

# Surge-Trap<sup>®</sup> Pluggable

SOLUTIONS GUIDE

DIN-Rail Mountable  
Surge Protective Devices

NEW  
LINE



**MERSEN**  
Expertise, our source of energy



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# STP T1+2 RANGE

## Type 1+2 pluggable protectors

Suitable for the **first level of protection** in incoming power supply panels and areas with greater exposure to the atmosphere, where installations are usually **provided with external lightning protection systems**.

- Devices capable of protecting all equipment from direct lightning strikes.
- Suitable for all types of application: industrial, commercial or residential.
- High discharge capacity 10/350  $\mu$ s: 12.5 kA per phase.
- Provides protection even for the most sensitive equipment (IEC 60634-4-443 Category 1)
- Local (visual) and remote (M) end of life signalling.
- New optimised thermal disconnection system (both AC and DC).
- Wide range: Exclusive devices for TNS, TNC, IT or TT grounding arrangements for 120/208 V, 230/400 V and 277/480 V supplies.
- Meets all current international standards (IEC 61643 / IEC 62305, etc).



**HIGH DISCHARGE CAPACITY 10/350  $\mu$ s**



Telecom



Industrial



Wind



Lightning protection



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# STP T2 RANGE

## Type 2 pluggable protectors

Suitable for the **second level of protection** in supply distribution panels in which Type 1 protectors are installed, or for the first level of protection in residential, commercial or other applications **not exposed to direct strikes** and **with no external lightning protection system**.

- High discharge capacity tested with an 8/20  $\mu$ s waveform: 40 kA per phase.
- Suitable for all types of applications: industrial, commercial or residential.
- Provides protection even for the most sensitive equipment (IEC 60634-4-443 Category 1).
- Local (visual) and remote (M) end of life signalling.
- New optimised thermal disconnection system (both AC and DC).
- Wide range:
  - Exclusive devices for TNS, TNC, IT or TT grounding arrangements for 120/208 V, 230/400 V, 277/480 V and 690/1.000 V supplies.
  - Solution for photovoltaic applications, both solar field and rooftop, up to 1000 VDC. Common and differential mode protection. For both earthed and unearthed systems.
- Meets all current international standards (IEC 61643 / IEC 62305, EN 50529-11:2012...).



WIDE RANGE OF SOLUTIONS

Water treatment

Photovoltaic

Commercial

Smart metering



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# STP T2+3 RANGE

## Type 2+3 pluggable protectors

Suitable as the **final stage of protection** in panels with Type 2 protection devices installed upstream. The **residual voltage left downstream is less than for Type 1 or 2**. They should be installed **as close as possible to the equipment** being protected.

- High discharge capacity tested with an 8/20  $\mu$ s waveform: 20 kA per phase.
- Combined voltage pulse with 1,2/50  $\mu$ s waveform. Uoc: 10 kV.
- Suitable for all types of applications: industrial, commercial or residential.
- Provides protection even for the most sensitive equipment (IEC 60634-4-443 Category 1).
- Local (visual) and remote (M) end of life signalling.
- New optimised thermal disconnection system (both AC and DC).
- Wide range:
  - Exclusive devices for TNS, TNC, IT or TT grounding arrangements for 120/208 V, 230/400 V and 277/400 V supplies.
  - LCF models are first solution in the market for PLC lines (Power Line Communication). Smart metering.
- Meets all current international standards (IEC 61643 / IEC 62305, etc.).



WIDE RANGE OF SOLUTIONS



Data center



Bank



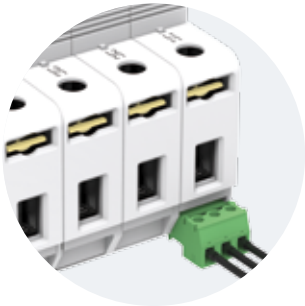
Outdoor LED lighting



Security

# STP RANGE

## The best performance in the market



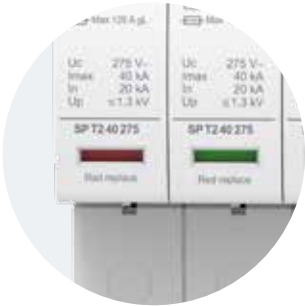
**Remote indication**  
Dry contacts, optional in all ranges, for remote indication of protector end of life.



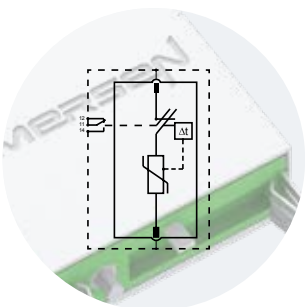
**Biconnect connection**  
Two types of terminal: for rigid or flexible cable and for fork type comb busbar.



**Mersen quality**  
Product range produced entirely by Mersen, with a thermal disconnection system. Use of the best materials and components.



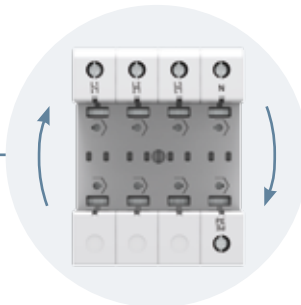
**Protector lifetime status indication**  
Clear display of protection end of life.



**New, optimised disconnection system**  
Mersen has developed a new, optimised disconnection system for end of life. Complies with the disconnection tests of the standards for protectors for photovoltaic applications.



**Easy to install**  
Easy and quick replacement of damaged cartridges.



**Reversible installation**  
Reversible chassis to allow cable entry from above or below.



**Polariser**  
Safety system to avoid possible cartridge replacement errors.



**MERSEN**  
*Expertise, our source of energy*

**A WORLD LEADER  
 in safety & reliability  
 for electrical power**

**A GLOBAL PLAYER**

Global expert in materials and equipment for extreme environments and in the safety and reliability of electrical equipment.

Mersen designs innovative solutions to address its clients' specific needs to enable them to optimize their manufacturing process in sectors such as Energy, Transportation, Electronics, Chemical, Pharmaceutical and Process Industries.

MERSEN France SB  
 S.A.S.  
 Rue Jacques de Vaucanson  
 F-69720 Saint-Bonnet-de-Mure  
 Tel : + 33 4 72 22 66 11

MERSEN Shanghai Co.  
 Ltd.  
 No.55-A6. Shu Shan Road,  
 Songjiang 201611 Shanghai  
 Tel: +8621 67602388

MERSEN USA  
 Newburyport-MA L.L.C.  
 374 Merrimac Street  
 Newburyport, MA 01950  
 Phone: 978-462-6662

[ep.mersen.com](http://ep.mersen.com)