Produkte
Products

TÜVRheinland®

Prüfbericht - Nr.: *Test Report No.:*	**19631086 001**		**Seite 1 von 6** *Page 1 of 6*
Auftraggeber: *Client:*	**Solar Idea Pvt. Ltd.** 8-2-277/A/7, Plot No.126, Road No 2, Banjara Hills, Hyderabad – 500034, Telangana, India		
Gegenstand der Prüfung: *Test item:*	Classic Solar Power Conditioning Unit with inbuilt MPPT charge Controller		
Bezeichnung: *Identification:*	1500VA	**Serien-Nr.:** *Serial No.:*	091604002437
Wareneingangs-Nr.: *Receipt No.:*	1803169361	**Eingangsdatum:** *Date of receipt:*	2016.09.30
Prüfort: *Testing location:*	**TÜV Rheinland (India) Pvt. Ltd.** Plot No.17B, Electronic City Phase II Industrial Area, Hosur Road Bangalore - 560 100, Karnataka, India		
Prüfgrundlage: *Test specification:*	Rated Output Efficiency measurement with Resistive load as per table 1 of IEC 61683:1999 as per customer's requirement.		
Prüfergebnis: *Test Result:*	Refer section " Summary of testing"		
Prüflaboratorium: *Testing Laboratory:*	**TÜV Rheinland (India) Pvt. Ltd.** Plot No.17B, Electronic City Phase II Industrial Area, Hosur Road Bangalore - 560 100, Karnataka, India		

geprüft/*tested by:*			**kontrolliert**/*reviewed by:*		
2016-11-18	Manjunath.K / Sr. Engineer		2016-11-18	Kamalaksha C.S / Sr. Manager	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges/*Other Aspects:*

According to the customer's requirement, the rated output efficiency measurement test conducted with resistive load.

This report consists of 6 pages including the following attachments:
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

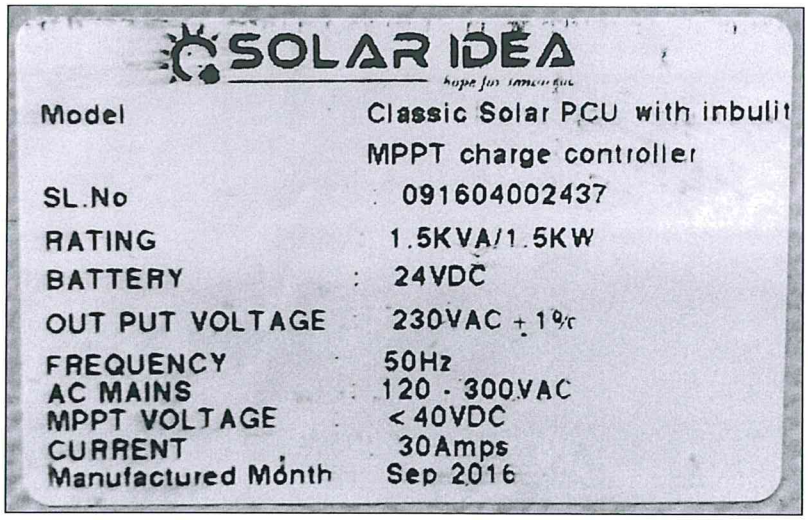
TEST REPORT
EFFICIENCY TESTING

Report reference No ..... :	19631086 001	
Tested by (printed name and signature)..... :	(see cover page)	.....
Approved by (printed name and signature)..... :	(see cover page)	.....
Date of issue..... :	(see cover page)	
Testing Laboratory Name ..... :	TÜV Rheinland (India) Pvt. Ltd.	
Address..... :	Plot No.17B, Electronic City Phase II Industrial Area, Hosur Road Bangalore - 560 100, Karnataka, India	
Applicant's Name..... :	Solar Idea Pvt. Ltd.	
Address..... :	8-2-277/A/7, Plot No.126, Road No.2, Banjara Hills, Hyderabad – 500034, Telangana, India	
Test specification ..... :		
Standard ..... :	IEC 61683:1999 as per customer's requirement.	
Test procedure..... :	QMA 37.501.03	
Non-standard test method ..... :	N/A	
Test Report Form No..... :	TUVR_EFF_R1	
TRF originator..... :	TUVR	
Master TRF..... :	2009.08.20	

Test item description..... :	Classic Solar Power Conditioning Unit with inbuilt MPPT charge Controller		
Manufacturer..... :	Solar Idea Pvt. Ltd.		
Model and/or type reference..... :	1500VA		
Serial number..... :	091604002437		
Rating(s) ..... :	RATING	:1.5KVA / 1.5KW	
	BATTERY	:24VDC	
	OUT PUT VOLTAGE	:230VAC ± 1%	
	FREQUENCY	:50Hz	
	AC MAINS	:120 – 300VAC	
	MPPT VOLTAGE	:<40VDC	
	CURRENT	:30Amps	
	Manufactured Month	:Sep 2016	

Efficiency Testing

Copy of marking plate:



General product information:

EUT is a Classic Solar Power Conditioning Unit with inbuilt MPPT charge Controller.

Particulars: test item vs. test requirements	
Operating condition ..... :	Input: High current DC Power supply (0-120V/120A) Output: 230VAC/50Hz with resistive load.
Condition of the equipment at the time of receipt..... :	Good
Test case verdicts	
Test case does not apply to the test object .. :	N/A
Test item does meet the requirement ..... :	P(Pass)
Test item does not meet the requirement .... :	F(Fail)
Testing	
Date of receipt of test item ..... :	2016.09.30
Date(s) of performance of test ..... :	2016.09.30

TÜV Rheinland (India) Pvt. Ltd. Bangalore - 560 100

Efficiency Testing

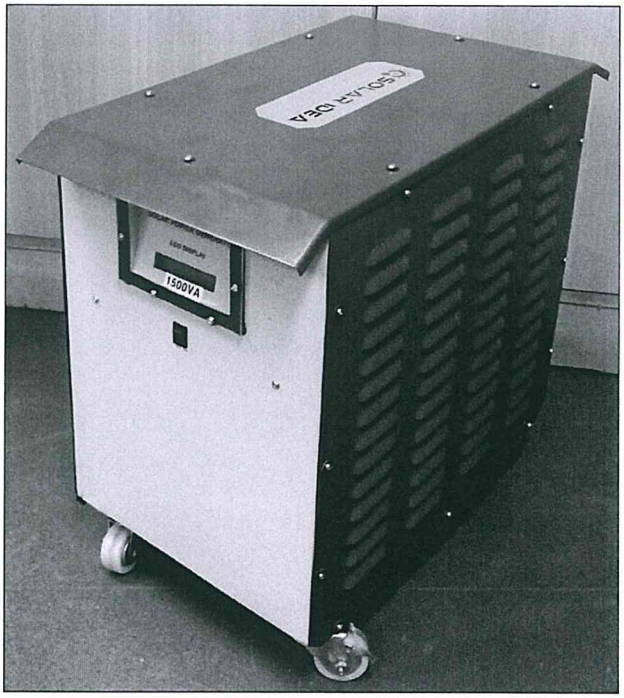
Summary of testing:

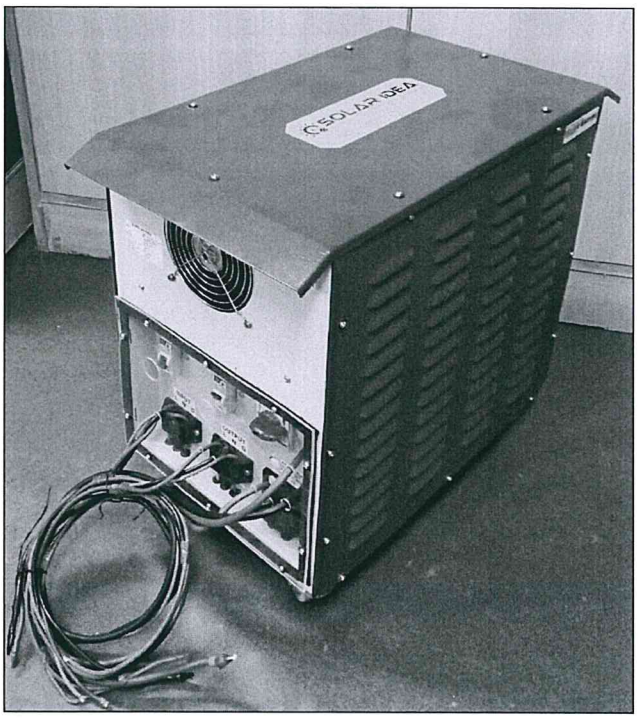
Table 1							
Model/Type		**1500VA**					
Sl. No.:		091604002437					
Load type:		**Resistive load**					
Load (%)		**5**	**10**	**25**	**50**	**75**	**100**	**120**
Actual load (%)		5.08	10.26	24.78	49.97	74.99	100.93	119.95
DC Input Voltage (V)		24.03	24.098	24.176	24.02	24.01	24.07	24.01
DC Input Current (A)		4.67	8.00	17.448	35.21	54.00	74.40	89.50
DC Input Power (W)		112.19	192.74	421.82	845.66	1296.76	1790.73	2148.72
Output	Frequency(Hz)	49.80	49.80	49.80	49.80	49.80	49.80	49.80
	Voltage (V)	226.38	226.03	226.57	227.60	228.41	228.59	229.09
	Current (A)	0.34	0.68	1.64	3.29	4.92	6.62	7.85
	Power Factor	1.00	0.999	0.999	1.000	1.000	1.000	1.00
	THD (V in %)	3.40	4.41	3.84	4.13	4.91	5.70	5.20
	THD (I in %)	4.79	4.83	4.15	4.33	5.03	5.85	5.39
	Power (W)	76.21	153.91	371.70	749.60	1124.80	1514.00	1799.30
	Power (VA)	76.29	153.95	371.72	749.60	1124.80	1514.00	1799.30
Rated Output Efficiency (%)		**67.93**	**79.86**	**88.12**	**88.64**	**86.74**	**84.55**	**83.74**
Overall Efficiency (%) (25 -100% Load)		**87.01**						
No-Load loss (W)		24.048V X 1.465A = 35.23W						
Standby loss (W)		24.048V X 1.465A = 35.23W						
Note: The above readings are taken at an ambient temperature of 25°C ± 2°C								

TÜV Rheinland (India) Pvt. Ltd. * Bangalore - 560 100 *

Efficiency Testing

Attachment-1: Photo Document

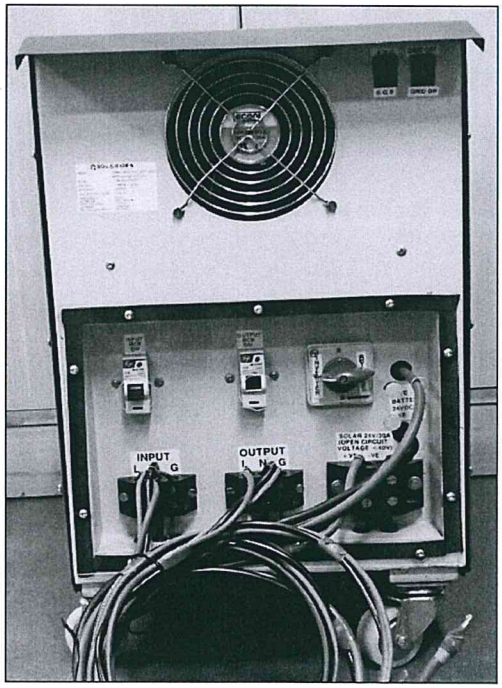




Overall View

Efficiency Testing

Front View



Rear View

* End of Report *