

Laboratory Centre for Testing and Calibration, HLL Lifecare Limited, R & D
Corporate Building, Akkulam, Sreekariyam, Thiruvananthapuram,
Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2505 (In lieu of C-1284, C-1285, C-1286) **Page** 1 of 4

Validity 17.11.2017 to 16.11.2019 **Last Amended on** 26.12.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
<u>ELECTRO-TECHNICAL CALIBRATION</u>				
1.	DC Current [§]	190 μ A to 300mA 300mA to 10 A	0.032% to 0.015 % 0.015% to 0.15%	Using Multiproduct Calibrator By Direct Method
2.	DC Voltage [§]	329mV to 32 V 32 V to 1000V	0.008% 0.008% to 0.064%	Using Multiproduct Calibrator By Direct Method
3.	Resistance [§]	2 Ω to 33K Ω 33k Ω to 1000V	0.88% to 0.02% 0.02% to 1.85%	Using Multiproduct Calibrator By Direct Method
4.	AC Voltage [§]	45 Hz to 1kHz 30 mV to 300mV 300mV to 1000V	0.44 % to 0.087% 0.087% to 0.19%	Using Multiproduct Calibrator By Direct Method
5.	AC Current [§]	45 Hz to 1kHz 329mA to 1A 1A to 10A	0.42% to 0.16% 0.16% to 0.20 %	Using Multiproduct Calibrator By Direct Method
6.	Temperature Simulation K Type TC [§]	(-) 200°C to 0°C 0°C to 650°C	0.4°C to 0.2°C 0.2°C to 0.5°C	Using Multiproduct Calibrator By Direct Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

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<u>MECHANICAL CALIBRATION</u>				
I. PRESSURE INDICATING DEVICES				
1.	Pressure ^s	0 bar to 20 bar	0.02 bar	Using Multifunction Calibrator by Comparison Method as per DKD R6-1
II. ACCELERATION AND SPEED				
1.	RPM [*]	100 rpm to 1000 rpm 1000 rpm to 12000r rpm	2 rpm 22 rpm	Using Tachometer by Comparison Method
III. WEIGHTS				
1.	Mass –Weights ^s (F1 class and below)	1mg 2mg 5 mg 10 mg 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g	0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.12 mg 0.10 mg 0.15 mg 0.10 mg 0.10 mg 0.14 mg	Using E2 class weights by ABBA Method OIML-R111-1

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IV.	WEIGHING SCALE AND BALANCE			
1.	Mass-Weighing scale [#] Readability:1 mg	1mg to 200 gm	0.6 mg	Using E2 class weights by Comparison OIML-R76-1

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THERMAL CALIBRATION

I.	TEMPERATURE			
1.	Thermal Sensors [§]	(-)30 °C to 125°C	0.09°C	Using SPRT with Datalogger by Comparison Method
2.	Thermal Chambers*	(-)20 °C to 150 °C	7.30°C	Using 9 RTDs with Datalogger by Comparison Method

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