ELECTRICAL TESTING LABORATORY

Model No.: RPS240-24-1D
Sr. No.: S#2503T000000000007
Date of Testing : 02.06.2025 to 11.06.2025

ULR No.: TC553825000000202F
Test Report No.: TR/ETL/082/25-26

2. FUNCTIONAL RANDOM VIBRATION TEST

a. Test Rationale:

The functional random test levels are the minimum test levels to be applied in order to demonstrate that the equipment under test is capable of functioning when subjected to conditions which are likely to occur in service, on railway vehicles.

b. Test Condition:

Test method	:	IEC 61373:2010 (Category 1, Class B)
Frequency	:	5 – 150 Hz
Acceleration	:	Vertical : 1.01 m/s^2 Transverse : 0.45 m/s^2 Longitudinal : 0.70 m/s^2
Direction	:	X, Y, Z axis
Duration	:	10 mins. at each axis
EUT Condition	:	EUT Energized condition with 240V AC 50Hz

c. Requirements:

The EUT shall not get any mechanical damage or any degradation in the performance of the EUT.

d. Observation:

No mechanical damage or any degradation was observed during & after the test. The performance of the EUT was found to be satisfactory after the test.

e. Result:

Complied

DURGESH AMBEKAR
DY. TECHNICAL MANAGER
TESTED BY

C. M. PATIL
TECHNICAL MANAGER
CHECKED BY

TC-5538

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3. RANDOM VIBRATION TEST (SIMULATED LONG LIFE TEST)

a. Test Rationale:

This test is aimed at establishing the mechanical integrity of the equipment at increased service levels.

b. Test Condition:

Test method	:	IEC 61373 : 2010 (Category 1, Class B)
Frequency	:	5 – 150 Hz
Acceleration	:	Vertical : 5.72 m/s^2 Transverse : 2.55 m/s^2 Longitudinal : 3.96 m/s^2
Direction	:	X, Y, Z axis
Duration	:	5 Hrs. at each axis
EUT Condition	:	EUT in de-energized Condition

c. Requirements:

The EUT shall not get any mechanical damage or any degradation in the performance of the EUT.

d. Observation:

No mechanical damage or any degradation was observed during & after the test. The performance of the EUT was found to be satisfactory after the test.

e. Result:

Complied

DURGESH AMBEKAR
DY. TECHNICAL MANAGER
TESTED BY

C. M. PATIL
TECHNICAL MANAGER
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ELECTRICAL TESTING LABORATORY

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4. SHOCK TEST

a. Test Rationale:

To determining the ability of a specimen to withstand specified severities of non-repetitive or repetitive shocks

b. Test Condition:

Test method	:	IEC 61373:2010 (Category 1, Class B)
Waveform	:	Half Sine
Acceleration	:	Vertical : 30.0 m/s^2 Transverse : 30.0 m/s^2 Longitudinal : 50.0 m/s^2
Pulse Width	:	30 ms
No of Shock	:	± 3 per Axis
Direction	:	X, Y, Z axis
EUT Condition	:	EUT in De-energized condition

c. Requirements:

The EUT shall not get any mechanical damage or any degradation in the performance of the EUT.

d. Observation:

No mechanical damage or any degradation was observed during & after the test. The performance of the EUT was found to be satisfactory after the test.

e. Result:

Complied

DURGESH AMBEKAR
DY. TECHNICAL MANAGER
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Test setup Photograph

X – Axis



Y – Axis



Z – Axis



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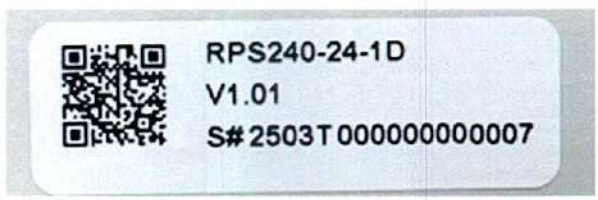
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EUT Photographs



Marking Plate



*** END OF TEST REPORT ***

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