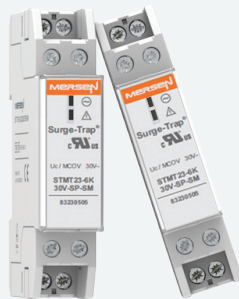


# Surge-Trap® STMT23 Series

Surge Protection for Power Lines

## SURGE PROTECTIVE DEVICE

## LOW VOLTAGE SPD FOR AC/DC VOLTAGE CONTROL AND POWER APPLICATIONS



Mersen's Surge Trap STMT Series features low voltage surge protective devices suitable for both AC and DC voltage applications. UL 1449 4th Edition approved, this series is ideal for the protection of controls, power supplies, communication systems, and other sensitive equipment. With a slim design, these DIN-rail mount SPDs are ideal for limited space applications. The series is suitable for operating voltages of 12-230 VAC and 24-365 VDC and offers an optional dry contact feature for remote monitoring.

### FEATURES AND BENEFITS:

- Maximum discharge current (8/20 $\mu$ s): 6kA - 20kA
- Nominal discharge current (8/20 $\mu$ s): 3kA - 10kA
- Combined voltage pulse (1.2/50 $\mu$ s): 10kV, 6kV
- Single phase networks
- Un: 12V, 24V, 48V, 60V, 120V, 230V
- Typically for use also in the corresponding DC voltages
- DIN-rail mountable, monobloc format
- Visual (LED) and remote end of life indicators
- Power status (LED) indicator
- Space saving "slim" format
- Back-up fuse IEC: 63A gG; UL: 30A CC (ATMR30)

### APPLICATIONS

- Industry and automation controls
- Commercial and residential installations
- Telecom & IT & Data Centers
- LED outdoor lighting
- Water treatment

### RATINGS:

- **Volts ( $U_n$ ):** 24-365VAC
- **Nominal Discharge Current Rating ( $I_n$ ):** 3-10kA
- **Surge Capacity ( $I_{max}$ ):** 6-20kA

### APPROVALS:

- UL 1449 4th Edition (Type 4 CA)
- IEC/EN 61643-11
- CSA C22.2 (Type 4 CA)



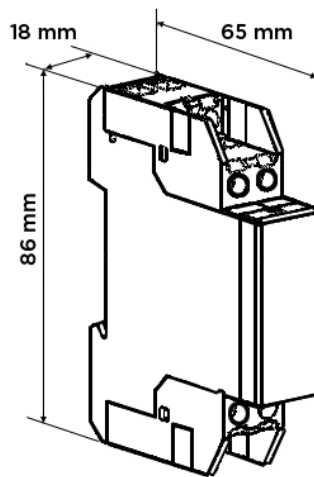
\* Agency information not applicable to DC ratings

Catalog Number	Reference number	Nominal Voltage	Maximum Continuous Operating Voltage [MCOV]	$I_{max}$ (8/20)	$I_n$ (8/20)	Voltage Protection Level	$U_p$ at $I_n$	Remote Monitoring?
83230500	STMT23-6K20V-SP-S	12 V	20 VAC	6 kA	3 kA	$\leq 0.22$ kV (L1-L2)	$\leq 0.22$ kV (L1-L2)	No
			25 VDC			$\leq 0.67$ kV (L1/L2-PE)	$\leq 0.70$ kV (L1/L2-PE)	
83230501	STMT23-6K20V-SP-SM	12 V	20 VAC	6 kA	3 kA	$\leq 0.22$ kV (L1-L2)	$\leq 0.22$ kV (L1-L2)	Yes
			25 VDC			$\leq 0.67$ kV (L1/L2-PE)	$\leq 0.70$ kV (L1/L2-PE)	
83230504	STMT23-6K30V-SP-S	24 V	30 VAC	6 kA	3 kA	$\leq 0.26$ kV (L1-L2)	$\leq 0.22$ kV (L1-L2)	No
			36 VDC			$\leq 0.78$ kV (L1/L2-PE)	$\leq 0.70$ kV (L1/L2-PE)	
83230505	STMT23-6K30V-SP-SM	24 V	30 VAC	6 kA	3 kA	$\leq 0.26$ kV (L1-L2)	$\leq 0.22$ kV (L1-L2)	Yes
			36 VDC			$\leq 0.78$ kV (L1/L2-PE)	$\leq 0.70$ kV (L1/L2-PE)	
83230506	STMT23-6K60V-SP-S	48 V	60 VAC	6 kA	3 kA	$\leq 0.48$ kV (L1-L2)	$\leq 0.33$ kV (L1-L2)	No
			77 VDC			$\leq 0.93$ kV (L1/L2-PE)	$\leq 0.70$ kV (L1/L2-PE)	
83230507	STMT23-6K60V-SP-SM	48 V	60 VAC	6 kA	3 kA	$\leq 0.48$ kV (L1-L2)	$\leq 0.33$ kV (L1-L2)	Yes
			77 VDC			$\leq 0.93$ kV (L1/L2-PE)	$\leq 0.70$ kV (L1/L2-PE)	
83230508	STMT23-6K75V-SP-S	60 V	75 VAC	6 kA	3 kA	$\leq 0.48$ kV (L1-L2)	$\leq 0.50$ kV (L1-L2)	No
			100 VDC			$\leq 0.93$ kV (L1/L2-PE)	$\leq 0.90$ kV (L1/L2-PE)	
83230509	STMT23-6K75V-SP-SM	60 V	75 VAC	6 kA	3 kA	$\leq 0.48$ kV (L1-L2)	$\leq 0.50$ kV (L1-L2)	Yes
			100 VDC			$\leq 0.93$ kV (L1/L2-PE)	$\leq 0.90$ kV (L1/L2-PE)	
83230502	STMT23-6K150V-SP-S	120 V	150 VAC	6 kA	3 kA	$\leq 0.61$ kV (L1-L2)	$\leq 0.70$ kV (L1-L2)	No
			200 VDC			$\leq 1.03$ kV (L1/L2-PE)	$\leq 0.90$ kV (L1/L2-PE)	
83230503	STMT23-6K150V-SP-SM	120 V	150 VAC	6 kA	3 kA	$\leq 0.61$ kV (L1-L2)	$\leq 0.70$ kV (L1-L2)	Yes
			200 VDC			$\leq 1.03$ kV (L1/L2-PE)	$\leq 0.90$ kV (L1/L2-PE)	
83230510	STMT23-20K275V-SP-S	240 V	275 VAC	20 kA	10 kA	$\leq 0.96$ kV (L1-L2)	$\leq 1.40$ kV (L1-L2)	No
			365 VDC			$\leq 1.04$ kV (L1/L2-PE)	$\leq 1.40$ kV (L1/L2-PE)	
83230511	STMT23-20K275V-SP-SM	240 V	275 VAC	20 kA	10 kA	$\leq 0.96$ kV (L1-L2)	$\leq 1.40$ kV (L1-L2)	Yes
			365 VDC			$\leq 1.04$ kV (L1/L2-PE)	$\leq 1.40$ kV (L1/L2-PE)	

**TECHNICAL DATA  
OVERVIEW**

Class	IEC: Type 2+3 / UL: Type 4 CA
$U_n$	12V, 24V, 48V, 60V, 120V, 230V
$I_n$ Range	6 – 20 kA
$I_{max}$ Range	3 – 10 kA
Body Material	PC+GF; V-0
Format	Slim monobloc
Backup fuse	IEC: 63A gG / UL: 30A CC (ATMR30)
$U_{oc}$ Range	6 – 10 kV
Response Time	25 ns
Number of Poles	2
IP Code	20
Product Warranty	2 years
Operating temperature	-40 ... 80 °C
Wire Gauge Range	1,5 ... 6 mm <sup>2</sup>

**DIMENSIONS**



**ELECTRICAL  
DIAGRAM**

