

Laboratory Elman Engineering, No. 2/384A, HMT Garden, Bodipalayam Post,
Seerapalayam Village, Madukkarai, Coimbatore, Tamil nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2860 **Page** 1 of 3

Validity 10.10.2018 to 09.10.2020 **Last Amended on** -

	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
<u>ELECTRO TECHNICAL CALIBRATION</u>				
I.	SOURCE			
1.	DC Voltage*	1 mV to 100 mV	0.015 mV to 0.12 mV	Using Metravi 14+ Multi Function Calibrator by Direct Method
2.	Resistance*	1 Ω to 390 Ω	0.140 Ω to 0.364 Ω	Using Metravi 14+ Multi Function Calibrator by Direct Method
3.	Temperature Simulation* (Indicator, Controller, Recorder)			Using Metravi 14+ Multi Function Calibrator by Direct Method
	Thermocouple			
	K-Type	(-) 200°C to 1372 °C	1.98 °C	
	J-Type	(-) 200°C to 1200 °C	0.83 °C	
	E-Type	(-) 200°C to 1000 °C	1.98 °C	
	B-Type	600 °C to 1820 °C	2.53 °C	
	S-Type	0 °C to 1767 °C	2.59 °C	
	R-Type	0 °C to 1767 °C	2.59 °C	
	N-Type	(-) 200°C to 1300°C	1.56 °C	
	T-Type	(-)200°C to 400 °C	1.05 °C	
	PT100 (RTD Type)	(-) 200°C to 800 °C	1.43 °C	
II.	MEASURE			
1.	DC Voltage*	1 mV to 50 mV 50 mV to 450 mV	0.015 mV to 0.063 mV 0.063 mV to 0.55 mV	Using Metravi 14+ Multi Function Calibrator by Direct Method
2.	Resistance*	1 Ω to 400 Ω 400 Ω to 4 k Ω	0.140 Ω to 0.364 Ω 0.364 Ω to 0.00346 k Ω	Using Metravi 14+ Multi Function Calibrator by Direct Method

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3.	Temperature Simulation* (Indicator, Controller, Recorder)			Using Metravi 14+ Multi Function Calibrator by Direct Method
	Thermocouple			
	K-Type	50°C to 1200 °C	1.98 °C	
	J-Type	50°C to 600 °C	0.81 °C	
	E-Type	50°C to 800 °C	1.98 °C	
	B-Type	600 °C to 1800 °C	2.53 °C	
	S-Type	400 °C to 1500 °C	2.13 °C	
	R-Type	400 °C to 1500 °C	2.13 °C	
	N-Type	50°C to 1050°C	1.56 °C	
	T-Type	50°C to 400 °C	1.05 °C	
	PT100 (RTD Type)	50°C to 350 °C	0.71 °C	

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<u>THERMAL CALIBRATION</u>				
I.	TEMPERATURE			
1.	RTD's/ Thermocouples, Temperature Controllers/ Indicators with Sensor, Recorder/ Data Logger with Sensor*	50 °C to 400 °C 400°C to 1200 °C	0.48 °C 2.934 °C	Using RTD, S-Type thermocouple with MFC, Dry Block Calibrator
2.	Temperature Indicator (for all non-medical applications) of Bath, Oven, Muffle Furnace*	50 °C to 400 °C 400°C to 1200 °C	0.21 °C 2.56 °C	Using RTD, S Type Thermocouple with MFC (Single Point Calibration)
3.	Oven, Furnace *	150 °C to 600 °C 600°C to 1200 °C	3.24 °C 5.10 °C	Using N-Type Thermocouples With Data Logger (Mapping) Multi Point Calibration

* Measurement Capability is expressed as an uncertainty (\pm) at a confidence probability of 95%

*Only for Site Calibration

Shally Sharma
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