

## Type 1 Surge Protective Devices (SPDs)

MultigTM is a family of DIN rail modular devices, with great performance characteristics. It is a Schneider Electric global offer dedicated to equipment manufacturers (OEMs), meeting the major standards for industry applications. Designed to meet your needs for most types of machines, offering a wide range of modular devices, it provides protection, signaling functions and accessories.

Multi9 PRD1 75r Surge Protective Device is a UL 1449 type 1 recognized device, offering 75 kA of protection, in a robust DIN rail mountable package with user replaceable modules for maximum flexibility.

Sensitive electronics are highly susceptible to surges and low voltage noise. Variable Frequency Drives (VFDs), Programmable Logic Controllers (PLCs), Human Machine Interfaces (HMI) and other electronic devices commonly found in industrial control panels are negatively impacted by these power quality events causing poor performance of the system.

In today's world, a proper power protection strategy is needed now more than ever. Schneider Electric can help combat problems associated with these type events.


## Superior Performance

Multi9 PRD1 75r surge protective devices utilize a high-energy suppression circuit that provides protection of 75,000 peak Amps of surge current per phase. This rugged, compact 35 mm DIN rail mounted device offers premium flexibility for installation inside control panels or other electrical enclosures. The $1,2 \& 3$ pole versions can be installed Line to Neutral (L-N) or Line to Ground (L-G) for added flexibility. The 4 pole version adds Neutral to Ground (N-G) protection for the most critical applications. Form C dry contacts are standard and provide the option for remote status indication.

## Modular Construction

Multi9 PRD1 75r SPDs are designed for easy replacement of the surge suppression modules. These modules are keyed to ensure proper installation based upon the maximum continuous operating voltage (MCOV) configuration of the device.

## Warranty

Schneider Electric Multi9 PRD1 75r SPDs have a 2-year limited warranty.


| Features | Advantages | Benefits |
| :--- | :--- | :--- |
| UL 1449 Type 1 recognized <br> component | Additional overcurrent protection devices <br> (OCPD) not required for installations, <br> though recommended for serviceability | Allows for easy installation inside a <br> control panel without conditions of <br> acceptability |

## Coordinated Fuse Technology

| 35mm DIN Rail Mounting | Robust surge protection in a compact <br> package | Quick and easy installation in control <br> panels or other electrical enclosures |
| :--- | :--- | :--- |
| 75,000 Amp Surge Current Capacity | Longer service life and suppression <br> against high-energy surge events | High performance surge suppression <br> even in severe electrical conditions |
| Form C Dry Contacts | Remote status indication | Allows for remote monitoring of SPD to to <br> local LED or PLC interface |
| Mechanical Indicators | Visual indication of the suppressor's <br> functionality | Provides immediate visual indication if <br> suppressor is damaged |
| Modular Design | Field replaceable protection modules | Allows for quick and easy replacement of <br> modules to reduce downtime |

## Specifications

| Multi9 PRD1 $75 r$ |  |
| :---: | :---: |
| Performance |  |
| Surge Current Rating | 75kA |
| Short Circuit Current Rating | 200kAIC |
| Modes of Protection | 1, 2, 3, 4 |
| Fusing | Individually Fused MOVs |
| Thermal Fusing | Yes |
| Overcurrent Fusing | Yes |
| Operating Frequency | $50 / 60 \mathrm{~Hz}$ |
| Mechanical Description |  |
| NEMA Ratings | NEMA 1 |
| Mounting Method | 35 mm DIN Rail |
| Compression Lugs | 14AWG - 4AWG (2-20 mm ${ }^{2}$ ) |
| Dry Contact Terminals | 30AWG-14AWG (0.05-2.5 mm²) |
| Operating Temperature | $-15^{\circ} \mathrm{F}$ to $+140^{\circ} \mathrm{F}\left(-25^{\circ} \mathrm{C}\right.$ to $\left.+60^{\circ} \mathrm{C}\right)$ |

Diagnostics
Green/Red Mechanical Indicator
Listings and Certification
UL 1449 4th Edition Recognized, and CSA C22.2 No. 269.4-17, 1st Edition.

NEC Standard
NEC 2017 and NEC 2020 Article 670.6: "Industrial machinery with safety interlock circuits shall have surge protection installed"

Industrial machinery safety interlocks are required to have surge protection installed per NFPA 79.

A survey of facility managers commissioned by NFPA found that $26 \%$ of respondents reported damage to safety interlocks from surge events.

## Dimensions



| Weight (lb. / g.) |  |
| :--- | :---: |
| Type | PRD1 75 r |
| 1P | $0.34 \mathrm{lb} .(154 \mathrm{~g})$. |
| 2P | $0.75 \mathrm{lb} .(340 \mathrm{~g})$. |
| 3P | $1.15 \mathrm{lb} .(522 \mathrm{~g})$. |
| 4P | $1.55 \mathrm{lb} .(703 \mathrm{~g})$. |
| Replaceable Module | $0.18 \mathrm{lb} .(82 \mathrm{~g})$. |

## Multi9 PRD1 75r Type 1 Ordering Options

| Poles | Voltage | Catalog <br> Numbers | Replacement Cartridge | Voltage Protection Ratings (VPR) |  |  |  | $I_{n}$ | MCOV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | L-N | L-G | N-G | L-L |  |  |
| 1 | 120V Single Phase | M9L11120 | M9LC175 | 600 | - | - | - | 20kA | 175 |
|  | 240 V Single Phase | M9L21240 | M9LC275 | 900 | - | - | - | 20kA | 275 |
|  | 277 V Single Phase | M9L31277 | M9LC320 | 1000 | - | - | - | 20kA | 320 |
|  | 347 V Single Phase | M9L41347 | M9LC420 | 1500 | - | - | - | 10kA | 420 |
| 2 | 120/240 Split Phase | M9L12240 | M9LC175 | 600 | - | - | 1200 | 20kA | 175 |
|  | 240/480V Split Phase | M9L22480 | M9LC275 | 900 | - | - | 1800 | 20kA | 275 |
| 3 | 240 V Delta, 3W+G | M9L23240 | M9LC275 | - | 900 | - | 1800 | 20kA | 275 |
|  | 480 V Delta, $3 \mathrm{~W}+\mathrm{G}$ | M9L53480 | M9LC550 | - | 1500 | - | 3000 | 10kA | 550 |
|  | 208Y/120V Wye, 4W | M9L13208 | M9LC175 | 600 | - | - | 1200 | 20kA | 175 |
|  | 480Y/277V Wye, 4W | M9L33480 | M9LC320 | 1000 | - | - | 2000 | 20kA | 320 |
|  | 600Y/347V Wye, 4W | M9L43600 | M9LC420 | 1500 | - | - | 2500 | 10kA | 420 |
|  | 690Y/400V Wye, 4W | M9L53690 | M9LC550 | 1500 | - | - | 3000 | 10kA | 550 |
| 4 | 208Y/120V Wye, 4W+G | M9L17208 | M9LC175 | 600 | 1200 | 600 | 1200 | 20kA | 175 |
|  | 480Y/277V Wye, 4W+G | M9L37480 | M9LC320 | 1000 | 1500 | 600 | 2000 | 20kA | 320 |
|  | 600Y/347V Wye, 4W+G | M9L47600 | M9LC420 | 1500 | 2000 | 800 | 2500 | 10kA | 420 |
|  | 690Y/400V Wye, 4W+G | M9L57690 | M9LC550 | 1500 | 2500 | 1000 | 3000 | 10kA | 550 |
|  | 240/120V HLD, 4W+G | M9L17240 | M9LC175/ M9LC275 | 600/800 | $\begin{aligned} & 1200 / \\ & 1500 \end{aligned}$ | 600 | $\begin{aligned} & 1200 / \\ & 1500 \end{aligned}$ | 20kA | $\begin{aligned} & 175 / \\ & 275 \end{aligned}$ |
|  | 480/240V HLD, 4W+G | M9L27480 | $\begin{aligned} & \text { M9LC275/ } \\ & \text { M9LC550 } \end{aligned}$ | 800/1500 | $\begin{aligned} & 1500 / \\ & 2000 \end{aligned}$ | 600 | $\begin{aligned} & 1500 / \\ & 2500 \end{aligned}$ | 10kA | $\begin{aligned} & 275 / \\ & 550 \end{aligned}$ |


1 Pole

2 Pole

3 Pole

4 Pole

Schneider

