ISS-100

Single-Channel Intrinsically Safe Switch

Description
The ISS-100 switches are UL 913 listed as an associated apparatus for interfacing between hazardous and non-hazardous areas. These units must be installed in a non-hazardous area.

Features & Benefits

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger-safe terminals</td>
<td>Meets IEC 61000 safety requirements</td>
</tr>
<tr>
<td>Compact design for DIN rail or surface mount</td>
<td>Allows flexibility in panel installation</td>
</tr>
<tr>
<td>LED Status Indicator</td>
<td>Visual indication of relay engagement</td>
</tr>
<tr>
<td>Isolated output relay</td>
<td>Allows connection to PLC or control voltage</td>
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</tbody>
</table>

Specifications

Input Characteristics
Supply Voltage
Functional Characteristics
Probe Sense Voltage
Output Characteristics
Output Contact Rating
Pilot Duty
General Purpose
Relay Contact Life (Electrical)
Relay Contact Life (Mechanical)
General Characteristics
Temperature Range
Maximum Input Power
Wire range
Terminal Torque
Provides Intrinsically-Safe Circuits in the following locations:

Division 1 and 2
Class I, Groups A,B,C,D;
Class II, Groups E,F,G;
and Class III

Entity Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_{oc}$</td>
<td>16.8V</td>
</tr>
<tr>
<td>$P_o=V_{oc}I_{sc}$</td>
<td></td>
</tr>
<tr>
<td>$I_{sc}$</td>
<td>1.2mA</td>
</tr>
<tr>
<td>$L_a$</td>
<td>100mH</td>
</tr>
<tr>
<td>$C_a$</td>
<td>0.39µF</td>
</tr>
</tbody>
</table>

Standards Passed

Electrostatic Discharge (ESD)
Radio Frequency Immunity (RFI)
Fast Transients
Safety Mark
UL
Dimensions
Weight
Mounting Method

1. Maximum distance between unit and switch contact is 10,000 feet.
2. All non-intrinsically safe wiring shall be separated from intrinsically safe wiring. Description of special wiring methods can be found in the National Electrical Code ANSI/NFPA 70, Article 504 Intrinsically Safe Systems. Check your state and local codes for additional requirements.
3. All switch contacts shall be non-energy storing, containing no inductance or capacitance.

See Notes 1 & 2

See Note 3

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