

# ALPHA ENTERPRISES

No. 785, HARSHAKUTIRA, 4th Main, 3rd Cross, Patel Venkataswamy Road,  
Subbaianapalya, Bangalore-560 033 Phone : 25456775 Mob: 9448240270  
Email : alpha\_ent23@yahoo.in GSTIN : 29ADWPV0639H1ZR

## CALIBRATION CERTIFICATE

CERTIFICATE: No.125-01/21  
DATE: 17/02/2022

CUSTOMER: - M/S POOJA DIAGNOSTICS  
# 8, ABOVE CANARA BANK, 80FT ROAD,  
CHANDRA LAYOUT, BENGALURU-560040.

DESCRIPTION OF ITEM: CENTRIFUGE

MODEL: R8C

SL.NO: BELC-2427

RANGE: 0 TO 5200 RPM

### DETAILS OF EQUIPMENT FOR CALIBRATION

Sl.No.	Description	Certified By	Certificate No.	Validity
1.	DIGITAL TACHOMETER	ELECTRONICS REGIONAL TEST LABORATORY KOLKATA	ERTL(E)/CAL/A348/0077/12-21/ NABL	03/01/2023

### OBSERVATIONS

Sl.No.	INSTRUMENT SPEED DISPLAYED RPM	SPEED READING ON DIGITAL STROBOSCOPE	DIFFERENCE IN ACTUAL & STROBOSCOPE	REMARKS
1	1600	1640	40	OK
2	2500	2520	20	OK
3	3900	3930	30	OK
4	5200	5230	30	OK

**NEXT CALIBRATION: 16/02/2023**

- REMARKS: 1) CALIBRATION TRACEABLE TO NATIONAL STANDARDS  
2) OVERALL DEVIATIONS IS WITHIN SPECIFIED ACCURACY (+) OR (-) 5%. HENCE, INSTRUMENT IS O.K.  
3) RESULTS ARE RELATED ONLY TO THE ITEM CALIBRATED



CALIBRATED BY:  
*Pavan*  
SERVICE ENGINEER

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DATE: 17/02/2022

CUSTOMER: - M/S POOJA DIAGNOSTICS  
# 8, ABOVE CANARA BANK, 80FT ROAD,  
CHANDRA LAYOUT, BENGALURU-560040.

DESCRIPTION OF ITEM: CENTRIFUGE

MODEL: R8C

SL.NO: EGLC-6659

RANGE: 0 TO 5200 RPM

### DETAILS OF EQUIPMENT FOR CALIBRATION

Sl.No.	Description	Certified By	Certificate No.	Validity
1.	DIGITAL TACHOMETER	ELECTRONICS REGIONAL TEST LABORATORY KOLKATA	ERTL(E)/CAL/A348/0077/12-21/ NABL	03/01/2023

### OBSERVATIONS

Sl.No.	INSTRUMENT SPEED DISPLAYED RPM	SPEED READING ON DIGITAL TACHOMETER	DIFFERENCE IN ACTUAL & TACHOMETER	REMARKS
1	1500	1520	20	OK
2	2400	2430	30	OK
3	3800	3820	20	OK
4	4600	4640	40	OK

**NEXT CALIBRATION: 16/02/2023**

REMARKS: 1) CALIBRATION TRACEABLE TO NATIONAL STANDARDS  
2) OVERALL DEVIATIONS IS WITHIN SPECIFIED ACCURACY (+) OR (-) 5%. HENCE, INSTRUMENT IS O.K.  
3) RESULTS ARE RELATED ONLY TO THE ITEM CALIBRATED



CALIBRATED BY:  
*Pavan*  
SERVICE ENGINEER



CALIBRATION CERTIFICATE OF : DIGITAL TACHOMETER

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1.0 SCOPE  
1.1 Service Request No. : CA/0003/12-21  
1.2 Calibration Certification No. : ERTL(E)/CAL/A348/0077/12-21 /NABL  
Date : 05-01-2022

ULR No. : CC200822000000001F

1.3 Requested by : ALPHA ENTERPRISES  
(Name & address of the organisation) NO.785,HARSHAKUTIRA,4thMAIN,3rd CROSS,.PATEL  
VENKATASWAMY RD,SUBBAIANAPALYA,  
BANGALORE-560033  
KARNATAKA

1.4 Description Item : DIGITAL TACHOMETER  
Identification Make : SYSTEMS  
of the item Model : HTM-590  
to be calibrated sl.No. : 17-979  
Id No. : NIL  
Dimension : NIL

1.4.1 Applicable Specification : Not mentioned  
1.4.2 Characterisation and condition of item Characterisation : Not applicable/  
Condition : Satisfactory  
1.5 Date of receipt of item : 07-12-2021  
1.6 Date of start of calibration : 03-01-2022  
1.6.1 Date of completion of calibration : 03-01-2022  
1.7 Location where calibration performed : IN HOUSE

1.8 Ambient condition during measurement : 25+/-3 °C  
45-70 %RH

1.9 Discipline (NABL) : MECHANICAL DISCIPLINE

1.9.1 Calibration procedure followed : EP15/OPN028

1.9.2 Details of non standard method followed (if any):

1.10 Measurement : The uncertainty figure is stated in the result.  
Uncertainty

1.11 Traceability : NPL,NEW DELHI ,

The following Standards / Equipment have been used.

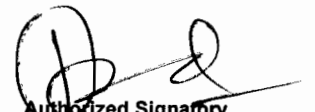
EQPT_NO	ITEM	MAKE	MODEL	CAL.VALID UPTO
1487	TACHOMETER	LUTRON	DT-2236	08-11-2022



CALIBRATION CERTIFICATE NO :		ERTL(E)/CAL/A348/ 0077/12-21/NABL	
CALIBRATION CERTIFICATE OF:		DATE	CALIBRATION ENGINEER
DIGITAL TACHOMETER		03-01-2022	P.DHABAL
MAKE/MODEL : SYSTEMS / HTM-590			
SL. NO : 17-979			
JOB NO:	0077/12-21/NABL	ID. No.:	NIL
Range: 100.0 to 6000rpm.		Resolution: 0.1/1 rpm.	Accuracy : Not specified.
TEST CONDITION:	Amb. Temp. 25.0 °C	Relative Humidity 45 %	

**MECHANICAL DISCIPLINE**

Measurement:					
Sl No	Set Value in r.p.m.	Standard Value in r.p.m	*Measured Value on DUC in r.p.m	Expanded Uncertainty at 95% CL & k=2 in % rdg.	Remarks
1	100.0	100.1	99.9	0.26	
2	500.0	500.4	500.0	0.26	Calibrated upto 6000 rpm.
3	1000.0	1002	1001	0.26	
4	2000.0	1999	2000	0.26	
5	3000.0	2999	3000	0.26	
6	4000.0	3998	4000	0.26	
7	5000.0	5000	5001	0.26	
8	6000.0	6000	5999	0.26	

  
Authorized Signatory  
Date: 03-01-22

Paresh Dhabal  
Scientist 'C'  
STQC, ERTL (E)  
Govt of India, Min. of Electronics & IT  
Block-DN, Sector-V, Salt Lake, Kolkata-91



CALIBRATION CERTIFICATE OF : DIGITAL TACHOMETER

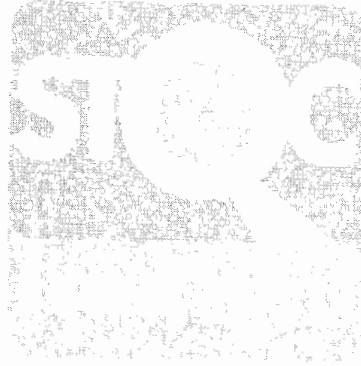
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Calibration Certification No. : ERTL(E)/CAL/A348/0077/12-21 /NABL  
Date : 05-01-2022

ULR No. : CC200822000000001F

3.0 Remarks (if any) :

Performance check has been carried out.



4.0 Ref. of sticker allotted : 02271

5.0 Next Calibration due date : 03-01-2023



CC2008



CALIBRATION CERTIFICATE OF : DIGITAL TACHOMETER

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Calibration Certification No. : ERTL(E)/CAL/A348/0077/12-21 /NABL  
Date : 05-01-2022  
ULR No. : CC200822000000001F

### NOTES

1. This certificate/ report refer only to the particular item submitted for calibration/test.
2. The certificate/report, if reproduced for any purpose, commercial or otherwise, should be reproduced in full. The reproduction of a part, or an abstract thereof, has to be got specially approved from Director, Electronics Regional Test Laboratory (East).
3. The results reported in the certificate /reports are valid at the time of and under the stated conditions on measurement.
4. Calibration need to be done periodically to maintain the accuracy of the measurement. ( in case of calibration report only)

RELEASED BY  
( Signature & Date )

*Shilpa Biswas*  
10/01/2022

**SHILA BISWAS**  
Scientist 'C'  
ERTL(E), Govt. of India  
DN 63, Sec-V, Kolkata-91