

DECLARATION OF CONFORMITY

Manufacturer: INGETEAM ENERGY S.A.
Avda. Ciudad de la Innovación nº 13
E-31621 Sarriguren (Navarre). SPAIN
Phone +34 948288000 / Fax +34 948288001

We hereby declare the conformity of our products Brand/Model:

INGECON® SUN 10	INGECON® SUN 11
INGECON® SUN 12.5	INGECON® SUN 15
INGECON® SUN 20	INGECON® SUN 25
INGECON® SUN 30	

Are conforming to the provisions of the following harmonised standards:

EMC:

Emission: UNE EN 61000-6-3:2001+A11(2004) (Residential Environments)

Immunity: UNE EN 61000-6-2:2006 (Industrial Environments)

Harmonics: EN 61000-3-12:2005

Flickers: EN 61000-3-11:2000

Electrical Security: UNE EN 50178:1998

Therefore fulfils with thw safety provisions for people and things required by the following Council Directives:

Low Voltaje Directive: 2006/95/CE

EMC Directive: 2004/108/CE

In case that our supplies are incorporated into equipment subject to the Directive 89/392/CE and its modifications, these products cannot be put into service without the prior Declaration of fulfilment of the above mentioned Directives and Quality Standards by the equipment to which they are to be incorporated.

Sarriguren, September 2009



Mr. Juan Carlos Jadraque
Head of PV Area Ingeteam Energy S.A.

INGECON® SUN

CE





ATTESTATION OF CONFORMITY

TO ENEL DISTRIBUZIONE SPA DK 5940 SPECIFICATIONS

ATTESTATO DI CONFORMITA'

ALLE SPECIFICHE DK 5940 ENEL DISTRIBUZIONE SPA

Attestation number
Attestazione numero : 350046700

Issued to
Rilasciata a : INGETEAM S.A.
: Avda. Ciudad de la Innovacion n. 13
: E-31621 Sarriguren (Navarra)
: SPAGNA

Manufacturer
Costruttore : INGETEAM S.A.
: Avda. Ciudad de la Innovacion n. 13
: E-31621 Sarriguren (Navarra)
: SPAGNA

Product Type
Tipo prodotto :

Interface Device <i>Dispositivo Interfaccia</i>	Interface Protective Device <i>Dispositivo protezione interfaccia</i>	Static Conversion Device <i>Dispositivo di conversione statico</i>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Model reference
Riferimento Modello :

Models / Modelli	Software release
INGECON SUN 10	AAS1340.10
INGECON SUN 11	AAS1340.11
INGECON SUN 12.5	AAS1340.12.5
INGECON SUN 15	AAS1340.15

Software release
Revisione software : See above / Vedere sopra

Testing Laboratory
Laboratorio prove : Euro Test Laboratori S.r.L., Via dell'Industria 18 – 35020 Brugine (PD), ITALY
(SINAL Accreditation No. 0192)

Test Report ref. No.
Rapporto di prova Nr. : DK 01 CdO 08C304002, EMC 01 CdO 08C304002 – issued by Euro Test Laboratori; EMC Test Reports B0034-07-15-EE-3 and -6 issued by accredited lab LABEIN TECNALIA; CE Declaration dated January 2008 issued by INGETEAM S.A.

Requirements
Requisiti : Technical Specification DK 5940 (Ed. 2.2, April 2007), issued by ENEL DISTRIBUZIONE SPA
Specifiche tecniche DK 5940 (Ed. 2.2, April 2007) emesse da ENEL DISTRIBUZIONE SPA

The undersigned declares that the above described product meets the above mentioned technical specification. This attestation of conformity is issued based on the test results as laid down in the referred Test Report by Euro Test Laboratori S.r.L.. The investigation does not include an assessment of the manufacturer's production.

Il sottoscritto dichiara che il prodotto di cui sopra è conforme ai requisiti tecnici menzionati. Questo attestato di conformità è rilasciato sulla base dei risultati di prova riferiti nel rapporto di Euro Test Laboratori sopra menzionato.

La valutazione non include una verifica del luogo di produzione.



Attestazione numero

Attestation number
: 350105100

Date of issue

Emesso in data

: 2009-07-20

Franco Vasta

Certification Manager

KEMA QUALITY B.V. is EN 45011:1998 and ISO/IEC Guide 65:1996 accredited by the Dutch Accreditation Council (RvA).

Accreditation certificate Number C 001, valid until April 7, 2010.

KEMA QUALITY B.V. è accreditata dal Dutch Accreditation Council (RvA) in accordo a EN 45011:1998 e ISO/IEC Guida 65:1996. Certificato di Accreditazione numero C 001, valido fino al 7 Aprile 2010.

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Integral publication of this attestation and adjoining reports is allowed. *E' consentita la pubblicazione integrale del presente attestato e del relativo rapporto di prova.*

KEMA Quality B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands

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ATTESTATION OF CONFORMITY

TO ENEL DISTRIBUZIONE SPA REQUIREMENTS

ATTESTATO DI CONFORMITA'

ALLE PRESCRIZIONI ENEL DISTRIBUZIONE SPA

Attestation number
Attestazione numero : 350105100

Issued to
Rilasciata a : Ingeteam Energy, S.A.
 Avda.Ciudad de la Innovacion 13
 E-31621 Sarriguren – Navarra -Spain

Manufacturer
Costruttore : Ingeteam Energy, S.A.
 Avda.Ciudad de la Innovacion 13
 E-31621 Sarriguren – Navarra -Spain

Product Type
Tipo prodotto :

Interface Device <i>Dispositivo Interfaccia</i>	Interface Protective Device <i>Dispositivo protezione interfaccia</i>	Static Conversion Device <i>Dispositivo di conversione statico</i>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Model reference
Riferimento Modello :

Modelli <i>Models</i>	Versione Software <i>Software release</i>
INGECON SUN 20 IP54	AAS1346.20
INGECON SUN 20 IP54 HP	AAS1346.22
INGECON SUN 25 IP54	AAS1346.25
INGECON SUN 30 IP54	AAS1346.30
INGECON SUN 20 IP54 HP PI	AAS1346.22
INGECON SUN 25 IP54 PI	AAS1346.25
INGECON SUN 30 IP54 PI	AAS1346.30

Software release
Revisione software : Vedere tabella precedente / *See table above*

Testing Laboratory
Laboratorio prove : Euro Test Laboratori S.r.L., Via dell'Industria 18 – 35020 Brugine (PD), ITALY
 (SINAL Accreditation No. 0192)

Test Report ref. No.
Rapporto di prova Nr. : Reports: CONBT 01 CdO 09C304001 and EMC01 CdO 09C304001 issued by Euro Test Laboratori S.r.L.; CE-026/09-18-EE-1 issued by LABEIN-Tecnalia; CE Declarations of Conformities (to LV and EMC Directives) issued by Ingeteam Energy S.A.

Requirements
Requisiti : Guideline for Connections to ENEL DISTRIBUZIONE Network (Ed. 1, Dec 2008) issued by ENEL DISTRIBUZIONE SPA; Technical Specification DK 5940 (Ed. 2.2, April 2007), issued by ENEL DISTRIBUZIONE SPA
Guida per le Connessioni alla Rete Elettrica di ENEL DISTRIBUZIONE (Ed. 1. Dic 2008); Specifiche tecniche DK 5940 (Ed. 2.2, April 2007) emesse da ENEL DISTRIBUZIONE SPA

The undersigned declares that the above described product complies with ENEL requirements. This attestation of conformity is issued based on the test results as laid down in the referred Test Reports. The investigation does not include an assessment of the manufacturer's production.

Il sottoscritto dichiara che il prodotto di cui sopra è conforme alle prescrizioni ENEL. Questo attestato di conformità è rilasciato sulla base dei risultati di prova riferiti nei rapporti di prova sopra menzionati. La valutazione non include una verifica del luogo di produzione.



A handwritten signature in black ink, appearing to read "F. Vasta".

Date of issue
Emesso in data : 2008-06-17

Franco Vasta

Certification Manager

KEMA QUALITY B.V. is EN 45011:1998 and ISO/IEC Guide 65:1996 accredited by the Dutch Accreditation Council (RvA).
Accreditation certificate Number C 001, valid until April 7, 2010.

KEMA QUALITY B.V. è accreditata dal Dutch Accreditation Council (RvA) in accordo a EN 45011:1998 e ISO/IEC Guida 65:1996. Certificato di Accreditazione numero C 001, valido fino al 7 Aprile 2010.

CERTIFICATE OF CONFORMITY

Manufacturer: INGETEAM ENERGY S.A.
Avda. Ciudad de la Innovación nº 13
E-31621 Sarriguren (Navarre). SPAIN
Phone +34 948288000 / Fax +34 948288001

We hereby declare that our product Brand/Model INGECON® SUN:

INGECON® SUN 10

INGECON® SUN 12.5

INGECON® SUN 15

INGECON® SUN 50

INGECON® SUN 60

INGECON® SUN 70

INGECON® SUN 80

INGECON® SUN 90

INGECON® SUN 100

Fullfils with the safety provisions for people and things required by the following Council Directives:

2006/95/CE Low Voltage Directive

2004/108/CE Electromagnetic Compatibility Directive

Complying with this directives allows this equipments to be marked CE.

Fullfils with requirements of the standards:

CEI 11-20 (2000)

CEI 11-20 V1 (2004)

Sarriguren, March 2009

Ingeteam

Ingeteam Energy, S.A.

Avda. Ciudad de la Innovación, 13
E-31621 Sarriguren-Navarra-Spain
Tel +34 948 288000
www.ingeteam.com
C.I.F. A-31-270853

CE



CERTIFICATE OF CONFORMITY

Manufacturer: INGETEAM ENERGY S.A.
Avda. Ciudad de la Innovación nº 13
E-31621 Sarriguren (Navarre). SPAIN
Phone +34 948288000 / Fax +34 948288001

We hereby declare that our product Brand/Model INGECON® SUN:

INGECON® SUN 20

INGECON® SUN 25

INGECON® SUN 30

Fullfils with the safety provisions for people and things required by the following Council Directives:

2006/95/CE Low Voltage Directive

2004/108/CE Electromagnetic Compatibility Directive

Complying with this directives allows this equipments to be marked CE.

Fullfils with requirements of the standards:

CEI 11-20 (2000)

CEI 11-20 V1 (2004)

Sarriguren, September 2009

Ingeteam

Ingeteam Energy, S.A.

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C.I.F. A-31-270853

CE



Modello	PI	SW Version (PI)	DI	Dgen	Pnom	Potenza continuativa	Tensione di alimentazione	Fattore di potenza	Contributo alla Corrente di corto Circuito
Ingecon Sun 10	Ingeteam	AAS1340.10	Contattore Telemecanique LC1 D25		10,0 kW	10,9 kW	400V 3F+N	1	21,7A
Ingecon Sun 11	Ingeteam	AAS1340.11	Contattore Telemecanique LC1 D25						
Ingecon Sun 12,5	Ingeteam	AAS1340.12.5	Contattore Telemecanique LC1 D25		12,5 kW	12,8 kW	400V 3F+N	1	27,1A
Ingecon Sun 15	Ingeteam	AAS1340.15	Contattore Telemecanique LC1 D25		15,0 kW	15,6 kW	400V 3F+N	1	32,5A
Ingecon Sun 20	Ingeteam	AAS1346.20	Contattore Telemecanique LC1 D38P7 38A AC3	Fuse aR 22x58 63A	20kW	22 kW	400V 3F+N	1	43A
Ingecon Sun 20 HP	Ingeteam	AAS1346.20	Contattore Telemecanique LC1 D38P7 38A AC3	Fuse aR 22x58 63A	22kW	22 kW	400V 3F+N	1	43A
Ingecon Sun 20 HP PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 D38P7 38A AC3	Fuse aR 22x58 63A	22kW	22 kW	400V 3F+N	1	43A
Ingecon Sun 25			Contattore Telemecanique LC1 D38P7 38A AC3	Fuse aR 22x58 63A	25kW	27,5kW	400V 3F+N	1	54A
Ingecon Sun 25 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 D38P7 38A AC3	Fuse aR 22x58 63A	25kW	27,5kW	400V 3F+N	1	54A
Ingecon Sun 30			Contattore Telemecanique LC1 D50P7 50A AC3	Fuse aR 22x58 80A	30kW	33kW	400V 3F+N	1	65A
Ingecon Sun 30 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 D50P7 50A AC3	Fuse aR 22x58 80A	30kW	33kW	400V 3F+N	1	65A
Ingecon Sun 50 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 F185		50 kW	55 kW	400V 3F	1	108 A
Ingecon Sun 60 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 F185		60 kW	66 kW	400V 3F	1	131 A
Ingecon Sun 70 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 F185		70 kW	77 kW	400V 3F	1	152 A
Ingecon Sun 80 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 F185		80 kW	88 kW	400V 3F	1	173 A
Ingecon Sun 90 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 F185		90 kW	99 kW	400V 3F	1	195 A
Ingecon Sun 100 PI	Carlo Gavazzi DPC02DM48 B003	A1	Contattore Telemecanique LC1 F185	NS250H TM200D 3P 70kA Merlin Gerin MG31671	100 kW	110 kW	400V 3F	1	216 A

TARATURE DELLE PROTEZIONI DI INTERFACCIA

	PROTEZIONE	ESECUZIONE	VALORE DI TARATURA	TEMPO DI INTERVENTO
15.1	Massima tensione	unipolare	273 V	80 ms
15.2	Minima tensione	unipolare	186 V	80 ms
15.3	Massima frequenza	unipolare	50,3 Hz	< 100 ms
15.4	Minima frequenza	unipolare	49,7 Hz	< 100 ms
15.5	Derivata frequenza	unipolare	Hz/s	

Versioni Firmware dei dispositivi Ingecon Sun

FW	Ingecon Sun	
AAS1321	Ingecon Sun 10kW	
AAS1340	Ingecon Sun 12,5kW IP54	
AAS1342	Ingecon Sun 15kW IP54	
AAS1347	Ingecon Sun 20kW IP54	
AAS1346	Ingecon Sun 25kW IP54	
AAS1348	Ingecon Sun 30kW IP54	
AAS1302	Ingecon Sun 50kW	
AAS1302	Ingecon Sun 60kW	
AAS1299	Ingecon Sun 70kW	
AAS1300	Ingecon Sun 80kW	
AAS1329	Ingecon Sun 90kW	
AAS1301	Ingecon Sun 100kW	
AAS1312	Ingecon Sun 100kW TL	
AAV1300	Ingecon Sun Nx125 kW TL	Valido per 125TL 250TL,375TL,500TL
AAV1301	Ingecon Sun Nx125 kW TL Master Slave	Valido per la versione master slave 250TL,375TL,500TL
AAV1300	Ingecon Sun Nx156 kW TL	Valido per 315HE TL, 470HE TL,500HE TL, 630HE TL
AAV1301	Ingecon Sun Nx156 kW TL Master Slave	Valido per la versione master slave 315HE TL,470HE TL,500HE TL,630HE TL

La versione firmware è la stessa dei convertitori Nx125 kW con parametri diversi



Confirmation

We hereby confirm that the product(s) to which this confirmation relates exhibit the below mentioned properties.

Products:
High Performance MCB

Type:
S801S-UC

Ultimate short circuit breaking capacity for photovoltaic applications:
250VDC +20%

Type:
S802S-UC

Ultimate short circuit breaking capacity for photovoltaic applications with two serial connected contacts:
500VDC +20%

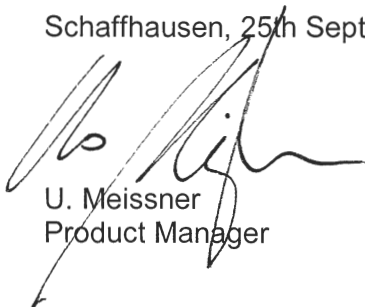
Type:
S803S-UC

Ultimate short circuit breaking capacity for photovoltaic applications with three serial connected contacts:
750VDC +20%

Type:
S804S-UC

Ultimate short circuit breaking capacity for photovoltaic applications with four serial connected contacts:
1000VDC +20%

Schaffhausen, 25th September 2006



U. Meissner
Product Manager



Gerald Puchner
R&D Manager

ABB Switzerland Ltd
CMC Low Voltage Products