



SPECIALTY DEVICES

LCR-4 AUXILIARY LOAD CONTROL RELAY

DESCRIPTION

The LCR-4 is an auxiliary load control relay designed to switch AC or DC loads or control circuits that exceed meter manufacturer's 100mA rating of the KYZ switching device. It is an intermediate, low-cost way to interface a higher current load to a low current output, generally between the meters' KYZ outputs, and customer-owned loads, appliances or electrical equipment to be controlled by the utility, and insures the long-term reliability of the meter's KYZ pulse output.



The LCR-4 is designed to provide isolation and improve safety and reliability when switching loads or control circuits involved in a load management program. A 2-wire, dry-contact output from the meter is used to activate the higher current output as shown in the figure below. It provides a very low-current sense wetting voltage and may be used with meters having a dry-contact output whether electro- mechanical, or high or low voltage semiconductor outputs.

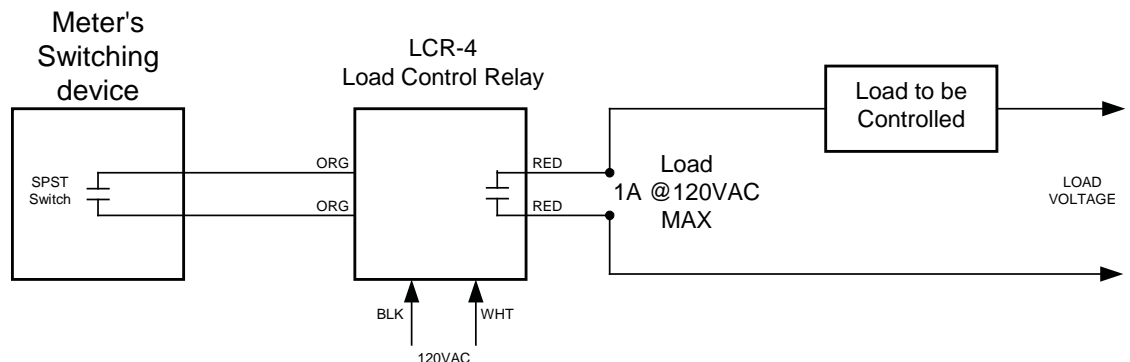
When the control signal is sensed, the LCR-4's solid-state relay is activated, closing a normally-open contact. The LCR-4's output is an optically-isolated, 2-Wire Form A output (Common, Normally Open) capable of switching up to 1 Amp, across a wide voltage range of 12 to 120VAC or VDC.

The LCR-4 is potted in epoxy in a 2" x 1.5" x .75" cube with 18" leads for the input, output and power terminals. No mounting is required and the LCR-4 may be positioned inside a meter enclosure or other convenient location because of its small size. No conductive parts are exposed allowing excellent electrical isolation between any voltage potentials and/or ground. Built-in transient protection for the relay's contact is included, eliminating the need for external or off-the-board transient suppressors.

LCR-4

FUNCTIONAL SUMMARY

	IN	OUT
#	1	1
TYPE	2 Wire	2 Wire
FORM	A	A





SPECIALTY DEVICES

LCR-4 AUXILIARY LOAD CONTROL RELAY

SPECIFICATIONS

ELECTRICAL

Power Input:	12 to 120VAC/VDC; 140VAC/VDC max
Output:	One dry Form A contact (COM & NO). The contacts are rated at 120 VAC/VDC at 1 Amp with no heat sinking
Insulation Resistance:	100 megohms minimum
Operate and Release Time:	Turn-On: 8 mS typical; 25 mS Max Turn Off: .2 mS typical; 5mS Max

MECHANICAL

Mounting:	Any position
Size:	2" length, 1.5" width, .75" height
Weight:	5 ounces

TEMPERATURE

Temperature Range:	-38° C to +70° C, -36.4° F to +158° F
Humidity:	0 to 98% non-condensing

LCR-4