

ELECTRICAL LABORATORY- TEST REPORT
Safety of Machinery –Electrical Equipment of The Machines
Part 1: General Requirements

Test Report N°.....		
Date of issue.....	11-04-2017	
Sample date in.....	08-02-2017	
Date of performance.....	08-02-2017 to 08-02-2017	
Applicant.....		
Customer.....		
Sample description.....	ELECTRO DYNAMIC VIBRATION SHAKER	
Sample Condition.....	Ok	
Customer reference.....	N/A	
Trade mark / Manufacturer..		
Model / Type / Reference.....	SEV-80	
Ratings.....	220Vac, 3.6A, 50Hz	
Test method(s).....	BS EN 60204-1:2006+A1:2009	
Overall verdict	Pass	<input checked="" type="checkbox"/>
	Fail	<input type="checkbox"/>

Page 1 of 39

REMARKS: This report is governed by, and incorporates by reference, the Condition of testing as posted at its date of issuance and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. **This report sets forth solely our findings with respect to the test samples identified herein.** It includes all of the test requested by you and the results thereof based upon the information that you provided us with. You have 10 calendar days from the date of issuance of this report to notify us of any material error or omission; provided, however, that such notice shall be written and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Tests are destructive and non reversible, the submitted samples will not return to their original conditions. The client acknowledges that any remaining part of the sample will be discarded if not retrieved in a period of 30 calendar days from the date of issuance of this report.

**Institute of Testing & Certification
 (India) Pvt. Ltd.**



Authorised Signatory



INSTITUTE OF TESTING AND CERTIFICATION (INDIA) PVT. LTD.

BS EN 60204-1			
Clauses	Requirement – Test	Results – Remarks	Verdict
5.	INCOMING SUPPLY CONDUCTOR TERMINATIONS AND DEVICES FOR DISCONNECTING AND SWITCHING OFF		
5.1	Incoming supply conductor terminations		
	The electrical equipment of the machine shall have only one incoming supply connection	Single Incoming Supply	P
	Unless a plug is supplied it is recommended that the supply conductors are terminated at the supply disconnecting devices		P
	Neutral conductor “N” should be indicated in the technical documentation and label “N” is provided at neutral conductor	Neutral conductor identified as ‘N’	P
	There shall be no connection between neutral conductor and protective bonding circuit or combined PEN-terminals.	The neutral & Protective bonding circuit has separate wires	P
	All terminals of incoming supply shall be clearly marked	Incompliance	P
5.2	Terminal for connection to external protective Earthing system		
	Terminal for connection of external protective conductor provided and marked with “PE” or with graphical symbol or by use of bicolor combination GREEN/YELLOW	Bolt provided for PE terminal & color of cable GREEN/YELLOW bicolor provided	P
	Cross section of incoming PE conductor shall be according to table 1	In Compliance	P
5.3	Supply disconnecting device		
5.3.1	A supply disconnecting device shall be provided for each incoming supply to the machine.	switch provided	P
5.3.2	The supply disconnecting device shall be one of the following:		
	a) A switch-disconnector with or without fuses		N/A
	b) A disconnector with or without fuses, which has an auxiliary contact that in all cases causes switching device to break the load circuit.	Switch Provided as Disconnector Device	P
	c) circuit breaker suitable for isolation		N/A
	d) any other switching device in accordance with an IEC product standard for that device and which meets the isolation requirements of IEC 60947-1 as well as a utilization category		N/A
	e) Plug/socket combination for flexible cable supply		N/A




BS EN 60204-1			
Clauses	Requirement – Test	Results – Remarks	Verdict
	The disconnecting time should be as per Table A.1 of annex A		N/A
	<ul style="list-style-type: none"> Ground bond test with 10A and 24V and resistance should be less than 0.1Ω 	 Measured Resistance = 23.3mΩ	P
18.3	Insulation Resistance test		
	Insulation resistance measured with 500V DC between power circuit conductors and PE circuit is to be 1 MΩ. Test made on individual sections of complete electrical installation	 Measured Resistance is >45GΩ	P
18.4	Voltage test		
	Electrical equipment should withstand a test voltage applied twice the rated equipment or 1000V whichever is higher for 1 sec.	 No voltage break down and no flashover occur	P
18.5	Protection against residual voltage		
	Tests for protection against residual voltages are performed to ensure compliance with Cl. 6.2.4		N/A
18.6	Functional tests		
	The functions of electrical equipment shall be tested		P

Table -1

Sr. No	TEST CONDUCTED	TEST CONDITIONS	TEST REQUIREMENTS	RESULTS
01	HIGH VOLTAGE TEST	Test voltage: 1KV/50 Hz Test Duration: 1second Test Part: Between conductors of all circuits & protective bonding circuit.	Shall withstand without breakdown	P
02	INSULATION RESISTANCE TEST	Test Voltage: 500V D.C Test part: Between power circuit conductors & protective bonding	Shall not be Less than 1 MOhm	P (Rmeas → >45 GΩ)
03	EARTH CONTACT RESISTANCE TEST	Test Current: 10A/24V Test Part: Between protective earth terminals and body that is part of the protective bonding circuit.	Calculated Earth Contact Resistance from current & drop in voltage shall not exceed 0.1 ohm	P (Rmeas → 23.3 mΩ)
		Test Current: 10A/24V Test Part: Between protective earth terminals and door/Machine metal accessible part that is part of the protective bonding circuit.		P (Rmeas → 22.2 mΩ)

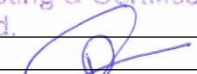
REMARKS:

1. All the tests conducted as per the standard specification.
2. The test results pertain to the sample submitted for testing.
3. Abbreviations used:
Info - Information, Mfr. – Manufacturer, NM – Not Mentioned, IP- Ingress Protection, Cl. – Clause, Temp. – Temperature, Ckt. – Circuit, amb. – Ambient, Sr. No. – Serial number, N/A-Not applicable, P-Pass

Institute of Testing & Certification
(India) Pvt. Ltd.

Test Report No.-

Page 6 of 39


 Authorised Signatory