

On the selection and installation of surge protection devices in a TT wiring system for equipment and human safety

ABSTRACT

This paper provides a comprehensive guidance for the selection and installation of transient protection devices, especially in a TT wiring system with the aim of safeguarding both the equipment concerned and the operators and users of equipment. A number of core and fringe issues with respect to surge protection have been discussed in details with the view of developing high level of electrical safety practices among engineers. The information presented can also be used as educational material that guides electrical engineers in addressing lightning protection issues of LV power systems and ELV signal systems. A number of real life examples and survey outcomes that reflect misinterpretation of standards and scientific practices, gathered in the South Asian region have also been discussed.

Keyword: Electrical safety; Lightning protection; Transient; Risk assessment; Earth fault