

# Intrinsically Safe SAFE-PAK® Relays Amplify Sensor Load-Handling Capabilities

Costly explosion-proof enclosures with their mounting requirements are unnecessary. No purging is required.

**SAFE-PAK:** Less than 100 microamps at 9 VDC actuates the unit to control loads to 5A at 120 VAC. Resistive (up to 100,000Ω ) or short-circuiting sensors operate the unit. 120 VAC and 240 VAC model.

**Low Sensitivity SAFE-PAK:** Sensor closures up to 1000Ω resistance control resistive loads to 5A at 120 VAC. 120 VAC, N.O. model.

See table on Page L-2 for specific approval information.



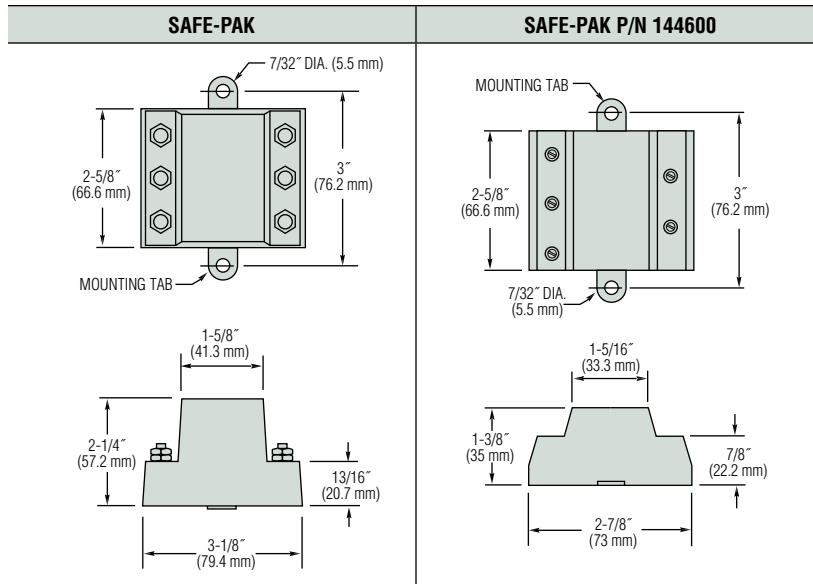
P/N  
22445  
25872  
25873  
64101



P/N  
144600



## Dimensions



## How To Order

Select Part Number based on Relay Style, Operating Voltage and Switch Operation required.

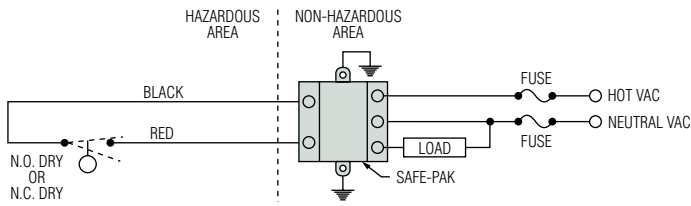
Relay Style	Operating & Load Voltage Range	Load Current Maximum	Turn-On Sensitivity (Typical) <sup>1</sup>	Turn-Off Sensitivity (Typical) <sup>1</sup>	Voltage Loss	Operating Temperature Range	Output Leakage Current Maximum	Switching Operation	Part Number
SAFE-PAK®	95 to 135 VAC	5A	400 K Ω	1 M Ω	2 VAC	0°F to +120°F (-17.8°C to +48.9°C)	6 mA @ 120 VAC	SPST N.O.	22445 <sup>5</sup> ⚡
	100 to 135 VAC						6 mA @ 120 VAC	SPST N.C.	25872 <sup>5</sup> ⚡
	200 to 250 VAC						12 mA @ 250 VAC	SPST N.O.	25873 ⚡
Low Sensitivity SAFE-PAK®	110 to 130 VAC	.5A @ 20 VAC <sup>2</sup> .05A @ 200 VAC <sup>2</sup>	300 Ω	1000 Ω	—	-10°F to +140°F (-23.3°C to +60°C)	0	SPST N.O.	64101 ⚡
	105 to 125 VAC	5A	500 Ω	2000 Ω	2 VAC	-40°F to +120°F (-40°C to +48.9°C)	6 mA @ 120 VAC	SPST N.O.	144600 ⚡

Notes:

- Temperature Dependent.
- 50-60 Hz
- All AC voltage and current specifications are RMS values unless otherwise stated.
- Housing material is Polysulfone.
- Certified intrinsically safe under MSHA certification No. 1662 for use on permissible equipment. For Group D use only.

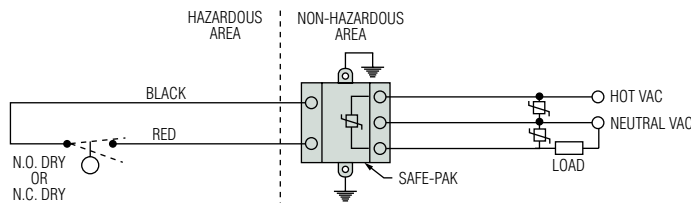
⚡ – Stock Items.

**Typical Wiring Diagrams**



SAFE-PAK, Part Numbers 25872, 25873, 64101 or 144600 with sensor switch in hazardous location.

Transient Protection for SAFE-PAK (AC Loads) Use a properly sized metal oxide varistor (MOV) as shown below.



Installation and maintenance must be in accordance with the National Electrical Code and the applicable GEMS INSTRUCTION, INSTALLATION and SERVICE bulletin available at [www.gemssensors.com](http://www.gemssensors.com)