



SM195 Roller Shutter Controller INFORMATION BRIEF

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GENERAL DESCRIPTION

The SM195 module is used in conjunction with roller doors and roller shutters. On many Roller Shutter installations in shopping malls and schools, there is a centre-off key switch where the operator can send a shutter Up or Down, however if they go direct from Up to Down, they can stall or short out the door motor. With the SM195 in-line with the key switch, it will make sure that the shutter has stopped moving completely before the motor direction may be changed

DETAILS OF OPERATION

The SM195 Module ensures that no motor load current will pass through the UP/DOWN shutter control switch, just low voltage DC. for signalling. This also means that the existing UP/DOWN switch only needs to be a lower priced signal level switch and that no extra high current 'auxiliary' contacts need to be fitted.

The module has two 30amp relays which would switch the two FWD/REV windings of the shutter motor.

Where a UPS battery Backup system is incorporated within the roller shutter system, the module has an additional relay contact which will 'wake up' the inverter within the UPS about one-second before any motor loads are applied. It will also not shut the inverter down until 2 seconds *after* the UP/DOWN shutter operations have been completed. This procedure is more kind to the inverter electronics and this will help to prevent some inverter failures.

The module has a software lockout that prevents operators going directly from **UP** to **DOWN** or vice versa. Should the operator attempt this, a 2-second delay is injected into the switching transition which allows the door/shutter to come to rest before a reverse direction is applied to the motor circuit. This feature reduces the vulnerability of door systems to operator abuse.

Where dual-controls are required, the installer simply adds another centre-off door switch in parallel with the existing switch. Should both UP and DOWN selections be engaged simultaneously by the operator, the control will simply inhibit motor operation. (Without the SM195 such an action would stress both motor and UPS and probably trip a protective overload switch)

INSTALLATION

By using the SM195 module, the wiring controls are less complex than hard-wiring relays and safety interlocks. It is directly compatible with most 240V roller shutter systems.

This also simplifies installations for field staff. By using this module, Roller Shutter installations should be completed faster and the installers capacity to 'get it wrong' and damage expensive hardware is diminished.

The wiring diagram below shows the general wiring configuration, including connections to a small 240V UPS system if the shutter requires mains backup functionality.

