

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product

Surge Protective Device for PV application

Name and address of the applicant

SUNTREE Electric Group Co., Ltd.
Xinguang Industrial Zone, Liushi Town, Yueqing City,
Zhejiang
P.R. China

Name and address of the manufacturer

SUNTREE Electric Group Co., Ltd.
Xinguang Industrial Zone, Liushi Town, Yueqing City,
Zhejiang
P.R. China

Name and address of the factory

Note: When more than one factory, please report on page 2

SUNTREE Electric Group Co., Ltd.
Xinguang Industrial Zone, Liushi Town, Yueqing City,
Zhejiang
P.R. China

Ratings and principal characteristics

Ucpv:600 VDC; PV T2 In=20kA; Imax=40kA; Up:2.8kV;
Itotal:40kA; Iscpv:10A; Indoor; One port; IP20

Trademark / Brand (if any)

Suntree (logo)

Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

SUP2H6-PV, SUP4H6-S40

Additional information (if necessary may also be reported on page 2)

N/A

A sample of the product was tested and found to be in conformity with

IEC 61643-31:2018

As shown in the Test Report Ref. No. which forms part of this Certificate

CN22K4LM 001

This CB Test Certificate is issued by the National Certification Body



TÜV Rheinland InterCert Kft., MEEI Division
H-1143 Budapest, Gizella út 51-57., Hungary
Web: www.tuv.com

Date: 2022-11-13

Signature:



Wencai Zhang

CERTIFICATE



of Conformity Low Voltage Directive 2014/35/EU

Registration No.: AN 50563699 0001

Report No.: CN22N6T1 001

Holder: SUNTREE Electric Group Co., Ltd.
Xinguang Industrial Zone,
Liushi Town, Yueqing City
Zhejiang
P.R. China

Product: Surge Protector
(Surge Protective Device for PV application) ®

Identification:

Type Designation	: SUP2H6-PV, SUP4H6-S40 (SUNTREE)
Serial No.	: Engineering Samples
Remark:	
Issued in conjunction with TÜV Rheinland license R 50563694 0001	

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.

Certification Body

Date 16.11.2022



Yongming Yang
Yongming Yang

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with.



SUNTREE Electric Group Co., Ltd.
Maggie Liu

Date : 16.11.2022
Our ref. : ZWC 01
Your ref.: M.L.

Xinguang Industrial Zone,
Liushi Town, Yueqing City
Zhejiang
P.R. China

Ref : AN Certificate of Conf. Low Voltage D.

Type of Equipment : Surge Protective Device for PV application
Model Designation : See Certificate
Certificate No. : AN 50563699 0001
Report No. : CN22N6T1 001

Dear Maggie Liu,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body



Yongming Yang

CC: SUNTREE Electric Group Co., Ltd.

Enclosure

证书的详细资料请登陆www.certipedia.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50563694

Blatt Sheet
0001

Ihr Zeichen Client Reference
M.L.

Unser Zeichen Our Reference
01-ZWC-CN22N6T1 001

Ausstellungsdatum Date of Issue
16.11.2022 (day/mo/yr)

Genehmigungsinhaber License Holder

SUNTREE Electric Group Co., Ltd.
Xinguang Industrial Zone,
Liushi Town, Yueqing City
Zhejiang
P.R. China

Fertigungsstätte Manufacturing Plant

SUNTREE Electric Group Co., Ltd.
Xinguang Industrial Zone,
Liushi Town, Yueqing City
Zhejiang
P.R. China

Prüfzeichen Test Mark



Regular Production
Surveillance
Safety
Type Approved

www.tuv.com
ID 1111261195

Geprüft nach Tested acc. to
EN 61643-31:2019

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Surge Protector (Surge Protective Device for PV application)

Type Designation	: SUP2H6-PV, SUP4H6-S40 (SUNTREE)	6
Maximum continuous operating voltage (Ucpv)	: 600 V DC	
Voltage protection level (Up)	: 2.8kV(+/PE, -/PE)	
Short-circuit current rating (Iscpv)	: 10 A	
Nominal discharge current (In)	: 20 kA	
Maximum discharge current (Imax)	: 40 kA	
Itotal	: 40 kA	
Type of SPD	: Type 2	
Location	: Indoor	
Temperatures	: -40°C to +70°C	

Remark: test according to IEC 61643-31:2018 was considered.

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ANLAGE (Appendix): 1.0

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935



Zertifizierungsstelle

Yang Yongming

Yongming Yang

SUNTREE Electric Group Co., Ltd.
Maggie Liu

Date : 16.11.2022
Our ref. : ZWC 01
Your ref.: M.L.

Xinguang Industrial Zone,
Liushi Town, Yueqing City
Zhejiang
P.R. China

Ref : R TÜV-Mark Approval

Type of Equipment : Surge Protective Device for PV application
Model Designation : See Certificate
Certificate No. : R 50563694 0001
Report No. : CN22N6T1 001

Dear Maggie Liu,

The above specified technical equipment has been tested and found to be in accordance with the relevant requirements.

Enclosed you will find the certificate of approval.

If cancellation of the certificate is submitted by November 15 in a given year, no fee will be charged for the following year.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

Please contact our office for approval of your new products.

With kind regards,

Certification Body



Yongming Yang

cc: SUNTREE Electric Group Co., Ltd.

Enclosure

证书的详细资料请登陆www.certipedia.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

(To be filled in by TÜV Rheinland)

Constructional Data Form

Page 1/
4

Applicant:	SUNTREE Electric Group Co., Ltd.
Address:	Xinguang Industrial Zone, Liushi Town, Yueqing City, Zhejiang, P.R. China
Factory:	SUNTREE Electric Group Co., Ltd.
Address:	Xinguang Industrial Zone, Liushi Town, Yueqing City, Zhejiang, P.R. China
Kind of Equip.:	Surge Protective Device for PV application
Designation:	SUP2H6-PV, SUP4H6-S40
Location category:	Indoor
Number of ports:	One port
Method of mounting:	DIN-rail
Residual Current(I_{PE})	0.3mA d.c.; 0.5 mA a.c.
Type of current:	DC
Test Class:	Type 2
Nominal discharge current(I_n):	20kA
Max. discharge current (I_{max}):	40kA
Max. continuous operation voltage (U_{cpv}):	600 V DC
Short-circuit current rating (I_{SCPv}):	10 A
Continuous current for PV application (I_{cpv})	50 μ A
Voltage protect level (U_p):	2.8 kV(+ to PE, - to PE)
Application system	Photovoltaic system
IP code	IP20
Temperatures and humidity	-40°C to +70°C/5% to 95%
Air pressure and altitude	62kPa to 106kPa, -500m to 2000m
Remark:	OCFM Trade Mark: 

1. Circuit Diagram

TÜV Rheinland

Wenzhou city Yueqing
(Place)

2022/11/02
(Date)

3 November
2022
(Date)

(Signature)

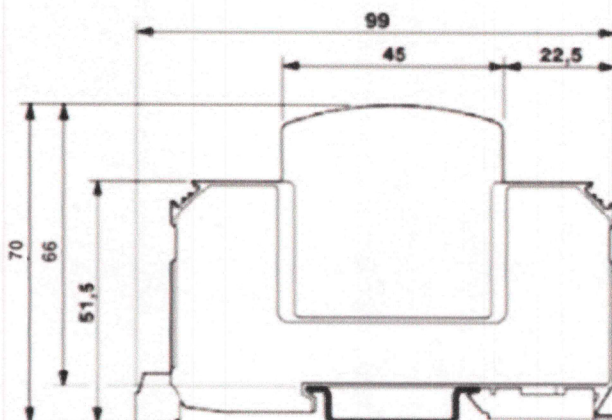
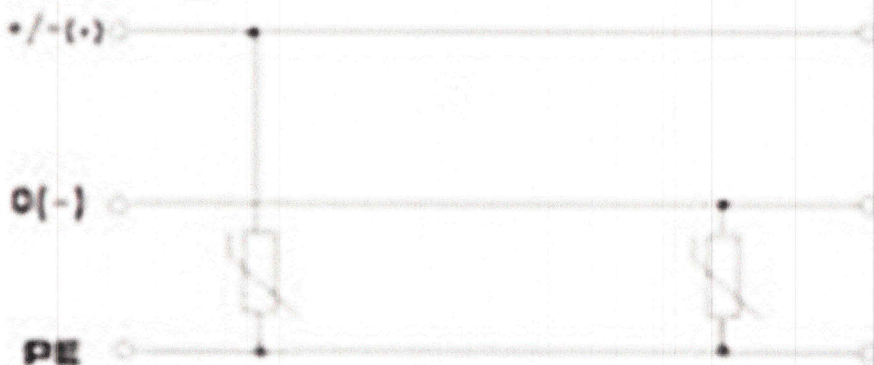
Ruijie Ma
(Stamp and Signature of Applicant)



(To be filled in by TÜV Rheinland)

Constructional Data Form

Page 2/
4



TÜV Rheinland

wenzhou city Yueqing
(Place)



2022/11/02
(Date)

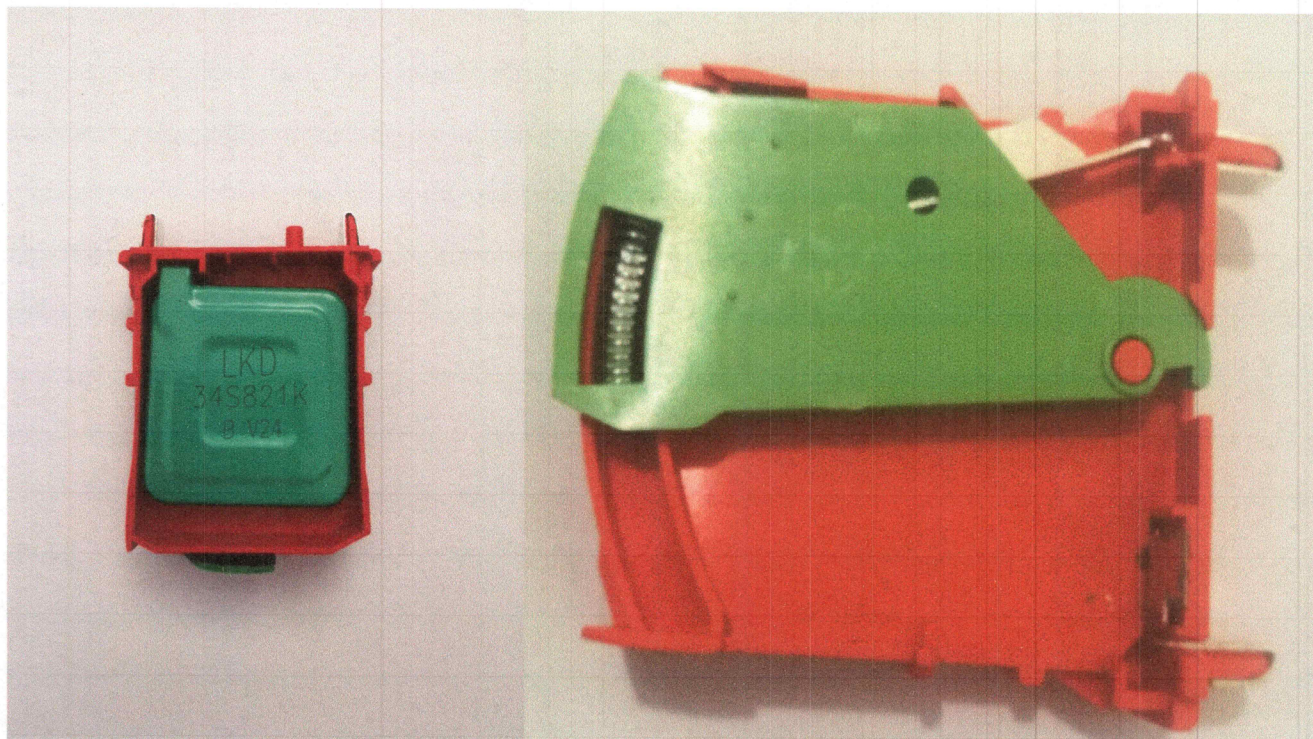
3 November
2022
(Date) Abma Zhang
(Signature)

Ruijie Ma
(Stamp and Signature of Applicant)

(To be filled in by TÜV Rheinland)

Constructional Data Form

Page 3/
4



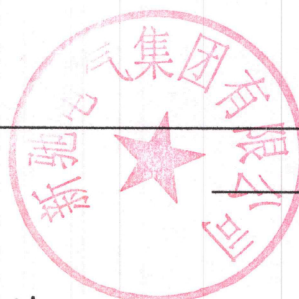
TÜV Rheinland

Wenzhou city, Yueqing
(Place)

2022/11/02
(Date)

3 November
2022
(Date) Ruijie Ma
(Signature)

Ruijie Ma
(Stamp and Signature of Applicant)



Constructional Data Form

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2. Part list

No.	Name	Type & Specifications	Manufacturer	Standards	Certification
1	MOV	34S821K	Longke Electronics Co., Ltd.	IEC61051-1:2018	TUV B 080789 0003Rev.03
2	Box cover	PA66 A3 GF25 V0XI UL94 V-0	Jiangyin YINUO Engineering Plastics Co., Ltd.	IEC61643-31	Test with SPD
3	Box body	Muld	Zhejiang Leisheng Electronics Co., Ltd.	IEC61643-31	Test with SPD
4	Micro switch	G10-00P-150-127 2A 125VAC	Wenzhou Gangyuan Electronics Co., Ltd	CAN/CSA-C22.2 No. 61058-1	WOYR8.E4901 51
5	Telesignalling terminals	ZB15EDGK-3.81-03p-G01 ZB15EDGV-3.81-03p-G01	NingboZhongbo Photovoltaic Technology Co., Ltd	DIN EN61984 (VDE 0627): 2002	Test with SPD
6	Tin solder	S-SnA 135°C	Zhejiang Qiangli Holding Co., Ltd.	SGS	Test with SPD

TÜV Rheinland

Wenzhou city Yueqing
(Place)

2022/11/02
(Date)

3 November
2022
(Date) *Abnau Zhang*
(Signature)

Ruijie Ma
(Stamp and Signature of Applicant)

