

* Centrifuge is calibrated by shakti Scientific Co. with the Digital Thermometer which is calibrated by Sadbhav Calibration.

* All traceability certificates are attached with it.

* KINDLY Go through certificates.

Register Office :
212, Sakar Complex,
Sanstha-Vasahat, Dandiabazar,
Raopura, Vadodara-390001, Guj.

E : info@shaktiscientific.in
Ph : +91 265 -2712565 / 2412756
M.: 87587 411 85 / 96386 39 393

CALIBRATION CERTIFICATE

CUSTOMER. Pulsepath Clinical Laboratory
1st Floor, 23, Aroma Complex Soma
Talav Road, Dabhoi Road, Vadodara

CERTIFICATE NO: 081

DESCRIPTION OF ITEM: Lab Centrifuge "Remi" **CERTIFICATE DATE:** 17/09/2020

MODEL NO: R8C **SR.NO:** JFLC-11710 **RANGE:** 4000RPM

DETAILS OF EQUIPMENT USED FOR CALIBRATION:

SR.NO	DESCRIPTION	CERTIFIED BY	CERTIFICAT NO.	VALIDITY
1	DIGITAL TECHOMETER	SADBHAV CALIBRATION	N/0311A/07/2020	27/07/2021

OBSERVATIONS

R.P.M.CALIBRATION:

POINT	INSTRUMENT TIMER DISPLAYED	CALIBRATED TECHO-METER READING	ERROR OBSERVED	ACCEPTD ERROR	RESULT
1	1000RPM	994 RPM	- 06RPM	+/-100RPM	PASS
2	2000RPM	1993 RPM	- 07RPM	+/-100RPM	PASS
3	3000RPM	2988 RPM	- 12RPM	+/-100RPM	PASS
4.	4000RPM	3983RPM	-17RPM	+/-100RPM	PASS

1. Calibration done with Rotor Swing Out R81 16x15ml-----
2. Calibration Traceable to national Standards
3. Result is related only to the item calibrated
4. Maximum tolerance permissible RPM2%FSD

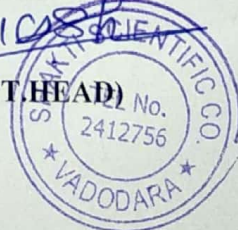
REMARKS: Overall deviation is within specified tolerance. Accepted
NEXT CALIBRATION DUE: 16/09/2021

CALIBRATED BY:

Jyotish
(SERVICE ENGR.)




APPROVED BY:

[Signature]
(DEPT. HEAD)


Corporate Office: LF-17, 4th Floor, Lotus Aura-1, Sama-Savli Road, Vemali, Vadodara-390008, Gujarat, INDIA.



Certificate of Calibration

Page 1

Certificate No.: **N/0311A/07/2020** (ULR-CC21182000003476F) Date of Performance of Calibration: **27-07-2020**
 Calibration At: LABORATORY User Specified Due Date: **27-07-2021**
 Date of Issue of Calibration Certificate: **29-07-2020**

Customer Details

Calibrated For: **Shakti Scientific Co** Division : --
 LF-16, 4th Floor, Lotus Aura-1, Sama-Savli Road, Vadodara - 390008.
 Reference: Challan No: 266, Dated: 25/07/2020 Location : --

Device Under Calibration

Date of Receipt: 25-07-2020 Conditions on Receipt: Satisfactory
 Description: Tachometer Digital (Non-Contact) Make/Model: Lutron/DT2234C
 Size/Range: 5 to 99999RPM Least Count: 0.1RPM upto 999.9 RPM & 1RPM above it
 Identification: -- Sr No.: L165478
 Accuracy Class of DUC: Not Specified

Master Equipment Used for Calibration(Traceability:NABL Lab/NPL)

Sr No.	Items	Identification	Range	Traceability	Valid Upto
1	Digital Tachometer	DCNCT/SCS/67/12/2007	99999 RPM	IDEMI Certificate No.:CC/ECL/0907/19-20	16-08-2020

Calibration Parameters

Environmental Condition: Temperature:25 °C Humidity:54%RH
 Procedural Reference: CP 403 based on S9086-Q5-STM-010/CH-491R1, Rev. 1, THE NAVAL SEA SYSTEMS COMMAND (SEA-03Z71).U.S

Mechanical Calibration

Results : Item is Calibrated in as found conditions without any adjustments

Standard Readings in RPM	DUC Reading in RPM	Deviation in RPM	(±) % Expanded Uncertainty
120.0	120.0	0.0	2.34
960.0	960.1	0.1	0.27
3840	3840	0	0.10
30720	30722	2	0.07

Expanded Uncertainty: ±As Per Result at 95.45% confidence level with coverage factor $k=2$

Note: Identification with self adhesive stickers affixed on DUC/case with user specified due date.

--- END OF CERTIFICATE ---

Calibrated By
Dakshesh P Talpada
 Calibration Engineer



Review and Authorised By

Binay B Bhuptani
 QM

Note : 1. This Certificate refers only to the particular item(S) submitted for calibration. 2. This certificate shall not reproduced, except in full, unless written permission for the publication of approved abstract has been obtained from the Proprietor. Sadbhav Calibration Services, Vadodara. 3. The calibration results reported in this certificate are valid at the time of and under the stated condition of measurement.



(A Govt. of India Society)
(Ministry of Micro, Small & Medium Enterprises)



NABL Accreditation Certificate Nos.
CC-2287, TC-5538

CALIBRATION CERTIFICATE

IDEMI

INSTITUTE FOR DESIGN OF ELECTRICAL
MEASURING INSTRUMENTS, MUMBAI

MSME - Technology Centre
Mumbai

(A Govt. of India Society)
Ministry of Micro, Small & Medium Enterprises
Government of India

Eastern Express Highway,
Chunabhatti, Sion P.O.,
MUMBAI - 400 022.









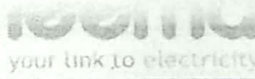






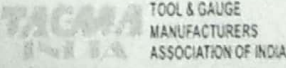
Phone : (022) 2405 0301-4
Fax : (022) - 2405 0016

Website : www.idemi.org

Download "IDEMI CALIBRATION SERVICES" App from Google Play Store & E-Book From website

FF - LAB - 13

ACCREDITATIONS / RECOGNITIONS / CERTIFICATIONS / MEMBERSHIPS

Govt. of India Institute under the Ministry of MSME	
Laboratories are Accredited by NABL as per ISO/IEC 17025	
Recognised by BIS, under Laboratory Recognition Scheme for Type Testing of Energy Meter.	
Certified by SGS, UK for ISO 9001 : 2015	
Member of National Conference of Standards laboratories International	
Member of Bureau of Indian Standards (BIS)	
Member of British Standard Institute, (BSI) United Kingdom	
Member of Society of EMC Engineers	
Member of Institute for Electrical & Electronic Mfg. Association (IEEMA) India.	
Member of Metrology Society of India.	
Member of Fluid Power Society	
Member of Indo - German Chamber of Commerce	
Undertakes the Testing and Calibration as per IEC Standards (International Electro Technical Commission)	
Undertakes the Testing for CE Marking	
Member of Indo - American Society	
Member of Tool & Gauge Manufacturing Association (TAGMA)	



CALIBRATION CERTIFICATE



Work Order No. : WO/ECL/0411/19-20
Date : 14/08/2019
ULR No. : CC228719100001927F
Calibrated Item : Digital Tachometer

Certificate No. : **CC/ECL/0907/19-20**
Date of Calibration : 17/08/2019
Page No. : 1 of 2

Calibrated for : M/s. Sadbhav Calibration Services, Arihant Super Market, Extension Building, Opposite State Bank of India, Near Lalbaug Crossing, Manjalpur, Vadodara, Gujarat - 390 011.

Calibrated at : IDEMI, Mumbai.

Specification of device under calibration	Standard instruments used for calibration
Manufacturer : M/s. Indi Condition of Item on receipt : No visible damage Calibrated from 30 to 99999 RPM (Non- Contact Mode) Sr. No. : S12K0712123 Model : 6123 ID No. : DCNCT/SCS/67/12/2007 Accuracy : $\pm (0.05\% + 1 \text{ Digit})$	RPM Source with Digital Tachometer ID No. : IDEMI/ECL/TACHO/01 Calibration Validity up to 04/04/2020 All measurement results are traceable to the International system of units (SI), ensured by comparison, directly or indirectly with National or International standards through unbroken chain of calibration

Ambient Conditions :

Temperature : 26 °C

Relative Humidity : 62 %

Remarks : Please refer page 2 for Calibration Results.

- 1) Procedure of Calibration : Above mentioned item is calibrated as per operating procedure : OP-S&R -01
- 2) Reported Expanded Uncertainty is at Coverage Factor $k=1.96$ & at 95 % Confidence Level.
- 3) Calibration Status : Sticker No. 880 indicating 'CAL STATUS' is affixed on instrument.
- 4) Our NABL Accreditation Certificate No. is CC - 2287, Valid up to 30/08/2020.
- 5) Next Calibration Due on : 16/08/2020.

PRADEEP
SHANTILAL
GUJARATHI
Digitally signed by
PRADEEP SHANTILAL
GUJARATHI
Date: 2019.09.06 14:56:33
+05'30'
AUTHORISED SIGNATORY

Note:

1. This certificate refers only to the particular item(s), submitted for calibration. The certificate should not be reproduced expect in full without the prior permission from the Managing Director, IDEMI, Mumbai - 400 022.
2. This is computer generated certificate and may not contain signature. Where send by email, this is signed with digital signature of authorized signatory, approved by NABL. For any queries, please quote work order number mentioned in this certificate



वैद्युतिक मापन उपयंत्र अभिकल्प संस्थान, मुंबई
INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, MUMBAI

भारत सरकार की सोसायटी
सूक्ष्म लघु एवं मध्यम उद्यम मंत्रालय
Government of India Society

Ministry of Micro Small & medium Enterprises

स्वातंत्र्यवीर तात्या टोपे मार्ग, चुनाभट्टी सायन झकघर मुंबई
Swatantryaveer Tatya Tope Marg, Chunabhatti, Sion, P.O. Mumbai - 400 022

FF-LAB-03



वैद्युतिक मापन उपयंत्र अभिकल्प संस्थान, मुंबई ४०००२२

INSTITUTE FOR DESIGN OF ELECTRICAL

MEASURING INSTRUMENTS, MUMBAI - 400 022



ELECTRICAL CALIBRATION LABORATORY

Instrument Sr. No. : S12K0712123
Date of Calibration : 17/08/2019
ULR No. : CC228719100001927F

Page No. : 2 of 2
Certificate No. : CC/ECL/0907/19-20

Calibration Results :

NON CONTACT MODE

Calibration Standard		Device Under Calibration		Error		Expanded Uncert. in RPM
Range	Reading	Range	Reading	Units	% of Rdg.	
Auto Range	RPM		RPM	RPM		
	29.998	5 RPM	30.1	0.102	0.34	1
	99.915	to 99999 RPM	99.9	-0.015	-0.02	3
	500.19		500.1	-0.09	-0.02	3
	999.98		999.9	-0.08	-0.01	3
	9999.8		9999	-0.8	-0.01	3
	29998		29994	-4	-0.01	6
	59998		59991	-7	-0.01	6
99899		99896	-3	-0.003	6	

Note : 1) Value mentioned above is mean of 5 readings.

2) Above calibration is carried out as per customer's requirement.

End of Calibration Certificate



FF-INS-09

OUR NABL & BIS ACCREDITATION STATUS



ACCRD. CERT. No. CC-2287, TC - 5538

IDEMI (MSME-Technology Centre) is a Government of India Society working under the Ministry of Micro, Small & Medium Enterprises (MSME) and Accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) for its facilities at Mumbai and on site in the following fields as per ISO/IEC 17025

SR. NO.	FIELD	NABL ACCREDITATION CERTIFICATE NUMBER
1	Electro Technical Calibration	CC-2287
2	Pressure Calibration	CC-2287
3	Mass & Volume Calibration	CC-2287
4	Dimensional Metrology	CC-2287
5	Fluid Flow Calibration	CC-2287
6	Thermal Calibration	CC-2287
7	Electrical Testing	TC-5538
8	EMI / EMC Testing	TC-5538
9	Monoblock Pump Testing	TC-5538
10	Electronics Testing	TC-5538
11	Energy Meter Testing	Recognised by BIS

NOTE

1. This/These certificate(s) refer(s) only to the particular instrument(s) submitted for calibration.
2. This/These certificate(s) shall not be reproduced, except in full unless written permission for the publication of an approved abstract has been obtained from the Managing Director of Institute for Design of Electrical Measuring Instruments, Mumbai.
3. The calibration results reported in the certificate(s) are valid at the time of and under the stated conditions of measurement.
4. IDEMI, Mumbai shall not be responsible for any change in calibration date and performance specification on account of malfunctioning of the standard / Instrument / Equipment due to any damage caused to it after handing over it to customer or his authorised representative & certificate has been issued.