



DESCRIPTION

The **SS Series Sentry Switch** is a unique UL listed replacement device for a 120V or 277V standard or three-way wall switch. It provides the capability of centrally sweeping off overhead lighting automatically, then allowing local override at every switch location.

The installed switches are centrally swept off by means of momentarily interrupting the supply voltage at the lighting circuit breaker panel to the controlled lighting circuits. The **SS Series**, installed in place of the standard wall switches, senses this momentary interruption (five seconds) of the power source, and then physically unlatches, dropping to the off position. When in the off position, the switch toggles illuminate, allowing them to be easily identified for after-hours override of lights. This feature allows unnecessary lighting to be turned off after hours and turned off ahead of and behind janitorial and maintenance crews. Different schedules can be programmed for weekend occupancy.

When used in place of conventional wall switches, the **SS Series** system will allow the building operator to control after-hours lighting automatically. Tenant comfort and acceptance is assured by having override available at any time, from any switch, for only that particular area. Substantial power savings will be realized, not only from containing after-hours use, but also because lighting will not be turned on the following morning until that particular office or area is physically occupied.



OPERATION

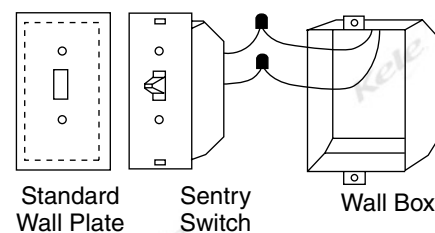
Although controlling the **SS Series** is very simple, the variations of implementation can be quite diverse. A contactor or low-voltage relay panel will be installed adjacent to the lighting circuit breaker panel to provide the five-second interruption to the lighting circuits. This panel will be interfaced to the BAS system to provide the automatic lighting control sweeps. A short off-sweep (less than three seconds) allows advance warning that the lights will be turned off.

Normally-closed contactors are recommended for these panels because they provide a mechanical failsafe to the on position.

The **SS 20277** replaces a standard 120V or 277V toggle wall switch with a minimum 1.5A and maximum 20A load. The low-current version, **SS 05277**, must be used on loads less than 1.5A, but it has a maximum capacity of 5A. The **SS 23277** is a three-way emulation model. Although functionally equivalent to a three-way switch, there is an operational compromise. The lights cannot be off with both light switches in the up position. When switch #1 is in the up position, manually moving switch #2 to the up position will result in the lights coming back on within five seconds. The operator must then move switch #2 back down to turn the lights off.

SPECIFICATIONS	
Supply Voltage	120V, 240V or 277V (No neutral required)
Switch Rating	Standard wall switch on/off operation
SS 20277	SPST, 1.5A to 20A @ 120-277 VAC
SS 05277	SPST, 1.5A or less @ 120-277 VAC
SS 23277	SPDT, 1A min to 20A max @ 120-277 VAC
Special Features	Resets "OFF" when power is interrupted for >5 sec.
Egress Time Delay	An off pulse of < 3 seconds tells occupants of impending all lights "OFF"
Status indication	Switch ILLuminates when "OFF"
Operating Temperature	32° to 131°F (0° to 55°C)
Operating Humidity	20% to 95% non-condensing
Wiring Terminations	Push-in wire clips, 14 AWG to 12 AWG wire
Mounting	Typical vertical single gang switch box, No plate included
Color	Clear toggle matches any plate color
Enclosure Rating	Indoor only
Dimensions	2.78"W x 4.5"H x 1.5"D (xxxx cm)
Weight	0.3 lb. (0.14 Kg)
Approvals	UL and cUL Listed
Warranty	5 years

WIRING



**SS 20277, SS 05277
Two-Wire Switches**



LIGHTING CONTROLS

SENTRY SWITCH SS SERIES

INSTALLATION

The **SS Series** is a direct mechanical replacement for standard toggle wall switches and utilizes standard single- and multi-ganged wall boxes, plaster rings, and switch plates. SS Series switches are spring-loaded to the off position. They are mechanically held in the on position. Be sure the mounting flange marked "top" is up and that the switch springs to the down position. On three-way switches, be sure the red and yellow wires are crossed red to yellow and yellow to red in conventional traveller manner.

WIRING

The two-wire switches, **SS 20277** and **SS 05277**, have conventional SPST switching contacts and are not polarity sensitive. The three-wire **SS 23277** is a standard SPDT contact arrangement. Black connects to line or load, and red and yellow are connected as cross-over travellers in the conventional manner red to yellow - yellow to red.

Checkout

All **SS Series** switches are mechanically held on. When they release, the mechanism trips. Any time the power to any properly loaded **SS Series** switch is interrupted for more than five seconds, the switch will trip. To check a switch, observe the switch in the off position. The lever should be illuminated. Turn the switch on and make sure the appropriate lights turn on. Turn off the power to the circuit feeding the switch. After five seconds the mechanism trips, and the switch will move to the off position. If the **SS Series** fails to trip off, check the light circuit to make sure at least a 1.5A load is connected. If the load is less than 1.5A, replace the standard switch with a low current model. If the load is correct, replace the **SS Series** switch. For three-way switch applications, the minimum load allowed will be 1.5A. The individual three-way switches are checked as above.

NOTE: Unlike conventional three-way switches, it is impossible to have the lights off with both three-way **SS Series** switches in the up position. If the lights are on and an attempt is made to turn them off by moving a switch to the up position, the lights will turn off. Within five seconds the switch that is not being operated will trip off, turning the lights back on. This is normal. It is then necessary to turn the switch that is not being operated back down to the off position. The normal off position for both three-way switches is down. If the lights are off and either three-way **SS Series** switch is in the up position, the switch is wired wrong and must be rewired.

ORDERING INFORMATION

MODEL SS05277

DESCRIPTION

Sentry switch for 1.5A loads or less (rated for up to 5A), 120V or 277V (DO NOT EXCEED the maximum 5A current rating)

SS20277 SS23277

Sentry switch for 1.5A-20A load, 120V or 277V

Sentry switch for three-way switches, 120V or 277V