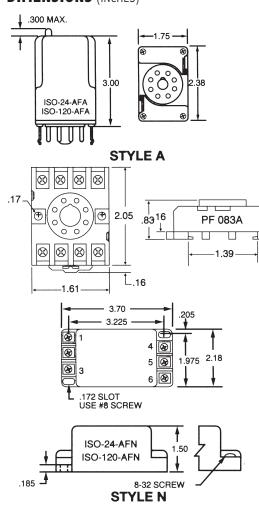
OPERATION

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

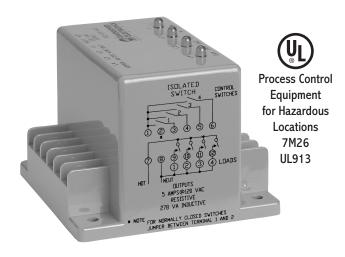
| CONTROL VOLTAGE | 24 or 120 VAC ±10%, 50/60 Hz | | |
|-----------------------|--|----------------------|---|
| CONTROL SWITCH | Open Circuit V Short Circuit C | | 16 VDC 200 µAmps |
| RESPONSE | Operate Release | 6 mSEC (2.5 mSEC | Approx.) |
| POWER REQUIRED | 1.5 VA | | |
| DUTY CYCLE | Continuous | | |
| 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 | | n Operations Operations @ Rated Load |
| INDICATORS | On When Output is On | | |
| TEMPERATURE RATING | Operate Storage | | 1°F (-20° to +55°C) 85°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 | Α |
| ISO-120-AFA | 120 VAC | A |
| 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

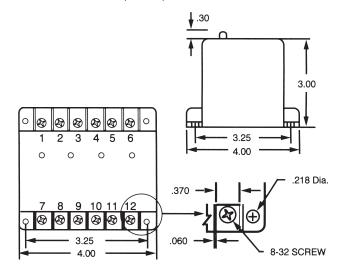
| of Leff feations | | | | |
|--|---|--|--|--|
| CONTROL VOLTAGE | 24 or 120 VAC ±10%, 50/60 Hz | | | |
| CONTROL SWITCH | Open Circuit V Short Circuit C | | 6.2 VDC 10 µAmps | |
| RESPONSE TIMES | Operate Release | 6 mSEC (A | | |
| POWER REQUIRED | 2.5 VA | | | |
| DUTY CYCLE | Continuous | | | |
| CONTACT RATING | SPST-N.O., 5 amps per channel @ 24 or 120 VAC, Resistive; 278 VA, Inductive | | | |
| | 2500 Volts, Input to Output | | | |
| ISOLATION | 2500 Volts, In | put to Outp | ut | |
| LIFE EXPECTANCY | 2500 Volts, In Mechanical Electrical | 20 Million | ut Operations perations @ Rated Load | |
| | Mechanical | 20 Million 50,000 Op | Operations perations @ Rated Load | |
| LIFE EXPECTANCY | Mechanical Electrical | 20 Million 50,000 Operation (1974) 20 Million 50,000 Operation (1974) | Operations perations @ Rated Load | |
| LIFE EXPECTANCY INDICATORS TEMPERATURE | Mechanical Electrical On When Corre | 20 Million 50,000 Opesponding (-4° to 131 -40° to 18 | Operations Deterations @ Rated Load Dutput is On 1°F (-20° to +55°C) 85°F (-40° to +85°C) | |
| INDICATORS TEMPERATURE RATING | Mechanical Electrical On When Corre Operate Storage | 20 Million 50,000 Opersponding (-4° to 131 -40° to 18 | Operations Deterations @ Rated Load Output is On 1°F (-20° to +55°C) B5°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.

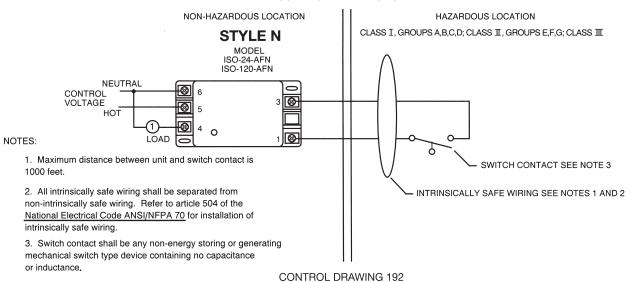
DIMENSIONS (INCHES)

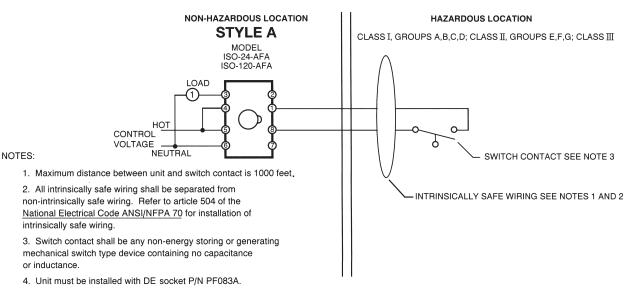


ORDERING INFORMATION

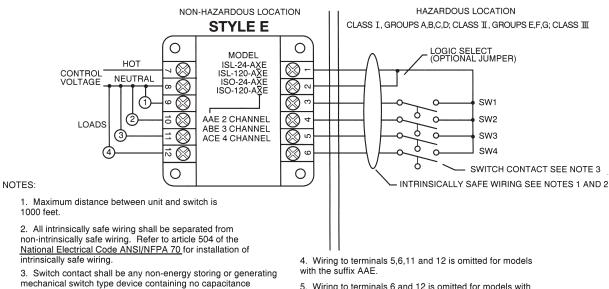
| MODEL NUMBER | CONTROL VOLTAGE | CHANNELS |
|-----------------|--------------------|----------|
| ISL-24-AAE | 24 VAC | 2 |
| ISL-24-ABE | 24 VAC | 3 |
| ISL-24-ACE | 24 VAC | 4 |
| ISL-120-AAE | 120 VAC | 2 |
| ISL-120-ABE | 120 VAC | 3 |
| ISL-120-ACE | 120 VAC | 4 |
| ISO-24-AAE | 24 VAC | 2 |
| 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 191





CONTROL DRAWING 193



5. Wiring to terminals 6 and 12 is omitted for models with the suffix ABE.

or inductance.