### **OPERATION**

The ISO Series single channel devices are used to provide a safe and reliable means of controlling loads from hazardous locations without releasing sufficient energy, under normal or abnormal conditions, to cause ignition of a flammable or combustible atmospheric mixture while in its most easily ignited concentration. An isolated output turns on when the control switch input from the hazardous location is closed. When the control switch input opens, the isolated output turns off. The Style A single channel plug-in devices come equipped with integral spring mating clips and socket (PF083A) which secure the device to make this unit the only UL913 Intrinsically Safe plug-in associated apparatus available on the market today. The Style N, surface mounted enclosure is sealed with a high quality epoxy resin material and has five (5) #8-32 screw terminals.

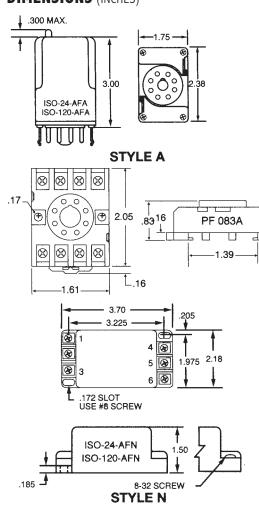






Single Channel Isolated Switch

# **DIMENSIONS** (INCHES)



## SPECIFICATIONS

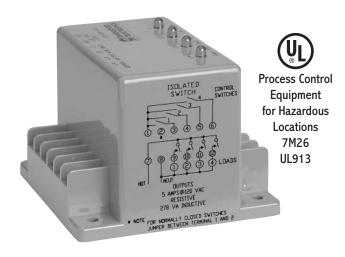
CONTROL VOLTAGE	24 or 120 VAC ±10%, 50/60 Hz		
CONTROL SWITCH	Open Circuit V		16 VDC 200 µAmps
RESPONSE	Operate Release	6 mSEC	(Approx.)
POWER REQUIRED	1.5 VA		· · · · /
DUTY CYCLE	Continuous		
CONTACT RATING	SPST-N.O., 5 amps @ 24 or 120 VAC, Resistive; 278 VA, Inductive		
SENSITIVITY	100 k ohm		
ISOLATION	2500 Volts, Input to Output		
LIFE EXPECTANCY	Mechanical Electrical		on Operations Operations @ Rated Loa
INDICATORS	On When Output is On		
TEMPERATURE RATING	Operate Storage		31°F (-20° to +55°C) 185°F (-40° to +85°C)
ENCLOSURE	Style "A" and "N"		
TERMINATIONS	(12) #8-32 Screw terminals		
WEIGHT	20 oz.		

### **ORDERING INFORMATION**

MODEL Number	CONTROL VOLTAGE	ENCLOSURE STYLE
ISO-24-AFA	24 VAC	A
ISO-120-AFA	120 VAC	Α
ISO-24-AFN	24 VAC	N
ISO-120-AFN	120 VAC	N

Style "A" Socket Included (PF083A) with clips

SOLATED SWITCHES



Multiple Channel Isolated Switch

### SPECIFICATIONS

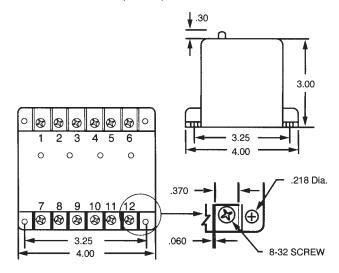
JI LUII ICATIONS				
CONTROL VOLTAGE	24 or 120 VAC $\pm$ 10%, 50/60 Hz			
CONTROL SWITCH	Open Circuit V		6.2 VDC	
	Short Circuit Current 10 µAmps			
RESPONSE	Operate	6 mSEC (/	Approx.)	
TIMES	Release	2.5 mSEC	(Approx.)	
POWER REQUIRED	2.5 VA			
DUTY CYCLE	Continuous			
CONTACT	SPST-N.O., 5 amps per channel @ 24 or			
RATING	120 VAC, Resistive; 278 VA, Inductive			
	2500 Volts, Input to Output			
ISOLATION	2500 Volts, In	put to Outp	out	
LIFE EXPECTANCY	2500 Volts, In		Operations	
		20 Million		
	Mechanical	20 Million 50,000 O	Operations perations @ Rated Load	
LIFE EXPECTANCY	Mechanical Electrical	20 Million 50,000 O esponding	Operations perations @ Rated Load	
LIFE EXPECTANCY INDICATORS	Mechanical Electrical On When Corr	20 Million 50,000 0 esponding -4° to 13	Operations perations @ Rated Load Output is On	
LIFE EXPECTANCY  INDICATORS  TEMPERATURE	Mechanical Electrical On When Corre	20 Million 50,000 0 esponding -4° to 13 -40° to 18	Operations perations @ Rated Load Output is On 1°F (-20° to +55°C) 85°F (-40° to +85°C)	
LIFE EXPECTANCY INDICATORS TEMPERATURE RATING	Mechanical Electrical On When Corre Operate Storage	20 Million 50,000 0 esponding -4° to 13 -40° to 13 an® Surface	Operations perations @ Rated Load Output is On  1°F (-20° to +55°C) 85°F (-40° to +85°C) Mounted	
LIFE EXPECTANCY  INDICATORS  TEMPERATURE RATING  ENCLOSURE	Mechanical Electrical On When Corre Operate Storage Style "E" Lexa	20 Million 50,000 0 esponding -4° to 13 -40° to 13 an® Surface	Operations perations @ Rated Load Output is On  1°F (-20° to +55°C) 85°F (-40° to +85°C) Mounted	

### **OPERATION**

The ISO/ISL Series multiple channel devices are used to provide a safe and reliable means of controlling loads from hazardous locations without releasing sufficient energy under normal or abnormal conditions to cause ignition of a flammable or combustible atmospheric mixture while in its most easily ignited concentration. An isolated output turns on when the corresponding control switch input from the hazardous location is activated. When using normally closed control switch inputs, a jumper should be installed between terminals 1 and 2. Normally open control switch inputs do not require the optional jumper. When the

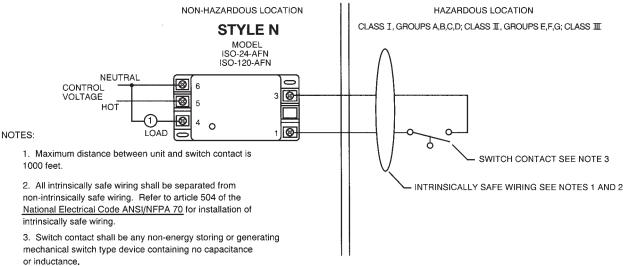
non-latching ISO Series control switch input is activated, its corresponding output turns on. When the control switch input is deactivated, its output turns off. When the latching ISL Series control switch input 2, 3 or 4 is activated, its corresponding output turns on. When control switch 2, 3 or 4 is deactivated, its corresponding output remains latched on as long as control switch input 1 is activated; otherwise it turns off immediately. Control switch input 1 also controls output 1 just as in the non-latching ISO Series.

## **DIMENSIONS** (INCHES)

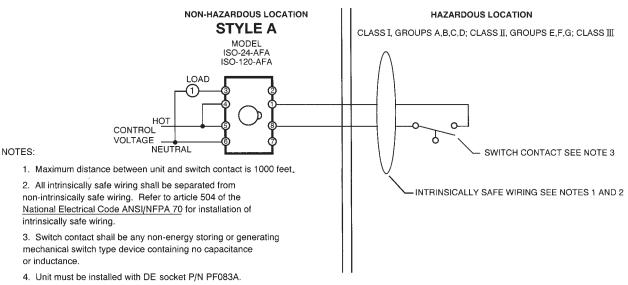


### ORDERING INFORMATION

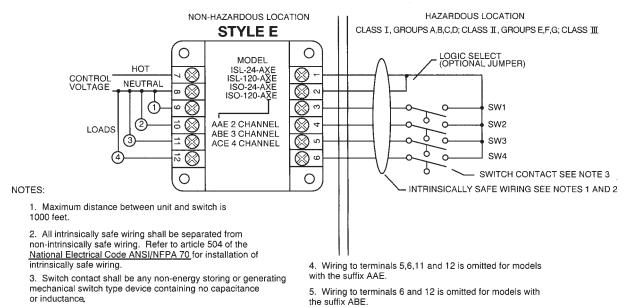
MODEL NUMBER	CONTROL VOLTAGE	CHANNELS
ISL-24-AAE	24 VAC	2
ISL-24-ABE	24 VAC	3
ISL-24-ACE	24 VAC	4
ISL-120-AAE	120 VAC	2
ISL-120-ABE	120 VAC	3
ISL-120-ACE	120 VAC	4
ISO-24-AAE	24 VAC	2
ISO-24-ABE	24 VAC	3
ISO-24-ACE	24 VAC	4
ISO-120-AAE	120 VAC	2
ISO-120-ABE	120 VAC	3
ISO-120-ACE	120 VAC	4



**CONTROL DRAWING 192** 



#### **CONTROL DRAWING 193**



SOLATED SWITCHES