



HWA Series

### HWA Surge Protective Devices

SurgeLogic™ HWA surge protective devices are compact, nipple-mounted parallel-connected surge suppressors that come in a variety of voltage configurations, including Delta. A surge suppression path is provided for each mode, and the product is rated NEMA Type 4X. Internal diagnostics continuously monitor the device status.

US and Canadian UL® Listed as a Type 2 SPD to UL 1449 and UL 1283 standards. Complies with requirements of NEC® Article 285 and CSA C22.2 No. 8-M1986 as appropriate. Complies with UL 96A 12th Edition Master Label requirements for Lightning Protection Systems.

- LEDs indicate operational status
- Short circuit current rating 200 kA
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Convenient side-nipple mounting
- Compact design provides easy mounting inside or outside the equipment cabinets
- -54 dB EMI/RFI filtering
- Sine wave tracking
- Audible alarm indicates loss of suppression (does not contain alarm enable/disable switch)
- Dry contacts
- Optional flush-mount kit TVSHWAFMK

**Table 6.7: HWA Surge Protective Devices**

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 4X Cat. No.
120/240 V, 1-phase, 3-wire + ground [1]	50	TVS1HWA50X
	80	TVS1HWA80X
	100	TVS1HWA100X
208Y/120 V, 3-phase, 4-wire + ground [2] [3] [1]	50	TVS2HWA50X
	80	TVS2HWA80X
	100	TVS2HWA100X
240/120 V, 3-phase, 4-wire + ground [1] High-leg Delta	50	TVS3HWA50X
	80	TVS3HWA80X
	100	TVS3HWA100X
240 V, 3-phase, 3-wire + ground Delta	50	TVS6HWA50X
	80	TVS6HWA80X
	100	TVS6HWA100X
480Y/277 V, 3-phase, 4-wire + ground [2] [4] [1]	50	TVS4HWA50X
	80	TVS4HWA80X
	100	TVS4HWA100X
480 V, 3-phase, 3-wire + ground Delta	50	TVS5HWA50X
	80	TVS5HWA80X
	100	TVS5HWA100X
600Y/347 V, 3-phase, 4-wire + ground [1]	50	TVS8HWA50X
	80	TVS8HWA80X
	100	TVS8HWA100X
600 V, 3-phase, 3-wire + ground Delta	50	TVS9HWA50X
	80	TVS9HWA80X
	100	TVS9HWA100X

### XR Surge Protective Devices

The XR SPD provides high-quality surge suppression in a compact and versatile package. This product is ideal for panel builders as well as manufacturers and integrators of instrumentation cabinets for industrial, commercial, and residential applications for single-phase power systems.

US and Canadian UL® Listed as Type 1 SPD to the UL 1449 standard. Complies with requirements of NEC® Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate.

- LEDs indicate operational status
- Short circuit current rating 25 kA
- Convenient side nipple mounting
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Optional flush mount kit TVSXRFMK



XR Series

**Table 6.8: XR Nipple-Mounted Surge Protective Devices**

System Voltage	Peak Surge Current Rating per Phase (kA)	Cat. No.
120/240 V, 1-phase, 3-wire + ground	50	TVS120XR50S
	80	TVS120XR80S

[1] Do not use on ungrounded systems. Systems must be solidly grounded.  
 [2] Can be used on 4-wire or 3-wire grounded wye systems with or without neutral.  
 [3] 208Y/120 series also applies to the following voltage 220Y/127.  
 [4] 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240.