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