

INTRINSICALLY SAFE RELAY

**MADE IN
THE U.S.A.**

FEATURES:

- LED Indicator
- Surge Protection
- Relay Contact Output
- Din Rail Mounting Socket Included



OPERATION

The Intrinsically Safe Relay provides a safe and reliable method of load control when interfaced with a contact closure in a hazardous location. When the control switch input is closed between pins 1 and 8, the output relay becomes energized, and the LED is illuminated. When the control switch input is open, the output relay is de-energized, and the LED is turned off.

TYPICAL APPLICATIONS

Lift station controls where intrinsic safety is required.

Anywhere an interface is required where the contact closure is in a hazardous location and the controls are in a non-hazardous location.

SPECIFICATIONS

| | |
|--------------------|--|
| Operating Voltage: | 120 VAC, \pm 10%, 50/60 Hz |
| Output Rating: | 10A @ 120VAC Resistive |
| Power Consumption: | 1.25VA |
| Operating Temp: | -20 to +60 °C |
| Storage Temp: | -45 to +85 °C |
| Enclosure: | Lexan |
| Base: | 8 Pin, Round |
| Socket: | 8 Pin, Din Rail Mount with Special Locking Tab |



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UL913

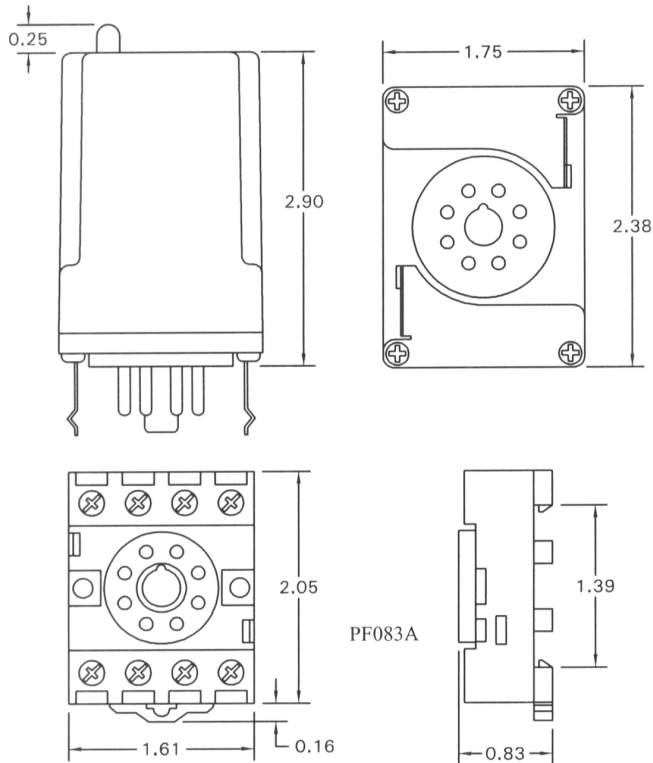
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This associated apparatus provides intrinsically safe circuits for use in Class I, Groups A, B, C, D Class II, Groups E, F, G and Class III - Hazardous Locations in accordance with the M.P.E. drawing Number 0301.

ORDERING INFORMATION

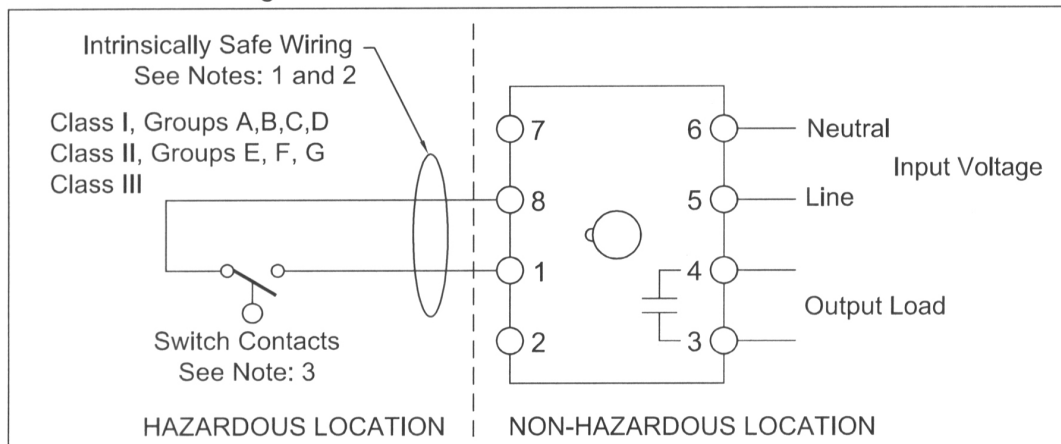
Part Number: **030 -120 -118**

INTRINSICALLY SAFE RELAY



UL Control Drawing No. 0301

Revision Date: 3-28-05



Notes for UL Control Drawing 0301:

1. All intrinsically safe wiring shall be separated from non-intrinsically safe wiring. Refer to article 504 of the National Electric Code (ANSI/NFPA 70) for installation of intrinsically safe wiring.
2. Maximum distance between unit and switch contacts is 1000 feet.
3. Switch contact shall be any non-energy storing or generating switch type device containing no capacitance or inductance.
4. Device must be installed in MPE socket P/N DS-8-A or PF083A **and** with locking clips attached to base.
5. Cable capacitance plus intrinsically safe equipment capacitance (C_i) must be less than the marked capacitance (C_a) and cable inductance plus intrinsically safe equipment inductance (L_i) must be less than the marked inductance (L_a) shown any barrier.
6. The simple apparatus (Float Switch) connected to the ISR shall not be mounted on other electrical apparatus that has a voltage and current rating higher than the ISR (See Entity Parameters V_{oc} and I_{sc} below). A simple apparatus (Such as a Float Switch) is defined as an electrical component or combination of components of simple construction with well defined electrical parameters that does not generate more than 1.5V, 100mA and 25mW, or a passive component that does not dissipate more than 1.3W and is compatible with the intrinsic safety of the circuit in which it is used.
7. If the electrical parameters of the cable are unknown, then a capacitance value of 60pF/ft – and an inductance of 0.20uH/ft are to be used.
8. Entity Parameters: $V_{oc} = 9.33V$ $I_{sc} = 0.218mA$ $C_a = 3.6\mu F$ $L_a = 100mH$