

# Surge-Trap® Monobloc STMT23 Series - 20kA Slim

**SURGE PROTECTION FOR POWER LINES**

DIN-RAIL IEC TYPE 2+3 / CLASS II+III



STM T23 20 S is the series of combined Type 2+3/Class II+III devices for discharging voltage surges while providing a very fine voltage protection level, in accordance with EN/IEC 61643. Suitable as the final stage of protection in panels with Type 2 protection devices installed upstream. These SPDs should be installed as close as possible to the equipment being protected. Ideal for limited spaces. Wide range of voltage ratings.

## TECHNICAL DATA OVERVIEW

|                    |                                |
|--------------------|--------------------------------|
| Class              | Type 2+3 / Class II+III        |
| $U_n$              | 12V, 24V, 48V, 60V, 120V, 230V |
| $I_{max}$ Range    | 6 ... 20 kA                    |
| Body Material      | PC+GF; V-0                     |
| Number of Poles    | 2                              |
| Format             | Slim monobloc                  |
| $I_n$ (8/20) Range | 3 ... 10 kA                    |
| $U_{oc}$ Range     | 6 ... 10 kV                    |
| Back-up fuse       | 25 ... 63 A gG                 |
| Response Time      | 25 ns                          |

## FEATURES & BENEFITS

- Maximum discharge current (8/20μs): 20kA, 10kA, 6kA
- Nominal discharge current (8/20μs): 10kA, 5kA, 3kA
- Combined voltage pulse (1.2/50μs): 10kV, 6kV
- Single phase TT and TNS networks
- $U_n$ : 12V, 24V, 48V, 60V, 120V, 230V
- Typically for use also in the corresponding DC voltages
- DIN-rail mountable, monobloc format
- For DIN-rail fuseboxes (in the pole of the luminaire)
- Visual (LED) and remote end of life indicators
- Power status (LED) indicator
- Space saving "slim" format
- Rated current load for Fusebox models (IL): 5 A
- Back-up fuse: 25 ... 63 A gG

## APPLICATIONS

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

## STANDARDS

- IEC 61643-11
- EN 61643-11



# Surge-Trap® Monobloc STMT23 Series - 20kA Slim

## PRODUCT RANGE



STMT23-10K320V-SP-SF

### 2 Poles (Series/Parallel) for Fusebox

| Catalog number       | Reference number | U <sub>n</sub> | U <sub>c</sub> | I <sub>max</sub> (8/20) | I <sub>n</sub> (8/20) | U <sub>oc</sub> | U <sub>p</sub> at I <sub>n</sub>  |
|----------------------|------------------|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------------------------|
| <b>C4 (1Ph+N)</b>    |                  |                |                |                         |                       |                 |                                   |
| STMT23-10K320V-SP-SF | 83230512         | 230 VAC        | 320 V          | 10 kA                   | 5 kA                  | 10 kV           | ≤ 1.5 kV (L-N)<br>≤ 1.8 kV (N-PE) |



STMT23-20K275V-SP-SM

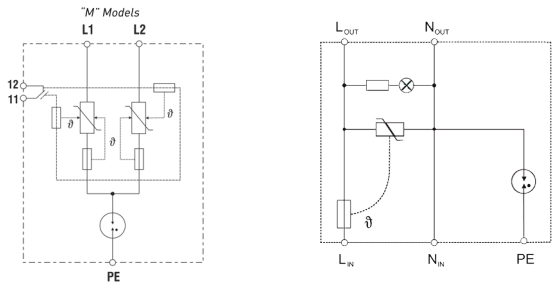
### 2 Poles (Parallel)

| Catalog number        | Reference number | U <sub>n</sub> | U <sub>c</sub>     | I <sub>max</sub> (8/20) | I <sub>n</sub> (8/20) | U <sub>oc</sub> | U <sub>p</sub> at I <sub>n</sub>         |
|-----------------------|------------------|----------------|--------------------|-------------------------|-----------------------|-----------------|------------------------------------------|
| <b>TT/TNS (1Ph+N)</b> |                  |                |                    |                         |                       |                 |                                          |
| STMT23-6K20V-SP-S     | 83230500         | 12 V           | 20 VAC<br>25 VDC   | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.22 kV (L1-L2)<br>≤ 0.7 kV (L1/L2-PE) |
| STMT23-6K20V-SP-SM    | 83230501         | 12 V           | 20 VAC<br>25 VDC   | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.22 kV (L1-L2)<br>≤ 0.7 kV (L1/L2-PE) |
| STMT23-6K30V-SP-S     | 83230504         | 24 V           | 30 VAC<br>36 VDC   | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.22 kV (L1-L2)<br>≤ 0.7 kV (L1/L2-PE) |
| STMT23-6K30V-SP-SM    | 83230505         | 24 V           | 30 VAC<br>36 VDC   | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.22 kV (L1-L2)<br>≤ 0.7 kV (L1/L2-PE) |
| STMT23-6K60V-SP-S     | 83230506         | 48 V           | 60 VAC<br>77 VDC   | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.33 kV (L1-L2)<br>≤ 0.7 kV (L1/L2-PE) |
| STMT23-6K60V-SP-SM    | 83230507         | 48 V           | 60 VAC<br>77 VDC   | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.33 kV (L1-L2)<br>≤ 0.7 kV (L1/L2-PE) |
| STMT23-6K75V-SP-S     | 83230508         | 60 V           | 75 VAC<br>100 VDC  | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.5 kV (L1-L2)<br>≤ 0.9 kV (L1/L2-PE)  |
| STMT23-6K75V-SP-SM    | 83230509         | 60 V           | 75 VAC<br>100 VDC  | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.5 kV (L1-L2)<br>≤ 0.9 kV (L1/L2-PE)  |
| STMT23-6K150V-SP-S    | 83230502         | 120 V          | 150 VAC<br>200 VDC | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.7 kV (L1-L2)<br>≤ 0.9 kV (L1/L2-PE)  |
| STMT23-6K150V-SP-SM   | 83230503         | 120 V          | 150 VAC<br>200 VDC | 6 kA                    | 3 kA                  | 6 kV            | ≤ 0.7 kV (L1-L2)<br>≤ 0.9 kV (L1/L2-PE)  |
| STMT23-20K275V-SP-S   | 83230510         | 230 V          | 275 VAC<br>365 VDC | 20 kA                   | 10 kA                 | 10 kV           | ≤ 1.4 kV (L1-L2)<br>≤ 1.4 kV (L1/L2-PE)  |
| STMT23-20K275V-SP-SM  | 83230511         | 230 V          | 275 VAC<br>365 VDC | 20 kA                   | 10 kA                 | 10 kV           | ≤ 1.4 kV (L1-L2)<br>≤ 1.4 kV (L1/L2-PE)  |

# Surge-Trap® Monobloc STMT23 Series - 20kA Slim

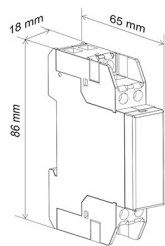
## ELECTRICAL DIAGRAMS

TT/TNS (1Ph+N) - Parallel    C4(1Ph+N) - (Series/Parallel)



## DIMENSIONS

Slim SPD



Slim SPD Fusebox

