



Sentry 30 Isolation Relay

APPLICATION

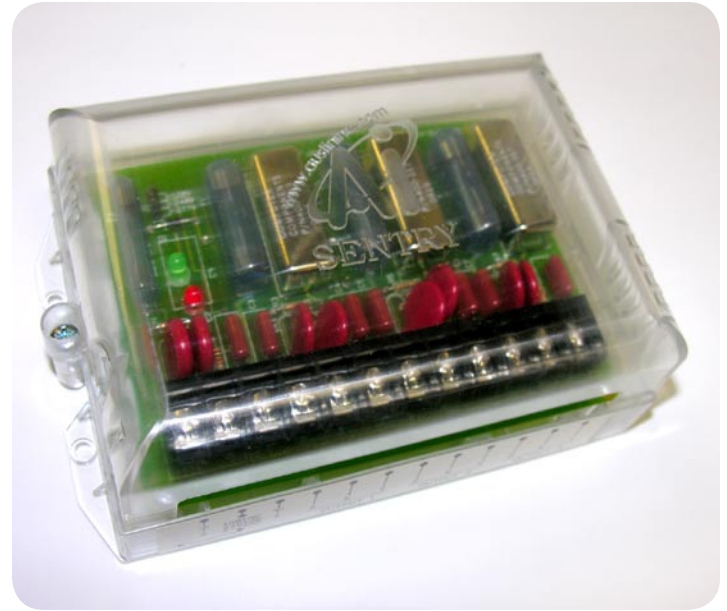
The Sentry 30 Isolation Relay (Bistable) Output accepts one Form C open collector or relay contact input and provides up to three isolated bistable outputs. Therefore, excellent isolation is achieved between the originating device and up to three end devices. The bistable output prevents propagation 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 inputs for proper operation.

The single output model provides isolation between the originating relay and the end device. The bistable output configuration serves as a debouncing circuit because it operates in a latching mode.

The dual output model provides isolation between the originating relay and two end devices. It also isolates each end device from one another in latching mode. Jumpers on the Sentry 30 allow the second output relay to serve as a spare until it is required.

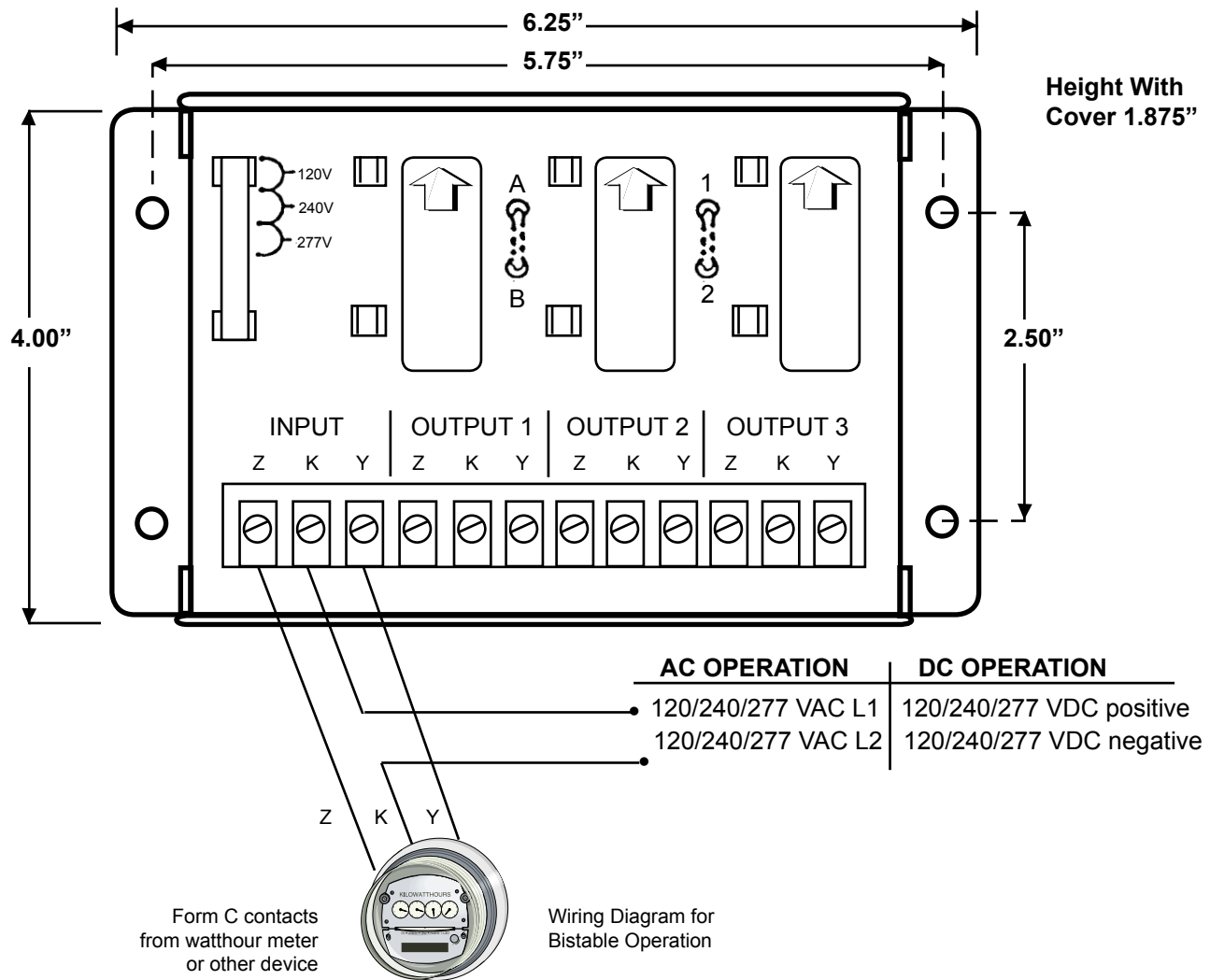
The triple output model supports three end devices and has a jumper that allows the third output relay to serve as a spare.

Power input is jumper-selectable to 120, 240 or 277 VAC or VDC.



Sentry 30-1: One output relay
Sentry 30-2: Two output relays
Sentry 30-3: Three output relays

Power Input:	120/240/277 VAC, +10% -20% 120/240/277 VDC, +10% -20%
Surge Suppression:	320 VAC/ 420 VDC continuous, 90 joules, 4,500 A
Power Dissipation:	4W max. at 277 VAC, 8.2 W max. at 420 VDC
Signal Input:	Form C
Contact Rating:	100 VA max., 150VAC/ 200VDC max. 2 A, switched, max.
Contact Surge	150 VAC/ 200 VDC continuous,
Suppression:	45 joules, 4,500 A
Temperature:	-30° C to +85° C
Humidity:	10% to 98%, non-condensing
Life Expectancy:	20 billion operations
Mounting:	Upright within 30 degrees of vertical



Installation: The Sentry 30 must be mounted within 30 degrees of vertical and must be in that position for at least one minute prior to operation.

Place the power jumper (located to right of the fuse) to select the input voltage: use the two upper pins for 120 VAC, the middle two pins for 240 VAC or the bottom two pins for 277 VAC operation. 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 BDC negative terminal. The terminal labeled K INPUT on the Sentry 30 should be connected to L1 of the AC line or the BDC 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 the output relay and the fuse size is determined by the end device on a per relay basis. Therefore, output fuses must be user-supplied.

A jumper must be used if a fused output is not desired. A jumper must be installed between points 1 and 2 (refer to the figure) to deactivate operation of the third relay until required. A jumper must be installed between points A and B (refer to the figure) to deactivate operation of the second relay until required.

Note: Total external circuit resistance for any Sentry 30 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.

Austin International accepts no responsibility for equipment damage or improper system operation caused by the use of output or input fuses that are of inappropriate size