



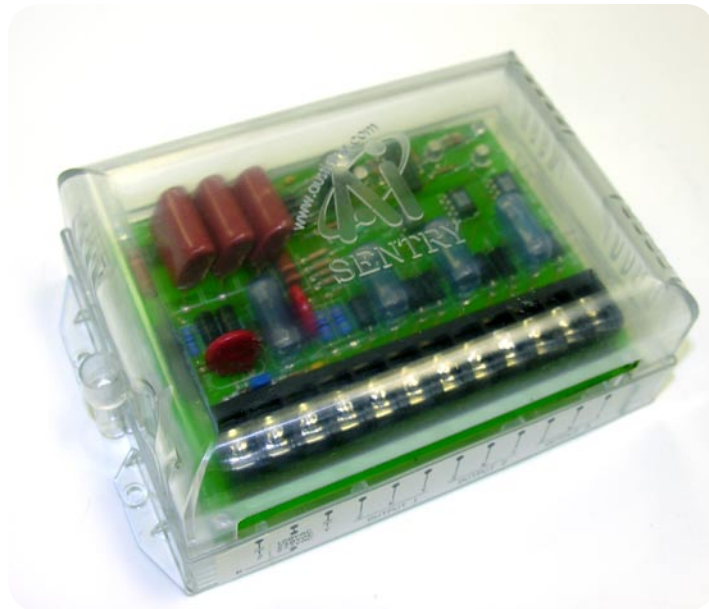
# Sentry 30-E Isolation Relay

The Sentry 30-E is an all solid state version of the Sentry 30. It is a direct replacement, with all mounting holes and terminal block locations being identical to the Sentry 30. The Sentry 30-E is housed in a plastic enclosure with a clear cover to protect the circuit board from dust and debris and to permit viewing of the LED's. The Sentry 30-E Isolation Relay (Bistable) Input accepts one Form C open collector or relay contact input and provides up to three isolated bistable outputs. Therefore, excellent electrical isolation is achieved between the originating device and up to three end devices.

The Form C bistable outputs prevent propagation of contact bounce from the input relay and also eliminates extraneous pulses during power up or power down. Bistable outputs serve as excellent interface devices between hard bounce, dry contacts and newer end devices that need clean bounceless inputs for proper operation.

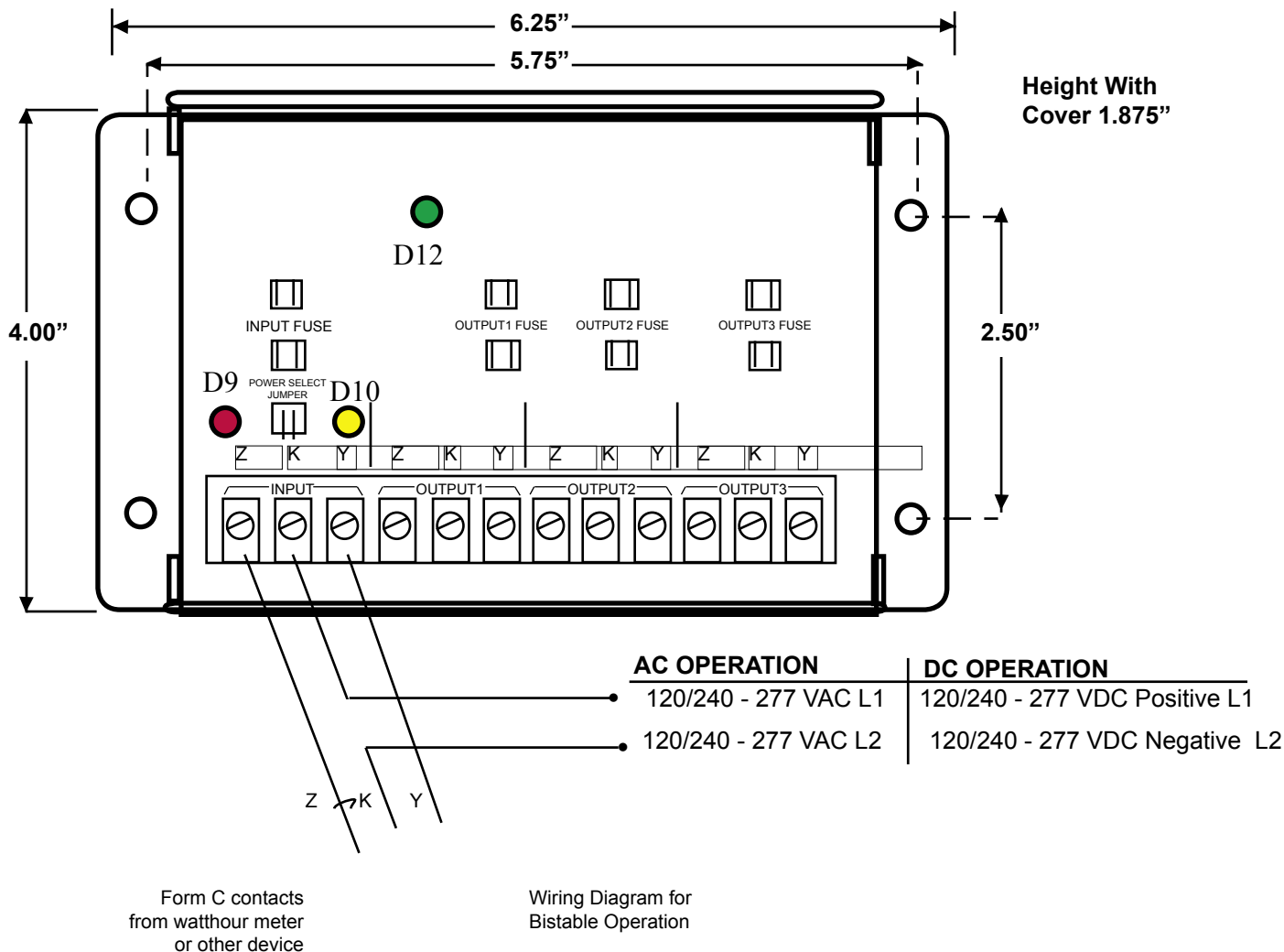
Because the Sentry 30-E is an all solid state device, it can be mounted in any position, thus allowing for maximum use of space in typical meters cabinets. The on-board LED's (Red for K-Z and Yellow for K-Y and Green for the output) provide a good indication of proper operation. The LED's are located directly above the Y and Z inputs.

Power input is jumper selectable  
Jumper on for 120 VAC or VDC only.  
Jumper off for 240, 277 VAC or VDC.  
As a direct replacement for the Sentry 30, it eliminates the mercury wetted relays and removes any future possibility of disposal problems.



## Specifications

<b>Power Input:</b>	120 VAC or VDC +/-20% 240 VAC or VDC -20% 277 VAC or VDC +20%
<b>Surge Suppression:</b>	320 VAC/ 420 VDC continuous, 90 joules, 4,500 A
<b>Power Dissipation:</b>	18.5VA max. at 277 VAC
<b>Signal Input:</b>	Form C only
<b>Contact Type:</b>	Solid State Photomos Relay 350 Volts DC or Peak AC
<b>Contact Surge:</b>	500 mA max for 10 mS
<b>Max Pulse Rate:</b>	10 Pulses / Second
<b>Suppression:</b>	45 joules, 4,500 A
<b>Temperature:</b>	-40° C to +85° C
<b>Humidity:</b>	10% to 98%, non-condensing
<b>Life Expectancy:</b>	Unlimited Operating
<b>Mounting:</b>	Any Position



**Installation:** The Sentry 30 - E can be mounted in any position.

The Z lead from the originating relay should be connected directly to the terminal labeled Z INPUT. The Y lead from the originating relay should be connected directly to the terminal labeled Y INPUT. The K lead from the originating relay should be connected to L2 of the AC line or the VDC negative terminal. The terminal labeled K INPUT on the Sentry 30 - E should be connected to L1 of the AC line or the VDC positive terminal.

The input fuse (0.25 amp slow-blow) is located on the extreme left of the board. Fuse clips are mounted to the left of each output relay. These fuses are on the K leg of each output relay and the fuse size is determined by the end device on a per relay basis. The S30-E is supplied with 500 MA output fuses. This fuse current rating may not be appropriate for the load current rating and Austin International accepts no responsibility for equipment damage or improper system operation caused by inappropriate sized output fuses.

**Note:** Total external circuit resistance for any Sentry 30 - E Isolation Relay input must be less than 500 ohms. Twisted pair or shielded cable must be used in cases where external input lines exceed 2000 feet in order to avoid inductive or capacitive interference.

**CAUTION:** For applications requiring 240 or 277 VAC input, the user should verify that the pulse initiator or other pulse source supplying inputs to the S30 - E does not have output protection devices with voltage breakdown levels less than 318 VAC rms (455 VDC peak).