## Table 1 – Classification of SPDs

| Location of<br>Switchboard /<br>Distribution Board                                       | Switchboard Receiving<br>Energy from the<br>Licensee or Other<br>Building |          | Sub-Switchboard<br>and/or Distribution<br>Board Receiving<br>Energy from<br>Switchboard Located<br>in the Same Building | Final Distribution<br>Board Receiving<br>Energy from Sub-<br>Switchboard or<br>Distribution Board<br>Located in the Same<br>Building |
|--|---|----------|---|--|
| Impulse Test<br>Classification (MS IEC<br>61643-1)                                       | Class I   | Class II | Class II  | Class III  |
| Impulse Current, I <sub>imp</sub><br>(10/350 µs) per mode                                | ≥ 10 kA   |          |   |  |
| Nominal Discharge<br>Current, I <sub>n</sub> (8/20 µs)<br>per mode                       |   | ≥ 20 kA  | ≥ 10 kA   |  |
| Maximum Discharge<br>Current, I <sub>max</sub> (8/20 µs)<br>per mode                     |   | ≥ 65 kA  | ≥ 40 kA   |  |
| Open-Circuit Voltage, $U_{oc}$ (1.2/50 µs) per mode                                      |   |          |   | ≥ 6 kV   |
| Voltage Protection<br>Level, $U_p$ (L-N, L-E, N-<br>E) at $I_{imp}$ or $I_n$ or $U_{oc}$ | ≤ 2500 V  | ≤ 2000 V | ≤ 1500 V  | ≤ 1000 V   |