

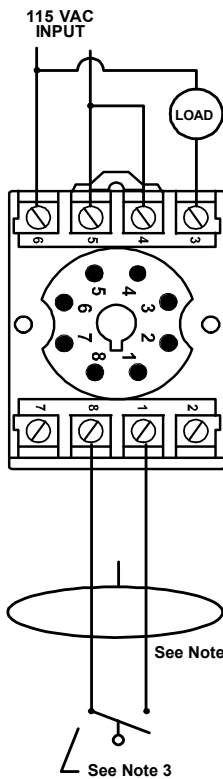
# ISS-101

## Single-channel intrinsically safe switch



### Wiring Diagram

CONTROL DRAWING ISS-101



**NOTES:**

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 Install Bulletin for full instructions and Hazardous Location information.

### Description

The ISS-101 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.

**Must use Model OT08PC socket for UL Rating!**

Note: Manufacturer's recommended screw terminal torque for the OT Series Octal Sockets is 12 in.-lbs.

### Features & Benefits

FEATURES	BENEFITS
<b>Compact design for DIN rail or surface mount via octal base</b>	Allows flexibility in panel installation
<b>LED status indicator</b>	Visual indication of relay engagement
<b>Isolated output relay</b>	Allows connection to PLC or control voltage
<b>Standard 8-pin socket</b>	Pop-in replacement for other manufacturers' parts

### Accessories (included)



**OT08PC 8-pin Octal Socket**

Octal Socket for plug-in units. 8-pin surface & DIN rail mountable. Rated for 10A @ 600VAC.

### Specifications

**Input Characteristics**

**Supply Voltage** 90-120VAC

**Functional Characteristics**

**Probe Sense Voltage** 5VDC continuous

**Output Characteristics**

**Output Contact Rating**

180VA @120VAC, C300

**Pilot Duty**

8A @120VAC

**General Purpose**

**Relay Contact Life (Electrical)**

100,000 cycles min. @ rated load

**Relay Contact Life (Mechanical)**

10,000,000 cycles

**General Characteristics**

**Temperature Range**

-20° to 55°C (-4° to 131°F)

**Maximum Input Power**

1.5 W

**Wire range**

12 to 20 AWG

**Terminal Torque**

3.5 to 4.5 in.-lbs. (max. 4.5 in.-lbs.)

**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**

$V_{OC} = 16.8V$       $P_o = V_{OC} \cdot I_{SC}$   
 $I_{SC} = 1.2mA$      4  
 $L_a = 100mH$   
 $C_a = 0.39\mu F$

## ISS-101

### Standards Passed

**Electrostatic Discharge (ESD)** IEC 61000-4-2, Level 3, 6kV contact, 8kV air

**Radio Frequency**

**Immunity (RFI)** IEC 61000-4-3, Level 3, 10V/m

**Fast Transients** IEC 61000-4-4, Level 3, 4kV input power

**Safety Mark**

**UL** UL913 Sixth Edition (File #E233355)

**Dimensions** **H** 44.45 mm (1.75"); **W** 60.33 mm (2.375");

**D** 104.78 mm (4.125")

**Weight** 0.5 lb. (8 oz., 226.8 g)

**Mounting Method** DIN rail or surface mount

(plug into OT08PC socket)