

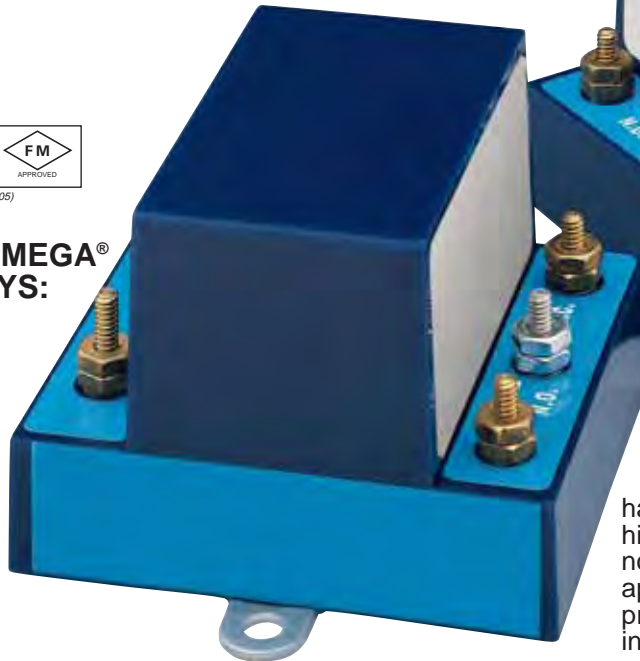
# SOLID STATE RELAYS FOR INTRINSIC SAFETY

SBG Series Starts at  
**\$182**



## ADVANTAGES OF OMEGA® SOLID STATE RELAYS:

- ✓ Rapid, Arc-Free Response for Positive, Non-Mechanical Operation
- ✓ Solid State Reliability Ensures Consistent Performance
- ✓ Low-Power Switching where a Few Milliamps of Current Control High-Power Loads
- ✓ Encapsulated Construction—Impervious to Dust, Moisture, and Foreign Material
- ✓ Standardized, Modular Housings for Easier Installation
- ✓ Exceptionally Long, Trouble-Free Service Life



SBG22445, \$182, shown smaller than actual size.

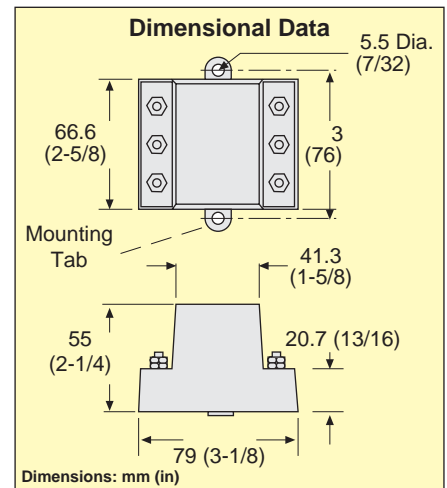
hazardous area to safely control higher-power AC loads in the non-hazardous area. Typical applications include flow, level, and pressure switches, which may be inputs to an alarm or control system.

### Solid State Relay:

Less than 100  $\mu$ A at 14 Vdc actuates the unit to control AC loads to 5 A at 120 Vac. Resistive (up to 400,000  $\Omega$ ) or short-circuiting sensors operate the unit. There are 115 Vac and 230 Vac models.

### Latching Solid State Relay:

The 115 Vac model has momentary actuation, "start-stop" or differential control switching for resistive loads to 0.3 A. OMEGA® solid state relays for intrinsic safety allow non-voltage producing switches mounted in the



**MOST POPULAR MODELS HIGHLIGHTED!**

## To Order (Specify Model Number)

Model No.	Price	Description	Line & Load Voltage Range	Load Current Max	Turn-On Sensitivity (Typical)	Turn-Off Sensitivity (Typical)	Voltage Loss	Operating Temperature Range	Output Leakage Current Max	Switching Operation
SBG22445	\$182									SPST NO
SBG25872	182	SSR for intrinsic safety	95 to 135 Vac	5 A	$\leq 400$ k $\Omega$	1 M $\Omega$	2 Vac	0 to 120°F	6 mA @ 120 Vac	SPST NC
SBG25873	182		200 to 250 Vac						12 mA @ 250 Vac	SPST NO
SBG41705	234	Latching SSR for intrinsic safety	105 to 125 Vac	0.3 A steady state	$\leq 25$ k $\Omega$	1 M $\Omega$	2 Vac	32 to 120°F	3 mA @ 120 Vac	SPST NO

Note 1: For typical wiring diagrams, see next page.

Note 2: All AC voltage and current specifications are RMS values unless otherwise stated.

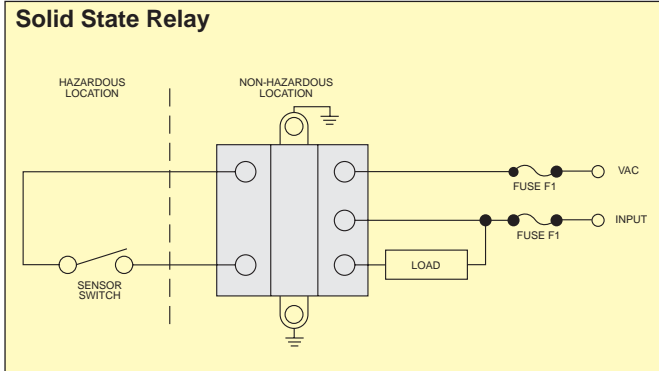
Note 3: Housing material is polysulfone.

Comes with operator's manual.

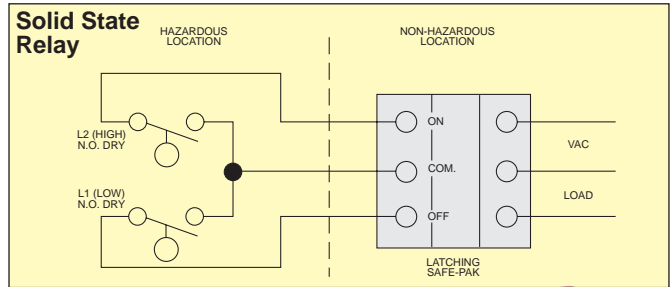
Ordering Example: SSBG22445, intrinsic safety SSR, \$182.

# WIRING SOLID STATE RELAYS FOR INTRINSIC SAFETY

Solid state relays are typically used with non-powered sensor switches in the hazardous area. Examples include level switches shown on pages K-75 through K-81.



Solid state relays SBG22445, SBG25872, and SBG25873 have a sensor switch for hazardous locations.



Latching solid state relay SBG41705 handles high and low sensors located in a hazardous location.

**Warning:**  
Product must be maintained and installed in strict accordance with the National Electrical Code and the applicable OMEGA® operator's manual. Failure to observe this warning could result in serious injuries or damages.



## INTRINSICALLY SAFE RELAYS FOR LEVEL CONTROL SYSTEMS

Intrinsically safe relay electronics are designed for use with OMEGA® LVC-E conductivity level switches and LVC-S, LVC-N, and LVC-F mounting assemblies. They can also be used with other non-powered mechanical relays to provide an intrinsically safe switch in a hazardous area. Relay electronics must be mounted in the non-hazardous area.

See Pages K-68 through K-71 for Complete Specifications

The sensor switches can be mounted in the hazardous area and are intrinsically safe only when connected to an approved intrinsically safe relay. Consult Flow Engineering for additional information.



LVC551, \$213, shown smaller than actual size.

**MOST POPULAR MODELS HIGHLIGHTED!**

To Order (Specify Model Number)						
Model No.	Price	Description	Function	Max Media Resistance	Approvals	Hazardous Locations
LVC551	\$213	8 A resistive @ up to 120 Vac	Field selectable high/low, latching/non-latching, pump up/pump down	470,000 Ω	FM	Class I, II, Division 1, Groups A, B, C, D, E, F, G
LVC552	213	8 A resistive @ up to 120 Vac		100,000 Ω	UL	
LVC553	213	8 A resistive @ up to 120 Vac		100,000 Ω	CSA	

Comes with operator's manual.

Ordering Example: LVC551, SPDT relay output, \$213.

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### • Heaters

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