

(PREVIEW)

Indian Standard

SPECIFICATION FOR DIRECT RECORDING ELECTRICAL MEASURING INSTRUMENTS

1. SCOPE

1.1 This standard applies to direct recording and direct recording-cum-indicating electrical measuring instruments both the continuous line and the dotted line types, which are used for recording or recording-cum-indicating the instantaneous, rms or mean values of one or more measured quantities as a function of time instruments, namely:

- a) ammeters,
- b) voltmeters,
- c) wattmeters, varmeters and phasemeters (single and poly-phase),
- d) frequency meters, -and
- e) ohm-meters

This applies to those instruments which incorporate rectifiers or diodes and to thermocouple instruments, also to certain accessories like shunts, series resistors, inductors and capacitors, used with such apparatus.

In the case of other accessories associated with instruments in as much as the calibration has been made of the instrument together with the accessory, the standard is applicable to the combination of instruments and accessory.

1.2 The standard also applies to electrically measuring equipment provided that the recording electrically measuring instrument (receiver) only is considered, and that the relationship between the non-electrical quantity to the electrical one is known. (Furthermore, it applies to recording instruments incorporating electronic devices in their auxiliary circuits).

1.3 This standard does not apply to:

- a) recording instruments having a square wave response greater than 90 percent on a square wave with an amplitude equal to the effective range and frequency of 5 Hz,
- b) recording instruments incorporating, in their measuring circuits, amplifying or electronic devices (other than rectifiers or diodes),
- c) integrating recording instruments, and
- d) indirect recording instruments.