Laboratory	**Procom Systems, Survey No. 30/4, Second Floor, Dhayari, Pune, Maharashtra**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Certificate Number	**CC-2802**	**Page**	**1 of 5**
Validity	**16.08.2018 to 15.08.2020**	**Last Amended on**	**-**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		ELECTRO TECHNICAL CALIBRATION		
I.	**SOURCE**			
1.	DC Voltage[#]	1 mV to 100 mV 100 mV to 1000 V	1.43 % to 0.13 % 0.13 %	Using 5½ Digit Zeal Multi Function Calibrator By Direct method
2.	DC Current[#]	0.2 mA to 200 mA 200 mA to 10 A 10 A to 900 A	0.8 % to 0.15 % 0.15 % to 0.24 % 1.01 % to 1.2 %	Using 5½ Digit Zeal Multi Function Calibrator By Direct method Using 5½ Digit Zeal Multi Function Calibrator with Current Coil By Direct method
3.	AC Voltage[#]	**50 Hz** 5 mV to 200 mV 200 mV to 1000 V	 1.8 % to 0.4 % 0.4 % to 0.22 %	Using 5½ Digit Zeal Multi Function Calibrator By Direct method
4.	AC Current[#]	**50 Hz** 0.2 mA to 200 mA 200 mA to 10 A 10 A to 1000 A	 1.2 % to 0.5 % 0.5 % to 0.6 % 2.08 % to 2.50 %	Using 5½ Digit Zeal Multi Function Calibrator By Direct method Using 5½ Digit Zeal Multi Function Calibrator with Current Coil By Direct method

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Convenor

Anuja Anand
Program Manager

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
5.	Resistance#	1 Ω to 1000 MΩ	0.74 % to 2.5 %	Using Decade Resistance Box By Direct method
6.	Frequency#	45 Hz to 1kHz	0.311 % to 0.09 %	Using 5½ Digit Zeal Multi Function Calibrator By Direct method
7.	Temperature Simulation#			Using Yokogawa CA71 Multi Function Calibrator By Direct method.
	RTD Thermocouple K Type J Type T Type R Type S Type B Type N Type	(-) 200ºC to 800 ºC (-) 200ºC to 1300 ºC (-) 200ºC to 1200 ºC (-) 100ºC to 400 ºC 400ºC to 1200 ºC 300ºC to 1300 ºC 600ºC to 1350 ºC (-) 100ºC to 1200 ºC	0.85 °C 2.42 °C 2.42 °C 2.41 °C 3.71 °C 3.0 °C 3.28 °C 2.41 °C	
II.	**MEASURE**			
1.	DC Voltage#	10 mV to 100 mV 100 mV to 900 V	0.6 % to 0.02 % 0.02 % to 0.05 %	Using 6½ Picotest DMM M3510A By Direct Method
2.	DC Current#	1 mA to 100 mA 100 mA to 9 A	0.29 % to 0.07 % 0.07 % to 0.35 %	Using 6½ Picotest DMM M3510A By Direct Method
3.	Resistance# 2 Wire /4 Wire	100 Ω to 400 Ω 400 Ω to 10 MΩ	1.50 % to 0.06 % 0.06 % to 1.09 %	Using 6½ Picotest DMM M3510A By Direct Method
4.	Frequency#	100 Hz to 1 kHz 1 kHz to 100 kHz	0.1 % to 0.02 % 0.02 %	Using 6½ Picotest DMM M3510A By Direct Method

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
5.	Stop Watch#	6 sec to 60 min	0.32 s to 2.5 s	Using Digital Stop Watch By Comparison method
6.	Temperature Simulation#			Using 6½ DMM Picotest DMM M3510A By Direct method.
	Thermocouple			
	K Type	(-)100ºC to 1100 ºC	1.23 °C	
	J Type	(-)100ºC to 700 ºC	1.23 °C	
	T Type	(-)100ºC to 400 ºC	1.75 °C	
	R Type	100ºC to 1600 ºC	3.06 °C	
	S Type	100ºC to 1600 ºC	2.17 °C	
	B Type	700ºC to 1350 ºC	2.36 °C	
	N Type	(-)100ºC to 1200 ºC	1.54 °C	

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		THERMAL CALIBRATION		
I.	**TEMPERATURE**			
1.	RTD & T/C Temperature Sensors (With & Without Indicators / Controllers), Digital Thermometers , Glass Thermometers , Temperature Gauges[#]	50 °C to 250 °C	0.3 °C	Using 4 wire RTD sensor with Handy Digital Calibrator & Liquid bath by Comparison method.
2.	RTD & T/C Temperature Sensors (With & Without Indicators / Controllers),Digital Thermometers , Glass Thermometers , Temperature Gauges[#]	250 °C to 500 °C 500 °C to 1200 °C	1.2 °C 3.5 °C	Using R Type T/C sensor and Handy Digital Calibrator with Dry Well Bath by Comparison Method.
3.	Thermal/Climatic Chambers, Hot Air Ovens, Industrial Autoclaves[♣] (Non-Medical Use)	(-) 80 °C to 250 °C	1.1°C	Using Multiple RTD Sensors with Data logger by Multipoint mapping method.

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
4.	Hot Air Ovens, Chambers, Furnaces♣	250°C to 1200°C	4.4°C	Using Multiple N Type T/C Sensors with Data logger by Multi-Point Mapping Method.

*** Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%**
♣Only for Site Calibration
 # The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.

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