

Product selection

OVR DIN rail SPD

Choosing the correct model

1) Determine the service voltage

Consult qualified personnel if the facility or operation service voltage is unknown.

2) Select the SPD maximum continuous operating voltage (MCOV, U_c)

The MCOV should correspond to the service voltage.

Example: If the service voltage is 480V Delta, an SPD with 550V or 660V MCOV will be required.

Surge protection devices must also provide a level of protection compatible with the withstand voltage of the equipment. This withstand voltage depends on the type of equipment and its sensitivity. The incoming surge protector may not provide adequate protection by itself, as certain electrical phenomena may greatly increase its residual voltage if cable lengths exceed 10m. A second SPD may be necessary. See Coordination below.

3) Select the SPD surge capacity (I_{max})

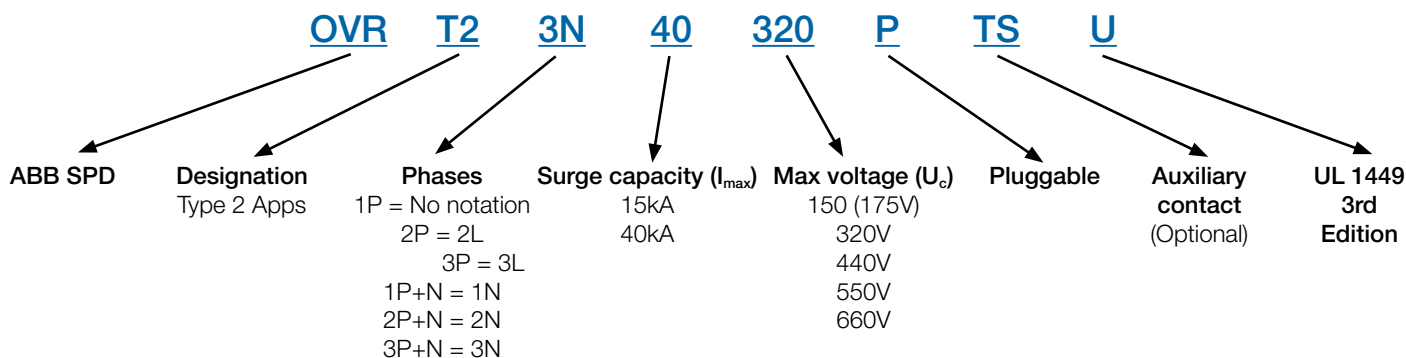
Surge capacity is the amount of energy the SPD can withstand from a single surge event. The higher the surge capacity, the longer the device will protect the system. A second surge protector may be required if the surge capacity of the first is not capable of diverting all surge current to ground. See Coordination below.

4) Remote monitoring (Optional)

Integrated auxiliary contact for remote monitoring available on models with "TS" designation.

Consult the Service Voltage and Location table on page 16.16 for help in the selection of SPDs.

OVR DIN rail SPD - Part number diagram



Complete facility protection

Installing surge protection at the main distribution panel is only the beginning of protecting the entire operation. As most transient surges are created internally, it is necessary to install surge protection at sub-distribution panels (equipment protection) to be fully protected. Stepping down the I_{max} level from the service entrance panel toward equipment to be protected is recommended.

For example, if a 40kA I_{max} SPD is installed in the main distribution panel, then 15kA I_{max} SPDs should be installed in sub-distribution panels for equipment protection.

Coordination

It may be necessary to add a second surge protector, wired to the incoming unit, to achieve the required voltage protection and/or surge capacity. For Type 2 or 4 SPDs, installing this second unit a minimum of 1m from the first unit will allow the two to work together, achieving the required protection.

Wiring rules

The impedance of the cables increases the voltage across the connected equipment. Therefore, the length of the cable between the surge protector and the equipment should be minimized.

The surge protective device should be installed as close to the equipment to be protected as possible. If this is not possible (the equipment is over 30m from the panel), then a second surge protector must be installed.