Retrofit Surge Protective FD Frame (RSPF) Series



FD Frame

Introduction

Eaton's retrofit surge protective (RSP) series consists of UL® 1449 4th Editionlisted surge protective devices (SPD) that provide a reliable, cost-effective, aftermarket solution for surge protection. Designed for easy installation, this Type 1 orType 2 SPD is approved for field installation and is capable of easy installation directly into a panelboard or switchboard without any modifications. The RSPF is available in multiple configurations that are specifically designed for Eaton panelboards and switchboards, allowing for installation on systems utilizing most common voltages. Easy mounting options coupled with a compact footprint enable quick installation of the RSPF in panelboards and switchboards in less than 10 minutes.

Applications

The Eaton RSPF series SPD protects critical electrical and electronic equipment from damage caused by voltage transients and surges when properly installed. This is done by shunting high-energy lightning surges (and other transient disturbances) away from the equipment being protected. It does this in nanoseconds by providing a low impedance surge path to ground through thermally protected metal oxide varistors while supporting power frequency voltage.

The Eaton RSPF series SPD was designed solely for aftermarket applications and developed to fit in the space of an Eaton FD-frame molded case circuit breaker. The RSPF is intended for retrofit into existing panelboards or switchboards with space or provisions for the FD frame size.

Features

- Voltage ratings from 208 Vac to 600 Vac
- Uses thermally-protected metal oxide varistor (MOV) technology
- LED protection status indicators
- 20 kA nominal discharge current (I_n) rating (maximum rating in the UL 1449 4th Edition standard)
- FD-frame molded case circuit breaker footprint for ease of installation
- Compact footprint—6.00 L x 4.13 W x 3.69 D inches
- Direct bus mounting
- 2-year warranty
- 50 kA and 100 kA per phase surge current capacity
- No user-serviceable parts or items requiring periodic maintenance

Standards and Certifications

- UL 1449 4th EditionType 1 andType 2
- Tested to UL 1283 EMI filter 6th Edition

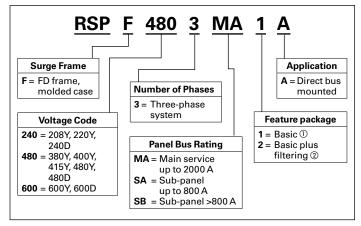
Designed and tested in accordance with the latest versions of these standards:

- IEEE C62.41.1
- IEEE C62.41.2
- IEEE C62.43
- IEEE C62.45
- IEEE C62.48
- IEEE C62.62



Catalog Numbering Selection

Table 34.1-6. RSP Catalog Numbering System



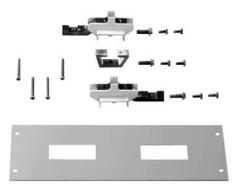
- ① Available only with SB and MA options.
- ② Available only with SA option.

Mounting Provisions

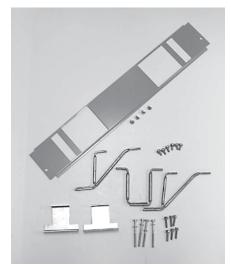
Kit contains A, B, and C phase connnectors, hardware, and instruction to mount three-pole RSPF surge devices.

Table 34.1-7. Available Optional Equipment

Description	Catalog number
Provision kit for PRL3A panelboard	KPRL3AFD3
Provision kit for PRL4A panelboard	KPRL4FD



KPRL3AFD3



KPRL4FD

RSPF Dimensions

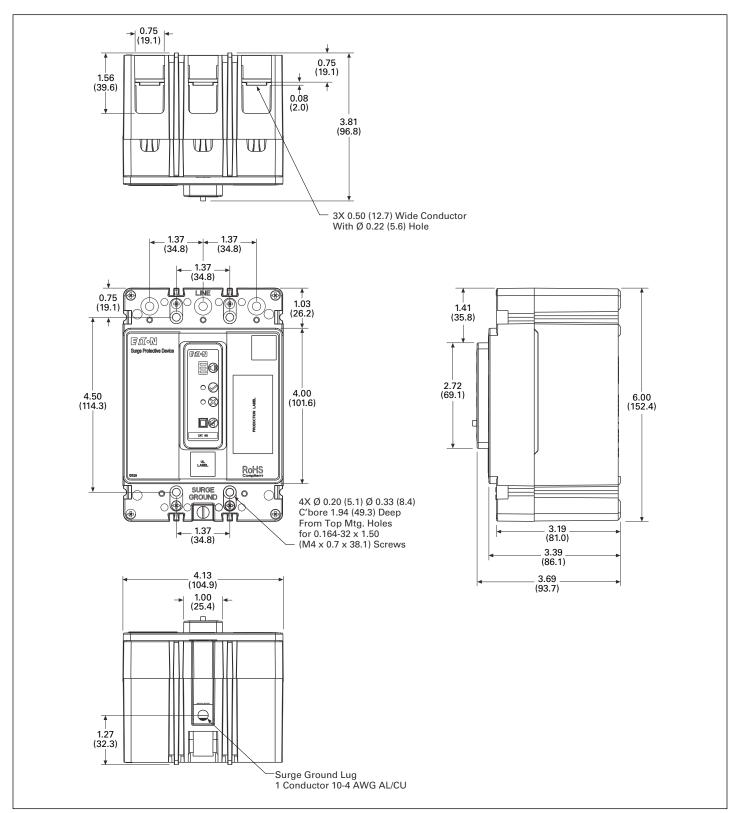


Figure 34.1-4. RSPF Dimensions in Inches (mm)