

ENGINEERING SPECIFICATION SYMCOM MODEL LSRX-C

AC Current Sensor

PART 1 GENERAL

1.1 REFERENCES

- A. UL 508 Industrial Control Equipment Underwriters Laboratories
- B. IEC 60947 Low Voltage Switchgear and Controlgear International Electrotechnical Commission
- C. CSA C22.2 No. 14 Industrial Control Equipment Canadian Standards Association
- D. ANSI/IEEE C62.41 American National Standards Institute/Institute of Electrical & Electronics Engineers

1.2 WARRANTY

A. Manufacturer Warranty: The manufacturer shall guarantee the equipment to be free from material and workmanship defects for a period of five years from the date of manufacture when installed and operated according to the manufacturer's requirements.

PART 2 PRODUCTS

2.1 MANUFACTURERS

The equipment specified shall be the Model LSRX-C, manufactured by SymCom, Inc.

2.2 DESCRIPTION

- A. Regulatory Requirements:
 - 1. The equipment shall be UL certified:
 - a. The equipment shall be UL Listed as type NKCR—Industrial Control Equipment-Motor Controllers-Auxiliary Devices.

1.2 PERFORMANCE/DESIGN CRITERIA: AC CURRENT SENSOR

- A. Capabilities and Features:
 - 1. Inputs
 - a. The equipment shall accept single-phase operating current rated 5-200 amps.
 - 2. Outputs
 - a. The equipment shall include one Form A (SPST) output relay. Contacts pilot duty rated 480VA@240VAC. Contacts general purpose rated 5A@240VAC.
 - 3. Functional Specifications
 - a. The equipment shall energize the output contacts when greater than 4.5 amps are present.
 - b. The equipment shall include an electrical life of 1x10⁵ operations at rated load.
 - c. The equipment shall include a mechanical life of 1x10⁷ operations.
 - d. The equipment shall include one depluggable terminal block.
 - e. The equipment shall include one LED indicator light. The light will illuminate when the relay contacts are energized.

B. Electromagnetic Compatibility:

- 1. The equipment shall be immune to electrostatic discharge per IEC 61000-4-2, Level 2, 4kV contact discharge and 4kV air discharge.
- 2. The equipment shall be immune to electrical fast transient bursts per IEC 61000-4-4, Level 3. Specified limits shall be 2kV power supply port, 1kV input/output ports.
- 3. The equipment's power supply port shall be immune to electrical surges per IEC 61000-4-5, Level 3. Specified limits shall be 2kV line-to-line and line-to-ground.
- 4. The equipment shall be immune to radiated radio frequency emissions. Specified limits shall be 10V/m at 150 MHz.
- B. Dielectric Isolation: Equipment withstands an alternating current potential of 1000V plus twice the rated voltage of the equipment for 1 minute without breakdown between uninsulated live parts and the enclosure with the contacts open and closed; between terminals of opposite polarity with the contacts closed; and between uninsulated live parts of different circuits.
- C. Environmental Requirements:
 - 5. The equipment shall operate continuously without derating in ambient temperatures of -20° to 70°C (-4° to 158°F).
 - 6. The equipment shall operate continuously without derating in relative humidity of up to 95% non-condensing per IEC 68-2-3.
 - 7. The equipment shall operate properly after storage in ambient temperatures of -40° to 80°C (-40° to 176°F).
- D. Dimensions: The equipment dimensions shall not exceed 2.70" H x 1.13" W x 2.50" D.
- E. Enclosure class of protection: The equipment shall provide IP20 (finger safe) protection.
- F. Mounting:
 - The equipment shall be surface mountable.

End of Section