

## *Indian Standard*

# LIVE WORKING — MINIMUM APPROACH DISTANCES FOR a.c. SYSTEMS IN THE VOLTAGE RANGE 72.5 kV TO 800 kV — A METHOD OF CALCULATION

*( First Revision )*

## **1 Scope**

This International Standard describes a method for calculating the minimum approach distances for live working, at maximum voltages between 72,5 kV and 800 kV. This standard addresses system overvoltages, and the working air distances between parts and/or workers at different potentials.

The required withstand voltage and minimum approach distances calculated by the method described in this standard are evaluated taking into consideration the following:

- workers are trained for, and skilled in, working in the live working zone;
- the anticipated overvoltages do not exceed the value selected for the determination of the required minimum approach distance;
- transient overvoltages are the determining overvoltages;
- tool insulation has no continuous film of moisture present on the surface;
- no lightning is seen or heard within 10 km of the work site;
- allowance is made for the effect of conducting components of tools;
- the effect of altitude on the electric strength is taken into consideration.

For conditions other than the above, the evaluation of the minimum approach distances may require specific data, derived by other calculation or obtained from additional laboratory investigations on the actual situation.