TÜVRheinland®

Produkte

Prüfbericht - Nr.: *Test Report No.:*	**19616000 001**		**Seite 1 von 8** *Page 1 of 8*
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:*	10KVA	**Serien-Nr.:** *Serial No.:*	11608001931
Wareneingangs-Nr.: *Receipt No.:*	1803119805	**Eingangsdatum:** *Date of receipt:*	2016.02.09
Prüfort: *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:*

2016.03.09	Sachin Raj / Engineer	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

kontrolliert/ *reviewed by:*

2016.03.09	Basavant Magadum / Asst. Manager	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges/ *Other Aspects:*

The report consists of 8 pages including this coverpage and following attachment:

Attachment 1: Photo Document

Abkürzungen:	***P(ass)***	=	***entspricht Prüfgrundlage***	***Abbreviations:***	***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***

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	10KVA
Serial no.	11608001931
EUT Rating	Rating : 10KVA / 10Kw Battery : 120VDC O/P Voltage : 230 VAC±1% Frequency : 50Hz AC Mains : 160 – 300VAC MPPT Voltage : <500VDC Current : 30A
Test requested	IP21
Applicable standard	As per IEC 60529: 2013-08 Edition 2.2
EUT Dimensions (L x W x H)	-
Condition of EUT on receipt	Good
Date of receipt	2016.02.09
Date of testing	2016.02.10 & 2016.02.24
Others	N/A

IEC 60529

Copy of marking plate:

Model : Classic Solar PCU with Inbuilt
: MPPT charge controller
SL.No : 01160800193 1
RATING : 10KVA/10KW
BATTERY : 120VDC
OUT PUT VOLTAGE : 230VAC ± 1%
FREQUENCY : 50Hz
AC MAINS : 160 - 300VAC
MPPT VOLTAGE : <500VDC
CURRENT : 30Amps
Manufactured Month : Jan 2016

General product information and considerations:

The equipment under test is

1) 10000VA Classic Solar Power Conditioning Unit with inbuilt MPPT charge controller

Summary of testing:

IP 2x : Pass

Observations: Test probe is not accessible to any hazardous live and mechanical parts

IP x1 : Pass

Observations: No water observed inside the EUT.

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	22.8°C, 55%rh, 911 mbar.	-
The jointed test finger of 12 mm diameter may penetrate up to its 80 mm length, but adequate clearance shall be kept.	Jointed test finger is not accessible to any live hazardous parts	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	23.7°C, 62%rh, 911 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	No water deposition observed inside the unit	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	
	**Front view**
	**Rear View**

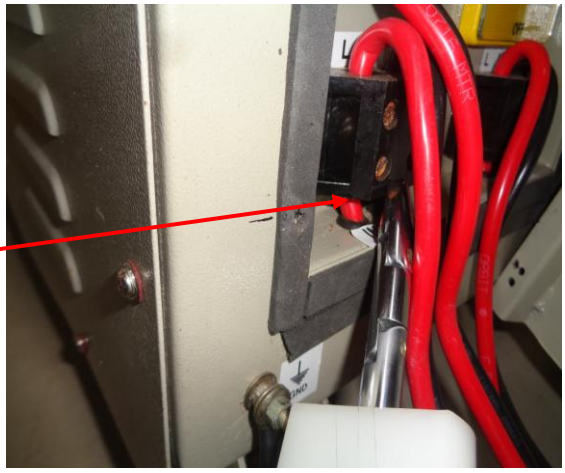
IEC 60529

Attachment 1: Photo Document

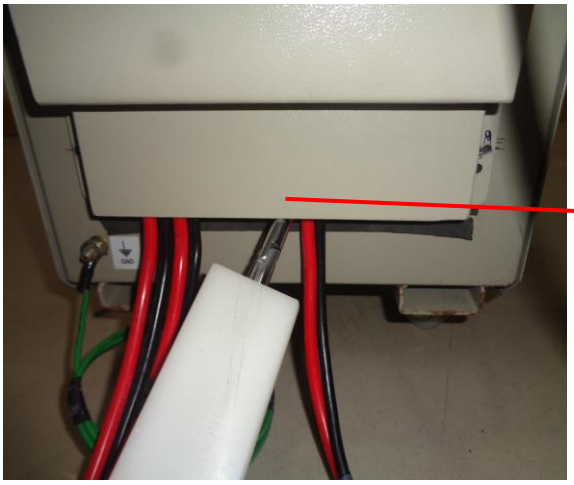
Overall view

IEC 60529

Attachment 1: Photo Document



IP2x Observation



IP2x Observation

End of Test Report