


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

 <p>0310</p> <p>Accredited to ISO/IEC 17025:2017</p>	<p>RS Calibration a trading name of RS Components Ltd</p> <p>Issue No: 053 Issue date: 24 August 2020</p>	
	<p>DPN 175 Birchington Road Corby Northamptonshire NN17 5JF</p>	<p>Contact: Mrs G MacLeod Tel: +44 (0)1536 405500 E-Mail: gabriela.fedor@rs-components.com Website: http://uk.rs-online.com/web/</p>
<p>Calibration performed at the above address only</p>		

DETAIL OF ACCREDITATION

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks
ELECTRICAL MEASUREMENTS			
DC RESISTANCE			
Specific values Generation	1 mΩ 10 mΩ 100 mΩ 1 Ω 10 Ω 100 Ω 1 kΩ 10 kΩ 100 kΩ 1 MΩ 10 MΩ 100 MΩ 1 GΩ	130 ppm 52 ppm 52 ppm 6.0 ppm 12 ppm 5.0 ppm 5.8 ppm 11 ppm 53 ppm 53 ppm 53 ppm 54 ppm 300 ppm	Known values of resistance for application to resistance measuring instruments. Specific values are those which fall within $\pm 0.5\%$ of the stated values.
Measurement	0 Ω to 2 Ω 2 Ω to 20 Ω 20 Ω to 200 Ω 200 Ω to 2 kΩ 2 kΩ to 20 kΩ 20 kΩ to 200 kΩ 200 kΩ to 2 MΩ 2 MΩ to 20 MΩ 20 MΩ to 200 MΩ 200 MΩ to 2 GΩ	20 ppm + 4.0 μΩ 12 ppm + 14 μΩ 10 ppm + 50 μΩ 10 ppm + 0.50 mΩ 10 ppm + 5.0 mΩ 10 ppm + 50 mΩ 12 ppm + 1.0 Ω 27 ppm + 100 Ω 150 ppm + 10 kΩ 0.18 % + 1.0 MΩ	Using digital multimeter. Generation of these values may also be undertaken however the uncertainties may be increased.
DC VOLTAGE			
Measurement	0 V to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1 kV	8.0 ppm + 0.10 μV 5.0 ppm + 0.40 μV 5.0 ppm + 4.0 μV 7.0 ppm + 40 μV 7.0 ppm + 500 μV	Using digital multimeter. Generation of these values may also be undertaken however the uncertainties may be increased.



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DC CURRENT			
Generation	20 A to 500 A 500 A to 2500 A	590 ppm 490 ppm	Calibration of clamp-on ammeters and similar devices using multi-turn technique.
Measurement	0 μ A to 200 μ A 200 μ A to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A 2 A to 20 A 2 A to 10 A 10 A to 20 A 20 A to 100 A	16 ppm + 0.40 nA 16 ppm + 4.0 nA 17 ppm + 40 nA 56 ppm + 800 nA 220 ppm + 16 μ A 470 ppm + 400 μ A 320 ppm 330 ppm 75 ppm	Using digital multimeter. Generation of these values may also be undertaken however the uncertainties may be increased. Using digital multimeter and shunt. Generation of these values may also be undertaken however the uncertainties may be increased.
AC VOLTAGE			
Measurement	10 Hz to 40 Hz 1 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 40 Hz to 100 Hz 1 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V 100 Hz to 2 kHz 1 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V 2 kHz to 10 kHz 1 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V	170 ppm + 4.0 μ V 140 ppm + 20 μ V 140 ppm + 200 μ V 140 ppm + 2.0 mV 140 ppm + 4.0 μ V 110 ppm + 20 μ V 110 ppm + 200 μ V 110 ppm + 2.0 mV 140 ppm + 20 mV 140 ppm + 2.0 μ V 90 ppm + 20 μ V 90 ppm + 200 μ V 94 ppm + 2.0 mV 140 ppm + 20 mV 160 ppm + 4.0 μ V 130 ppm + 20 μ V 130 ppm + 200 μ V 130 ppm + 2.0 mV 140 ppm + 20 mV	Using digital multimeter. Generation of these values may also be undertaken however the uncertainties may be increased.



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AC VOLTAGE (continued) Measurement (continued)	<p><i>10 kHz to 30 kHz</i> 1 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V</p> <p><i>30 kHz to 100 kHz</i> 1 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V</p> <p><i>100 kHz to 300 kHz</i> 200 mV to 2 V 2 V to 20 V 20 V to 200 V</p> <p><i>300 kHz to 1 MHz</i> 200 mV to 2 V 2 V to 20 V</p>	<p>400 ppm + 8.0 μV 260 ppm + 40 μV 260 ppm + 400 μV 260 ppm + 4.0 mV 270 ppm + 40 mV</p> <p>0.090 % + 20 μV 660 ppm + 200 μV 660 ppm + 2.0 mV 660 ppm + 20 mV 680 ppm + 200 mV</p> <p>0.35 % + 2.0 mV 0.35 % + 20 mV 0.35 % + 200 mV</p> <p>1.2 % + 20 mV 1.2 % + 200 mV</p>	
AC CURRENT Generation	<p>20 A to 250 A 50 Hz to 800 Hz</p> <p>250 A to 1750 A 50 Hz to 100 Hz</p> <p>1750 A to 2500 A 50 Hz to 60 Hz</p>	<p>0.090 %</p> <p>0.090 %</p> <p>0.090 %</p>	Calibration of clamp-on ammeters and similar devices using multi-turn technique.
Measurement	<p><i>10 Hz to 2 kHz</i> 1 μA to 200 μA 200 μA to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A 2 A to 20 A</p> <p><i>2 kHz to 10 kHz</i> 1 μA to 200 μA 200 μA to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A</p> <p><i>50 Hz to 800 Hz</i> 20 A to 50 A 50 A to 100 A</p>	<p>600 ppm + 20 nA 360 ppm + 200 nA 350 ppm + 2.0 μA 340 ppm + 20 μA 720 ppm + 200 μA 950 ppm + 2.0 mA</p> <p>600 ppm + 20 nA 360 ppm + 200 nA 350 ppm + 2.0 μA 340 ppm + 20 μA 850 ppm + 200 μA</p> <p>0.11 % 0.11 %</p>	<p>Using digital multimeter. Generation of these values may also be undertaken however the uncertainties may be increased.</p> <p>Using digital multimeter and shunt. Generation of these values may also be undertaken however the uncertainties may be increased.</p>



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INDUCTANCE at 1 kHz			
Generation	100 μ H 1 mH 10 mH 100 mH 1 H	330 ppm 490 ppm 500 ppm 470 ppm 470 ppm	Known inductance values for the calibration of inductance measuring instruments
CAPACITANCE at 1 kHz			
Generation	1 nF 2 nF 3 nF 4 nF 5 nF 6 nF to 9 nF 10 nF 20 nF to 80 nF 90 nF 100 nF to 900 nF 1 μ F 2 μ F 3 μ F and 4 μ F 5 μ F and 9 μ F 10 μ F to 30 μ F 40 μ F and 50 μ F 60 μ F and 80 μ F 90 μ F and 100 μ F	0.092 % 0.064 % 0.057 % 0.055 % 0.053 % 0.050 % 0.050 % 0.031 % 0.037 % 0.042 % 0.12 % 0.12 % 0.098 % 0.12 % 0.12 % 0.18 % 0.18 % 0.18 %	Known capacitance values for the calibration of capacitance measuring instruments
FREQUENCY			
Measurement	10 Hz to 100 kHz 100 kHz to 1 MHz 1 MHz to 2 GHz	3.0 in 10^9 2.0 in 10^{10} 5.0 in 10^{10}	Using counter timer and off-air standard.
Timer and stopwatch calibrations	5 s to 99 999s	0.10 s	Manual calibration.
OSCILLOSCOPE CALIBRATION			
Horizontal deflection coefficients	500 ps to 10 ms	0.29 ppm	Using time markers. The uncertainty quoted will be particularly dependent on the horizontal resolution of the oscilloscope being calibrated.
Vertical deflection coefficients	6 mV to 60 mV 60 mV to 600 mV 600 mV to 60 V 60 V to 100 V 100 V to 120 V	0.33 % 0.14 % 0.12 % 0.31 % 0.31 %	Using chopped waveforms of known peak to peak amplitude. The uncertainty quoted will be particularly dependent on the vertical resolution of the oscilloscope being calibrated.



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Bandwidth	<i>Input VSWR up to 1.2:1</i> 50 kHz to 550 MHz 550 MHz to 1 GHz	0.29 dB 0.38 dB	Relative to a low frequency reference. The uncertainty quoted will be dependent on the vertical resolution of the oscilloscope being calibrated.
	<i>Input VSWR from 1.2:1 to 1.6:1</i> 50 kHz to 550 MHz 550 MHz to 1 GHz	0.43 dB 0.53 dB	
Rise and fall times	Using 150 ps edge	21 ps	Using fast rise pulses. The uncertainty quoted will be dependent on the vertical and horizontal resolution of the oscilloscope being calibrated.
	Using 500 ps edge	50 ps	
Input resistance (DC)	50 Ω	0.13 %	For values within 20% of the nominal values shown.
	1 M Ω	0.13 %	
CALIBRATION OF MULTI-FUNCTION CALIBRATORS			Using automated system. Generation of these parameters up to and including 100 kHz may also be undertaken but the uncertainties may be increased
DC RESISTANCE			
Specific Values	0 Ω 1 Ω 10 Ω 100 Ω 1 k Ω 10 k Ω 100 k Ω 1 M Ω 10 M Ω 100 M Ω	70 $\mu\Omega$ 70 ppm 20 ppm 13 ppm 12 ppm 12 ppm 19 ppm 32 ppm 49 ppm 640 ppm	
DC VOLTAGE			
Specific Values	0 V 100 mV 1 V 10 V 19 V 100 V 1000 V	1.1 μ V 12 ppm 7.0 ppm 6.0 ppm 6.0 ppm 8.0 ppm 8.0 ppm	



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DC CURRENT Specific Values	0 μ A 100 μ A 1 mA 10 mA 100 mA 1 A 10 A	5.0 nA 48 ppm 45 ppm 45 ppm 46 ppm 70 ppm 100 ppm	
AC VOLTAGE	<p>At 10 Hz, 20 Hz, 30 Hz, 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz, 1 kHz, 10 kHz and 20 kHz:</p> <p>1 mV 10 mV 100 mV</p> <p>At 30 kHz and 50 kHz:</p> <p>1 mV 10 mV 100 mV</p> <p>At 100 kHz:</p> <p>1 mV 10 mV 100 mV</p> <p>1 V and 10 V: 10 Hz, 20 Hz and 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz, 1 kHz, 10 kHz, 20 kHz and 30 kHz 50 kHz 100 kHz 300 kHz 500 kHz 1 MHz</p> <p>19 V: 1 kHz</p> <p>100 V: 10 Hz, 20 Hz and 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz, 1 kHz, 10 kHz, 20 kHz and 30 kHz 50 kHz 100 kHz</p> <p>1000 V: 50 Hz, 55 Hz, 60 Hz, 300 Hz and 1 kHz</p>	<p>0.80 % 800 ppm 170 ppm</p> <p>0.80 % 810 ppm 230 ppm</p> <p>1.1 % 0.13 % 440 ppm</p> <p>49 ppm 44 ppm 80 ppm 110 ppm 270 ppm 480 ppm 0.11 %</p> <p>44 ppm</p> <p>55 ppm 49 ppm 80 ppm 130 ppm</p> <p>70 ppm</p>	1 mV and 10 mV are not available at 10 Hz



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AC CURRENT	100 μ A: 10 Hz and 20 Hz 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz and 1 kHz 5 kHz 1 mA: 10 Hz and 20 Hz 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz and 1 kHz 5 kHz 10 mA: 10 Hz and 20 Hz 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz and 1 kHz 5 kHz 100 mA: 10 Hz and 20 Hz 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz and 1 kHz 5 kHz 1 A: 10 Hz and 20 Hz 30 Hz 40 Hz, 50 Hz, 55 Hz, 60 Hz, 300 Hz and 1 kHz 5 kHz 10 A: 40 Hz, 55 Hz, 300 Hz and 1 kHz	230 ppm 220 ppm 210 ppm 380 ppm 190 ppm 190 ppm 180 ppm 290 ppm 190 ppm 190 ppm 180 ppm 280 ppm 190 ppm 190 ppm 230 ppm 220 ppm 190 ppm 330 ppm 800 ppm	
ELECTRICAL SIMULATION OF TEMPERATURE (Base metal thermocouple indicators)			Application or measurement of DC voltages equivalent to those for the thermocouple types indicated, with cold junction compensation enabled.
K type	-200 °C to -190 °C	0.18 °C	
	-190 °C to -100 °C	0.11 °C	
	-100 °C to +1300 °C	0.085 °C	
T Type	-150 °C to -100 °C	0.12 °C	
	-100 °C to 0 °C	0.090 °C	
	0 °C to 400 °C	0.069 °C	
J Type	-100 °C to 0 °C	0.088 °C	
	0 °C to 1000 °C	0.080 °C	



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CALIBRATION OF 16TH/17TH EDITION TEST EQUIPMENT			Using dedicated calibration system.
Insulation Resistance	10 k Ω to 5 M Ω	0.16 %	
	5 M Ω to 100 M Ω	1.2 %	
	100 M Ω to 1 G Ω	1.4 %	
Continuity Resistance	900 m Ω to 2 Ω	3.5 %	
	2 Ω to 6 Ω	1.1 %	
	6 Ω to 20 Ω	0.67 %	
	100 Ω	0.32 %	
	1 k Ω	1.2 %	
Continuity Current	100 mA	2.2 %	
	200 mA	1.9 %	
	300 mA	1.7 %	
Insulation Voltage	50 V	3.0 %	
	100 V	2.1 %	
	250 V	1.5 %	
	500 V	1.3 %	
	1000 V	1.3 %	
Current on Insulation resistance function			
1000 V range	0.5 mA	3.1 %	
	1.0 mA	2.1 %	
500 V range	0.5 mA	3.1 %	
	1.0 mA	2.1 %	
Loop Resistance at 50 Hz	0.33 Ω	10 %	
	0.5 Ω	6.7 %	
	1 Ω	3.5 %	
	5 Ω	1.2 %	
	10 Ω	1.0 %	
	100 Ω	0.87 %	
	1000 Ω	0.87 %	
RCD Current at 50 Hz	10 mA to 30 mA	2.1 %	
	30 mA to 300 mA	1.9 %	
	300 mA to 2 A	1.6 %	
RCD Trip Time	20 ms to 40 ms	4.8 %	
	40 ms to 200 ms	2.4 %	
	200 ms to 390 ms	0.48 %	
	390 ms to 900 ms	0.90 %	



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PAT Insulation Resistance	1 M Ω to 4 M Ω 4 M Ω to 10 M Ω	0.16 % 1.2 %	
PAT Earth Bond Resistance at 50 Hz	0.1 Ω 0.22 Ω 0.33 Ω 0.5 Ω 1 Ω 5 Ω 10 Ω 100 Ω 1000 Ω	8.0 % 4.1 % 3.0 % 2.3 % 1.6 % 1.0 % 0.94 % 0.87 % 0.87 %	
PAT Earth Bond Current at 50 Hz	0 mA to 100 mA 100 mA to 10 A 10 A to 30 A	2.1 % + 6 mA 1.7 % + 60 mA 1.7 % + 60 mA	
PAT Leakage Current Test	2.7 mA at 240 V 4.7 mA at 240 V 7.7 mA at 240 V	1.9 % 1.8 % 1.8 %	
PAT Flash Voltage Test At 50 Hz	1000 V (Class 1) 1500 V (Class 1) 1000 V (Class 2) 3000 V (Class 2)	5.8 % 5.4 % 5.8 % 5.0 %	
PAT Flash Current Test At 50 Hz	0.67 mA at 1000 V (Class 1) 1.00 mA at 1500 V (Class 1) 0.34 mA at 1000 V (Class 2) 1.00 mA at 3000 V (Class 2)	6.0 % 5.9 % 6.8 % 5.9 %	
TEMPERATURE CALIBRATION			Unless otherwise stated the calibration was performed by comparison with reference standards. Other units other than Celsius can be reported
Temperature indicators and recorders with temperature sensor(s)	-20 $^{\circ}$ C to -10 $^{\circ}$ C -10 $^{\circ}$ C to +50 $^{\circ}$ C 50 $^{\circ}$ C to 100 $^{\circ}$ C 100 $^{\circ}$ C to 200 $^{\circ}$ C	0.045 $^{\circ}$ C 0.040 $^{\circ}$ C 0.049 $^{\circ}$ C 0.051 $^{\circ}$ C	Calibration performed within Liquid Baths
	50 $^{\circ}$ C to 200 $^{\circ}$ C 200 $^{\circ}$ C to 550 $^{\circ}$ C	0.058 $^{\circ}$ C 0.19 $^{\circ}$ C	Calibration performed within Metal Block Baths



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DEW POINT and RELATIVE HUMIDITY			
Dew-point	1°C to 40°C	0.12°C to 0.26°C	Calibration by comparison with a reference dew point hygrometer and reference PRTs
Temperature probes in air and Temperature probes associated with hygrometers	10 °C to 20 °C 20 °C to 25 °C 25 °C to 50 °C	0.19 °C 0.080 °C 0.29 °C	Calibration performed within an air chamber
Relative humidity instruments	Example conditions At 10 °C 53 %rh to 85 %rh At 23 °C 24 %rh to 85 %rh At 30 °C 16 %rh to 85 %rh At 60 °C 10 %rh to 37 %rh	Corresponding to above dew-point and temperature uncertainties 0.80 %rh to 1.2 %rh 0.60 %rh to 0.93 %rh 0.43 %rh to 0.93 %rh 0.30 %rh to 1.1 %rh	
DIMENSIONAL MEASUREMENTS Unless otherwise stated, the ranges are presented in millimetres (mm) and the uncertainties in micrometres (µm).			
LENGTH			
Micrometers			
External	BS 870:2008 0 to 600	<div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px;"> Heads: 2.0 Setting and extension rods: 1.0 + (8.0 x length in m) </div>	
Internal	BS 959:2008 0 to 600		
Depth	BS 6468:2008 0 to 300		
Vernier Gauges			
Calipers	BS 887:2008 0 to 600	Overall performance 10 + (30 x length in m)	
Height gauges	BS 1643:2008 0 to 600		
Depth gauges	BS 6365:2008 0 to 300		
Dial gauges and dial test indicators	BS 907:2008 and BS 2795:1981 0 to 100	1.0	



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LENGTH (continued)			
Feeler gauges	BS 957:2008 0.03 to 1	1.5	
Steel rules, engineers	0 to 1200	8.0 + (10 x length in metres)	
ANGLE			
Squares Blades Type	BS 939:2007 0 to 300	3.0	On squareness. The uncertainty quoted is for the departure from flatness, straightness, or squareness, i.e. the distance separating the two parallel planes that just enclose the surface under consideration.
MEASURING INSTRUMENTS AND MACHINES			
Road measuring wheels			Using procedure MLCP 52
Derived road wheel calibration factor	0.95 to 1.05	0.0014	
PRESSURE CALIBRATION			Methods consistent with EURAMET CG3
Gas pressure (gauge)			
Calibration of pressure indicating instruments and gauges	-90 kPa to 100 kPa 100 kPa to 250 kPa 250 kPa to 2 MPa 2 MPa to 100 MPa	4.7 Pa 21 Pa 0.17 kPa 0.25 kPa	
Hydraulic pressure (gauge)			
Calibration of pressure indicating instruments and gauges	0.6 MPa to 6 MPa 6 MPa to 16 MPa 16 MPa to 40 MPa 40 MPa to 60 MPa 60 MPa to 100 MPa	200 ppm 130 ppm + 6.6 kPa 100 ppm + 43 kPa 200 ppm 90 ppm + 65 kPa	
END			



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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 uncertainty of measurement 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 CIPM-ILAC definition of the CMC is as follows:

A CMC is a calibration and measurement capability available to customers under normal conditions:

- (a) as published in the BIPM key comparison database (KCDB) of the CIPM MRA; or*
- (b) as described in the laboratory's scope of accreditation granted by a signatory to the ILAC Arrangement.*

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 CMC is calculated according to the procedures given in M3003 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 CMC in certificates issued under its accreditation.

The CMC may be described using various methods in the Schedule of Accreditation:

- As a single value that is valid throughout the range.
 - As an explicit function of the measurand or of a parameter (see below).
 - As a range of values. The range is stated such that the customer can make a reasonable estimate of the likely uncertainty at any point within the range.
 - As a matrix or table where the CMCs depend on the values of the measurand and a further quantity.
- In graphical form, providing there is sufficient resolution on each axis to obtain at least two significant figures for the CMC.

Expression of CMCs - symbols and units

In general, only units of the SI and those units recognised for use with the SI are used to express the values of quantities and of the associated CMCs. Nevertheless, other commonly used units may be used where considered appropriate for the intended audience. For example, the term "ppm" (part per million) is frequently used by manufacturers of test and measurement equipment to specify the performance of their products. Terms like this may be used in Schedules of Accreditation where they are in common use and understood by the users of such equipment, providing their use does not introduce any ambiguity in the capability that is being described.

When the CMC is expressed as an explicit function of the measurand or of a parameter, this often comprises a relative term (e.g., percentage) and an absolute term, i.e. one expressed in the same units as those of the measurand. This form of expression is used to describe the capability that can be achieved over a range of values. Some examples are shown below. It should be noted that these expressions are not mathematical formulae but are instead written in a commonly used shorthand for expressing uncertainties - therefore, for the purposes of clarity, an indication of how they are to be interpreted is also provided below.

DC voltage, 100 mV to 1 V: 0.0025 % + 5.0 μ V:

Over the range 100 mV to 1 V, the CMC is 0.0025 % \cdot V + 5.0 μ V, where V is the measured voltage.

Hydraulic pressure, 0.5 MPa to 140 MPa: 0.0036 % + 0.12 ppm/MPa + 4.0 Pa

Over the range 0.5 MPa to 140 MPa, the CMC is 0.0036 % \cdot p + (0.12 \cdot 10⁻⁶ \cdot p \cdot 10⁻⁶) + 4.0 Pa, where p is the measured pressure in Pa.

It should be noted that the percentage symbol (%) simply represents the number 0.01. In cases where the CMC is stated only as a percentage, this is to be interpreted as meaning percentage of the measured value or indication.

Thus, for example, a CMC of 1.5 % means 1.5 \cdot 0.01 \cdot i, where i is the instrument indication.