



# S.K.ELECTRONICS POWER HOUSE

206, Amit Apt, "C" wing, Karpe Wadi, Tisgaon Road Kalyan (East), 421306

E-mail [skepowerhouse@gmail.com](mailto:skepowerhouse@gmail.com) web:- [www.skepowerhouse.com](http://www.skepowerhouse.com) Mob – 9869559446/9702628

Works : G -1 Mauli Krupa Tukaram Wadi Near Lalit Kata Kalyan Shil Road Manpada Dombivali (East) 421204

Ref : SKE-TC-1021 -16

Date : 28/10/2021

## TEST REPORT OF 60KVAC/25mA - 70KVDC/25mA HV TESTER

NAME OF THE CUSTOMER : - CHAITANYA ELECTRICAL  
DETAIL OF THE EQUIPMENT : - AC – DC HIGH VOLTAGE TESTER

HIGH VOLTAGE CONTROL UNIT: - Sr. No. SKE – 1021/ 33

HIGH VOLTAGE TRANSFORMER: - Sr. No. SKE – 1021/32

HIGH VOLTAGE RECTIFIER : - Sr. No. SKE – 1021/31-33

INPUT VOLTAGE -230VAC 50HZ

OUTPUT AC KV VOLTAGE 0 -- 60 KVAC

OUTPUT DC KV VOLTAGE 0 -- 70 KVDC

OUTPUT CURRENT 25mA –AC – 25mADC

TEST -- 60KVAC INPUT VOLTAGE: - 230VAC

OUTPUT HV VOLTAGE Standard digital meter	OUTPUT HVVOLTAGE Under test meter
5.0KVAC	4.8 KVAC
10.3 KVAC	10.2 KVAC
20.2 KVAC	20.4KVAC
30.2 KVAC	29.9 KVAC
40.5 KVAC	40.1KVAC
50.6 KVAC	50.8KVAC
60.4 KVAC	60.2KVAC

TEST – 70KVDC INPUT VOLTAGE:- 230VAC

OUTPUT HV VOLTAGE Standard digital meter	OUTPUT HVVOLTAGE Under test meter
5.0 KVDC	4.9 KVDC
10.4 KVDC	10.6 KVDC
20.6 KVDC	19.8 KVDC
30.7 KVDC	29.4 KVDC
40.0 KVDC	39.8 KVDC
50.4 KVDC	51.4 KVDC
60.1 KVDC	61.7 KVDC
70.8KVDC	71.4KVDC

## TEST TRIP PROTECTION

### 1) AC HV TRIPING :-

5 mA	15 mA	25 mA
5.2 mA	16.1 mA	25.2 mA

### 2) DC HV TRIPING :-

5 mA	15 mA	25 mA
5.4 mA	15.3 mA	25.6 mA

## TEST POPINT

- 1) AC KV METER / AC mA METER TESTED :- OK
- 2) DC KV METER / DC mA METER TESTED :- OK
- 3) TIMER TEST :- OK
- 4) EIRTH FAIL PROTECTION TEST :- OK
- 5) SAFETY KEY FUNCTION TESTED :- OK
- 6) EMG STOP SWITCH TESTED :- OK
- 7) SMART SWITCH TESTED :- OK
- 8) OVER LOAD TRIP TESTED :- OK

TESTED BY: - SALIM S. KANNURE



The image shows a handwritten signature in black ink over a circular purple stamp. The stamp contains the text 'SALIM S. KANNURE' and 'ELECTRICIAN' around the perimeter, with 'POWER HOUSE' at the bottom. The signature is written in a cursive style.



**Manufacturers & Exporters of Electrical / Electronics Instruments / Calibration Services**

**CALIBRATION CERTIFICATE**

PAGE NO. : 1 OF 2

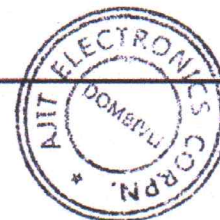
ULR NO :	CC260421000000374F	DT OF CALIBRATION:	11/2/2022
WORK ORDER NO.	WO/AEC/374/21-22	RECOM. DT OF CALIBRATION :	11/1/2023
CERTIFICATE NO :	CC/AEC/0374/21-22	DT OF RECEIPT OF ITEM :	10/31/2021
CERTIFICATE ISSUE DT :	11/2/2022		

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
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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 : 11/1/2023
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	FLUKE MPC 5080A Used is calibrated at Goderj and certificate No. :M-210118-12-1 Calibration Valid up to : 11/1/2023
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%
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<p><b>REMARKS:</b></p> <p>1) Procedure of Calibration: Above mentioned item is calibrated as per operating procedure No : LAB-SOP-M/21,S/01</p> <p>2) Reported Expanded Uncertainty is at Coverage Factor k= 1.96&amp; at 95 % Confidence Level.</p> <p>3)The measured values mentioned are the average of 5 readings.</p> <p>4) The Parameter Marked with an * (If any) are not accredited by NABL.</p> <p>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.</p> <p>6)The calibration results reported are valid at the time of and under the stated conditions of measurement.</p> <p>7) Calibration Status: Sticker indicating 'CAL STATUS' is affixed on the instrument.</p> <p>8)Our NABL Accreditation No. is CC-2604 valid up to 06.07.2022</p> <p>9) Any correction in this certificate invalidates this certificate.</p> <p>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.</p>
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**CALIBRATION CERTIFICATE**

PAGE NO. : 2 OF 2

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**CALIBRATION RESULTS :**

PARAMETER : AC HIGH VOLTAGE @50 HZ

RANGE	DUC READING	STD METER READING	ERROR	UNCERTAINTY (%)
	<b>kV</b>	<b>kV</b>	<b>kV</b>	
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 (%)
	<b>kV</b>	<b>kV</b>	<b>kV</b>	
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 (%)
	<b>mA</b>	<b>mA</b>	<b>mA</b>	
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 (%)
	<b>mA</b>	<b>mA</b>	<b>mA</b>	
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

Athorized Signature

Mr Shital Naradekar  
(Quality Manager)



Calibrated By

Mr. ChandraShekhar Verlekar  
(Calibration Engineer)





# Calibration Certificate

Product Code: Description:  
AIT 501

Serial Number:  
R200005940

- Threshold settings prior to calibration:

This is a new calibration there are no previous calibration values.

- Calibration of this instruments is hereby certified to be within the published

Function ;	Input Adjust	Reading Range
Output	2500V	2500~2900V
$\Omega$ (500V)	500M $\Omega$	476~524M $\Omega$
$\Omega$ (1000V)	5.00G $\Omega$	4.84~5.24G $\Omega$
$\Omega$ (2500V)	50.0G $\Omega$	45.6~54.4G $\Omega$
$\Omega$ (5000V)	500G $\Omega$	416~548G $\Omega$
DCV	100V	96~104V
ACV	600V/60Hz	582~618V

- The instrument is calibrated against standards traceable to CE standards.

- Details of reference equipment used:

Calibration FLUKE 5520A

Serial Number:8970003

- Certificate of reference equipment:

Issue Date:

Certificate Number:DBS20061864

Date:

25.06.2022

Signed:

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Authorised by







# TEST AND CALIBRATION REPORT



Product	SCOT M3K	Date Of Calibration(DOC)	28-05-2022
Chassis Number	A.G 1108	Recommended next calibration: One year from DOC	
Serial Number	2100.02AG1172	Tested By	JPS.
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.

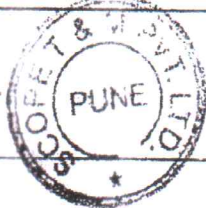
Part 3 : This procedure covers safety measures and there compliance.

## 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

**SCOPE**  
T&M Pvt Ltd  
EL 31/11J, MIDC BHOSARI, PUNE 411 026, INDIA

Product	CRM 100B	Date Of Calibration(DOC)	28-05-2022
Chassis Number	AG 614	Recommended next calibration: One year from DOC	
Serial Number	2301-02 AG 1212	Tested By	RY
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

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	28.05.2022
6. Next Calibration Due Date	28.05.2023

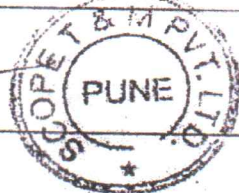
Test No.	Acceptance limits of Current		Measured Value of current in Amps	Resistance Range Selected	Standard Resistors used $\mu\Omega$	Acceptance limits of Resistance in $\mu\Omega$		Measured value of Resistance in $\mu\Omega$	Remark
	MIN	MAX				MIN	MAX		
1	99.0A	101.0A	100.2 A	200 $\mu\Omega$	40.10 $\mu\Omega$	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 $\Omega$	OK
2	Power supply Leakage	Measure Resistance Between C+ and Earthing	3.4 K $\Omega$ to 5.2K $\Omega$	OK
3	Switch Leakage	Measure Resistance Between C- and Earthing	3.4 K $\Omega$ to 5.2K $\Omega$	OK
4	Voltage Input Isolation	Measure Resistance Between V+ and Earthing	370 $\Omega$ to 560 $\Omega$	OK
5	Voltage Input Isolation	Measure Resistance Between V- and Earthing	370 $\Omega$ to 560 $\Omega$	OK

Tested By:

*Ryazale*



Verified By:

*[Signature]*



# 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 :	28.05.2022
6. Next Calibration Due Date:	28.05.2023

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:

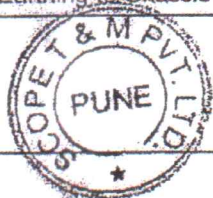
Operation	Channel	Expected Value in mSec		Measured Value in mSec	Remark
		Min	Max		
CLOSE	R - R'	99	101	100	OK
	Y - Y'	99	101	100	OK
	B - B'	99	101	100	OK
OPEN	R - R'	49	51	50	OK
	Y - Y'	49	51	50	OK
	B - B'	49	51	50	OK

## 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: *Shubham*



Verified By: *M. P. Deshpande*