



**ENGINEERING SPECIFICATION**  
**SYMCOM MODELS 201-100-SLD, 201-200-SLD**  
**SEAL LEAK DETECTOR**

**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. ANSI/IEEE C62.41 – American National Standards Institute/Institute of Electrical & Electronics Engineers
- D. CSA C22.2 No. 14 Industrial Control Equipment – Canadian Standards Association

**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**

*For the 201-100-SLD*

The equipment specified shall be the 201-100-SLD, manufactured by SymCom, Inc.

*For the 201-200-SLD*

The equipment specified shall be the 201-200-SLD, manufactured by SymCom, Inc.

**2.2 DESCRIPTION**

- A. Regulatory Requirements:
  - 1. The equipment shall be UL Listed as type NKCR—Industrial Control Equipment-Motor Controllers-Auxiliary Devices.
  - 2. The equipment shall be ULC Listed as type NKCR7—Industrial Control Equipment-Motor Controllers-Auxiliary Devices Certified for Canada.
  - 3. The equipment shall be CE marked for use in the European Union and evaluated against IEC 60947 Low Voltage Switchgear and Controlgear.

**2.3 PERFORMANCE/DESIGN CRITERIA: SEAL LEAK DETECTOR**

- A. Protective Leak Detection Functions:
  - 1. The equipment shall provide notification of the following conditions:
    - a. Reduced resistance of the probe indicating a possible seal leak
- B. Capabilities and Features
  - 1. Inputs:
    - a. The equipment shall provide one control input.  
*For the 201-100-SLD*
    - b. The equipment shall accept single-phase input voltage rated 95-120VAC.  
*For the 201-200-SLD*
    - c. The equipment shall accept single-phase input voltage rated 190-240VAC.
  - 2. Outputs:
    - a. The equipment shall include one Form C output relay contact pilot duty rated 480VA @ 240VAC.
    - b. The equipment shall include one Form C output relay contact general purpose rated 10A @ 240VAC.
  - 3. Functional Specifications
    - a. The equipment shall include a dial adjustment to set the input sensitivity from 4.7k to 100k ohms.
    - b. The equipment shall have one indicator LED capable of indicating the status of the output relay.
- C. Electromagnetic Compatibility
  - 1. The equipment shall be immune to electrostatic discharge per IEC 61000-4-2, Level 3, 6kV contact discharge and 8kV air discharge.
  - 2. The equipment shall be immune to electrical fast transient bursts exceeding IEC 61000-4-4, Level 4. Specified limits shall be 4kV.
  - 3. The equipment shall be immune to electrical surges per IEC 61000-4-5, Level 4. Specified limits shall be Level 4, 4kV line-to-line, and Level 4, 4kV line-to-ground.
  - 4. The equipment shall be immune to electrical surges per ANSI/IEEE C62.41 Surge and Ring Wave. Specified limits shall be 6kV line-to-line.
  - 5. The equipment shall be immune to radiated radio frequency emissions. Specified limits shall be 10V/m at 150 MHz.



- D. 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.
- E. Environmental Requirements
1. The equipment shall operate continuously without derating in surrounding air temperatures of -40° to 70°C (-40° to 158°F).
  2. The equipment shall operate continuously without derating in relative humidity of 10% up to 95% non-condensing per IEC 68-2-3.
  3. The equipment shall operate properly after storage in ambient temperatures of -40° to 80°C (-40° to 176°F).
- F. Dimensions: The equipment dimensions shall not exceed 1.750" H x 2.375" W x 4.125" D (with socket).
- G. Mounting:
1. The equipment shall be mounted using the SymCom OT08-PC 8-pin octal socket.
    - a. The socket shall be 600V rated.
    - b. The socket shall be 10A rated.
    - c. The socket shall provide a means for mounting on the surface or on a DIN rail.

End of Section