



CHAITANYA ELECTRICAL

All Type Electrical Work

GSTIN/UIN: 27IHEPS3717M1ZO | Mo.No: 09049320517, 8888036201

Gmail: chaitnyaelectricals2017@gmail.com

H-NO.B1/43 , OM Sai Nagar, Kamalapur - Jogeshwari . M.I.D.C. Waluj , Chhatrapati Sambhajinagar.431136.

Date: 24.05.2023

DECLARATION LETTER

I have undersigned declared that our PPE tools and equipment's are used in good condition. Our tool equipment's comply with standard make and ISI mark with 5-star energy efficient. I Hereby declare that the information provided above is true and correct to the best my knowledge, information and belief.

I shall be personally liable and responsible for all acts of omission and commission.

Refer calibration details: -

Equipment's Calibration Details: -

Name of System	Make	Model	Sr. No.	Calibration Due date
CB Time Interval Meter	SCOPE	SCOT M3K	2100.02 AG 1172	27.04.2024
Contact Resistance Meter	SCOPE	CRM 100B	2301.02 AG 1212	27.04.2024
5 kV Insulation Tester (Megger)	Megger	AIT 501	R200005940	21.02.2024
CT Injection Tester	Standard	Standard	8970003	19.02.2024
HI-POT Tester (HV Test Set)	SKE	SKE-6725	M-210118-12-1	01.11.2023
Earth Meter Tester	Metravi	1501	210807564	21.02.2024
Tapariya Tool kit-1	Tapariya	T-2012	ISI MARK	
Electrical Tester /Multimeter	Tapariya/MECO	Tapariya/MECO		19.02.2024
33 Insulating Hand Gloves	Classic	Kwality	738	6.01.2024

Authorized Signatory



TEST AND CALIBRATION REPORT



Product	SCOT M3K	Date Of Calibration(DOC)	28.04.2023
Chassis Number	AG 1108	Recommended next calibration: One year from DOC	
Serial Number	2100.02 AG 1172	Tested By	3PS
Customer	CHAITANYA ELECTRICAL AURANGABAD		

This test procedure is to be followed after burn-in and before dispatch of product. The procedure established the fitness of product as per the claimed technical specifications and its suitability to work under field condition.

Part 1 : This procedure covers Functional performance.

Part 2 : This procedure covers Calibration of the equipment.

Part 3 : This procedure covers safety measures and there compliance.

Part 1: Functional Test

Instrument is connected to simulator (SCOPE Make) and tests are carried out for 25 operations. Minimum & Maximum readings are noted down

Operation	Channel	Expected Value in mSec	Measured Value in mSec		Remark
			Minimum	Maximum	
CLOSE	R - R'	75 to 85	79	80	OK
	Y - Y'		80	81	OK
	B - B'		79	80	OK
OPEN	R - R'	15 to 25	19	20	OK
	Y - Y'		20	21	OK
	B - B'		20	21	OK
C-O	R - R'	65 to 75	69	70	OK
	Y - Y'		70	71	OK
	B - B'		69	70	OK

Tested By: *Shahy*



TEST AND CALIBRATION REPORT



Product	SCOT M3K	Serial Number	2100.02AG1172
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Part 2: Calibration Test

Reference Standard used :	SCALE TCV Calibration Tester calibrated by ARAI Pune.
1. Calibration Standard Name:	SCALE TCV_1
2. Calibration Standard Sr. No:	2204.00.AD05
3. Manufactured By	SCOPE
4. Calibration Report No.	ARAI/CAL/1912/3275
5. Calibration on :	28.04.2023
6. Next Calibration Due Date:	27.04.2024

Specification:

	Parameter	Expected Value
Time Interval	Close Time Main	100.061 mSec
	Open Time Main	50.043 mSec

Expected timing for Close and Open operation on SCALE TCV for all channels:

Operation	Channel	Expected Value in mSec		Measured Value in mSec	Remark
		Min	Max		
CLOSE	R - R'	99	101	100	OK
	Y - Y'	99	101	100	OK
	B - B'	99	101	100	OK
OPEN	R - R'	49	51	50	OK
	Y - Y'	49	51	50	OK
	B - B'	49	51	50	OK

Part 3: Safety Checks

Equipment used : 4 1/2 digit Digital Multimeter.

Channel	Resistance	Expected Value	Remarks
Contact Channel R-R'	R to EARTH	Less than 1KΩ	OK
	R' to EARTH	Less than 1KΩ	OK
	R to R'	Less than 2KΩ	OK
Contact Channel Y-Y'	Y to EARTH	Less than 1KΩ	OK
	Y' to EARTH	Less than 1KΩ	OK
	Y to Y'	Less than 2KΩ	OK
Contact Channel B-B'	B to EARTH	Less than 1KΩ	OK
	B' to EARTH	Less than 1KΩ	OK
	B to B'	Less than 2KΩ	OK
Breaker Control	+ to C+	OPEN	OK
Breaker Control	+ to T+	OPEN	OK
Earthing	Master Earthing to Chassis	< 1 Ω	OK

Tested By: *Shubh*



Verified By: *M. G. G.*

TEST AND CALIBRATION REPORT



Product	CRM 100B	Date Of Calibration(DOC)	28.04.2023
Chassis Number	AG 614	Recommended next calibration: One year from DOC	
Serial Number	2301.02 AG 1212	Tested By	AY
Customer	CHAITANYA ELECTRICAL AURANGABAD		

This test procedure is to be followed after burn-in and before dispatch of product. The procedure established the fitness of product as per the claimed technical specifications and its suitability to work under field condition.

Part 1 : This procedure covers Functional and Calibration performance.

Part 2 : This procedure covers safety measures and there compliance.

Part 1: Functional and Calibration Test

Test No.	Acceptance limits of Current		Measured Value of current in Amps	Resistance Range Selected	Standard Resistors used $\mu\Omega$	Acceptance limits of Resistance in $\mu\Omega$		Measured value of Resistance in $\mu\Omega$	Remark
	MIN	MAX				MIN	MAX		
Details of calibration standard used									
1.	Precision Shunt Set Name		CRM SHUNT SET 1						
2.	Precision Shunt Set Sr.No.		MMC/CRM SHUNTSET1/QAT1						
3.	Manufactured by		PEMI						
4.	Calibration Report No.		PEMI/03/08/19/CRMSS1-QAT1						
5.	Calibrated On		28.04.2023						
6.	Next Calibration Due Date		27.04.2024						
1	99.0A	101.0A	100.2 A	200 $\mu\Omega$	40.10 $\mu\Omega$	39.2	41.0	40.0 $\mu\Omega$	OK
2	99.0A	101.0A	100.2 A		160.50 $\mu\Omega$	157.2	163.8	161.8 $\mu\Omega$	OK
3	99.0A	101.0A	100.2 A	2000 $\mu\Omega$	400.60 $\mu\Omega$	392	410	400 $\mu\Omega$	OK
4	99.0A	101.0A	100.2 A		1601.60 $\mu\Omega$	1569	1635	1601 $\mu\Omega$	OK

Part 2: Safety Checks

Test No.	Test Name	Test Procedure	Expected Value	Remark
1	Earthing Connection	Measure Resistance Between Chassis and Earthing	<1 Ω	OK
2	Power supply Leakage	Measure Resistance Between C+ and Earthing	3.4 K Ω to 5.2K Ω	OK
3	Switch Leakage	Measure Resistance Between C- and Earthing	3.4 K Ω to 5.2K Ω	OK
4	Voltage Input Isolation	Measure Resistance Between V+ and Earthing	370 Ω to 560 Ω	OK
5	Voltage Input Isolation	Measure Resistance Between V- and Earthing	370 Ω to 560 Ω	OK

Tested By:

Rajesh



Verified By:

[Signature]



HINDAVI CALIBRATION TECHNOLOGY

Plot No - 1 Sr. No - 145/4, Nagapur, Bolhegaon Phata,
Ahmednagar - 414111. Maharashtra, India.
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CC - 3361

Format No. HCT/RF/7.8/A/ET

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CALIBRATION CERTIFICATE	
ULR : CC336123000001243F	
Calibration Certificate No. 23B22/01-ET-001	Issued Date 25/02/2023
Date of Calibration 22/02/2023	The Next Calibration Due on 21/02/2024

Customer Name : M/s. Chaitanya Electrical
H.No. B1/43, Oom SaiNagar, Kamalapur, Jogeshwari, MIDC, Waluj, Aurangabad.

Date of Receipt : -- Work Order No. : 23FEB22/01

Condition of Item On Receipt : Ok

Discription of Calibration Item :

Instrument Name : Insulation Tester	Range : As Per Manual
ID No. : R200005940	Resolution/LC : As Per Manual
Make : Rishabh	Model : AIT 501
Sr. No. : R200005940	Acc. Criteria : --
Location : --	Other : --

Calibration information :

Calibrated At : Site	Work Instruction Procedure : HCT/WI/ET-01 & 06
Method Used : Direct Method	Reference Standard Used : ---

Discription of Standard Used :

Standard Name : High Resistance Jig
 Make/Model : Zeal/ZMHR15M-1000G
 Sr No./ID NO. : 2021041254/HCT/MI/ET-07
 Traceability No. : CC/ECL/0878/22-23 & 09/61 (2022-2023)
 Valid up to : 11/09/2023 & 15/09/2023
 Reference laboratory : IDEMI Mumbai/Zeal
 Accreditation CC No. : CC-2287 / CC-3385

Environmental Conditions :

Temperature : 25±4°C Relative Humidity : 60±15%RH Mains Voltage : 230 V ± 2.3 V E-N Voltage : < 1V

Calibration Result :

Range	Test Point	Value on Standard	Measured Value on UUC	Measurement Error	Measurement Error (% rdg)	Expanded Uncertainty (± %)	Coverage Factor (K)				
Parameter : High Resistance											
20 G Ohm @ 500V	5	MΩ	5.000	MΩ	5.0	MΩ	0.0	MΩ	0.00	2.32	2.00
	10		10.00		10.0		0.0		0.00	2.32	2.00
	100		100.0		99.8		-0.2		-0.20	2.31	2.00
	200		200.0		199		-1		-0.50	2.31	2.00
	500		500.0		498		-2		-0.40	2.31	2.00
	1000		1000		998		-2		-0.20	2.34	2.00
	10	GΩ	10.00	GΩ	9.99	GΩ	-0.01	GΩ	-0.10	2.31	2.00

Remarks -

- 1)The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k such that providing a level of confidence of approximately 95%.
- 2) This certificate refers only to the particular items submitted for calibration at lab/site.
- 3)This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
- 4)The uncertainty evaluation has been carried out in accordance with NABL requirements.
- 5) Any correction in certificate invalidates this certificate
- 6)The calibration results reported in this certificate are valid at the time of and under the stated conditions of measurement.
- 7)The instrument was calibrated against laboratory standards whose values are traceable to recognised National/International Standards.



Calibrated By :	Dighe S. B.	Authorised Signatory :	Nimse L. B. TM
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HINDAVI CALIBRATION TECHNOLOGY

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CC - 3361

Format No. HCT/RF/7.8/A/ET

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CALIBRATION CERTIFICATE	
ULR : CC33612200000050F	
Calibration Certificate No. 23B22/01-ET-001	Issued Date 25/02/2023
Date of Calibration 22/02/2023	The Next Calibration Due on 21/02/2024

Range	Test Point	Value on Standard	Measured Value on UUC	Measurement Error	Measurement Error (% rdg)	Expanded Uncertainty (± %)	Coverage Factor (K)				
Parameter : High Resistance											
40 G Ohm @ 1000V	5	MΩ	5.000	MΩ	5.0	MΩ	0.0	MΩ	0.00	2.32	2.00
	10		10.00		10.0		0.0		0.00	2.32	2.00
	100		100.0		99.8		-0.2		-0.20	2.31	2.00
	200		200.0		199		-1		-0.50	2.31	2.00
	500		500.0		498		-2		-0.40	2.31	2.00
	1000		1000		998		-2		-0.20	2.34	2.00
	10	GΩ	10.00	GΩ	9.9	GΩ	-0.1	GΩ	-1.00	2.31	2.00
100 G Ohm @ 2500 V	5	MΩ	5.000	MΩ	5.0	MΩ	0.0	MΩ	0.00	2.32	2.00
	10		10.00		10.0		0.0		0.00	2.32	2.00
	100		100.0		99.9		-0.1		-0.10	2.31	2.00
	200		200.0		198		-2		-1.00	2.31	2.00
	500		500.0		498		-2		-0.40	2.31	2.00
	1000		1000		997		-3		-0.30	2.34	2.00
	10	GΩ	10.00	GΩ	9.9	GΩ	-0.1	GΩ	-1.00	2.31	2.00
100		100.0		99.9		-0.1		-0.10	6.11	2.00	
1T Ohm @ 5000 V	5	MΩ	5.000	MΩ	5.0	MΩ	0.0	MΩ	0.00	2.32	2.00
	10		10.00		10.0		0.0		0.00	2.32	2.00
	100		100.0		100.0		0.0		0.00	2.31	2.00
	200		200.0		198		-2		-1.00	2.31	2.00
	500		500.0		498		-2		-0.40	2.31	2.00
	1000		1000		997		-3		-0.30	2.34	2.00
	10	GΩ	10.00	GΩ	10.0	GΩ	0.0	GΩ	0.00	2.31	2.00
100		100.0		99.8		-0.2		-0.20	6.11	2.00	
1000		1000		997		-3		-0.30	5.85	2.00	

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Format No. HCT/RF/7.8/A/ET

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CALIBRATION CERTIFICATE	
ULR : CC336123000001244F	
Calibration Certificate No. 23B22/01-ET-002	Issued Date 25/02/2023
Date of Calibration 22/02/2023	The Next Calibration Due on 21/02/2024

Customer Name : M/s. Chaitanya Electrical
H.No. B1/43, Oom SaiNagar, Kamalapur, Jogeshwari, MIDC, Waluj, Aurangabad.
Date of Receipt : -- Work Order No. : 23FEB22/01
Condition of Item On Receipt : Ok

Discription of Calibration Item :

Instrument Name	: Earth Resistance Tester	Range	: 0 - 10/100/1000 Ω
ID No.	: 210807564	Resolution/LC	: 0.01/0.1/1 Ω
Make	: Metravi	Model	: ERT-1501
Sr. No.	: 210807564	Accuracy	: --
Location	: --	Type	: Digital

Calibration information :

Calibrated At	: Lab	Work Instruction Procedure	: HCT/WI/ET-01 & 06
Method Used	: Direct Method	Referance Standard Used	: ---

Discription of Standard Used :

Standard Name	: Decade Resistance Box
Make/Model	: Zeal/ZMDRB
Sr No./ID NO.	: 2021041252/HCT/MI/ET-05
Traceability No.	: 03/27 (2021-2022)
Valid up to	: 01/03/2023
Reference laboratory	: Zeal
Accredation CC No.	: CC-2042

Environmental Conditions :

Temperature : 25±4°C	Relative Humidity : 60±15%RH	Mains Voltage : 230 V ± 2.3 V	E-N Voltage : < 1V
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Remarks -

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Calibrated By :	Dighe S. B.	Authorised Signatory :	Nimse L. B. TM
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Format No. HCT/RF/7.8/A/ET
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Calibration Certificate No. 23B22/01-ET-002	Issued Date 25/02/2023
Date of Calibration 22/02/2023	The Next Calibration Due on 21/02/2024

Calibration Result :

Range	Test Point	Value on Standard	Measured Value on UUC	Measurement Error	Measurement Error (% rdg)	Expanded Uncertainty (\pm %)	Coverage Factor (K)
Parameter : Resistance							
10 Ω	1	1.00	1.00	0.00	0.00	0.14	2.00
	2	2.00	2.00	0.00	0.00	0.14	2.00
	4	4.00	3.99	-0.01	-0.25	0.14	2.00
	6	6.00	5.98	-0.02	-0.33	0.14	2.00
	8	8.00	7.97	-0.03	-0.38	0.14	2.00
	10	10.00	9.96	-0.04	-0.40	0.14	2.00
100 Ω	10	10.00	9.9	-0.1	-1.00	0.14	2.00
	20	20.00	19.9	-0.1	-0.50	0.01	2.00
	50	50.00	49.9	-0.1	-0.20	0.01	2.00
	100	100.00	99.8	-0.2	-0.20	0.01	2.00
1000 Ω	200	200.00	199	-1	-0.50	0.01	2.00
	400	400.00	399	-1	-0.25	0.01	2.00
	600	600.00	598	-2	-0.33	0.01	2.00
	800	800.00	798	-2	-0.25	0.01	2.00
	1000	1000.00	997	-3	-0.30	0.01	2.00

Remarks -

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- 3)This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
- 4)The uncertainty evaluation has been carried out in accordance with NABL requirements.
- 5) Any correction in certificate invalidates this certificate
- 6)The calibration results reported in this certificate are valid at the time of and under the stated conditions of measurement.
- 7)The instrument was calibrated against laboratory standards whose values are traceable to recognised National/International Standards.



Calibrated By :	Dighe S. B.	Authorised Signatory :	Nimse L. B. TM
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CALIBRATION CERTIFICATE

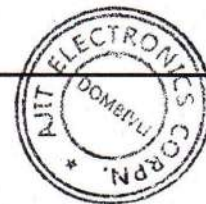
PAGE NO. : 1 OF 2

ULR NO :	CC260421000000374F	DT OF CALIBRATION:	02.11.2022
WORK ORDER NO.	WO/AEC/374/21-22	RECOM. DT OF CALIBRATION :	01.11.2023
CERTIFICATE NO :	CC/AEC/0374/21-22	DT OF RECEIPT OF ITEM :	02.11.2022
CERTIFICATE ISSUE DT :	02.11.2022		

CALIBRATED FOR :	M/S. CHAITANYA ELECTRICALS, H NO. b1/43, Om Sai Nagar, Kamalapur-Jogeshwari, MIDC waluj, Aurangabad - 431133	CALIBRATED AT :	AJIT ELECTRONICS CORPN LAB DOMBIVLI
SPECIFICATIONS OF ITEM UNDER CALIBRATION		STANDARD INSTRUMENTS USED FOR CALIBRATION	
Product Name	HV TEST SET	High Voltage Divider With DMM STANDERED USED IS CALIBRATION AT NEC LAB Certificate No. : CAL/20-21/CC/2211 CERTIFICATE VALIDITY UP TO :28/09/2021 FLUKE MPC 5080A Used is calibrated at Goderj and certificate No. :M-210118-12-1 Calibration Valid up to : 22/01/2022.	
Product Sr No	Control Unit- 1021/33 HV Tx Unit- 1021/32 Rectifire Unit-1021/33		
Condition of item On receipt	Good & Working		
Range of Calibration	As per report		
Model	SKE-6725		
Range	0 - 60 KV , 25mA AC 0-70 KV , 25mA DC		
Make	S K ELECTRONICS POWER HOUSE	The standred instruments used for calibration are traceable to National/International Standered through accredited laboratories	
AMBIENT CONDITIONS :	TEMPERATURE : 25 ± 4 °C	RELATIVE HUMIDITY : 30% to 75%	

REMARKS:

- 1) Procedure of Calibration: Above mentioned item is calibrated as per operating procedure No : LAB-SOP-M/21,S/01
- 2) Reported Expanded Uncertainty is at Coverage Factor k= 1.96& at 95 % Confidence Level.
- 3)The measured values mentioned are the average of 5 readings.
- 4) The Parameter Marked with an * (If any) are not accredited by NABL.
- 5)This certificate refers only to the item submitted for calibration and shall not be reproduced except, in full without the written approval from AEC.
- 6)The calibration results reported are valid at the time of and under the stated conditions of measurement.
- 7) Calibration Status: Sticker indicating 'CAL STATUS' is affixed on the instrument.
- 8)Our NABL Accreditation No. is CC-2604 valid up to 06.07.2022
- 9) Any correction in this certificate invalidates this certificate.
- 10) The observations reported represent values at the time of the measurements, and under the stated conditions. They do not convey any long term stability information.



CALIBRATION CERTIFICATE

PAGE NO. : 2 OF 2

ULR NO :	CC260421000000374F	DT OF CALIBRATION:	02.11.2022
WORK ORDER NO.	WO/AEC/374/21-22	RECOM. DT OF CALIBRATION :	01.11.2023
CERTIFICATE NO :	CC/AEC/0374/21-22	DT OF RECEIPT OF ITEM :	02.11.2022
CERTIFICATE ISSUE DT :	02.11.2022		

CALIBRATION RESULTS :

PARAMETER : AC HIGH VOLTAGE @50 HZ

RANGE	DUC READING	STD METER READING	ERROR	UNCERTAINTY (%)
	kV	kV	kV	
0 - 60 KV	5.9	6.00	-0.1	3.82
	30.1	30.00	0.1	3.74
	53.8	54.00	-0.2	3.73

PARAMETER : DC HIGH VOLTAGE

RANGE	DUC READING	STD METER READING	ERROR	UNCERTAINTY (%)
	kV	kV	kV	
0 - 70 KV	6.9	7.00	-0.1	3.80
	34.8	35.00	-0.2	3.73
	63.1	63.00	0.1	3.73

PARAMETER : AC CURRENT @50Hz

RANGE	DUC READING	STD METER READING	ERROR	UNCERTAINTY (%)
	mA	mA	mA	
25 mA	4.9	5.00	-0.1	1.38
	14.8	15.00	-0.2	1.01
	24.7	25.00	-0.3	1.00

PARAMETER : DC CURRENT

RANGE	DUC READING	STD METER READING	ERROR	UNCERTAINTY (%)
	mA	mA	mA	
25 mA	4.9	5.00	-0.1	1.00
	14.9	15.00	-0.1	0.36
	24.8	25.00	-0.2	0.25

Authorized Signature

Mr Shital Naradekar
(Quality Manager)



Calibrated By

Mr. ChandraShekhar Verlekar
(Calibration Engineer)

