


# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

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

 <b>UKAS</b> CALIBRATION  <b>25391</b>  Accredited to ISO/IEC 17025:2017	<b>SJM Controls Ltd</b>	
	Issue No: 002    Issue date: 02 July 2024	
	<b>SJM Controls Ltd</b> 2 Cartier Court Blackwood Lanark ML11 9GN	<b>Contact: Scott MacLean</b> Tel: +44 (0) 7875 396734 E-Mail: <a href="mailto:scott.maclean@sjmcontrols.co.uk">scott.maclean@sjmcontrols.co.uk</a> Website: <a href="http://www.sjmcontrols.co.uk">http://www.sjmcontrols.co.uk</a>
Calibration performed by the Organisation at the locations specified		

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

#### Laboratory locations:

Location details	Activity	Location code
<b>Address</b> SJM Controls Ltd 2 Cartier Court Blackwood Lanark ML11 9GN	Electrical	P
<b>Local contact</b> Mr Scott MacLean Tel: +44 (0) 7875 396734 E-Mail: <a href="mailto:scott.maclean@sjmcontrols.co.uk">scott.maclean@sjmcontrols.co.uk</a>		

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

Location details	Activity	Location code
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.	Electrical	S



25391

Accredited to  
ISO/IEC 17025:2017

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

**SJM Controls Ltd**

**Issue No: 002 Issue date: 02 July 2024**

**Calibration performed by the Organisation at the locations specified**

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( $k = 2$ )	Remarks	Location Code
The method followed for all electrical calibrations of both sources and measuring instruments is by direct comparison of the unit under test against laboratory references, unless otherwise stated in the remark's column. All other calibrations are by comparison with reference instruments unless otherwise stated, Generation means that these values can be supplied for the calibration of measuring devices and Measurement means that devices with an output can be calibrated.				
<b>ELECTRICAL</b>				
DC VOLTAGE	0 V	4.3 mV	Measure	P & S
	0 to 5 V	0.85 mV		
	0 to 15 V	1.8 mV		
DC Current	0 V	0.10 mV	Generate	P & S
	0 to 5 V	0.56 mV		
	0 to 15 V	2.5 mV		
DC Current	0 to 20 mA	4.3 µA	Measure	P & S
	0 to 22 mA	16 µA		
	0 to 20 mA	4.3 µA	Generate	P & S
	0 to 30 mA	17 µA		
TEMPERATURE SIMULATION				
Temperature indicators, simulators, recorders, controllers and transmitters, calibration by electrical simulation				
Base metal thermocouple Generate and Measure Type J	-100 °C to 0 °C	0.73 °C	including cold junction compensation	P & S
	0 °C to +600 °C	0.60 °C		
Type K	-200 °C to 0 °C	0.83 °C		
	0 °C to +1200 °C	0.64 °C		
Type N	-200 °C to 0 °C	0.94 °C		
	0 °C to +1295 °C	0.61 °C		
Type T	-200 °C to 0 °C	0.84 °C		
	0 °C to +400 °C	0.55 °C		
Noble metal thermocouple Generate and Measure Type R	0 °C to 1760 °C	2.7 °C	including cold junction compensation	P & S
	0 °C to 1760 °C	2.7 °C		
PT 100 Generate and Measure	-200 °C to 0 °C	0.18 °C		P & S
	0 °C to +600 °C	0.28 °C		
END				



25391

Accredited to  
ISO/IEC 17025:2017

## Schedule of Accreditation

issued by

### United Kingdom Accreditation Service

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

#### SJM Controls Ltd

Issue No: 002 Issue date: 02 July 2024

Calibration performed by the Organisation at the locations specified

### 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:  $Q[a, b] = [a^2 + b^2]^{1/2}$