

ISS-101

Single-Channel Intrinsically Safe Switch



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!

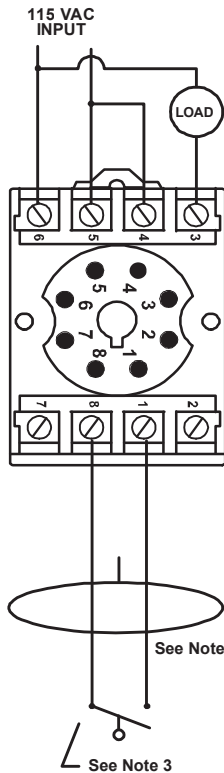
Note: Manufacturer's recommended screw terminal torque for the OT Series Octal Sockets is 12 in.-lbs.

Features & Benefits

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

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.

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	
Pilot Duty	180VA @120VAC, C300
General Purpose	8A @120VAC
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	$V_{OC} = 16.8V$ $P_o = \frac{V_{oc} \cdot I_{sc}}{4}$ $I_{sc} = 1.2mA$ $L_a = 100mH$ $C_a = 0.39\mu F$

8

PUMP CONTROLS & LIQUID LEVEL CONTROLS

For dimensional drawing see: Appendix, page 509, Figure 8.

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)