

### Multiple Channel Isolated Switch



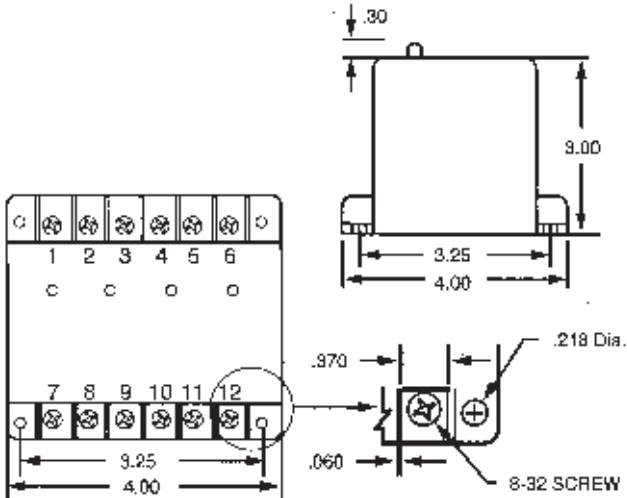
Process Control  
Equipment  
for Hazardous  
Locations  
7M26  
UL913

### ► 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)



### ► SPECIFICATIONS

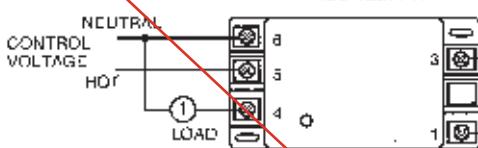
<b>CONTROL VOLTAGE</b>	24 or 120 VAC $\pm 10\%$ , 50/60 Hz	
<b>CONTROL SWITCH</b>	Open Circuit Voltage	6.2 VDC
	Short Circuit Current	10 $\mu$ Amps
<b>RESPONSE TIMES</b>	Operate	6 mSEC (Approx.)
	Release	2.5 mSEC (Approx.)
<b>POWER REQUIRED</b>	2.5 VA	
<b>DUTY CYCLE</b>	Continuous	
<b>CONTACT RATING</b>	SPST-N.O., 5 amps per channel @ 24 or 120 VAC, Resistive; 278 VA, Inductive	
<b>ISOLATION</b>	2500 Volts, Input to Output	
<b>LIFE EXPECTANCY</b>	Mechanical	20 Million Operations
	Electrical	50,000 Operations @ Rated Load
<b>INDICATORS</b>	On When Corresponding Output Is On	
<b>TEMPERATURE RATING</b>	Operate	-4° to 131°F (-20° to +55°C)
	Storage	-40° to 185°F (-40° to +85°C)
<b>ENCLOSURE</b>	Style "E" Lexan® Surface Mounted	
<b>TERMINATIONS</b>	(12) #8-32 Screw terminals	
<b>WEIGHT</b>	8 oz.	

### ► 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 191

NON-HAZARDOUS LOCATION

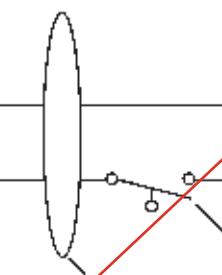
**STYLE N**MODEL  
ISO-24-AFN  
ISO-120-AFN

## NOTES:

1. Maximum distance between unit and switch contact is 1000 feet.
2. All intrinsically safe wiring shall be separated from non-intrinsically safe wiring. Refer to article 504 of the National Electrical Code ANSI/NFPA 70 for installation of intrinsically safe wiring.
3. Switch contact shall be any non-energy storing or generating mechanical switch type device containing no capacitance or inductance.
4. Intrinsically safe wiring see notes 1 and 2.

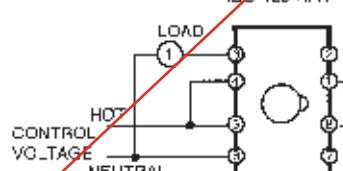
HAZARDOUS LOCATION

CLASS I, GROUPS A,B,C,D; CLASS II, GROUPS E,F,G; CLASS III

SWITCH CONTACT SEE NOTE 3  
INTRINSICALLY SAFE WIRING SEE NOTES 1 AND 2

## CONTROL DRAWING 192

NON-HAZARDOUS LOCATION

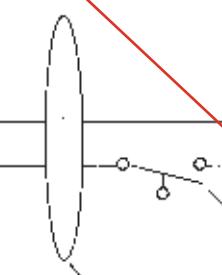
**STYLE A**MODEL  
ISO-24-AFA  
ISO-120-AFA

## NOTES:

1. Maximum distance between unit and switch contact is 1000 feet.
2. All intrinsically safe wiring shall be separated from non-intrinsically safe wiring. Refer to article 504 of the National Electrical Code ANSI/NFPA 70 for installation of intrinsically safe wiring.
3. Switch contact shall be any non-energy storing or generating mechanical switch type device containing no capacitance or inductance.
4. Unit must be installed with DE socket P/N PF083A.

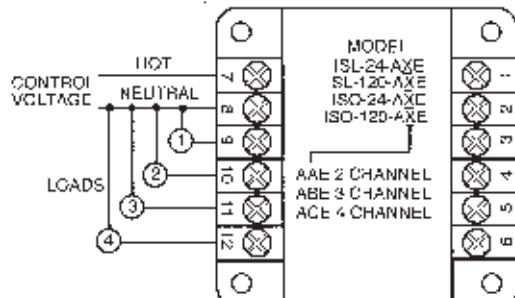
HAZARDOUS LOCATION

CLASS I, GROUPS A,B,C,D; CLASS II, GROUPS E,F,G; CLASS III

SWITCH CONTACT SEE NOTE 3  
INTRINSICALLY SAFE WIRING SEE NOTES 1 AND 2

## CONTROL DRAWING 193

NON-HAZARDOUS LOCATION

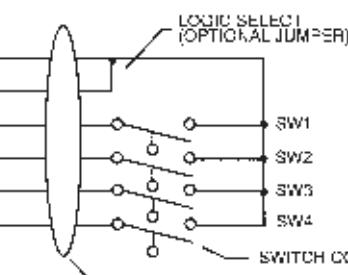
**STYLE E**MODEL  
ISL-24-AXE  
SL-120-AXE  
ISO-24-AXC  
ISO-120-AXEAAE 2 CHANNEL  
ABE 3 CHANNEL  
ACE 4 CHANNEL

## NOTES:

1. Maximum distance between unit and switch is 1000 feet.
2. All intrinsically safe wiring shall be separated from non-intrinsically safe wiring. Refer to article 504 of the National Electrical Code ANSI/NFPA 70 for installation of intrinsically safe wiring.
3. Switch contact shall be any non-energy storing or generating mechanical switch type device containing no capacitance or inductance.
4. Logic select (optional jumper) is connected between terminals 1 and 2.
5. Wiring to terminals 5,6,11 and 12 is omitted for models with the suffix AAE.
6. Wiring to terminals 6 and 12 is omitted for models with the suffix ABE.

HAZARDOUS LOCATION

CLASS I, GROUPS A,B,C,D; CLASS II, GROUPS E,F,G; CLASS III

LOGIC SELECT (OPTIONAL JUMPER)  
SW1  
SW2  
SW3  
SW4  
SWITCH CONTACT SEE NOTE 3  
INTRINSICALLY SAFE WIRING SEE NOTES 1 AND 2