

# POWER TRANSFORMERS

## PART 5 ABILITY TO WITHSTAND SHORT CIRCUIT

### 1 SCOPE

This standard (Part 5) identifies the requirements for power transformers to sustain without damage the effects of overcurrents originated by external short circuits. It describes the calculation procedures used to demonstrate the thermal ability of a power transformer to withstand such overcurrents and both the special test and the theoretical evaluation method used to demonstrate the ability to withstand the relevant dynamic effects. The requirements apply to transformers as defined in the scope of IS 2026 (Part 1).

### 2 REFERENCES

The following standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
2026	Power transformers:
(Part 1) : 2011	General ( <i>second revision</i> )
(Part 2) : 2008	Temperature rise ( <i>first revision</i> )
(Part 3) : 2009	Insulation levels, dielectric tests and external clearances in air ( <i>third revision</i> )
(Part 8) : 2009	Application guide
10561 : 1983	Application guide for power transformers
11171 : 1985	Specification for dry-type power transformers