



UL, ULC Approved\*

Fire Alarm Control Relays, Track Mount and Encapsulated; Model 4098-9843 and 2088 Series

#### **Features**

#### **UL listed under Standard 864 as Control Unit Accessory (UOXX)**

# Single encapsulated SPDT relay package with color coded 18 AWG wire leads, available in two versions:

- 2088-9021 (PAM-1) provides diode polarized multiple input voltage ability and LED indication
- 4098-9843 (PAM-SD) provides a diode polarized 24 VDC coil with in/out wiring

### Description

These multi-purpose control relays offer SPDT or DPDT, 10 A (or 7 A) contacts in a variety of mechanical packages. Models are available for coil operation by one of four input voltages allowing a single relay to be energized from a voltage source of 18-35 VDC or VAC, 120 VAC, or 230 VAC (not available with 4098-9843). Voltage selection is made by wiring to the appropriate input terminals or wire leads.

Each relay model (except model 4098-9843) contains a red LED which indicates that the relay is energized.

Mounting options are varied for application flexibility. Track mounted relays may be "snapped apart" from a standard four-module assembly and used independently if desired.

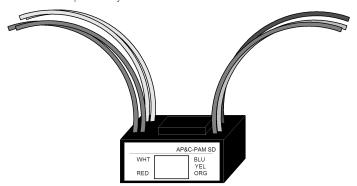


Figure 1: Encapsulated Relay Package (typical of 2088-9021, PAM-1 and 4098-9843, PAM-SD)

## **Specifications**

#### **Table 1: Temperature Ratings**

Specification	Rating
<b>UL Listed Range</b>	32° F to 120° F (0° C to 49° C)
Humidity	85% RH Non-condensing

#### Table 2: Encapsulated Relays, see Relay Selection Chart for dimensions

Specification	Rating
Connections	18 AWG (0.82 mm <sup>2</sup> ) color-coded wire leads

#### Table 3: Relay 2088-9021

Specification		Rating	
Contact Ratings		10 A @ 120 VAC, resistive	
Coil Ratings	Voltage	18-35 VAC/VDC, 120, or 240 VAC	
	Current	15 mA @ 24 VAC/VDC, & @ 120 or 230 VAC	

#### Table 4: Relay 4098-9843

Specification	Rating	
Coil Ratings	18-32 VDC input, polarized, 15 mA @ 24 VDC	
Contact Ratings	7 A at 0.35 p.f @ 28 VDC & 120 VAC	
Contact Natings	250 μA @ 5 VDC	

#### **Table 5: Temperature Ratings**

Specification	Rating
UL Listed Range	32° F to 120° F (0° C to 49° C)
Humidity	100% RH, condensing

<sup>\*</sup> Additional listings may be applicable; contact your local product supplier for the latest status.



# **Relay Selection Chart**

#### **Table 6: Relay Selection Chart**

Module Positions	Reference Number	SKU Number	Relay Type	Packaging	Dimensions
One	2088-9007	MR-101/T	SPDT	Track mount, without cover	3-1/4" H x 2-1/8" W x 1-1/2" D (83 mm x 54 mm x 38 mm)
	2088-9009	MR-201/T	DPDT		
	2088-9008	MR-101/C	SPDT	Track mount with cover	5-1/8" H x 3-1/8" W x 2-1/2" D (131 mm x 79 mm x 64 mm)
	2088-9010	MR-201/C	DPDT		
Four	2088-9017	MR-104/T	SPDT	Track mount, without cover	3-1/4" H x 8-1/2" W x 1-1/2" D (83 mm x 216 mm x 38 mm)
	2088-9019	MR-204/T	DPDT		
	2088-9018	MR-104/C	SPDT	Track mount with cover	5-1/8" H x 9-1/2" W x 2-1/2" D (131 mm x 241 mm x 64 mm)
NA	2088-9021	PAM-1	- SPDT	Encapsulated, multi-voltage coil, color coded 18 AWG (0.82 mm²) wire leads, with coil status LED	1-1/2" H x 1" W x 7/8" D (38 mm x 25.4 mm x 22 mm)
	4098-9843	PAM-SD		Encapsulated, 24 VDC coil, color coded 18 AWG (0.82 mm²) wire leads (no LED)	1-1/2" H x 1-3/16" W x 13/16" D (38 mm x 30 mm x 21 mm)