



STXH240S05



STXR480Y05 / STXR480Y05A

The Mersen®, Surge-Trap® Series Surge Protection Devices (SPD) (distributed by Uni-Line®) safeguard residential air conditioning (A/C) units including mini-splits, furnaces, and air handlers from costly voltage surge events, such as fluctuations in power often generated from inside a home or building, and from an outside source like lightning. Compact in size, the Surge-Trap Series provides Type 1 and Type 2 surge protection to help maintain safe, reliable A/C and furnace performance.

The single phase model STXH240S05 safeguards residential A/C and furnace equipment, and the 3-phase models STXR480Y05 and STXR480Y05A are used for Commercial and Industrial applications. The STXR models are flexible in both line or load installation applications for branch panel or individual equipment protection.

### Features and Benefits

- Designed with industry leading Mersen TPMOV technology
- Compact footprint designed to align easily with AC disconnect switches
- Easy to read LED status indicator; Green to show SPD is On; or the LED will be Out indicating SPD should be replaced
- NEMA 4X non-metallic enclosure for outdoor or indoor use
- For use with ANSI/UL Type 1 or 2 SPD installations
- Optional audible alarm and remote dry contacts (STXR480Y05A only)

### Replacement Information

STXH240S05	STXR480Y05 / STXR480Y05A
Intermatic: AG3000 Ditek: D50-CM, DTK-120/240CM+, DTK-120HW Mars: 83904, 83905, 83915 Supco: LBK10 5-2-1 (CPS): SPD60, SPD150 ICM: ICM515, ICM516, ICM517	Ditek: DTK-4803CMXPLUS Intermatic: AG4803C3

**3** Year  
Limited  
Warranty  
STXH240S05

**5** Year  
Limited  
Warranty  
STXR480Y05 /  
STXR480Y05A



## Specifications

Part Numbers	STXH240S05	STXR480Y05	STXR480Y05A
<b>Description</b>	Surge Protective Device	Surge Protective Device	Surge Protective Device with Optional audible alarm and remote dry contacts
<b>Electrical rating</b>	120/240V AC, 50/60Hz	277/480V AC, 50/60Hz	277/480V AC, 50/60Hz
<b>Phase</b>	Single	3 Phase WYE	3 Phase WYE
<b>Modes of Protection</b>	3	10	10
<b>Surge Capacity</b>	50 kA	50 kA	50 kA
<b>Nominal Discharge Current Rating (IN)</b>	20 kA	20 kA	20 kA
<b>Short Circuit Current Rating (SCCR)</b>	200 kA	200 kA	200 kA
<b>Max. Continuous Operating Voltage (MCOV)*</b>	L-L 300, L-N 150	L-L 640, L-N 320, L-G 470, N-G 150	L-L 640, L-N 320, L-G 470, N-G 150
<b>Voltage Protection Rating (VPR)*</b>	L-L 1000, L-N 600	L-L 2000, L-N 1200, L-G 1800, N-G 700	L-L 2000, L-N 1200, L-G 1800, N-G 700
<b>Flammability</b>	UL94-5VA	UL94-5VA	UL94-5VA
<b>End-of-Life LED Indicator</b>	Yes	Yes	Yes
<b>Wiring</b>	Pre-wired 18" 10 AWG	Pre-wired 3' (1m) 10 AWG	Pre-wired 3' (1m) 10 AWG
<b>Mounting Type</b>	1/2" – 14 threaded hub. Includes sealing locking washer, 1/2" knockouts with 18" leads	3/4" – 14 threaded hub includes locking washer, 3/4" knockouts with 3' leads. Optional mounting bracket for surface mount applications	3/4" – 14 threaded hub includes locking washer, 3/4" knockouts with 3' leads. Optional mounting bracket for surface mount applications
<b>Operating Temperature</b>	-40°F to 185°F (-40°C to 85°C)	-40°F to 185°F (-40°C to 85°C)	-40°F to 185°F (-40°C to 85°C)

\*Note: L-N = Line to Neutral, L-L = Line to Line, L-G = Line to Ground, N-G = Neutral to Ground

## Surge Protection Terms to Know

- **Surge** – The fluctuation in power that may cause damage to electrical equipment including HVAC equipment and appliances.
- **Metal Oxide Varistor (MOV)** – The most common SPD technology.
- **Thermally Protected Metal Oxide Varistor (TPMOV)** – Mersen's patented SPD technology; rated the best performing, most reliable surge suppression technology on the market.
- **Maximum Continuous Operating Voltage (MCOV)** – The maximum steady state voltage the SPD can withstand without becoming a fire or safety hazard. Also known as surge capacity or surge rating.
- **UL1449 4th Edition** – Meets Underwriter's Laboratory highest standard of testing for SPDs.
- **Nominal Discharge Current (IN)** – UL's test program term to measure peak current that can pass through a SPD and remains functional after 15 surges. The highest nominal discharge current rating by UL is 20kA.
- **Short Circuit Current Rating (SCCR)** – The amount of "available" current the SPD can be subjected to and also safely disconnect from the power source under short circuit conditions.
- **Voltage Protection Rating (VPR)** – The voltage allowed through the SPD after protecting a surge event. Similar to a golf score, the lower the rating, the better.
- **Type 1 Surge Protection** – Protect sensitive electronics from the damaging effects of electrical surges; installed before the main device in the load center.
- **Type 2 Surge Protection** – Protect sensitive electronics from the damaging effects of electrical surges. Intended for the installation of AC power and cable at the point of entrance to the building.