SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | E-mail: info@SMA.de
Amtsgericht (District court) Kassel HRB (registration number) 3972
Vorsitzender des Aufsichtsrats (Chairman of the Supervisory Board): Uwe Kleinkauf
Vorstand (Managing Board): Ulrich Hadding, Dr.-Ing. Jürgen Reinert

EU Declaration of Conformity

Within the meaning of the EU directives

- **Electromagnetic compatibility 2014/30/EU (L 96/79-106, March 29, 2014) (EMC)**
- **Low Voltage Directive 2014/35/EU (L 96/357-374, March 29, 2014) (LVD)**
- **Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31, 2015) (RoHS)**

The subject matter of the declaration described below meet the requirements relating to Union harmonization legislation.
The applied harmonized standards are listed in the following table.

The Sunny Tripower Core2	**STP 110-60**
Electromagnetic emission (EMC directive, Article 6 – Annex I.1.a)	
EN IEC 61000-6-4:2019	✓
EN 55011:2016 + A1:2017 group 1, class A	✓
Grid interferences (EMC directive, Article 6 – Annex I.1.a)	
EN 61000-3-11:2000	✓
EN 61000-3-12:2011	✓
Interference immunity (EMC directive, Article 6 – Annex I.1.b)	
EN IEC 61000-6-2:2019	✓
Device safety (LVD, Article 3 – Annex I)	
EN 62109-1:2010	✓
EN 62109-2:2011	✓
Restriction of the use of certain hazardous substances (RoHS)	
EN IEC 63000:2018	✓

✓ Standard applicable |
✗ Standard not applicable

The last two digits of the year in which the CE marking was affixed: 20

Note:
The declaration of conformity is issued under the sole responsibility of the manufacturer. Without an explicit written confirmation by SMA Solar Technology AG, this declaration of conformity is no longer valid if the product is modified, supplemented or changed in any other way and if components which are not part of the SMA accessory, are integrated in the product, as well as if the product is used or installed improperly.

Niestetal, 2020-07-29
SMA Solar Technology AG

i.V. Sven Bremicker

i.V. Sven Bremicker
Head of Technology Development Center

Declaration of Conformity

with German, European and International (Non-European) standards

German Standard DIN EN		European Standard EN		International Standard IEC (IEC/CISPR)
DIN EN 55011:2018-05, group1, class A		EN 55011:2016 + A1:2017 group 1, class A		CISPR11:2015 + A1:2017 group 1, class A
DIN EN IEC 61000-6-2:2019	based on	EN IEC 61000-6-2:2019	based on	EN IEC 61000-6-2:2019
DIN EN IEC 61000-6-4:2019	based on	EN IEC 61000-6-4:2019	based on	EN IEC 61000-6-4:2019
DIN EN 61000-3-11:2001-04	based on	EN 61000-3-11:2000	based on	IEC 61000-3-11:2000
DIN EN 61000-3-12:2012-06	based on	EN 61000-3-12:2011	based on	IEC 61000-3-12:2011
DIN EN 62109-1:2011	based on	EN 62109-1:2010	based on	IEC 62109-1:2010
DIN EN 62109-2:2012	based on	EN 62109-2:2011	based on	IEC 62109-2:2011
DIN EN IEC 63000:2019-05	based on	EN IEC 63000:2018	based on	IEC 63000:2016

C E R T I F I C A T E

of Conformity

TÜVRheinland®

Registration No.: AK 50485825 0001

Report No.: CN20SBR6 001

Holder:
SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Deutschland

Product:
PV-Inverter
(Grid-connected PV Inverter)

Identification:

```
Type Designation : STP 110-60
Serial Number    : Engineering Samples
Firmware version : 1.00.00.R
Remark(s)        : Refer to report CN20SBR6 001 for details.
```

Tested acc. to: G99/1-6/03.20

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body

TÜV Rheinland LGA Products GmbH Zertifizierstelle TÜV Rheinland

Date 11.11.2020

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | Email: info@SMA.de
Amtsgericht (District court) Kassel HRB (registration number) 3972
Vorsitzender des Aufsichtsrats (Chairman of the Supervisory Board): Dr. Erik Ehrentraut
Managing Board: Ulrich Hadding, Dr.-Ing. Jürgen Reinert

EU Declaration of Conformity

Within the meaning of the EU directives

- **Electromagnetic compatibility 2014/30/EU (L 96/79-106, March 29, 2014) (EMC)**
- **Low Voltage Directive 2014/35/EU (L 96/357-374, March 29, 2014) (LVD)**
- **Radio Equipment Directive 2014/53/EU (L 153/62, May 22, 2014) (RED)**
- **Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31, 2015) (RoHS)**

The subject matter of the declaration described below meet the requirements relating to Union harmonization legislation.
The applied harmonized standards are listed in the following table.

Device family	**STP 50-40***
Assemblies	NR-PC-KP20L.BG1 / NR-PL-ACRLY5-01 / NR-PL-AST5-01 / NR-PL-BFS5-01 / NR-PL-DST5-01 NR-PL-DCEMV5M-01 / NR-PL-DCP-01 / NR-PL-EXFAN-Set-01
Electromagnetic emission (EMC directive, Article 6 – Annex I.1.a)	
EN 61000-6-3:2007 + A1:2011	✓
EN 61000-6-4:2007 + A1:2011	✓
EN 55011:2016 + A1:2017 group 1, class A	✓
Grid interferences (EMC directive, Article 6 – Annex I.1.a)	
EN 61000-3-3:2013	✗
EN 61000-3-2:2014	✗
EN 61000-3-11:2000	✓
EN 61000-3-12:2011	✓
Interference immunity (EMC directive, Article 6 – Annex I.1.b)	
EN 61000-6-1:2007	✓
EN 61000-6-2:2005	✓
Device safety (LVD, Article 3 – Annex I)	
EN 62109-1:2010	✓
EN 62109-2:2011	✓
Health and safety (RED, Article 3.1.a)	
EN 62311:2008	✓
Electromagnetic compatibility (RED, Article 3.1.b)	
EN 301 489-1 V2.1.1	✓
EN 301 489-17 V3.1.1	✓
Effective exploitation of frequency range (RED, Article 3.2.)	
EN 300 328 V1.9.1	✓
EN 300 328 V2.1.1	✓
Restriction of the use of certain hazardous substances (RoHS)	
EN IEC 63000:2018	✓

✓ Standard applicable | ✗ Standard not applicable | *Including accessories: MD.SEN-40, MD.485-40, MD.IO-40

The last two digits of the year in which the CE marking was affixed: 17

Note:
The declaration of conformity is issued under the sole responsibility of the manufacturer.
Without an explicit written confirmation by SMA Solar Technology AG, this declaration of conformity is no longer valid if the product is modified, supplemented or changed in any other way and if components which are not part of the SMA accessory, are integrated in the product, as well as if the product is used or installed improperly.

Niestetal, 2020-01-09
SMA Solar Technology AG

i.V. Sven Bremicker

i.V. Sven Bremicker
Head of Technology Development Center

Declaration of Conformity

with German, European and International (Non-European) standards

German Standard DIN EN		European Standard EN		International Standard IEC (IEC/CISPR)
DIN EN 55011:2018-05, group1, class A		EN 55011:2016 + A1:2017 group 1, class A		CISPR11:2015 + A1:2017 group 1, class A
DIN EN 61000-6-1:2007-10	based on	EN 61000-6-1:2007	based on	IEC 61000-6-1:2005
DIN EN 61000-6-2:2006-03	based on	EN 61000-6-2:2005	based on	IEC 61000-6-2:2005
DIN EN 61000-6-3:2011-09	based on	EN 61000-6-3:2007 + A1:2011	based on	IEC 61000-6-3:2006 + A1:2010
DIN EN 61000-6-4:2011-09	based on	EN 61000-6-4:2007 + A1:2011	based on	IEC 61000-6-4:2006 + A1:2010
DIN EN 61000-3-2:2015-03	based on	EN 61000-3-2:2014	based on	IEC 61000-3-2:2014
DIN EN 61000-3-3:2014-03	based on	EN 61000-3-3:2013	based on	IEC 61000-3-3:2013
DIN EN 61000-3-11:2001-04	based on	EN 61000-3-11:2000	based on	IEC 61000-3-11:2000
DIN EN 61000-3-12:2012-06	based on	EN 61000-3-12:2011	based on	IEC 61000-3-12:2011
DIN EN 62109-1:2011	based on	EN 62109-1:2010	based on	IEC 62109-1:2010
DIN EN 62109-2:2012	based on	EN 62109-2:2011	based on	IEC 62109-2:2011
DIN EN 62477-1:2014-06	based on	EN 62477-1:2012	based on	IEC 62477-1:2012
DIN EN 62311:2008-09	based on	EN 62311:2008	based on	IEC 62311:2007
DIN EN ————————	based on	EN 301 489-1 V2.1.1	based on	IEC ————————
DIN EN ————————	based on	EN 301 489-17 V3.1.1	based on	IEC ————————
DIN EN ————————	based on	EN 300 328 V1.9.1	based on	IEC ————————
DIN EN ————————	based on	EN 300 328 V2.1.1	based on	IEC ————————
DIN EN IEC 63000:2019-05	based on	EN IEC 63000:2018	based on	IEC 63000:2016

APPROVALS®

Certificate of Conformity/Approval

Addendum

Certificate No.: **SAA-202733-EA**

Date of Issue: **7 December 2020**

Regulatory Definition: DC Isolator
Product Description: DC Isolator for use inside inverter

Additional Models	Trade Name	Rating/Marking
SB2.5-1VI-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:600V Ie:10A Imake:18A, Ic(break):18A, Isolar the 60°C: 18A IP65
SB3.0-1AV-41 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:600V Ie:15A Imake:20A, Ic(break):20A, Isolar the 60°C: 30A IP65
SB4.0-1AV-41 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:600V Ie:15A Imake:20A, Ic(break):20A, Isolar the 60°C: 30A IP65
SB5.0-1AV-41 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:600V Ie:15A Imake:20A, Ic(break):20A, Isolar the 60°C: 30A IP65

R A Nill

For and on Behalf of
SAA Approvals Pty Ltd

This certificate is issued by SAA Approvals Pty Ltd in accordance with the SAA Approvals Electrical Product Safety Certification Scheme accredited by JAS-ANZ under AS/NZS ISO/IEC 17065, RECS accreditation under the Queensland Government legislative requirements and REAS accreditation under the NSW Government legislative requirements. SAA certifies the product nominated in this certificate complies with standard/s listed above in accordance with the schemes herein. For SAA Contact Details and Certificate verification, go to:
www.saaapprovals.com.au

JAS-ANZ
www.jas-anz.org/register

SAA Approvals CERTIFIED

Issued: 08-12-20 202733/2a
Rating/Marking corrected

APPROVALS®

Certificate of Conformity/Approval

Addendum

Certificate No.: **SAA-202733-EA**

Date of Issue: **7 December 2020**

Regulatory Definition: DC Isolator
Product Description: DC Isolator for use inside inverter

Additional Models	Trade Name	Rating/Marking
SB6.0-1AV-41 (PV Swtich Disconnector)	SMA	Utilization Category DC-PV2, Ue:600V Ie:15A Imake:20A, Ic(break):20A, Isolar the 60°C: 30A IP65
STP3.0-3AV-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:850V Ie:12A Imake:18A, Ic(break):18A, Isolar the 60°C: 18A IP65
STP4.0-3AV-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:850V Ie:12A Imake:18A, Ic(break):18A, Isolar the 60°C: 18A IP65
STP5.0-3AV-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:850V Ie:12A Imake:18A, Ic(break):18A, Isolar the 60°C: 18A IP65

R A Nill

For and on Behalf of
SAA Approvals Pty Ltd

This certificate is issued by SAA Approvals Pty Ltd in accordance with the SAA Approvals Electrical Product Safety Certification Scheme accredited by JAS-ANZ under AS/NZS ISO/IEC 17065, RECS accreditation under the Queensland Government legislative requirements and REAS accreditation under the NSW Government legislative requirements. SAA certifies the product nominated in this certificate complies with standard/s listed above in accordance with the schemes herein. For SAA Contact Details and Certificate verification, go to:
www.saaapprovals.com.au

JAS-ANZ
www.jas-anz.org/register

SAA Approvals
CERTIFIED

Issued: 08-12-20 202733/3a
Rating/Marking corrected

APPROVALS®

Certificate of Conformity/Approval

Addendum

Certificate No.: **SAA-202733-EA**

Date of Issue: **7 December 2020**

Regulatory Definition: DC Isolator
Product Description: DC Isolator for use inside inverter

Additional Models	Trade Name	Rating/Marking
STP6.0-3AV-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:850V Ie:12A Imake:18A, Ic(break):18A, Isolar the 60°C: 18A IP65
STP8.0-3AV-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:1000V Ie:20A Imake:30A, Ic(break):30A, Isolar the 60°C: 30A IP65
STP10.0-3AV-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:1000V Ie:20A Imake:30A, Ic(break):30A, Isolar the 60°C: 30A IP65
STP15000TL-30 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:1000V Ie:33A Imake:43A, Ic(break):43A, Isolar the 60°C: 43A IP65

R A Nill

For and on Behalf of
SAA Approvals Pty Ltd

This certificate is issued by SAA Approvals Pty Ltd in accordance with the SAA Approvals Electrical Product Safety Certification Scheme accredited by JAS-ANZ under AS/NZS ISO/IEC 17065, RECS accreditation under the Queensland Government legislative requirements and REAS accreditation under the NSW Government legislative requirements. SAA certifies the product nominated in this certificate complies with standard/s listed above in accordance with the schemes herein. For SAA Contact Details and Certificate verification, go to:
www.saaapprovals.com.au

JAS-ANZ
www.jas-anz.org/register

SAA Approvals CERTIFIED

Issued: 08-12-20 202733/4a
Rating/Marking corrected

APPROVALS®

Certificate of Conformity/Approval

Addendum

Certificate No.: **SAA-202733-EA**

Date of Issue: **7 December 2020**

Regulatory Definition: DC Isolator
Product Description: DC Isolator for use inside inverter

Additional Models	Trade Name	Rating/Marking
STP20000TL-30 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:1000V Ie:33A Imake:43A, Ic(break):43A, Isolar the 60°C: 43A IP65
STP25000TL-30 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:1000V Ie:33A Imake:43A, Ic(break):43A, Isolar the 60°C: 43A IP65
STP50-40 (PV Switch Disconnector)	SMA	Utilization Category DC-PV2, Ue:1000V Ie:20A Imake:30A, Ic(break):30A, Isolar the 60°C: 30A IP65

R A Nill

For and on Behalf of
SAA Approvals Pty Ltd

This certificate is issued by SAA Approvals Pty Ltd in accordance with the SAA Approvals Electrical Product Safety Certification Scheme accredited by JAS-ANZ under AS/NZS ISO/IEC 17065, RECS accreditation under the Queensland Government legislative requirements and REAS accreditation under the NSW Government legislative requirements. SAA certifies the product nominated in this certificate complies with standard/s listed above in accordance with the schemes herein. For SAA Contact Details and Certificate verification, go to:
www.saaapprovals.com.au

JAS-ANZ
www.jas-anz.org/register

SAA Approvals CERTIFIED

Issued: 08-12-20 202733/5a
Rating/Marking corrected

SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | E-mail: info@SMA.de
Amtsgericht (District court) Kassel HRB (registration number) 3972
Vorsitzender des Aufsichtsrats (Chairman of the Supervisory Board): Dr. Erik Ehrentraut
Managing Board: Ulrich Hadding, Dr.-Ing. Jürgen Reinert

EU Declaration of Conformity

Within the meaning of the EU directives

- **Electromagnetic compatibility 2014/30/EU (L 96/79-106, March 29, 2014) (EMC)**
- **Low Voltage Directive 2014/35/EU (L 96/357-374, March 29, 2014) (LVD)**
- **Radio Equipment Directive 2014/53/EU (L 153/62, May 22, 2014) (RED)**
- **Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31, 2015) (RoHS)**

The subject matter of the declaration described below meet the requirements relating to Union harmonization legislation.
The applied harmonized standards are listed in the following table.

	Sunny Boy Storage
	SBS2.5-1VL-10
Electromagnetic emission (EMC directive, Article 6 – Annex I.1.a)	
EN 61000-6-3:2007 + A1:2011	✓
EN 61000-6-4:2007 + A1:2011	✓
Grid interferences (EMC directive, Article 6 – Annex I.1.a)	
EN 61000-3-3:2013	✓
EN 61000-3-2:2006 + A1:2009 + A2:2009	✓
Interference immunity (EMC directive, Article 6 – Annex I.1.b)	
EN 61000-6-1:2007	✓
EN 61000-6-2:2005	✓
Device safety (LVD, Article 3 – Annex I)	
EN 62109-1:2010	✓
EN 62109-2:2011	✓
EN 62477-1:2012	✓
Health and safety (RED, Article 3.1.a)	
EN 62311:2008	✓
Electromagnetic compatibility (RED, Article 3.1.b)	
EN 301 489-1 V12.1.1	✓
EN 301 489-17 V3.1.1	✓
Effective exploitation of frequency range (RED, Article 3.2.)	
EN 300 328 V1.9.1	✓
EN 300 328 V2.1.1	✓

✓ Standard applicable
× Standard not applicable

The last two digits of the year in which the CE marking was affixed: 16

Note:
The declaration of conformity is issued under the sole responsibility of the manufacturer.
Without an explicit written confirmation by SMA Solar Technology AG, this declaration of conformity is no longer valid if the product is modified, supplemented or changed in any other way and if components which are not part of the SMA accessory, are integrated in the product, as well as if the product is used or installed improperly.

Niestetal, 2019-07-04
SMA Solar Technology AG

i.V. Sven Bremicker

i.V. Sven Bremicker
Head of Technology Development Center

Declaration of Conformity

with German, European and International (Non-European) standards

German Standard DIN EN		European Standard EN		International Standard IEC (IEC/CISPR)
DIN EN 61000-6-1:2007-10	based on	EN 61000-6-1:2007	based on	IEC 61000-6-1:2005
DIN EN 61000-6-2:2006-03	based on	EN 61000-6-2:2005	based on	IEC 61000-6-2:2005
DIN EN 61000-6-3:2011-09	based on	EN 61000-6-3:2007 + A1:2011	based on	IEC 61000-6-3:2006 + A1:2010
DIN EN 61000-6-4:2011-09	based on	EN 61000-6-4:2007 + A1:2011	based on	IEC 61000-6-4:2006 + A1:2010
DIN EN 61000-3-2:2010-03	based on	EN 61000-3-2:2006 + A1:2009 + A2:2009	based on	IEC 61000-3-2:2005 + A1:2008 + A2: 2009
DIN EN 61000-3-3:2014-03	based on	EN 61000-3-3:2013	based on	IEC 61000-3-3:2013
DIN EN 61000-3-11:2001-04	based on	EN 61000-3-11:2000	based on	IEC 61000-3-11:2000
DIN EN 61000-3-12:2012-06	based on	EN 61000-3-12:2011	based on	IEC 61000-3-12:2011
DIN EN 62109-1:2011	based on	EN 62109-1:2010	based on	IEC 62109-1:2010
DIN EN 62109-2:2012	based on	EN 62109-2:2011	based on	IEC 62109-2:2011
DIN EN 62477-1:2014-06	based on	EN 62477-1:2012	based on	IEC 62477-1:2012
DIN EN 62311:2008-09	based on	EN 62311:2008	based on	IEC 62311:2007
DIN EN ————————	based on	EN 301 489-1 V2.1.1	based on	IEC ————————
DIN EN ————————	based on	EN 301 489-17 V3.1.1	based on	IEC ————————
DIN EN ————————	based on	EN 300 328 V1.9.1	based on	IEC ————————
DIN EN ————————	based on	EN 300 328 V2.1.1	based on	IEC ————————

SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | E-mail: info@SMA.de
Amtsgericht (District court) Kassel HRB (registration number) 3972
Vorsitzender des Aufsichtsrats (Chairman of the Supervisory Board): Uwe Kleinkauf
Managing Board: Ulrich Hadding, Dr.-Ing. Jürgen Reinert

EU Declaration of Conformity

Within the meaning of the EU directives

- **Radio Equipment Directive 2014/53/EU (L 153/62, May 22, 2014) (RED)**
- **Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31, 2015) (RoHS)**

The subject matter of the declaration described below meet the requirements relating to Union harmonization legislation. The applied harmonized standards are listed in the following table.

	Sunny Boy		
	SB1.5-1VL-40	SB2.0-1VL-40	SB2.5-1VL-40
Health and safety (RED, Article 3.1.a)			
EN 62311:2008	✓	✓	✓
EN 62109-1:2010	✓	✓	✓
EN 62109-2:2011	✓	✓	✓
Electromagnetic compatibility (RED, Article 3.1.b)			
EN 61000-3-3:2013	✓	✓	✓
EN 61000-3-2:2014	✓	✓	✓
EN 61000-6-1:2007	✓	✓	✓
EN 61000-6-2:2005	✓	✓	✓
EN 301 489-1 V2.1.1	✓	✓	✓
EN 301 489-17 V3.1.1	✓	✓	✓
Effective exploitation of frequency range (RED, Article 3.2.)			
EN 300 328 V1.9.1	✓	✓	✓
EN 300 328 V2.1.1	✓	✓	✓
Restriction of the use of certain hazardous substances (RoHS directive, Article 4.1)			
EN IEC 63000:2018	✓	✓	✓

✓ Standard applicable

✗ Standard not applicable

The last two digits of the year in which the CE marking was affixed: 14

This declaration is also valid for products with the following article designations: SB1.5-1VL-40-AT, SB2.0-1VL-40-AT, SB2.5-1VL-40-AT

Note:

The declaration of conformity is issued under the sole responsibility of the manufacturer. Without an explicit written confirmation by SMA Solar Technology AG, this declaration of conformity is no longer valid if the product is modified, supplemented or changed in any other way and if components which are not part of the SMA accessory, are integrated in the product, as well as if the product is used or installed improperly.

Niestetal, 2020-06-19

SMA Solar Technology AG

i.V. Sven Bremicker

i.V. Sven Bremicker
Head of Technology Development Center

Declaration of Conformity

with German, European and International (Non-European) standards

German Standard DIN EN		European Standard EN		International Standard IEC (IEC/CISPR)
DIN EN 61000-6-1:2007-10	based on	EN 61000-6-1:2007	based on	IEC 61000-6-1:2005
DIN EN 61000-6-2:2006-03	based on	EN 61000-6-2:2005	based on	IEC 61000-6-2:2005
DIN EN 61000-6-3:2011-09	based on	EN 61000-6-3:2007 + A1:2011	based on	IEC 61000-6-3:2006 + A1:2010
DIN EN 61000-6-4:2011-09	based on	EN 61000-6-4:2007 + A1:2011	based on	IEC 61000-6-4:2006 + A1:2010
DIN EN 61000-3-2:2015-03	based on	EN 61000-3-2:2014	based on	IEC 61000-3-2:2014
DIN EN 61000-3-3:2014-03	based on	EN 61000-3-3:2013	based on	IEC 61000-3-3:2013
DIN EN 61000-3-11:2001-04	based on	EN 61000-3-11:2000	based on	IEC 61000-3-11:2000
DIN EN 61000-3-12:2012-06	based on	EN 61000-3-12:2011	based on	IEC 61000-3-12:2011
DIN EN 62109-1:2011	based on	EN 62109-1:2010	based on	IEC 62109-1:2010
DIN EN 62109-2:2012	based on	EN 62109-2:2011	based on	IEC 62109-2:2011
DIN EN 62477-1:2014-06	based on	EN 62477-1:2012	based on	IEC 62477-1:2012
DIN EN 62311:2008-09	based on	EN 62311:2008	based on	IEC 62311:2007
DIN EN ----------	based on	EN 301 489-1 V2.1.1	based on	IEC ----------
DIN EN ----------	based on	EN 301 489-17 V3.1.1	based on	IEC ----------
DIN EN ----------	based on	EN 300 328 V1.9.1	based on	IEC ----------
DIN EN ----------	based on	EN 300 328 V2.1.1	based on	IEC ----------

C E R T I F I C A T E
of Conformity

TÜVRheinland®

Registration No.: AK 50487253 0001

Report No.: CN20WBEC 001

Holder:
SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Deutschland

Product:
PV-Inverter
(Grid-connected PV Inverter)

Identification:

Type Designation	:	STP 110-60
Serial Number	:	Engineering Samples
Firmware version	:	1.00.00.R
Remark(s)	:	Refer to report CN20WBEC 001 for details.

Tested acc. to: DRRG/DEWA:2016

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body

Date 24.11.2020

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

TÜV Rheinland (China) Ltd.
Member of TÜV Rheinland Group

TÜVRheinland®
Precisely Right.

SMA Solar Technology AG
Michael
Viotto
Sonnenallee 1
34266 Niestetal
Deutschland

Date : 24.11.2020
Our ref. : PJG 01
Your ref.: Viotto Michael
Customer no.: 1012694

Ref : AK Allgem. Konformitätsbeschgg.

Type of Equipment : Grid-connected PV Inverter
Model Designation : See Certificate
Certificate No. : AK 50487253 0001
Report No. : CN20WBEC 001

Dear Michael,

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

Weichun Li

CC: SMA Solar Technology AG

Enclosure

TÜV Rheinland (China) Ltd.
莱茵检测认证服务（中国）有限公司
Unit 707, AVIC Bldg., No. 10B, Central Road, East 3rd Ring Road, Chaoyang District, Beijing, 100022, P.R.China
北京市朝阳区东三环中路乙10号 艾维克大厦707室 邮编：100022
Tel: (8610)6566 6660
Fax: (8610)6566 6667
e-mail: info@bj.chn.tuv.com
Internet: http://www.chn.tuv.com

SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | E-Mail: info@SMA.de
Amtsgericht (District court) Kassel HRB (registration number) 3972
Vorsitzender des Aufsichtsrats (Chairman of the Supervisory Board): Uwe Kleinkauf
Vorstand (Managing Board): Ulrich Hadding, Dr.-Ing. Jürgen Reinert

Declaration of Conformity

Resolution n°7 – Addendum to Amendment n°1 of the Philippine Grid Code

SMA hereby declares that the following inverters (with the correct setting for the Philippines) comply with the following requirements defined in the Article II, Section 2 of the Resolution n° 7, Series of 2013, which establishes the connection and operational requirements for variable renewable energy generating facilities, as an addendum to the Amendment n°1 of the Philippine Grid Code:

- STP 15000TL-30, STP 20000TL-30, STP 25000TL-30
- STP 50-40, STP 110-60
- SC-2200-10, SC-2475-10, SC-2500-EV-10, SC-2750-EV-10, SC-3000-EV-10
- SCS-2200-10, SCS-2475-10, SCS-2900-10

1. The table below summarizes the minimum time requirements for the inverter to remain connected if the magnitude surpasses the applicable threshold. A disconnection of the inverter occurs after the corresponding minimum time.

Parameter	V_{max1}	V_{max2}	V_{min1}	V_{min2}	fmax	fmin
Threshold	120%xVnom	110%xVnom	90%xVnom	45%xVnom	62,4 Hz	57,6 Hz
Minimum time	0,2 s	2 s	3 s	1,5 s	0,2 s	5 s

V_{nom} = 400 V and f_{nom} = 60 Hz

2. Within the mentioned frequency limits the inverters will continuously operate without disconnection.
3. The inverters comply with the international Standards (IEC) regarding the flicker severity and current harmonics. The THDi is always lower than 5%Inom
4. The power factor can be set within 0.8 underexcited and 0.8 overexcited at the inverter terminals. For the definition of the power factor at the connection point within the required limits of 0.95 underexcited and 0.95 overexcited it is necessary to carry out an on-site analysis and define the proper configuration for the inverters. A communication device might be compulsory to be installed.
5. The rated power is calculated at the nominal voltage and with a power factor equal to the unity. The power will decrease if the voltage goes below the nominal value. If the active power and reactive power must be maintained within voltage variations up to 5%V_{nom}., the inverters´ power must be set to a lower value than the rated power.
6. The performance during network disturbances is according the figure 4 of the Resolution n°7. The inverters are able to remain connected during the defined voltage dip profile and inject reactive current during the duration of the fault. Similar voltage dips have been tested by independent testing laboratories for other applicable standards, such as, the German BDEW/AR-N 4110 or the European EN 50549-2.
7. The inverters are able to operate following an active power regulation. Power constrains via set-points can be implemented with additional communication accessories. A characteristic curve can be defined, so that the inverters automatically reduce their output power depending on the grid frequency.

Niestetal, 2021-03-02

SMA Solar Technology AG

i.V. Sven Bremicker

i.V. Sven Bremicker
Head of Technology Development Center

CERTIFICADO DE CONFORMIDAD

Certificate of Conformity number / *Certificado de conformidad número* **Nº 2621/0042-CER**

License holder / *Titular del certificado*	**SMA Solar Technology AG** Sonnenallee 1, 34266 Niestetal, Germany
Trademark / *Marca*	SMA
Contract number / Numero de contrato	**801223**
Tested model / Modelo ensayado	**STP110-60**
Type of product / Tipo de aparato	**Three phase inverter /** Inversor trifásico

Rated characteristics / Datos técnicos		
	Rated Power / Potencia nominal **[kW]**	**110**
	Rated Voltage / Tensión nominal **[V]**	**400**
	Rated Frequency / Frecuencia nominal **[Hz]**	**50**
	Firmware version / Versión Firmware	**1.00.00.R**
	Number of phases / Number of phases	**Trifásico**
	Isolation transformer / Transformador de aislamiento	**NO**

Regulation / *Normativa* **Procedimiento de Operación (P.O. 12.3)**
Procedimientos de verificación, validación y certificación de los requisitos del PO 12.3 sobre la respuesta de las instalaciones eólicas y fotovoltaicas ante huecos de tensión. PVVC Versión 10 (26 de Enero de 2012).

This certificate of conformity confirms that one sample of the above-mentioned product is in compliance with the referred standard / *Este certificado de conformidad confirma que una muestra del producto arriba mencionado está en cumplimiento con la norma referido.*

This certificate of conformity is based upon the test results of the test reports number below detailed and is only valid when the product is manufactured in accordance with the tested sample / *Este certificado de conformidad se basa en los resultados de ensayos ofrecidos en el siguiente de informe y es solo válido cuando el producto sea fabricado idénticamente a la muestra ensayada.*

- **Nº Test Report** / *Nº de Informe de ensayos*: 2221 / 0042.

This certificate is valid until / *Este certificado es válido hasta el*: 10th of February of 2026 / 10 de febrero de 2026

Madrid, a 10 de febrero de 2021

Daniel Arranz Muñiz
Certification Manager

C E R T I F I C A T E
of Conformity

TÜVRheinland®

Registration No.: AK 50488273 0001

Report No.: CN207PAR 001

Holder:
SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Deutschland

Product:
PV-Inverter
(Grid-connected PV Inverter)

Identification:
Type Designation : STP 110-60
Serial Number : Engineering Samples
Firmware version : 1.00.00.R
Remark(s) : Refer to report CN207PAR 001 for details.

Tested acc. to:
RD 1699:2011
RD 661:2007
RD 413:2014
UNE 206006 IN:2011
UNE 206007-1 IN:2013

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle TÜV Rheinland®

Date 03.12.2020

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

C E R T I F I C A T E
of Conformity

TÜVRheinland®

Registration No.: AK 50489796 0001

Report No.: CN20FNS4 001

Holder:
SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Deutschland

Product:
PV-Inverter
(Grid-connected PV Inverter)

Identification:

Type Designation : STP 110-60
Serial Number : Engineering Samples
Firmware version : 1.00.00.R
Remark(s) : Refer to report CN20FNS4 001 for details.

Tested acc. to:

TOR Erzeuger Typ A Version 1.0/08.19
TOR Erezuger Typ B Version 1.0
OVE-Richtlinie R25/03.20

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body
TÜV Rheinland LGA Products GmbH Zertifizierstelle TÜV Rheinland®

Date 17.12.2020

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg