# Schedule of Accreditation

**issued by**

# United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

**8809**

**Accredited to ISO/IEC 17025:2017**

## ABB Limited

**Issue No:** 020 **Issue date:** 30 July 2026

| | |
|---|---|
| **Oldends Lane**<br>**Stonehouse**<br>**Gloucester**<br>**GL10 3TA** | **Contact: Neil B Brown**<br>**Tel: +44 (0) 1453 853434**<br><br>**E-Mail: instrument.support@gb.abb.com**<br>**Website: www.abb.com/measurement** |

**Calibration performed by the Organisations at the locations specified below**

**Locations covered by the organisation and their relevant activities**

**Laboratory locations:**

| Location details | | Activity | Location code |
|---|---|---|---|
| **Address**<br>Oldends Lane<br>Stonehouse<br>Gloucester<br>GL10 3TA | **Local contact**<br>Neil B Brown<br><br>Tel: 01453 853434<br><br>E-Mail: instrument.support@gb.abb.com | Electrical<br>Pressure<br>Temperature | Lab |

**Site activities performed away from the locations listed above:**

| Location details | Activity | Location code |
|---|---|---|
| Customers' Premises<br><br>The customers' site or premises must be suitable for the nature of the particular calibrations undertaken and will be the subject of contract review arrangements between the laboratory and the customer. | Temperature<br>Electrical | Site |

Calibration and Measurement Capability (CMC)

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k$ = 2) | Remarks | Location Code |
|---|---|---|---|---|
| **ELECTRICAL** | | | All electrical calibrations are performed as a direct comparison against a reference standard unless stated otherwise | Lab |
| **DC Voltage** | | | | |
| Measurement | 0 mV to 100 mV<br>100 mV to 100 V | 18 µV<br>2.0 mV | For measurement of instrument outputs | |
| Generation | 0 mV to 100 mV<br>100 mV to 12 V | 0.015 mV<br>1.1 mV | For the calibration of measuring instruments | |
| **DC Current** | | | | |
| Measurement | 0 mA to 100 mA | 17 µA | For measurement of instrument outputs | |
| Generation | 0 mA to 25 mA | 0.0050 mA | For the calibration of measuring instruments | |
| **DC Resistance** | | | | |
| Measurement | 0 Ω to 400 Ω<br>400 Ω to 4 kΩ | 260 mΩ<br>0.70 Ω | For measurement of instrument outputs | |
| Generation | 0 Ω to 400 Ω<br>400 Ω to 4 kΩ | 0.20 Ω<br>0.80 Ω | For the calibration of measuring instruments | |
| Electrical calibration of temperature indicators, controllers and recorders for the following sensors: | | | | |
| Noble metal thermocouples Type R & S | 0 °C to 1768 °C | 1.1 °C | with cold junction compensation | |
| Base metal thermocouples Type K, T, N and J | -200 °C to 0 °C<br>0 °C to 1370 °C | 0.70 °C<br>0.60 °C | with cold junction compensation | |
| Pt100 | -200 °C to +850 °C | 0.25 °C | | |

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k$ = 2) | Remarks | Location Code |
|---|---|---|---|---|
| **ELECTRICAL** (cont'd) | | | | Site |
| **DC Voltage** | | | | |
| Measurement | 0 mV to 100 mV<br>100 mV to 50 V | 40 µV<br>12 mV | For measurement of instrument outputs | |
| Generation | 0 mV to 100 mV<br>100 mV to 12 V | 35 µV<br>3.0 mV | For the calibration of measuring instruments | |
| **DC Current** | | | | |
| Measurement | 0 mA to 100 mA | 31 µA | For measurement of instrument outputs | |
| Generation | 0 mA to 25 mA | 8.6 µA | For the calibration of measuring instruments | |
| **DC Resistance** | | | | |
| Measurement | 0 Ω to 400 Ω<br>400 Ω to 4 kΩ | 0.30 Ω<br>1.2 Ω | For measurement of instrument outputs | |
| Generation | 0 Ω to 400 Ω<br>400 Ω to 4 kΩ | 0.15 Ω<br>1.2 Ω | For the calibration of measuring instruments | |
| Electrical calibration of temperature indicators, controllers and recorders for the following sensors: | | | | |
| Noble metal thermocouples Type R & S | 0 °C to 1768 °C | 1.9 °C | with cold junction compensation | |
| Base metal thermocouples Type K, T, N and J | -200 °C to 0 °C<br>0 °C to 1370 °C | 1.0 °C<br>1.0 °C | with cold junction compensation | |
| Pt100 | -200 °C to +850 °C | 0.50 °C | | |
| **PRESSURE** | | | | Lab |
| Gas Pressure (gauge) | | | Methods consistent with EURAMET CG17 | |
| Calibration of pressure indicating instruments and gauges | -85 kPa to 0 kPa<br>0 kPa to 400 kPa<br>400 kPa to 1.2 MPa<br>1.2 MPa to 2 MPa | 0.58 kPa<br>0.56 kPa<br>0.97 kPa<br>1.01 kPa | Calibration of instruments with an electrical output can be undertaken | |

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k$ = 2) | Remarks | Location Code |
|---|---|---|---|---|
| **TEMPERATURE** | | | | Lab |
| Resistance thermometers | -80 °C to 0 °C | 0.68 °C | Calibration performed within a Liquid Bath | |
| | Ice point (0 °C) | 0.040 °C | Calibration performed within Metal Block Baths | |
| | -35 °C to +140 °C | 0.080 °C | | |
| | 140 °C to 250 °C | 0.24 °C | | |
| | 250 °C to 450 °C | 0.46 °C | | |
| | 450 °C to 650 °C | 0.70 °C | | |
| Thermocouples | -80 °C to 0 °C | 0.68 °C | Calibration performed within a Liquid Bath | |
| | Ice point (0 °C) | 0.80 °C | Calibration performed within Metal Block Baths | |
| | -35 °C to +140 °C | 0.41 °C | | |
| | 140 °C to 250 °C | 0.50 °C | | |
| | 250 °C to 450 °C | 0.70 °C | | |
| | 450 °C to 650 °C | 0.95 °C | | |
| | 650 °C to 1100 °C | 2.16 °C to 2.44 °C | | |
| | 1100 °C to 1200 °C | 3.48 °C | | |
| Temperature indicators and recorders with sensors | -80 °C to 0 °C | 0.68 °C | Calibration performed within a Liquid Bath | |
| | Ice point (0 °C) | 0.040 °C | Calibration performed within Metal Block Baths | |
| | -35 °C to +140 °C | 0.080 °C | | |
| | 140 °C to 250 °C | 0.24 °C | | |
| | 250 °C to 450 °C | 0.46 °C | | |
| | 450 °C to 650 °C | 0.53 °C | | |
| | 650 °C to 1100 °C | 2.0 °C to 2.6 °C | | |
| | 1100 °C to 1200 °C | 3.0 °C | | |
| Wireless temperature loggers | -80 °C to 0 °C | 0.68 °C | Calibration performed within Liquid Baths | |
| | Ice point (0 °C) | 0.085 °C | | |
| | -35 °C to +40 °C | 0.12 °C | | |
| | -80 °C to -40 °C | | | |
| Temperature controlled incubators, ovens, environmental chambers, fridges/refrigerators, freezers, rooms and similar enclosures (inclusive of associated indicators, controllers and recorders, all with sensors, within the specified parameters and ranges) | -40 °C to 0 °C | 2.1 °C | Single and multipoint time dependent temperature profiling, also referred to as spatial temperature surveying or mapping | Site |
| | 0 °C to 140 °C | 1.1 °C | | |
| | 140 °C to 250 °C | 1.7 °C | | |
| | 250 °C to 450 °C | 1.8 °C | | |
| | 450 °C to 650 °C | 2.1 °C | | |
| | | 2.2 °C | | |
| | -30 °C to +40 °C | 0.30 °C | Using thermocouples | |
| | | | Using PRT sensors or wireless temperature loggers | |
| Resistance thermometers | -35 °C to 0 °C | 0.45 °C | | Site |
| | 0 °C to 140 °C | 0.65 °C | | |
| | 140 °C to 250 °C | 0.85 °C | | |
| | 250 °C to 450 °C | 1.5 °C | | |
| | 450 °C to 650 °C | 2.3 °C | | |

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k$ = 2) | Remarks | Location Code |
|---|---|---|---|---|
| **TEMPERATURE** (cont'd) | | | | |
| Thermocouples | -35 °C to 0 °C<br>0 °C to 140 °C<br>140 °C to 250 °C<br>250 °C to 450 °C<br>450 °C to 650 °C | 0.80 °C<br>0.95 °C<br>1.1 °C<br>1.7 °C<br>2.4 °C | Calibration performed within Metal Block Baths | Site |
| Temperature indicators and recorders with sensors | -35 °C to 0 °C<br>0 °C to 140 °C<br>140 °C to 250 °C<br>250 °C to 450 °C<br>450 °C to 650 °C | 0.45 °C<br>0.60 °C<br>0.85 °C<br>1.5 °C<br>2.3 °C | | Site |
| END | | | | |

## Appendix - Calibration and Measurement Capabilities

**Introduction**

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

**Calibration and Measurement Capabilities (CMCs)**

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k = 2$. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

**Expression of CMCs - symbols and units**

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand.
Thus, for example, a measurement uncertainty of 1.5 % means $1.5 \times 0.01 \times q$, where $q$ is the quantity value.

The notation Q[a, b] stands for the root-sum-square of the terms between brackets: $Q[a, b] = [a^2 + b^2]^{1/2}$