

Report No.: AAEMT/S-ENV/231011-01
ULR No. TC85972300000751F

Dated: 13/10/2023

ENVIRONMENTAL TEST REPORT

Discipline: Electronics	Group: Environmental Test Facility
Report No.....:	AAEMT/S-ENV/231011-01
Date of Issue.....:	13/10/2023
No. of Pages.....:	06 Pages (Including 2 attachments)
Testing laboratory and its address.....:	AA ELECTRO MAGNETIC TEST LABORATORY PRIVATE LIMITED Plot No.174, Udyog Vihar Phase 4, Sector-18, Gurugram-122016, Haryana, India.
Manufacturer's Name.....:	ENERSOL SYSTEMS PVT. LTD.
Address.....:	510, Pace City-2, Sector-37, Gurgaon, Haryana.
Applicant's Name.....:	ENERSOL SYSTEMS PVT. LTD.
Address.....:	510, Pace City-2, Sector-37, Gurgaon, Haryana.
Test item description.....:	Multi-Function Meter (Power Factor Meter)
Trade Mark.....:	ENERSOL
Model/Type reference.....:	MFR-4210
Ratings.....:	240 V AC
Serial No.....:	307977
Test Report Form(s) Originator.....:	AA Electro Magnetic Test Laboratory Private Limited
Master TRF.....:	26/06/2019
Test Report Form No.....:	AAEMT_PAR_TRF_V1.0
Applicable Specification.....:	See Attachment 1
Test Method/Standard.....:	See Attachment 1

Tested by:

Authorized & Reviewed by:

Deepak Kumar
(Sr. Test Engineer)

Name/Designation

Date:13/10/2023

Bittu Kumar
(Lab Manager)

Name/Designation

Date: 13/10/2023





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Table – List of Attachments		
Attachment No.	Attachment Description	No. of pages in Attachment
Attachment – 1	Test Summary	01 Page (Page no.03)
Attachment – 2.	Photographs	02 Pages (Page no.05-06)
<p>General remarks:</p> <p>The test results presented in this report relate only to the object tested.</p> <p>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p>		
<p>Possible test case verdicts:</p> <ul style="list-style-type: none"> - test case does not apply to the test object : N/A - test object does meet the requirement : P (Pass) - test object does not meet the requirement : F (Fail) - Declaration of conformity Declaration of conformity of the results is based as per the standard limits 		
<p>Testing See below</p> <p>Date of receipt of test item..... : 11/10/2023</p> <p>Date(s) of performance of tests : 11/10/2023 to 12/10/2023</p> <p>Condition of Sample on receipt..... : Good / Satisfactory / Fit for Testing</p> <p>Opinions and Interpretations..... : See the specific Note / Annexure if any in the whole /full report.</p> <p>Ambient Temperature : (25 ± 2)⁰C</p> <p>Ambient Humidity : (50% +25) % Rh</p>		



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Attachment – 1 (Test Summary)

S. No.	Tests	Test Condition	Test Method/Standard	Result
1.	Dust Test (IP 5X)	Dust test As per cl. 13.4 and 13.5.2 of IEC 60529 : 2013	As per IEC 60529:2013	P
2.	Water Test (IP X4)	Water Test As per cl. 14.2.4 and 14.3 of IEC 60529: 2013	As per IEC 60529:2013	P

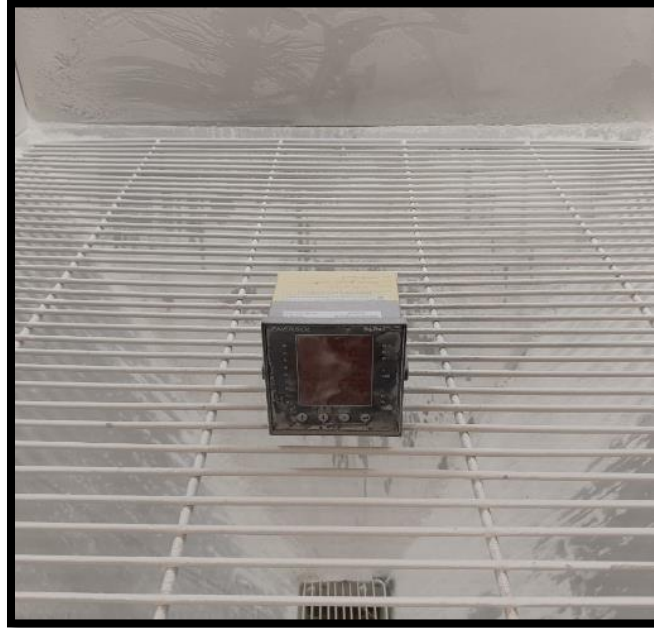
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Sr. No.	Test/ Requirement Name	Test Result/ Observation	Verdict
1.	<u>Initial measurement:</u> Visual inspection, mechanical and electrically check.	<u>In compliance</u> Equipment is checked visually, electrically and mechanically found satisfactory before the dust test.	P
	<u>IP 5X (Dust test as per cl. 13.4 and 13.5.2 of IEC 60529):2013</u> Equipment shall be subjected to a stream of dust in the dust chamber for 8 hours. The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct Operation of the equipment or impair safety.	<u>Conditioned</u>	P
	<u>Final measurement:</u> Visual inspection, mechanical and electrically check.	<u>In compliance</u> Equipment is checked visually, electrically and mechanically found satisfactory after dust test.	P
2.	<u>Initial measurement:</u> Visual inspection, mechanical and electrically check.	<u>In compliance</u> Equipment is checked visually, electrically and mechanically found satisfactory before the water test.	P
	<u>IP X4 (Water Test- Protected against spraying water cl. 14.2.4 and 14.3):IEC 60529: 2013</u> The oscillating tube has spray holes over the whole 180° of the semicircle. The tube is caused to oscillate through an angle of almost 360°, 180° on either side of the vertical, the time of one complete oscillation (2 x 360°) being about 12 s. The test duration of the test is 5 min. After testing enclosure shall be inspected for ingress of water if any water has entered it shall not: - be sufficient to interface with the correct operation of the equipment or impair safety. - deposit on the insulation parts where it could lead to tracking along the creepage distance. - reach live parts or winding not designed to operate when wet. - accumulate near the cable end or enter the cable if any.	<u>Conditioned</u>	P
	<u>Final measurement:</u> Visual inspection, mechanical and electrically check.	<u>In compliance</u> Equipment is checked visually, electrically and mechanically found satisfactory after water test.	P

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Attachments-2
Photograph of dust test

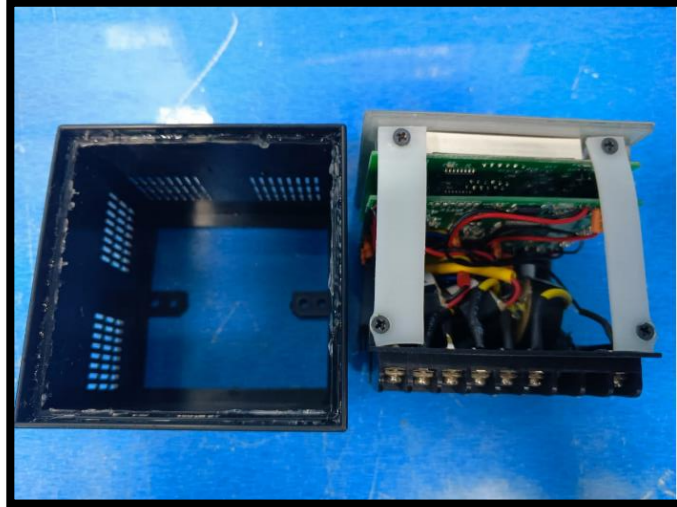


Photograph of water test

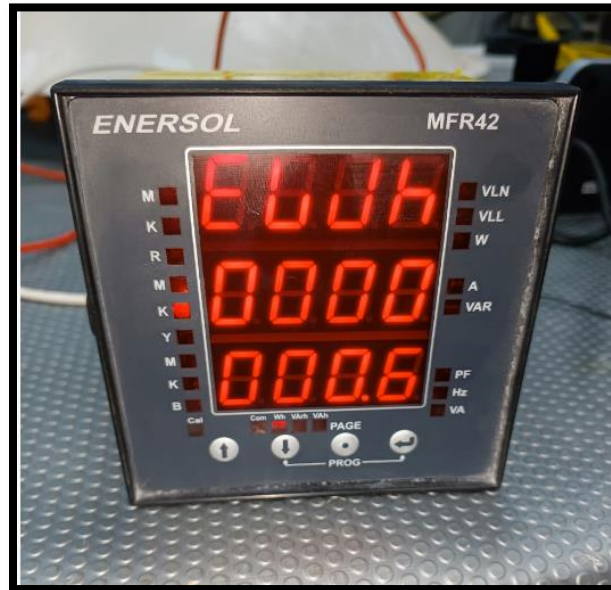


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Photograph after the test



*****END OF TEST REPORT*****

