



CC-2634

CERTIFICATE OF CALIBRATION

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godrej | CALIBRATION SERVICES

Godrej & Boyce Mfg. Co. Ltd.,
Calibration Services, Plant 18 B, 1st Floor,
Pirojshanagar, Vikhroli,
Mumbai - 400079.
Dir.: +91-22-67965914-48

FR-QT-21		ULR No.:	CC26342300009707F
Certificate No. :	M-230228-3-1	Date of Issue :	10-Mar-23
Date of Calibration :	28-Feb-23 To 03-Mar-23	Recom. Due Date :	03-Mar-24
Customer Details :		Calibrated at :	Lab
NATIONAL CENTRE FOR QUALITY CALIBRATION		Date of Receipt :	28-Feb-23
4, Abhishree Corporate Park, Nr. Swagat Bungalows BRTS,		Cond. On Receipt :	Satisfactory
Opp. Shell Petrol Pump, Iskon-Bopal Road,		Receipt No. :	M-230228-3
Ambli Ahmedabad, Gujarat India 380058			
Details of Under Calibration instrument			
Name :	Multi-Product Calibrator (With Scope Option)	Range :	As Per Report
Make :	Fluke	Sr. No. :	3043901
L.C. :	As Per Report	Model :	5522A
I.D. No. :	NCQC/E-01		
Details of Master Equipment			
Name	ID No./Sr. No.	Valid Upto	Traceability
Reference Multimeter(8508A)	LQE090/221965838	16-Nov-23	ETDC,Bangalore
Multifunction Calibrator(5720A)	LQE091/2216202	14-Nov-23	ETDC,Bangalore
AC Measurement Standard(5790A)	LQE128/3116031	19-Sep-23	IDEMI Mumbai
Current Shunt (10 mA)	LQE112/2232002	14-Nov-23	ETDC,Bangalore
Current Shunt (30 mA)	LQE113/2232001	14-Nov-23	ETDC,Bangalore
Current Shunt (3A)	LQE115/2251001	14-Nov-23	ETDC,Bangalore
Current Shunt (300 mA)	LQE114/2251002	14-Nov-23	ETDC,Bangalore
Current Shunt (10A)	LQE116/2251003	14-Nov-23	ETDC,Bangalore
Current Shunt (20A)	LQE117/1860015	14-Nov-23	ETDC,Bangalore
LCR Meter	LQE094/1043498	01-Dec-23	IDEMI Mumbai
Precision Power Analyzer	LQE105/91N723777	03-Feb-24	IDEMI Mumbai
Precision Power Analyzer	LQE105/91N723777	15-Nov-23	G&B, Chennai
Timer/Counter/Analyzer	LQE095/238691	24-Jan-24	IDEMI Mumbai
Phase Angle Meter	LQE104/233	20-Feb-24	IDEMI Mumbai
Work Instruction No. : WI-ET-18,20,21,22,23,25,26,27,28,36			
Environmental Details : Temperature : 25±2°C Relative Humidity : 50±20% RH			
REMARK :			
1. Calibration Points are taken as per Customer's Request.			
2. Group : Electro-Technical, Discipline : Direct Current, Alternating Current < 1 GHz, Time & Frequency, Temperature Simulation			
AUTHORIZED SIGNATORY : AK Kulkarni			Validity unknown
DESIGNATION : ASSO. MANAGER			Digitally signed by DSM'S GODREJ AND BOYCE MFG CO LTD
CALIBRATED BY : Lab Engineer : Bhavesh Patil			Date: 2023.03.10 11:30:30 +05:30
			Reason: Calibration Certificate Location: Mumbai

NCQC System Certificate No. 260

NCQC
Valid up to 03-03-2024
Reviewed

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Regd. Office: Pirojshanagar, L.B.S. Marg, Vikhroli, Mumbai - 400 079.T.:+91-22-67961700/1800 W:www.godrej.com
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FR-QT-21

Certificate No. M-220302-22-1

ULR Number : CC263422000009849F

Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.I. 95.45 (k)		
DC voltage :	329.9999 mV	0.1000mV	0.09969	0.00031	0.1300	2	
		1.0000mV	0.99929	0.00071	0.1300	2	
		50.0000mV	49.99959	0.00041	0.0009	2	
		100.0000mV	99.99922	0.00078	0.0009	2	
		329.0000mV	328.9976	0.0024	0.0009	2	
		-329.0000mV	-329.0019	0.0019	0.0009	2	
	3.299999 V	0.330000V	0.3300000	0.0000000	0.0009	2	
		1.000000V	1.0000008	-0.0000008	0.0009	2	
		3.290000V	3.2900029	-0.0000029	0.0009	2	
		-3.290000V	-3.2900028	0.0000028	0.0009	2	
	32.99999 V	5.00000V	5.0000214	-0.0000214	0.0009	2	
		10.00000V	10.0000149	-0.0000149	0.0009	2	
		32.90000V	32.900124	-0.000124	0.0009	2	
		-32.90000V	-32.900242	0.000242	0.0009	2	
	329.9999 V	50.0000V	50.000161	-0.000161	0.0009	2	
		100.0000V	100.000254	-0.000254	0.0009	2	
		329.9000V	329.89964	0.00036	0.0009	2	
		-329.9000V	-329.89979	-0.00021	0.0009	2	
	1020.000 V	500.000V	499.99959	0.00041	0.0009	2	
		750.000V	749.99941	0.00059	0.0009	2	
		1000.000V	999.99916	0.00084	0.0009	2	
		-1000.000V	-999.99915	-0.00085	0.0009	2	
	AC voltage: 32.999 mV	1mV@10Hz	1.000mV	1.0076	-0.0076	0.7200	2
		1mV@50Hz	1.000mV	1.0025	-0.0025	0.7200	2
6mV@20kHz		6.000mV	6.0015	-0.0015	0.7200	2	
AC voltage: 329.999 mV	33mV@10Hz	33.000mV	32.9963	0.0037	0.0348	2	
	33mV@50Hz	33.000mV	33.0001	-0.0001	0.0170	2	
	33mV@500kHz	33.000mV	33.068	-0.068	0.1034	2	
	329.9mV@10Hz	329.900mV	329.862	0.038	0.0250	2	
	329.9mV@50Hz	329.900mV	329.878	0.022	0.0045	2	
	329.9mV@500kHz	329.900mV	329.812	0.088	0.1300	2	



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 Dir.: +91 - 22-67965914-48

FR-QT-21		Certificate No. M-220302-22-1		ULR Number : CC263422000009849F		
Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L 95.45 (k)	
AC voltage: 3.29999V	3.29V@10Hz	3.29000V	3.28949	0.00051	0.0232	2
	3.29V@50Hz	3.29000V	3.28915	0.00085	0.0030	2
	3.29V@500kHz	3.29000V	3.28986	0.00014	0.1300	2
AC voltage: 32.9999V	32.9V@10Hz	32.9000V	32.8961	0.0039	0.0232	2
	32.9V@50Hz	32.9000V	32.9001	-0.0001	0.0080	2
	32.9V@100kHz	32.9000V	32.8978	0.0022	0.0243	2
AC voltage: 329.999V	329.9V@45Hz	329.900V	329.927	-0.027	0.0050	2
	329.9V@50Hz	329.900V	329.926	-0.026	0.0050	2
	329.9V@20kHz	329.900V	329.907	-0.007	0.0582	2
AC voltage : 1020V	1000V@50Hz	1000.00V	999.973	0.027	0.0047	2
	1000V@10kHz	1000.00V	1,000.086	-0.086	0.0100	2
DC Current: 329.999µA	1.000µA	1.000µA	1.00035	-0.00035	0.0600	2
	10.000µA	10.000µA	9.99992	0.00008	0.0060	2
	329.000µA	329.000µA	328.9886	0.0114	0.0060	2
	-329.000µA	-329.000µA	-328.9881	-0.0119	0.0060	2
DC Current: 3.29999mA	0.50000mA	0.50000mA	0.5000068	-0.0000068	0.0060	2
	1.00000mA	1.00000mA	1.0000121	-0.0000121	0.0060	2
	3.29000mA	3.29000mA	3.290051	-0.000051	0.0030	2
	-3.29000mA	-3.29000mA	-3.290052	0.000052	0.0030	2
DC Current: 32.9999mA	5.0000mA	5.0000mA	5.000051	-0.000051	0.0026	2
	10.0000mA	10.0000mA	10.000047	-0.000047	0.0025	2
	32.9000mA	32.9000mA	32.90039	-0.00039	0.0070	2
	-32.9000mA	-32.9000mA	-32.90025	0.00025	0.0070	2
DC Current: 329.999mA	50.000mA	50.000mA	50.00041	-0.00041	0.0061	2
	100.000mA	100.000mA	100.00038	-0.00038	0.0210	2
	329.900mA	329.900mA	329.9015	-0.0015	0.0579	2
	-329.900mA	-329.900mA	-329.9024	0.0024	0.0579	2
DC Current: 2.99999A	1.00000A	1.00000A	0.999902	0.000098	0.0485	2
	2.90000A	2.90000A	2.900016	-0.000016	0.0599	2
	-2.90000A	-2.90000A	-2.900056	0.000056	0.0599	2



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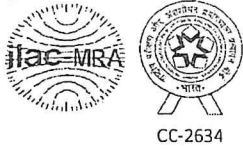
Godrej & Boyce Mfg. Co. Ltd.,
 Calibration Services, Plot 18 B, 1st Floor,
 Pirojshanagar, Vikhroli,
 Mumbai - 400079.
 Dir.: +91 -22-67965914-48

FR-QT-21 Certificate No. M-220302-22-1		ULR Number : CC263422000009849F				
Range		UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L 95.45 (k)
DC Current: 20A	5.0000A	5.0000A	4.999919	0.000081	0.0533	2
	10.0000A	10.0000A	9.999815	0.000185	0.0486	2
	-10.0000A	-10.0000A	-9.999089	-0.000911	0.0486	2
	20.0000A	19.9900A	19.998499	-0.008499	0.0650	2
	-20.0000A	-19.9900A	-19.998661	0.008661	0.0650	2
AC Current: 329.99µA	30µA@10Hz	30.00µA	29.9938	0.0062	0.1064	2
	30µA@50Hz	30.00µA	29.9941	0.0059	0.1064	2
	30µA@1kHz	30.00µA	30.0033	-0.0033	0.1063	2
AC Current: 3.29999mA	0.33mA@10Hz	0.33000mA	0.329874	0.000126	0.0990	2
	0.33mA@50Hz	0.33000mA	0.329922	0.000078	0.0990	2
	0.33mA@1kHz	0.33000mA	0.329948	0.000052	0.0990	2
AC Current: 32.9999mA	3.30mA@10Hz	3.30000mA	3.29849	0.00151	0.0250	2
	3.30mA@50Hz	3.30000mA	3.29961	0.00039	0.0250	2
	3.30mA@10kHz	3.30000mA	3.29964	0.00036	0.0250	2
AC Current: 329.999mA	33mA@10Hz	33.000mA	32.9921	0.0079	0.0250	2
	33mA@50Hz	33.000mA	32.9994	0.0006	0.0250	2
	33mA@10kHz	33.000mA	32.9944	0.0056	0.0250	2
	329.9mA@10Hz	329.900mA	329.934	-0.034	0.0250	2
	329.9mA@50Hz	329.900mA	329.836	0.064	0.0250	2
AC Current: 2.9999A	1.1A@10Hz	1.10000A	1.099562	0.000438	0.0250	2
	1.1A@50Hz	1.10000A	1.100036	-0.000036	0.0250	2
	1.1A@10kHz	1.10000A	1.103817	-0.003817	0.0250	2
AC Current: 10.9999A	3A@45Hz	3.0000A	2.99947	0.00053	0.0250	2
	3A@50Hz	3.0000A	2.99983	0.00017	0.0250	2
	3A@5kHz	3.0000A	2.99391	0.00609	0.0250	2
AC Current: 20.5A	11A@50Hz	11.0000A	10.99992	0.00008	0.0354	2
	11A@5kHz	11.0000A	10.99749	0.00251	0.0354	2
	20A@50Hz	20.0000A	19.99688	0.00312	0.0352	2
	20A@5kHz	20.0000A	19.99289	0.00711	0.0600	2



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FR-QT-21 Certificate No. M-220302-22-1		ULR Number : CC26342200000849F				
Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L. 95.45 (k)	
Resistance : 2 Wire Mode	10.9999Ω	0.100Ω	0.1000168	-0.0000168	0.0064	2
		1.000Ω	0.999868	0.000132	0.0060	2
		10.900Ω	10.900121	-0.000121	0.0013	2
	32.9999Ω	32.9000Ω	32.90014	-0.00014	0.0013	2
	109.9999Ω	109.9000Ω	109.90028	-0.00028	0.0013	2
	329.9999Ω	329.9000Ω	329.9064	-0.0064	0.0013	2
	1.099999kΩ	1.090000kΩ	1.090085	-0.000085	0.0013	2
	3.299999kΩ	3.290000kΩ	3.290042	-0.000042	0.0013	2
	10.99999kΩ	10.90000kΩ	10.900021	-0.000021	0.0013	2
Resistance : 4 Wire Mode	10.9999Ω	0.100Ω	0.1000128	-0.0000128	0.0064	2
		1.000Ω	0.9999417	0.0000583	0.0060	2
		10.900Ω	10.900041	-0.000041	0.0013	2
	32.9999Ω	32.9000Ω	32.90019	-0.00019	0.0013	2
	109.9999Ω	109.9000Ω	109.90004	-0.00004	0.0013	2
	329.9999Ω	329.9000Ω	329.9000	0.0000	0.0013	2
	1.099999kΩ	1.090000kΩ	1.0899973	0.0000027	0.0013	2
	3.299999kΩ	3.290000kΩ	3.289981	0.000019	0.0013	2
	10.99999kΩ	10.90000kΩ	10.899968	0.000032	0.0013	2
Resistance : COMP Off Mode	329.9999kΩ	32.90000kΩ	32.90008	-0.00008	0.0013	2
		109.9000kΩ	109.90008	-0.00008	0.0013	2
	1.099999MΩ	1.090000MΩ	1.099931	-0.009931	0.0013	2
	3.299999MΩ	3.290000MΩ	3.289905	0.000095	0.0053	2
	10.99999MΩ	10.90000MΩ	10.900141	-0.000141	0.0031	2
	32.99999MΩ	32.9000MΩ	32.89046	0.00954	0.0422	2
	109.9999MΩ	109.9000MΩ	109.90317	-0.00317	0.0200	2
	329.9999MΩ	329.900MΩ	329.802	0.098	0.2300	2
1100MΩ	1100.00MΩ	1,100.048	-0.048	0.2300	2	

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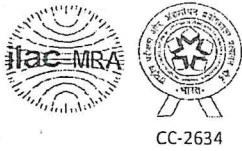
GODREJ & BOYCE CALIBRATION SERVICES

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Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L 95.45 (k)	
Frequency	119.99Hz, 3V	1.00Hz	0.99999835	0.00000165	0.0020	2
	119.99Hz, 3V	5.00Hz	5.00004878	-0.00004878	0.0020	2
	119.99Hz, 3V	50.00Hz	50.00002229	-0.00002229	0.0009	2
	1199.9Hz, 3V	120.00Hz	119.99992477	0.00007523	0.0009	2
	1199.9Hz, 3V	500.0Hz	499.99991172	0.00008828	0.0009	2
	1199.9Hz, 3V	1000.0Hz	999.99995497	0.00004503	0.0008	2
	1.199kHz, 3V	1.200kHz	1.19999922	0.00000078	0.0008	2
	11.999kHz, 3V	12.000kHz	11.9999932	0.0000068	0.0008	2
	119.99kHz, 3V	120.00kHz	119.99991399	0.00008601	0.0008	2
	119.99kHz, 3V	500.0kHz	499.99964188	0.00035812	0.0008	2
	2MHz, 3V	1.200MHz	1.199999143	0.000000857	0.0008	2
2MHz, 3V	2.000MHz	1.999993401	0.000006599	0.0008	2	
CAPACITANCE@100Hz	10.0000µF	9.99512	0.00488	0.22	2	
	11.0000µF	10.9912	0.0088	0.22	2	
	15.0000µF	14.9908	0.0092	0.22	2	
	32.9000µF	32.9021	-0.0021	0.22	2	
	33.000µF	33.0287	-0.0287	0.22	2	
	50.000µF	50.0768	-0.0768	0.22	2	
CAPACITANCE@1000Hz	100.000µF	100.027	-0.027	0.22	2	
	0.4000nF	0.400285	-0.000285	0.70	2	
	1.0000nF	1.00035	-0.00035	0.70	2	
	1.1000nF	1.10038	-0.00038	0.70	2	
	1.5000nF	1.50098	-0.00098	0.70	2	
	3.0000nF	3.00391	-0.00391	0.70	2	
	3.3000nF	3.30679	-0.00679	0.70	2	
	5.0000nF	5.00589	-0.00589	0.70	2	
	10.000nF	10.0006	-0.0006	0.70	2	
	11.000nF	10.9988	0.0012	0.22	2	
	15.000nF	14.9941	0.0059	0.22	2	
	32.000nF	31.9891	0.0109	0.22	2	
	33.000nF	32.9924	0.0076	0.22	2	
	50.000nF	49.9887	0.0113	0.22	2	
	100.00nF	99.9623	0.0377	0.22	2	
	110.000nF	109.982	0.018	0.22	2	
150.000nF	149.949	0.051	0.22	2		
329.000nF	328.953	0.047	0.22	2		

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FR-QT-21					
Certificate No. M-220302-22-1		ULR Number : CC263422000009 849F			
Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L 95.45 (k)
CAPACITANCE@1000Hz	1.0000µF	1.00164	-0.00164	0.22	2
	10.0000µF	9.99514	0.00486	0.22	2
	11.0000µF	10.9918	0.0082	0.22	2
	15.0000µF	14.9912	0.0088	0.22	2
	32.9000µF	32.9042	-0.0042	0.22	2
	33.000µF	33.0288	-0.0288	0.22	2
	50.000µF	50.0770	-0.0770	0.22	2
	100.000µF	100.035	-0.035	0.22	2
	110.000µF	110.141	-0.141	0.22	2
	150.000µF	150.281	-0.281	0.22	2
	329.999µF	329.996	0.003	0.22	2
	0.33000mF	0.330215	-0.000215	0.22	2
	0.50000mF	0.502883	-0.002883	0.22	2
	1.00000mF	0.999568	0.000432	0.22	2
Source: Thermocouple : K type	-200.00°C	-199.15	-0.85	0.02°C	2
	-100.00°C	-100.11	0.11	0.02°C	2
	0.00°C	-0.01	0.01	0.02°C	2
	200.00°C	199.874	0.126	0.02°C	2
	400.00°C	399.918	0.082	0.02°C	2
	800.00°C	799.913	0.087	0.02°C	2
	1000.00°C	999.865	0.135	0.02°C	2
	1370.00°C	1,369.914	0.086	0.02°C	2
Source: Thermocouple : S type	0.00°C	0.01	-0.01	0.04°C	2
	100.00°C	99.89	0.11	0.04°C	2
	400.00°C	399.88	0.12	0.04°C	2
	800.00°C	799.85	0.15	0.04°C	2
	1200.00°C	1,199.86	0.14	0.04°C	2
	1767.00°C	1,766.82	0.18	0.04°C	2
Source : RTD 385 (PT100)	-200.000°C	-199.999	-0.001	0.012°C	2
	-100.000°C	-100.007	0.007	0.012°C	2
	-50.000°C	-50.008	0.008	0.012°C	2
	0.000°C	-0.001	0.001	0.012°C	2
	50.000°C	50.002	-0.002	0.012°C	2
	100.000°C	99.994	0.006	0.012°C	2
	200.000°C	199.996	0.004	0.012°C	2
	400.000°C	399.986	0.014	0.012°C	2
	600.000°C	599.982	0.018	0.012°C	2
800.000°C	799.981	0.019	0.012°C	2	

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CERTIFICATE OF CALIBRATION

CALIBRATION SERVICES

Godrej & Boyce Mfg. Co. Ltd.,
 Calibration Services, Plot 18 B, 1st Floor,
 Pirojshanagar, Vikhroli,
 Mumbai - 400079.
 Dir.: +91-22-67965914-48

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FR-QT-21

Certificate No. M-220302-22-1

ULR Number : CC2634220000849F

Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty $\pm(\%)$	Coverage Factor @ C.L 95.45 (k)	
Measure: Thermocouple :K type	-199.95°C	-200.00	0.05	0.04°C	2	
	0.02°C	0.00	0.02	0.04°C	2	
	200.04°C	200.00	0.04	0.04°C	2	
	400.04°C	400.00	0.04	0.04°C	2	
	800.03°C	800.00	0.03	0.04°C	2	
	1,372.06°C	1370.00	2.06	0.04°C	2	
Measure: Thermocouple : S type	0.02°C	0.00	0.02	0.15°C	2	
	100.04°C	100.00	0.04	0.15°C	2	
	400.08°C	400.00	0.08	0.15°C	2	
	800.06°C	800.00	0.06	0.15°C	2	
	1,200.08°C	1200.00	0.08	0.15°C	2	
	1,767.00°C	1767.00	0.00	0.15°C	2	
Thermocouple Sourcing 10 μ V/°C mode	200.00°C	200.02	-0.02	0.20°C	2	
	-200.00°C	-199.98	-0.02	0.20°C	2	
	1000.00°C	1,000.06	-0.06	0.20°C	2	
	-1000.00°C	-999.96	-0.04	0.20°C	2	
	10000.00°C	10,000.12	-0.12	0.20°C	2	
	-10000.00°C	-9,999.96	-0.04	0.20°C	2	
Thermocouple Measurement 10 μ V/°C mode	9,999.96°C	10000.00	-0.04	0.10°C	2	
	-9,999.99°C	-10000.00	0.01	0.10°C	2	
	30,000.06°C	30000.00	0.06	0.10°C	2	
	-29,999.08°C	-30000.00	0.92	0.10°C	2	
Phase Angle : 3V/1V/50Hz	0.10°	0.10°	0.101	-0.001	1.20°	
	30.00°	30.00°	30.006	-0.006	1.20°	
	45.00°	45.00°	45.006	-0.006	1.20°	
	60.00°	60.00°	60.009	-0.009	1.20°	
	90.00°	90.00°	90.003	-0.003	1.20°	
Scope : DC Voltage	130Vdc at 1 M Ω	1.000mV	0.99634	0.00366	0.1300	2
		10.000mV	9.99684	0.00316	0.0130	2
		109.90mV	109.90135	-0.00135	0.0008	2
		2.1900V	2.190221	-0.000221	0.0008	2
		11.00V	10.999934	0.000066	0.0008	2
		130.00V	130.00577	-0.00577	0.0008	2
Scope : DC Voltage	6.6Vdc at 50 Ω	1.000mV	1.00054	-0.00054	0.1300	2
		10.000mV	10.01571	-0.01571	0.0130	2
		109.90mV	109.90645	-0.00645	0.0008	2
		2.1900V	2.191127	-0.001127	0.0008	2
		6.599V	6.602911	-0.003911	0.0008	2

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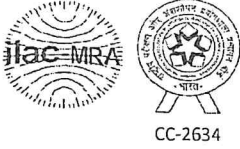
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FR-QT-21		Certificate No. M-220302-22-1		ULR Number : CC263422000009849F		
Range	UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L 95.45 (k)	
Scope Option : AC Voltage (Square Wave)	130Vp-p at 1kHz at 1MΩ	10.000mV	10.0076	-0.0076	0.0280	2
		109.90mV	109.8892	0.0108	0.0063	2
		2.1900V	2.1997	-0.0097	0.0030	2
		11.00V	10.9963	0.0037	0.0035	2
		130.00V	129.9423	0.0577	0.0041	2
	6.6Vp-p at 1kHz at 50Ω	10.0000mV	10.0076	-0.0076	0.0280	2
		109.90mV	109.9447	-0.0447	0.0063	2
		2.1900V	2.19206	-0.00206	0.0030	2
		6.599V	6.6048	-0.0058	0.0032	2
						2
Leveled SineWave : Flatness 50Ω @ 5 mVP-P	50kHz	5.00mV	5.0042	-0.0042	0.32dB	2
	10MHz	5.00mV	5.0046	-0.0046	0.32dB	2
	50MHz	5.00mV	5.041	-0.041	0.32dB	2
	100MHz	5.00mV	5.083	-0.083	0.38dB	2
	200MHz	5.00mV	5.098	-0.098	0.38dB	2
	300MHz	5.00mV	5.156	-0.156	0.42dB	2
	500MHz	5.00mV	5.229	-0.229	0.52dB	2
	600MHz	5.00mV	5.321	-0.321	0.52dB	2
Leveled SineWave : Flatness 50Ω @ 10 mVp-p	50kHz	10.00mV	9.968	0.032	0.32dB	2
	10MHz	10.00mV	10.451	-0.451	0.32dB	2
	50MHz	10.00mV	10.482	-0.482	0.32dB	2
	100MHz	10.00mV	10.094	-0.094	0.38dB	2
	200MHz	10.00mV	10.188	-0.188	0.38dB	2
	300MHz	10.00mV	10.221	-0.221	0.42dB	2
	500MHz	10.00mV	10.223	-0.223	0.52dB	2
	600MHz	10.00mV	10.196	-0.196	0.52dB	2
1000MHz	10.00mV	10.231	-0.231	1.32dB	2	

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FR-QT-21		Certificate No. M-220302-22-1					ULR Number : CC263422000009849F
Range		UUC Reading	Standard Reading	Error	Measurement Uncertainty ±(%)	Coverage Factor @ C.L. 95.45 (k)	
Leveled SineWave : Flatness 50Ω @ 30 mVp-p	50kHz	30.0mV	29.974	0.026	1.3dB	2	
	10MHz	30.0mV	30.008	-0.008	1.3dB	2	
	50MHz	30.0mV	30.034	-0.034	1.3dB	2	
	100MHz	30.0mV	29.728	0.272	1.3dB	2	
	200MHz	30.0mV	29.678	0.322	1.3dB	2	
	300MHz	30.0mV	29.902	0.098	1.3dB	2	
	500MHz	30.0mV	30.026	-0.026	1.3dB	2	
Timer Marker Function :		5.000S	4.99991159	0.00008841	0.0030	2	
		1.000S	0.9999842865	0.0000157135	0.0030	2	
		50.00mS	49.99992992	0.00007008	0.0300	2	
		20.00mS	19.9999821	0.0000179	0.0300	2	
		100.0nS	99.98	0.02	0.0600	2	
		50.00nS	49.96	0.04	0.0600	2	
		10.00nS	9.98	0.02	0.0600	2	
AC Power @50Hz @UNITY PF		5.000nS	4.96	0.04	0.0600	2	
		120V,0.01A	1.200W	1.2006	-0.0006	2.9500	2
		120V,0.1A	12.00W	12.001	-0.001	2.9200	2
		120V,1A	120.0W	120.018	-0.018	2.9200	2
		230V,5A	1150.0W	1,149.96	0.04	0.1200	2
Power @50Hz @ 0.2Lag		240V,20A	4800.0W	4,799.95	0.05	0.1200	2
		120V,0.01A	0.240W	0.2400	0.0000	2.9200	2
		120V,0.1A	2.400W	2.4003	-0.0003	2.9201	2
		120V,1A	24.00W	24.0093	-0.0093	2.9200	2
		230V,5A	230.0W	230.051	-0.051	0.5600	2
		120V,10A	240.0W	240.122	-0.122	0.5600	2
		240V,10A	480.0W	480.18	-0.18	0.5600	2
		240V,20A	960.0W	959.96	0.04	0.5600	2

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Table with columns: Range, UUC Reading, Standard Reading, Error, Measurement Uncertainty ±(%), Coverage Factor @ C.L. 95.45 (k). Rows include Power @50Hz @ 0.2Lead, Power Factor: 0.1 PF to 1 PF, and DC Power.

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Certificate No.:M-230228-3-1

ULR:CC26342300009707F

Remarks:

1. Equipment used for calibration were calibrated & traceable to National & International Standards.
2. This report refers only to particular item (s) submitted for calibration.
3. Godrej Calibration Services is not liable for any change in calibration data & performance specifications on account of malfunctioning of Standards / Instruments / Equipment covered by this report due to damage caused to it after issuance of this report.
4. The calibration results reported are valid at the time of and under the stated conditions of the measurements.
5. The Certificate should not be reproduced except in full without the prior permission from Godrej Calibration Service.
6. Satisfactory calibration report in no ways implies that the equipment calibrated is approved by NABL.
7. All precautions have been taken for any error or omission while calibrating the instruments and issuing this certificate. However Godrej Calibration Services shall not be liable for any loss or liability that may be arise to any party in this regards.
8. Readings given are average of 3 Measurements.
9. The reported Expanded Uncertainty is calculated at 95.45 % Confidence level with coverage factor k=2.

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