

Produkte

Prüfbericht - Nr.: 19615972 001		Seite 1 von 13			
Test Report No.:		Page 1 of 13			
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:	Refer section "Summary of Testing"	Serien-Nr.: Serial No.:	Refer section "Summary of Testing"		
Wareneingangs-Nr.: Receipt No.:	1803110293	Eingangsdatum: Date of receipt:	2016.01.28		
Prüfört: Testing location:	TÜV Rheinland (India) Pvt. Ltd. 82/A, West Wing, 3rd Main Road, Electronics City Phase 1 Bangalore – 560 100				
Prüfgrundlage: Test specification:	As per IEC 60529: 2013-08 Edition 2.2, (IP21)				
Prüfergebnis: Test Result:	Refer to section "summary of testing".				
Prüflaboratorium: Testing Laboratory:	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:			
 2016.02.19 Sachin Raj / Engineer		 2016.02.19 Basavant Magadam / Asst. Manager			
Datum Date	Name/Stellung Name/Position	Unterschrift Signature	Datum Date	Name/Stellung Name/Position	Unterschrift Signature
Sonstiges/ Other Aspects:					
The report consists of 13 pages including this coveragepage and following attachment:					
Attachment 1: Photo Document					
Attachment 2: Declaration Letter					
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	Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller
Manufacturer	Solar Idea Pvt. Ltd.
Model and/or Type reference	Refer section "Summary of Testing"
Serial no.	Refer section "Summary of Testing"
EUT Rating	Refer "Copy of marking plate"
Test requested	IP21
Applicable standard	As per IEC 60529: 2013-08 Edition 2.2
EUT Dimensions (L x W x H)	Model 3000VA – 440mm X 295mm X 410mm Model 5000VA – 590mm X 295mm X 630mm
Condition of EUT on receipt	Good
Date of receipt	2016.01.28
Date of testing	2016.02.05
Others	N/A

Copy of marking plate:

Model : Classic Solar PCU with Inbuilt MPPT charge controller
SL.No : 101505001571
RATING : 3KVA/3KW
BATTERY : 48VDC
OUT PUT VOLTAGE : 230VAC \pm 1%
FREQUENCY : 50Hz
AC MAINS : 120 - 300VAC
MPPT VOLTAGE : $<$ 80VDC
CURRENT : 30Amps
Manufactured Month : Oct 2015



Model : Classic Solar PCU with Inbuilt MPPT charge controller
SL.No : 101506001572
RATING : 5KVA/5KW
BATTERY : 96VDC
OUT PUT VOLTAGE : 230VAC \pm 1%
FREQUENCY : 50Hz
AC MAINS : 160 - 300VAC
MPPT VOLTAGE : $<$ 160VDC
CURRENT : 30Amps
Manufactured Month : Oct 2015

General product information and considerations:

The equipment under test are

- 1) 3000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller
- 2) 5000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller

Summary of testing:

IP 2x : done on (3000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller;
Serial No:101505001571)
(5000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller;
Serial No:101505001572)

Observations: Test probe does not penetrates through any openings on the EUT

IP x1 : done on (3000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller;
Serial No:101505001571)
(5000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller;
Serial No:101505001572)

Observations: No water observed inside the EUT.

Note: The below mentioned Inverter and respective model no's and rating are identical in physical enclosure construction and there are no changes in enclosures outside dimension and design as per customer's declaration (Refer declaration on page no.13).

Sl.No	Product / Test item	Model No./ Identification	Rating
1	Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller	2000VA	2KVA / 2KW
2	Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller	3000VA	3KVA / 3KW

TUV has visually examined the below mentioned models and found that the enclosure's dimension and design are same and both are identical in physical construction and design.
(Refer photos on page no.7 to 10)

Sl.No	Product / Test item	Model No./ Identification	Rating	Serial number	Dimensions in mm (L x W x D)
1	Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller	2000VA	2KVA / 2KW	101510001573	440 x 295 x 410
2	Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller	3000VA	3KVA / 3KW	101505001571	440 x 295 x 410

IEC 60529		
Test Condition	Description	Verdict

2 Test Specifications for IP2x Test

IP 2x Test		
Protection against access to hazardous parts with a tool		
Test lab ambient temperature/humidity & pressure during test	23.7°C, 59%rh, 912 mbar.	-
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 any openings on both 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		
The protection against the ingress of solid foreign objects implies that the object probes shall not fully penetrate the enclosure		-
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 probe specified above does not pass through any opening	Probe does not pass through any opening	P

IEC 60529		
Test Condition	Description	Verdict

3 Test Specifications for IPx1 Test

IPX1 Test		
Protection against vertically falling water drops		
Test lab ambient temperature/humidity & pressure during test	23.5°C, 63%rh, 912 mbar.	-
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 is no water deposit into the product.	P
Water ingress is sufficient to interfere with the correct operation of the equipment or impair safety	Both the tested units were turned ON after the test and was found to be working fine	P
Water ingress is deposited on insulation parts where it could lead to tracking along the creepage distances	No water deposited on high voltage insulation path.	P
Water ingress has reached live parts or windings that are not designed to operate when wet	No water deposited on live parts.	P

IEC 60529
Attachment 1: Photo Document

Model – 2000VA



Front view



Rear View



Overall view



Overall view

IEC 60529

Attachment 1: Photo Document

Model – 5000VA



Front view



Rear View



Overall view



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27.01.2016

To,

TÜV Rheinland (India) Pvt. Ltd.
82/A, West Wing,
3rd Main Road,
Electronic City- Phase 1,
Bengaluru-560 100

Karnataka, INDIA

Landmark – Opposite AUDI Service centre

Dear Sir,

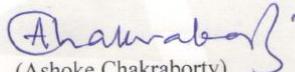
We hereby declare that both the models of 2000VA and 3000VA sent for IP21 testing resembles similar enclosures in construction and sizes including components rating in the design. Only differences in the transformer rating. The IP21 test for one model will suffice the other model.

The serial number for Model 2000VA units are 101510001573, 121510001811

The serial number for Model 3000VA units are 101505001571, 121505001812

Thanking You

Yours Faithfully,


(Ashoke Chakraborty)

Chief Technology Officer

SOLAR IDEA PRIVATE LIMITED, CIN : U40106TG2014PTC094915

Registered Office : Door No. 8-2-277/A/7, Plot No. 126, Road No. 2, Banjara Hills, Hyderabad -500034, Telangana State, India.

End of Test Report