

(PREVIEW)

Indian Standard
**METHODS OF MEASUREMENT OF
TRANSFORMER AND REACTOR
SOUND LEVELS**

1 SCOPE

1.1 This standard defines the methods by which the sound levels of transformers, reactors and their associated cooling plant shall be measured in the manufacturer's works so that compliance with any specification requirements may be confirmed and the characteristics of the noise emitted in service determined.

1.2 This standard is intended to apply to measurements made in the manufacturer's works as, when measurements are made on site, conditions may be very different due to proximity of other objects, extraneous noises, etc. Nevertheless, the same general rules as given herein may be followed when site measurements are made.

1.3 In those cases where sufficient power is available in the factory to permit full energisation of reactors, the methods to be followed are in same as for transformers. Such measurements shall be by agreement between the manufacturer and the purchaser. Alternatively, measurements may be made on site where conditions are suitable.

1.4 The methods defined are applicable to transformers and reactors of all types covered by IS 2026 (Part 1) : 1977 and IS 5553 series respectively without further limitation as regards size or voltage and when fitted with their normal auxiliary equipment, in as much as it may influence the measurement result.

1.5 Although the following test refers only to transformers, it is equally applicable to reactors provided that it is recognised that current taken by a reactor is dependent on the voltage applied and, consequently, that a reactor cannot be tested at no-load.

1.6 This standard gives a basis of calculation of sound power level which permits comparison of transformers of different types and, with certain hypothetical assumptions, the evaluation of the probable sound level at a distance. In view of this for the purpose of measurement of noise level of transformers/reactors only sound pressure level shall be measured.

REFERENCES

2.1 The following Indian Standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
2026 (Part 1) : 1977	Power transformers : Part 1 General (<i>first revision</i>)
5553 series :	Reactors
9779 : 1981	Sound level meters