

High-Resistance Ground SPD

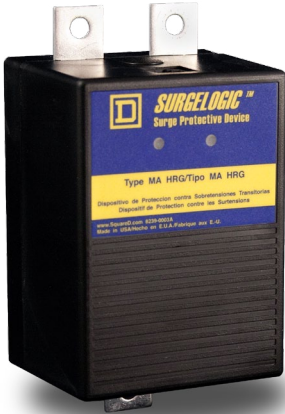
Square D[®] External Panel Surge Protective Devices

Square D brand Surgelocic[®] High-Resistance Ground (HRG) modular panel surge protective devices (SPDs) are designed specifically for HRG configured systems. Surgelocic SPDs deliver specification grade performance for service entrance or critical branch panel applications. HRG SPDs provide surge protection through a dissipative path from line to line and line to ground.



by Schneider Electric

HRG Modular SPD Features



Square D brand Surgelogic modular panel Surge Protective Devices (SPDs) provide superior design and service life for a wide variety of commercial, industrial, or institutional applications. HRG SPDs offer unsurpassed performance and surge suppression for high resistance ground configured systems at service entrance applications or as part of a suppression network. The robust modular construction minimizes possible down time and helps to reduce maintenance costs. HRG units feature redundant diagnostic system alerts for continued suppression against harmful transients.

Superior Performance

HRG modular panels provide reliable operation by incorporating the latest engineering improvements. Modules utilize a high-energy suppression circuit with proven fast acting metal oxide varistors (MOVs). HRG units feature a thermal cutout circuit for each individually fused MOV to isolate it in the event it is damaged.

For harsh environments, HRG modular panels are optionally available in a NEMA 4X stainless steel enclosure to provide surge suppression in areas that can quickly damage other enclosures.

Easy Installation

HRG external modular panels mount adjacent to the panel through a conduit connection and as close to the circuit breaker as possible to reduce lead lengths and improve transient suppression.

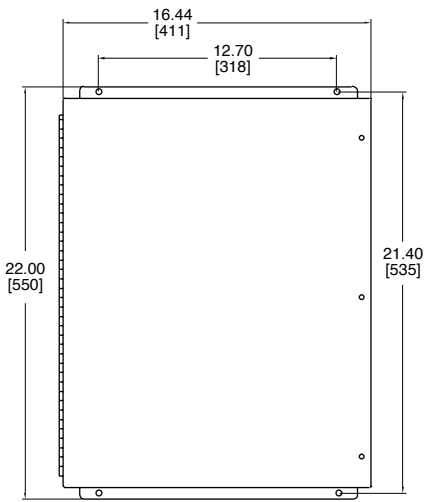
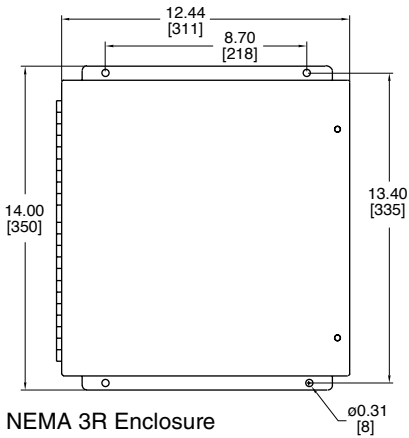
10-year Warranty

Surgelogic HRG modular SPDs have a 10-year warranty.

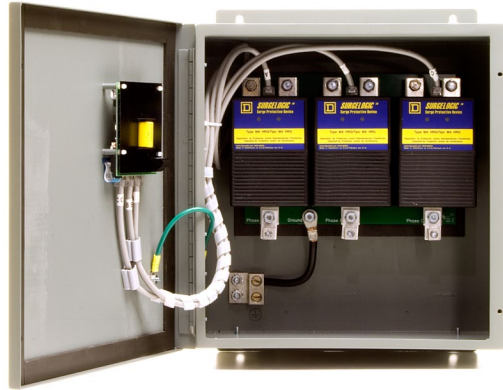
FEATURES	ADVANTAGES	BENEFITS
NEMA 3R or 4X Enclosure	Allows installation in outdoor applications	Provides surge suppression to vulnerable equipment powered from weather exposed panels
True HRG Architecture	Line to Line and Line to Ground suppression	Allows for dissipation of transients on critical HRG systems
EMI/RFI Noise Rejection	Increased transient suppression	Improves surge suppression to the equipment
Advanced Diagnostics	Allows for online testing of the suppressors functionality	Allows immediate response if suppressor is damaged
Suppression Status Alarms	Provides immediate alarm if suppression is ever damaged	Warns if operating with reduced or without surge suppression
Coordinated Fuse Technology	Thermal fuse capable of passing extreme surge currents	Provides premium surge suppression while managing thermal effects from MOV end of life

HRG Modular SPD

Features (continued)



HRG SPDs



Performance

Short Circuit Current Rating	200kA
Fusing	Individually fused MOVs
Filtering EM/RFI Noise Rejection	Yes

Mechanical Description

Housing Ratings	NEMA 3R or 4X
Connection Method	#10-#2 AWG Terminals
Mounting Method/Circuit Type	Parallel
Thermal Fusing	Yes
Operating Frequency	50/60 Hz
Operating Altitude	Sea Level-12,000' (3,658 m)
Storage Temperature	-40° F (-40° C) to 149° F (65° C)
Operating Temp.	-4° F (-20° C) to 149° F (65° C)
LCD Operating Temp.	32° F (0° C) to 149° F (65° C)

Diagnostics

Push to test diagnostic switches, red and green status LEDs per phase (internal redundant status LEDs are green), module status LEDs per mode, dry contacts, audible alarm with disable switch, surge counter.

Options

- Integral switch
- NEMA 4X stainless steel with integral switch
- Flush mount collar
- Remote monitor

Listings and Performance

cULus 1449 3rd edition Type 2 SPD, UL 1283, CSA C22.2 No. 8-M1986

HRG Modular SPD Specifications

Voltage	Surge Current	Configuration	Model Number	MCOV	I _n	VPR	
						L-G	L-L
277V/480Y ▲	120kA	3 Ø, Wye, 4-wire+G	TVS4HEMA12_	550V	20kA	1800V	2000V
277V/480Y ▲	160kA	3 Ø, Wye, 4-wire+G	TVS4HEMA16_	550V	20kA	1800V	2000V
277V/480Y ▲	200kA	3 Ø, Wye, 4-wire+G	TVS4HEMA20_	550V	20kA	1800V	2000V

▲ 480Y/277 series also applies to the following voltages 380Y/220, 400Y/230, and 415Y/240

MODEL NUMBER SUFFIX CODES

A = NEMA 3R steel enclosure (e.g. TVS4HEMA12A)

AI = NEMA 3R steel enclosure with integral switch (e.g. TVS4HEMA12AI)

SI = NEMA 4X stainless steel enclosure with integral switch (e.g. TVS4HEMA12SI)

SPD OPTIONS

Remote Monitor TVS12RMU

12"x12" Flush Mount Collar TVS12FMK

16"x20" Flush Mount Collar TVS20FMK

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