, 800 & 1000 Hz ic regulated internal power supplies ic regulated internal power supplies 220V +/- 10%, 50 Hz main operation

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