# National Accreditation Board for Testing and Calibration Laboratories

## SCOPE OF ACCREDITATION

**Laboratory Name :** TESTING LABORATORY,EMMESS CONTROL PVT LTD, DP 90 91 92, SIDCO INDUSTRIAL ESTATE THIRUMAZHISAI, CHENNAI, THIRUVALLUR, TAMIL NADU, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-11133 **Page No** 1 of 2

**Validity** 09/11/2022 to 08/11/2024 **Last Amended on** -

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| Permanent Facility | | | | |
| 1 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Capacitance & dissipation factor | IS 16227 Part I & II (Clause 7.4.3), IS 2705 (Clauses 9.1.3.b & 9.12) |
| 2 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Composite error | IS 16227 Part I & II Clause: 3.4.203, IS 2705 (Clause .No 7.2.6.203) |
| 3 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | High voltage power frequency dry withstand test on secondary winding | IS 16227 Part I & II ,IS 2705 |
| 4 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | ISF (Instrument Safety Factor) measurement | IS 16227 Part I & II |
| 5 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | ISF (Instrument Safety Factor) measurement | IS 2705 |
| 6 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current Transformer | Phase error | IS 16227 Part I & II (Clause: 7.2.6) |
| 7 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Phase error | IS 2705 (Clause 7.1.1 & 7.2.1 ) |
| 8 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Power frequency dry withstand between sections | IS 2705 (Clause 9.4) |
| 9 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Power frequency dry withstand between sections | IS 16227 Part I & II (Clause: 7.3.3) |
| 10 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Power frequency dry withstand test on primary winding | IS 16227 Part I & II (Clause:7.3.1), IS 2705 (Clause: 9.3) |
| 11 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Ratio error | IS 2705 (Clause No:.7.1.1 & 7.2.1) |
| 12 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Ratio error | IS 16227 Part I & II (Clause: 7.2.6) |
| 13 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Current transformer | Secondary winding resistance | IS 16227 Part I & II (Clause No: 3.4.202), IS 2705 (Clause No 6.2 ) |
| 14 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled (Upto 500 kVA 22kV class single phase and 3 phase) | Short circuit impedance and load loss | IS 1180 Part 1 (Clause. No.21.2.c ) |
| 15 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled (Upto 500 kVA 22kV class single phase and three phase) | No load loss and current | IS 1180 Part 1 (Clause.No. 21.2.d ) |
| 16 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled (Upto 500 kVA 22kV class1 phase and 3 phase) | No Load Current at 112.5 % voltage | IS 1180 Part I ( Clause.No.21.2.c ) |

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|---|---|---|---|---|
| 17 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled / (upto 500kVA 22 kV class 1 phase and 3 phase) | No load loss and current | IS 1180 Part 1 (Clause. No. 21.2.d ) |
| 18 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled /(Upto 500 kVA 22 kV class single phase and three phase) | No load loss and current | IS 1180 Part 1 (Clause.No. 21.2.d ) |
| 19 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled transformers (Upto 500 kVA 22 kV Class single phase and three phase) | Short circuit impedance and load loss | IS 1180 Part I ( Clause.No.21.2.c ) |
| 20 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Oil cooled transformers (Upto 500 kVA 22kV class single phase and three phase) | Short circuit impedance and load loss | IS 1180 Part I ( Clause.No.21.2.c ) |
| 21 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Voltage transformer | Capacitance and dissipation factor | IS 16227 Part 3 (Clause No. 7.4.3) |
| 22 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Voltage transformer | Phase error | IS 16227 (Clause No:7.2.6) |
| 23 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Voltage transformer | Power frequency dry withstand on secondary windings | IS 16227 Part 3 & 4 (Clause No: 7.3.4) |
| 24 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Voltage transformer | Power-frequency withstand tests on primary windings (separate source) | IS 16227 Part 3 & 4 (Clause No: 7.3.1) |
| 25 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Voltage transformer | Ratio error | IS 16227 Part 3 & 4 (Clause No:7.2.6) |
| 26 | ELECTRICAL- INDUCTORS & TRANSFORMERS | Voltage transformer | Separate source power frequency withstand test induced over voltage withstand | IS 16227 Part 3 & 4 (Clause No: 7.3.1.303) |