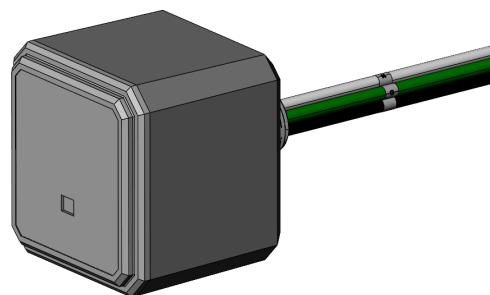


# SP 50RS SERIES

Type 1/2 SPDs for NEMA Type 4X Applications



## INSTALLATION INSTRUCTIONS

### WARNING



#### DANGER

- This equipment must be installed and serviced only by qualified electrical personnel in accordance with national and local electrical codes.
- Turn off all power supplying this equipment before working on equipment.
- Always use a properly rated voltage-sensing device to confirm power is OFF.
- Replace all devices, doors and covers before restoring power to this equipment.
- Do not apply petroleum-based products to non-metallic parts.



#### CAUTION

- Do not attempt to open or tamper with the SP 50RS device in any way as this may compromise performance and will void the warranty.
- Megger and hi-potential tests may damage the device.
- Disconnect all power supplying equipment and isolate the SP 50RS device before testing.
- Prior to installation, confirm that the SP 50RS is rated for the correct voltage, current and frequency equivalent to the application.
- For use in NEMA Type 1 through 4X applications.

Improper installation or misapplication of these devices may result in serious injury to the installer and/or damage to electrical system or related equipment. Protective eye wear and clothing should be worn whenever working around hazardous voltages.

Failure to follow these instructions could result in serious injury or death.

### INSTALLATION

#### Panel Mount and Wiring

1. Turn OFF all power supplied to this equipment.
2. Panel Mount: Punch out 1/2" enclosure knockout from the panel or the mounting location as close as possible to where the wires will terminate. Where other types of mounting are required, please consult the factory.
3. Insert a 1/2" close nipple to the Myers Hub provided and attached to the SP 50RS SPD. Insert SPD wires carefully through the knockout hole. Tighten a 1/2" steel conduit lock nut to secure the SPD to the enclosure (as shown in Figure 1).
4. Connect the electrical service wires as shown in the appropriate wiring diagram.
5. Connect the three remote status indicator wires to building alarm system.
  - Blue wire to Normally Open contact
  - Gray wire to Common contact
  - Red wire to Normally Closed contact

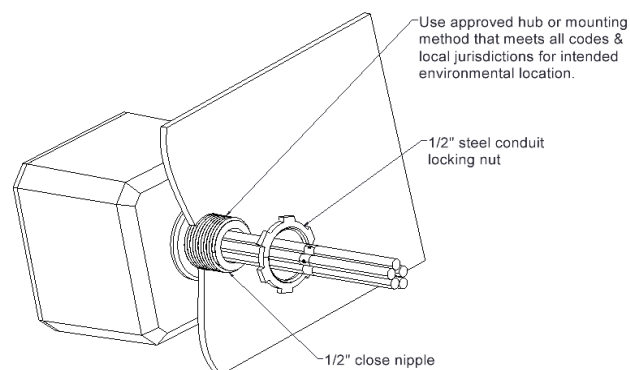
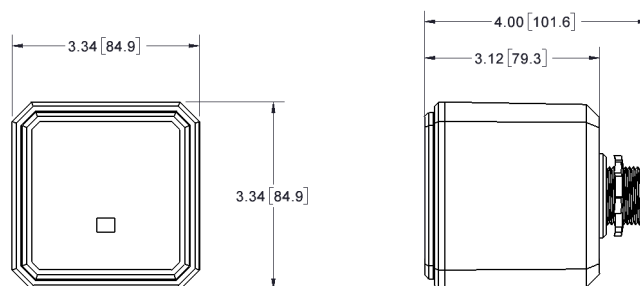


Figure 1 Panel Mount  
Typical NEMA Type 1 location

6. Overcurrent Protection: Type 1 SPDs are UL Listed and tested to be self-protecting. They do not require upstream protection according to UL 1449 and Section 285 of the NEC. However, it is recommended to install an upstream disconnect or breaker for maintenance and safety. Many switches and circuit breakers have limitations regarding more than one wire in a connector. Breaker manufacturers can provide information on the limitations of their available terminals. Where additional wires are prohibited under the same terminal, many times installing a new circuit breaker is convenient. Typical sizes are 15, 20 and 30 amps.
7. For optimal device performance, use shortest wire length of wire as possible. Cut off the excess wire instead of coiling it up. Avoid sharp edges.
8. Before energizing, installer shall verify service and separately derived system Neutral to Ground bonding jumper per NEC requirements.

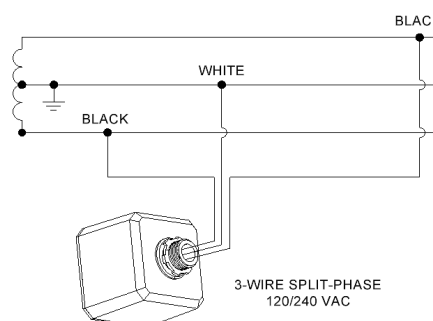
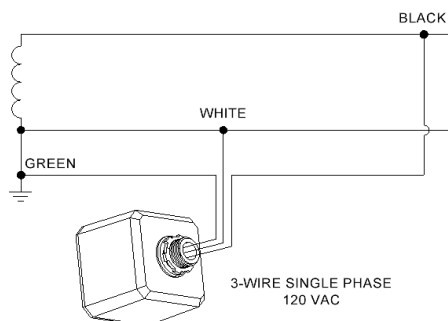


## WIRING DIAGRAMS

The SP 50RS Surge Protection Device (SPD) is to be used on solidly grounded systems ONLY!

### Single/Split Phase Systems

Refer to the connection diagrams to ensure that the SPD you have chosen is appropriate for the application.



### Three Phase Systems

Refer to the connection diagrams to ensure that the SPD you have chosen is appropriate for the application.

