SPECIALTY DEVICES

LCR-3B AUXILIARY LOAD CONTROL RELAY

LCR-3B

FUNCTIONAL SUMMARY

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

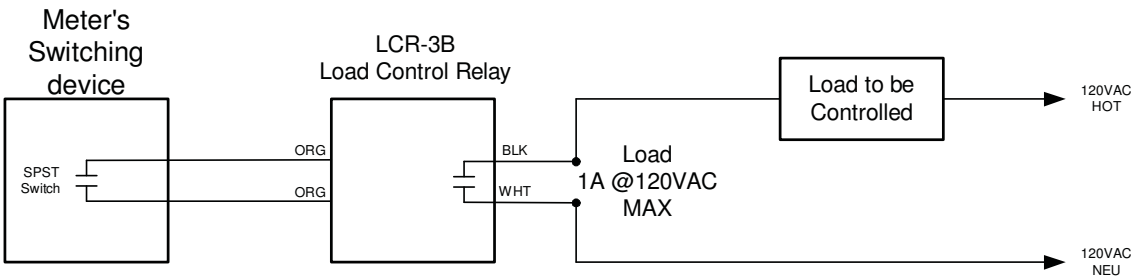
DESCRIPTION

The LCR-3B is an auxiliary load control relay designed to interface with loads or control circuits and features a dry-contact switch input. It is commonly used to interface between electric meters and loads or control circuits whose ratings exceed the meter manufacturers' 100mA/120VAC specification of the KYZ switching device. It is a convenient and low-cost way to interface a higher current load to a low current output, improving isolation and enhancing electric meter reliability.

The LCR-3B is designed to safely interface with utility load management receivers, customer-owned equipment or control circuits involved in load management programs. A 2-wire, dry-contact output from the meter is used to activate the higher current output as shown in Figure 1 below. It provides a very low-current sense wetting voltage and may be used with meters having dry-contact outputs whether electro-mechanical, or high or low voltage semiconductor outputs.

When the control signal is sensed, the LCR-3B's solid-state relay is energized, closing the normally-open contact. The LCR-3B's output is configured as a 2-Wire Form A output (Normally Open) capable of switching up to 1 Amp, across a wide AC voltage range of 12 to 120VAC.

The LCR-3B is potted in epoxy in a 2" x 1.5" x 1" enclosure with 18" leads for the input and output terminals. Two mounting tabs are provided but no mounting is required. The LCR-3B may be positioned inside a meter enclosure or other convenient location due to its small size. No conductive parts are exposed allowing excellent isolation between any potentials or ground. Built-in transient protection for the relay's contacts is included, eliminating the need for external or off-the-board transient suppressors.



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SPECIFICATIONS

ELECTRICAL

Power Input:	12 to 120VAC; 140VAC max
Output:	One dry Form A contact (Normally Open). The contacts are rated at 120 VAC at 1 Amp
Insulation Resistance:	100 megohms minimum
Operate and Release Time:	5 milliseconds typical

MECHANICAL

Mounting:	Any position
Size:	2” length, 1.5” width, 1” height
Weight:	10 ounces

TEMPERATURE

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

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