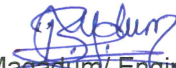

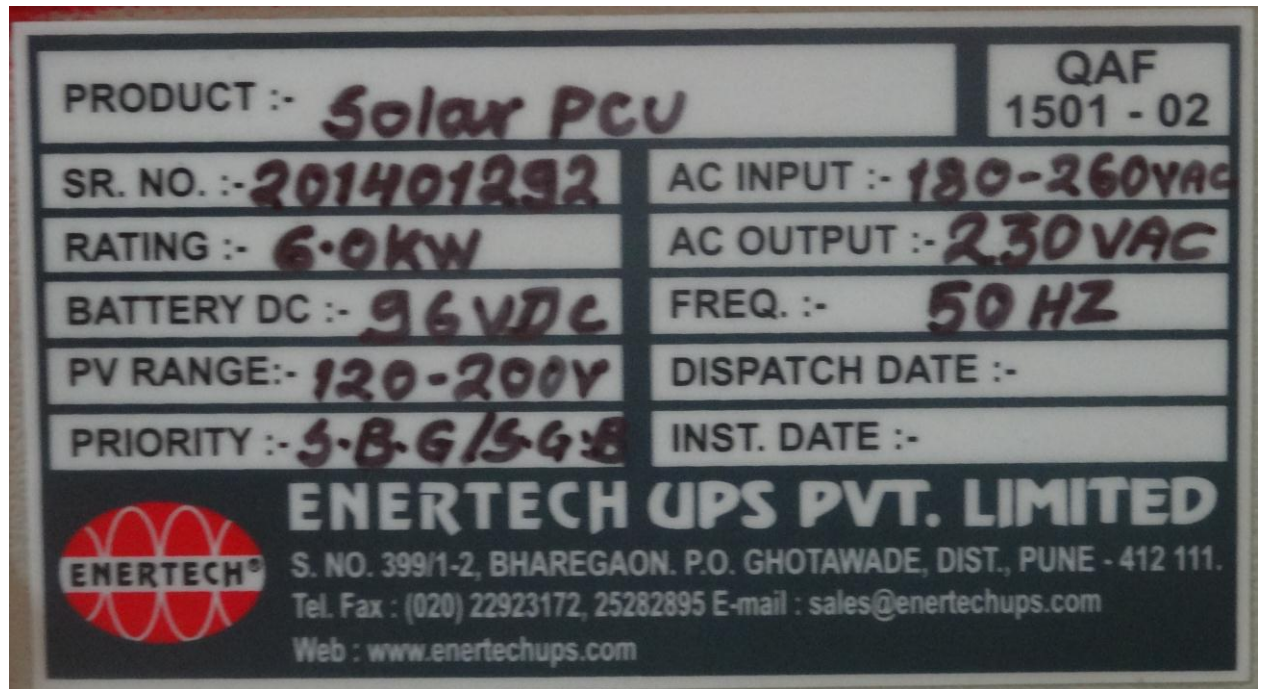


Produkte

Prüfbericht - Nr.: 19615519 001		Seite 1 von 13	
<i>Test Report No.:</i>		<i>Page 1 of 13</i>	
Auftraggeber: <i>Client:</i>	ENERTECH UPS PVT. LTD. S. No. 399/1-1, Plot No. 5, Bhare, P.O. Ghotawade, Near MSEB Substation, Pirangut, Tal. Mulshi, Pune- 412115, Maharashtra, INDIA		
Gegenstand der Prüfung: <i>Test item:</i>	SOLAR PCU		
Bezeichnung: <i>Identification:</i>	6 KW / 6 KVA	Serien-Nr.: <i>Serial No.:</i>	201401292
Wareneingangs-Nr.: <i>Receipt No.:</i>	1803024992	Eingangsdatum: <i>Date of receipt:</i>	2014.05.07
Prüfört: <i>Testing location:</i>	TÜV Rheinland (India) Pvt. Ltd. 82/A, West Wing, 3rd Main Road, Electronics City Phase 1 Bangalore – 560 100		
Prüfgrundlage: <i>Test specification:</i>	As per IEC 60529: 2001-02 Edition 2.1, (IP21)		
Prüfergebnis: <i>Test Result:</i>	See "Section 2" & "Section 3"		
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland (India) Pvt. Ltd. 82/A, West Wing, 3rd Main Road, Electronics City, Phase 1 Bangalore – 560 100		
geprüft/ tested by:	kontrolliert/ reviewed by:		
 2014.05.15 Basavant Magadam / Engineer Datum Name/Stellung Unterschrift Date Name/Position Signature	 2014.05.15 Ravindra J. / Senior Manager Datum Name/Stellung Unterschrift Date Name/Position Signature		
Sonstiges/ Other Aspects:			
The report consists of 13 pages including this coverpage and following attachment:			
Attachment-1: Photo Document			
Abkürzungen:		Abbreviations:	
P(ass) = entspricht Prüfgrundlage		P(ass) = passed	
F(ail) = entspricht nicht Prüfgrundlage		F(ail) = failed	
N/A = nicht anwendbar		N/A = not applicable	
N/T = nicht getestet		N/T = not tested	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

1 General Details

Test item description	Solar PCU
Manufacturer	M/s. ENERTECH UPS PVT. LTD.
Model and/or Type reference	6 KW / 6 KVA
Serial no.	201401292
EUT Rating	CAPACITY: 6 KW / 6 KVA MAINS INPUT: 180-260 VAC, 50Hz INV. OUTPUT : 230 VAC, 50Hz DC VOLTAGE: 96 VDC
Test requested	IP21
Applicable standard	As per IEC 60529: 2001-02 Edition 2.1
Condition of EUT on receipt	Good
Date of receipt	2014.05.07
Date of testing	2014.05.13
Others	N/A

Copy of marking plate:**General product information and considerations:**

EUT under test is an Off Grid Solar Power Conditioning Unit (PCU).

Summary of testing:

Below are the observations for IP 21 test.

IP 2x: Enclosure complies with the test requirements.

IP x1: There was a water deposition on the bottom cover of the PCU.
(Refer observation1 and Observation 2 photos on page no.13.)

2 Test Specifications for IP2x Test

IP 2x Test		
Protection against access to hazardous parts with a tool		
Test condition	Description	Remark
Test Lab ambient conditions		-
Temperature.....:	24.5°C	-
Humidity.....:	62%rh	-
The jointed test finger of 12.5mm diameter may penetrate up to its 80 mm length, but adequate clearance shall be kept.	Jointed test finger does not enter through the openings on the enclosure.	P
The access probe shall not touch hazardous mechanical parts	The access probe does not touch hazardous mechanical parts through any opening.	P
Protection against solid foreign objects		
Test condition	Description	Remark
The protection against the ingress of solid foreign objects implies that the object probes shall not fully penetrate the enclosure		P
Rigid sphere without handle or guard 12.5mm diameter with test force 30 N ± 10 %	Adequate clearance from hazardous parts	P
The protection is satisfactory if the full diameter of the sphere specified above does not pass through any opening	Sphere does not pass through any opening	P

3 Test Specifications for IPx1 Test

IPX1 Test		
Test for second characteristic numeral x1		
Test condition	Description	Remark
Test Lab ambient conditions		-
Temperature.....:	25.2°C	-
Humidity.....:	59%rh	-
Delivery rate	1mm/min ±5%	-
Distance from nozzle to enclosure surface	200mm	-
Test duration	10 min.	-
Visual check for water ingress	After exposure, EUT was gently cleaned before opening for the deposited water on the enclosure. On opening of enclosure there was water deposition on the bottom cover of the enclosure. Refer photos on page no. 13	-

Test condition	Description	Remark
Water ingress is sufficient to interfere with the correct operation of the equipment or impair safety	Functional check was performed and the EUT was found to be working satisfactorily without any deterioration.	-
Water ingress is deposit on insulation parts where it could lead to tracking along the creepage distances	No water deposited on high voltage insulation path.	-
Water ingress has reached live parts or windings that are not designed to operate when wet	No water deposited on live parts.	-

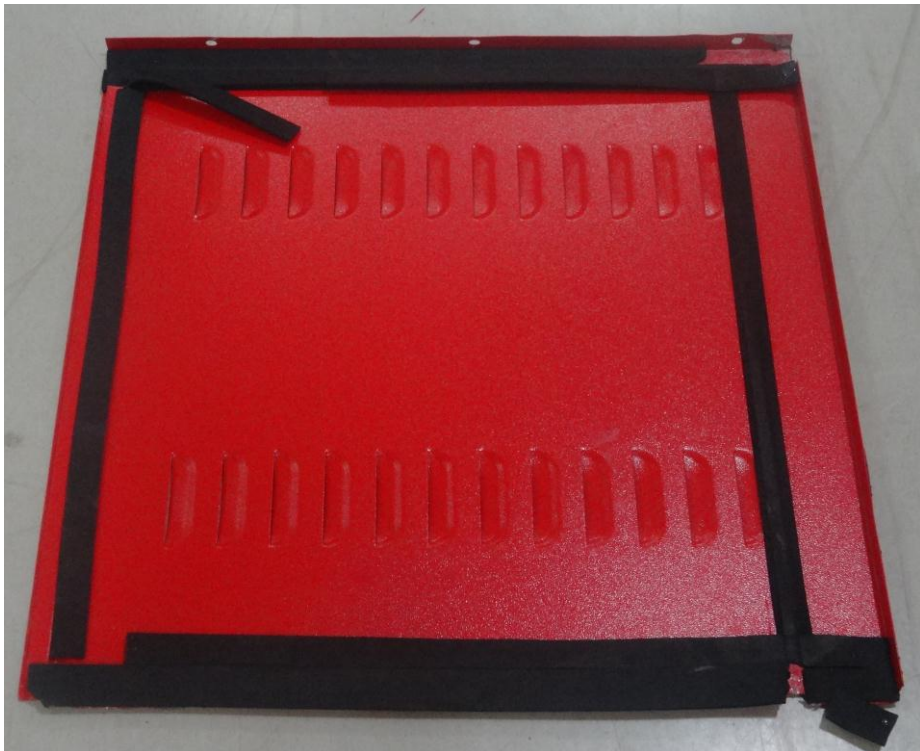
	<p>Front View</p>
	<p>Rear View</p>



Overall View



Internal View



Side Enclosure

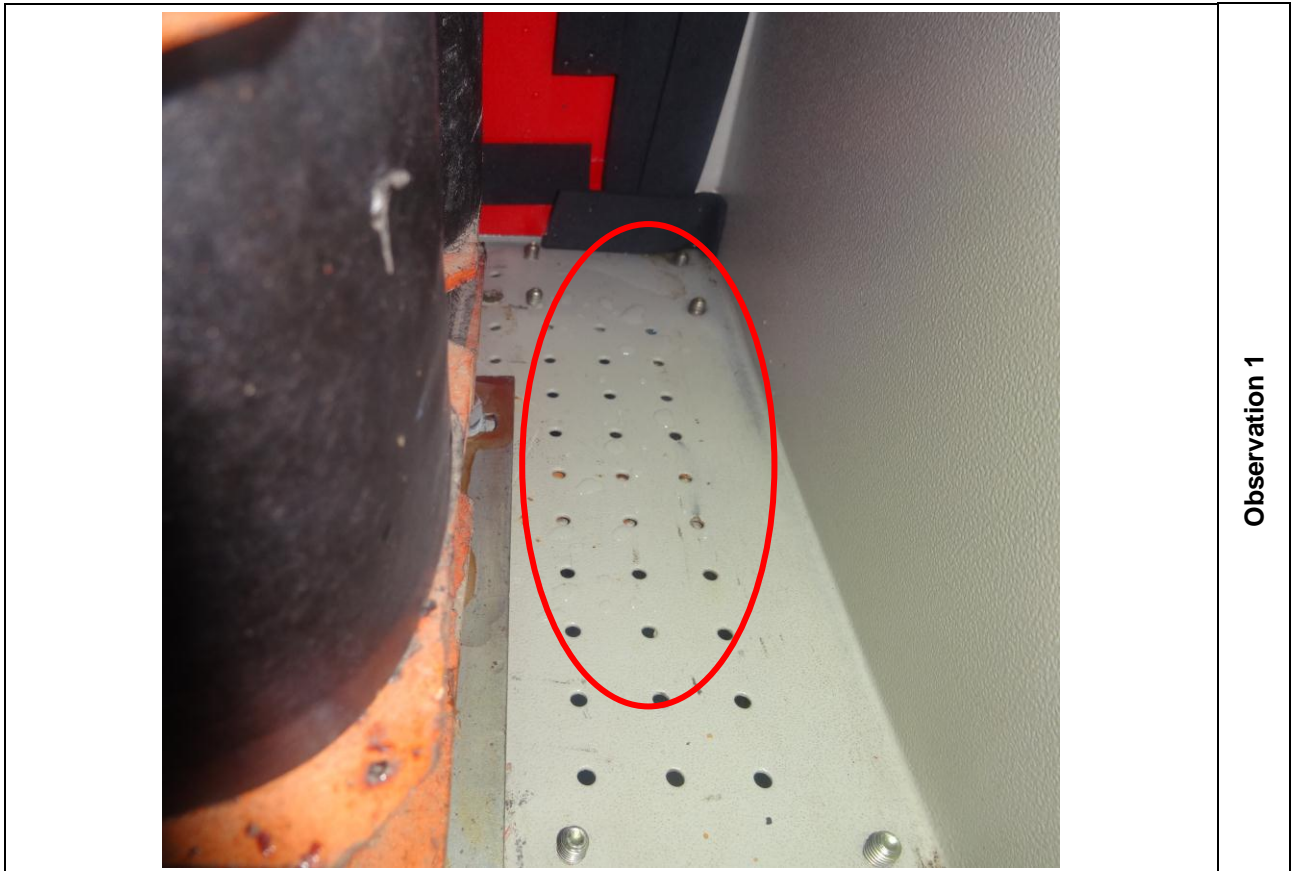
	<p>Top Enclosure</p>
	<p>Fan Enclosure</p>



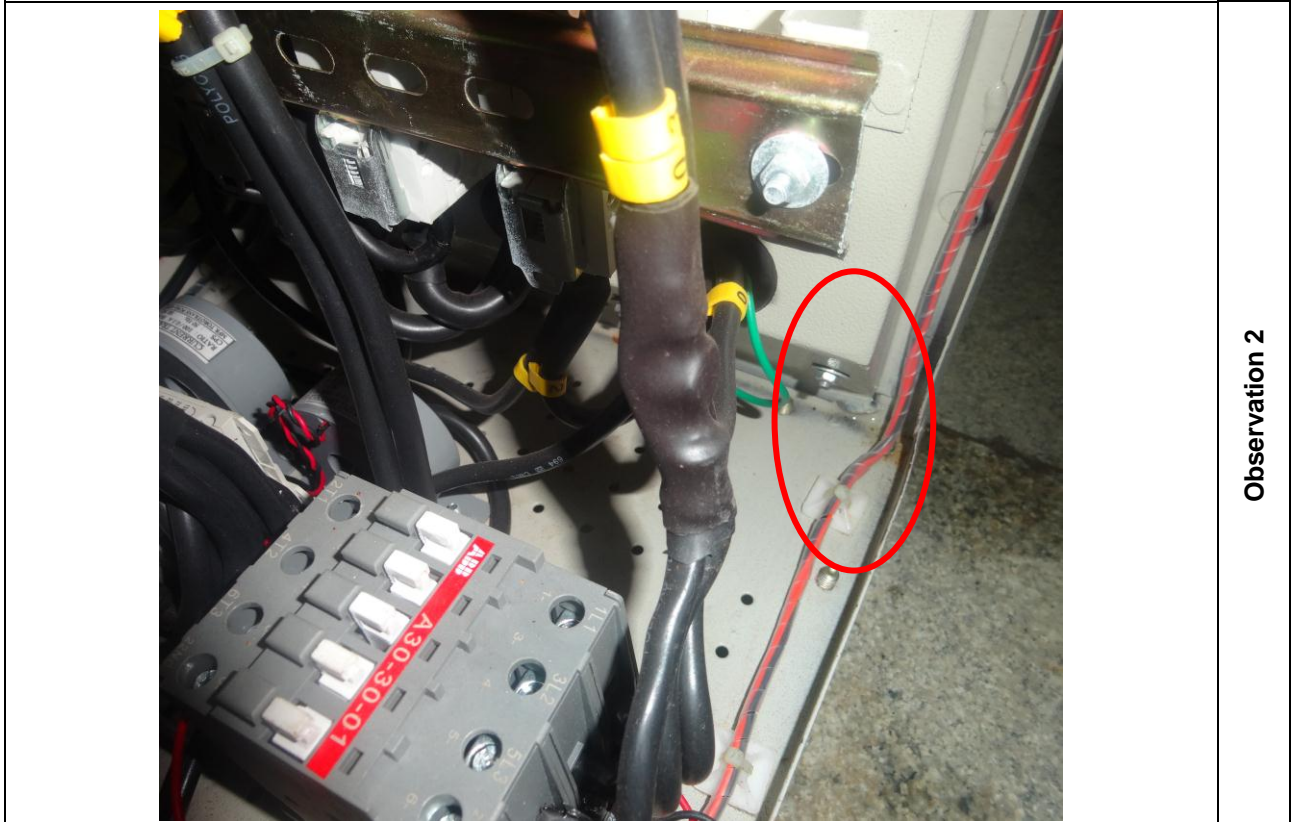
Terminal Guard



Enclosure construction



Observation 1



Observation 2

END OF TEST REPORT