

ATEX/IECEX/CSA/FM

TAG NOS
TS3377/1
TS3377/2

ATEX/IECEX/CSA/FM

DECLARATION OF CONFORMITY

This is to confirm that the BETA explosion proof pressure & temperature switches comply to the below mentioned applicable certificates.
Special attention should be paid to the additional comments like "Installation Instruction" and "Special conditions for safe use" as they are regarded to be an integral part of this Installation Manual.

V.- enclosure	KEMA 02ATEX2186	Ex II 2 G Ex d IIC T6 or II 2 G Ex d IIC T5 Ex II 2 D Ex tD A21 IP65 T100°C													
<table border="1"> <tr> <td>MODEL</td> <td>BETA B SWITCH</td> <td>CE-0344</td> <td rowspan="4"> II 2 G Ex d IIC T6 -40°C ± Tamb ± 70°C II 2 G Ex d IIC T5 -40°C ± Tamb ± 80°C II 2 D Ex tD A21 IP65 T100°C -40°C ± Tamb ± 80°C U max.-V I max.-A KEMA 02ATEX2186 IP 65 www.beta-b.nl </td> </tr> <tr> <td>RANGE</td> <td>SERIAL No:</td> <td>AC</td> </tr> <tr> <td>OVERRANGE PROOF</td> <td>TAG No:</td> <td>DC</td> </tr> <tr> <td colspan="3">MADE BY BETA BV - VERRIJN STUARTLAAN 22 - 2288 EL RIJSWIJK - THE NETHERLANDS</td> </tr> </table>			MODEL	BETA B SWITCH	CE-0344	II 2 G Ex d IIC T6 -40°C ± Tamb ± 70°C II 2 G Ex d IIC T5 -40°C ± Tamb ± 80°C II 2 D Ex tD A21 IP65 T100°C -40°C ± Tamb ± 80°C U max.-V I max.-A KEMA 02ATEX2186 IP 65 www.beta-b.nl	RANGE	SERIAL No:	AC	OVERRANGE PROOF	TAG No:	DC	MADE BY BETA BV - VERRIJN STUARTLAAN 22 - 2288 EL RIJSWIJK - THE NETHERLANDS		
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OVERRANGE PROOF	TAG No:	DC													
MADE BY BETA BV - VERRIJN STUARTLAAN 22 - 2288 EL RIJSWIJK - THE NETHERLANDS															
W.-enclosure	ITS09ATEX16437	Ex II 2 G Ex d IIC T6 or II 2 G Ex d IIC T5 Ex II 2 D Ex tD A21 IP6X T100°C													
W.-enclosure	IECEX KEM 07.0034	Ex d IIC T6 or Ex d IIC T5 Ex tD A21 T100°C IP66													
W.-enclosure	CSA No.:1873316	Class I/II/III, Div. 1, Groups B/C/D/E/F/G Zone 1 Ex d IIC T 6 DIP A21 Ta 100°C													
W.-enclosure	FM No.: 3028962	Class I/II/III, Div. 1, Groups A/B/C/D/E/F/G Zone 1 AEx d IIC T6													
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<p>Installation instruction : The cable glands and blanking elements shall be in type of explosion protection flameproof enclosure "d" suitable for the conditions of use and correctly installed. The devices shall provide a degree of protection of IP6X. For temperatures under rated conditions higher than 70 °C at the cable point, suitable heat resistant cables and cable glands shall be used. The installation cable has to be suitable for a temperature of ≥ 130 °C.</p> <p>Special conditions for safe use : The relation between the ambient temperature range and temperature class is listed at sub (15) of the original certificate :</p> <p>Ambient temperature range ATEX -60°C to +70°C for T6 -60°C to +80°C for T5/100°C</p> <p>Ambient temperature range IECEX/CSA/FM: -40°C to +70°C for T6 -40°C to +80°C for T5</p> <p>Max. electrical rating: 480VAC/ 10A (depending on selected micro switch) Max. pressure range: 54 MPa / 540 Bar / 7838 Psi</p> <p>The enclosure fulfills the requirements of: ATEX: EN 60079-0:2006/ EN 60079-1:2007/ EN 61241-0:2006/ EN 61241-1:2004 IEC: IEC 60079-0:2004/ IEC 60079-1:2003/ IEC 61241-0:2004/ IEC 61241-1:2004 CSA: C22.2 No. 0-M91/ C22.2 No. 61010-1-04/ C22.2 No. 30-M1986 FM: FM Approval Standard Class No. 3810/ No. 3615 ANSI/ISA S82.01-1994/ S82.03-1988 NEMA 250 -2003 (4X)</p>															

EC CERTIFICATE OF CONFORMITY



EC CERTIFICATE OF CONFORMITY (MODULE G)
GREENS POWER LIMITED
PRESSURE VESSEL
CERTIFICATE NO: COV1112456/2 SCHEDULE

EQUIPMENT DATA

Type: Waste Heat Recovery Boilers (W2E)

Maximum Design Pressure: Economiser = 60.5 Barg; Evaporators = 50.6 Barg;
Superheaters = 47.3 Barg

Capacity: Economiser = 1118.80 kg; Primary Evaporator = 1702.31 kg;
Secondary Evaporator = 772.51 kg;
Primary Superheater = 1035.63 kg;
Secondary Superheater = 517.81 kg

The undermentioned documents have been reviewed for compliance with the Pressure Equipment Directive 97/23/EC and following Design Code(s):

BS EN12952: 2001

TECHNICAL FILE CONTENTS

As detailed in Design Appraisal Document COV1112456 O-23387/PKC


LRV REPORTS

Design Appraisal Document	COV1112456 O-23387/PKC	19 October 2011
Inspection Certificate	COV1112456/01	02 March 2012

Schedule Issue: 1

Date of Schedule Issue: 13 March 2012

LRV Notified Body Number 0038

 behalf of Lloyd's Register Verification



Inspection Certificate

Project: **Ascot Environmental Ltd.**
(Order 27746 Job No. 06/409)
2 off Waste Heat Boilers (W2E), Dargavel

Client: **Greens Power Limited**
Raines House, Denby Dale Road,
Wakefield, WF1 1HR, England

Office: **Coventry**

Client's Order Number: **A8396; OVL3036A**

Date: **02 March 2012**

Order Status: **Complete**

Inspection Dates
First: **31 May 2011**
Final: **27 February 2012**

This certificate is issued to **GREENS POWER LIMITED**, to certify that the undersigned did at their request attend their workshop in Calder Vale Road, Wakefield, for the purpose of examining the items listed below, manufactured to Works Order No. OVL3036A: -

Description: 2 off Waste Heat Boilers (W2E), each comprising:-
Primary Evaporator
Secondary Evaporator
Primary Superheater
Secondary Superheater
Economiser

Code: BS EN 12952: 2001 & the Pressure Equipment Directive 97/23/EC Module G

Drawings: OVL3036-01 Rev. B and sub-level drawings as per Design Appraisal Document

The following examinations were carried out in accordance with Code & ITP No. OVL3036A/ITP1 Issue D: -

1. Review of Design Appraisal Document: COV1112456 O-23387/PKC dated 19 October 2011 Issue 1 refers
2. Review of Weld Index Sheet
3. Review of Welding Procedures, Procedure Qualifications and Welder Qualifications
4. Identification of materials and review of certification
5. Monitor fabrication
6. Review of NDE results
7. Witness of unit hydrostatic pressure tests at 118 barg (Primary Evaporators); 147.1 barg (Secondary Evaporators), 142.8 barg (Primary/Secondary Superheaters); and 144.8 barg (Economisers)
8. Verify calibration status of test equipment used
9. Final Inspection
10. Review stamping of nameplates
11. Review of documentation

All of the above was carried out to the satisfaction of the undersigned. On the basis of the scope of inspection undertaken, the equipment has been found to comply with specification requirements

For identification purposes the nameplates were stamped: 'ILRs'



Lloyd's Register EMEA

A member of the Lloyd's Register Group

Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Raines House
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WF1 1HR
England

Telephone: +44 (0)1924 203970
General Fax: +44 (0)1924 387320
Spares/Service Fax: +44(0)1924 377515

Hydraulic Pressure Test Certificate

Greens Power Reference No: OVL3036A
Site Name or Ship's Name: Scotgen Limited, Dumfries
Date of Test: 26/9/11
Hydraulic Test Pressure: 118 bar
Pressure Gauge No: 072558
Date of Last Calibration: 5/5/11

Description of Equipment Tested:

Primary Evaporator Boiler 1

We hereby certify that the above equipment has been tested in accordance with our Standard Operating Procedures and have recorded the test as being satisfactory.



SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a hydraulic test has been carried out on the above named equipment and the test was recorded as being satisfactory.

SIGNATURE (on behalf of Inspecting Authority) NAME (PRINT)

SIGNATURE (on behalf of Client) NAME (PRINT)

OVF083/1

GREENS POWER LIMITED
Registered in England No. 5067893
Registered office as above



Raines House
Denby Dale Road
Wakefield
WF1 1HR
England

Telephone: +44 (0)1924 203970
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Spares/Service Fax: +44(0)1924 377515

Hydraulic Pressure Test Certificate

Greens Power Reference No: OVL3036A
Site Name or Ship's Name: Scotgen Limited, Dumfries
Date of Test: 16/9/11
Hydraulic Test Pressure: 142.8 bar
Pressure Gauge No: 072 558
Date of Last Calibration: 5/5/11

Description of Equipment Tested:

Primary Superheater Boiler 1

We hereby certify that the above equipment has been tested in accordance with our Standard Operating Procedures and have recorded the test as being satisfactory.



SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a hydraulic test has been carried out on the above named equipment and the test was recorded as being satisfactory.



SIGNATURE (on behalf of Inspecting Authority) NAME (PRINT)

SIGNATURE (on behalf of Client)

NAME (PRINT)

OVF083/1

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Hydraulic Pressure Test Certificate

Greens Power Reference No: OVL3036A
Site Name or Ship's Name: Scotgen Limited, Dumfries
Date of Test: 16/9/11
Hydraulic Test Pressure: 142.8 bar
Pressure Gauge No: 072558
Date of Last Calibration: 5/5/11



Description of Equipment Tested:



Secondary Superheater Boiler 1

We hereby certify that the above equipment has been tested in accordance with our Standard Operating Procedures and have recorded the test as being satisfactory.

  
SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a hydraulic test has been carried out on the above named equipment and the test was recorded as being satisfactory.

 
SIGNATURE (on behalf of Inspecting Authority) NAME (PRINT)

 
SIGNATURE (on behalf of Client) NAME (PRINT)

OVF083/1

GREENS POWER LIMITED
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WF1 1HR
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Spares/Service Fax: +44(0)1924 377515

Hydraulic Pressure Test Certificate

Greens Power Reference No: OVL3036A
Site Name or Ship's Name: Scotgen Limited, Dumfries
Date of Test: 9/9/2011
Hydraulic Test Pressure: 147.1 bar
Pressure Gauge No: 9/5/2011
Date of Last Calibration: 072558.

Description of Equipment Tested:

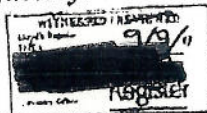
Secondary Evaporator Boiler 1

We hereby certify that the above equipment has been tested in accordance with our Standard Operating Procedures and have recorded the test as being satisfactory.

GPL
QC3

SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a hydraulic test has been carried out on the above named equipment and the test was recorded as being satisfactory.



SIGNATURE (on behalf of Inspecting Authority) NAME (PRINT)

SIGNATURE (on behalf of Client)

NAME (PRINT)

OVF083/1

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WF1 1HR
England

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Spares/Service Fax: +44(0)1924 377515


Hydraulic Pressure Test Certificate

Greens Power Reference No: OVL3036A
Site Name or Ship's Name: Scotgen Limited, Dumfries
Date of Test: 14/9/2011
Hydraulic Test Pressure: 144.8 bar
Pressure Gauge No: 072558
Date of Last Calibration: 5/5/11

Description of Equipment Tested:


Economiser Boiler 1

We hereby certify that the above equipment has been tested in accordance with our Standard Operating Procedures and have recorded the test as being satisfactory.



SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a hydraulic test has been carried out on the above named equipment and the test was recorded as being satisfactory.



SIGNATURE (on behalf of Inspecting Authority) NAME (PRINT)

SIGNATURE (on behalf of Client) NAME (PRINT)

OVF083/1

GREENS POWER LIMITED
Registered in England No. 5067893
Registered office as above



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Hydraulic Pressure Test Certificate

Greens Power Reference No: 1041
Site Name or Ship's Name: Green Power
Date of Test: 17/10/2001
Hydraulic Test Pressure: 200 bar
Pressure Gauge No: 1746-10001
Date of Last Calibration: 17/10/2001

Description of Equipment Tested:

Two 1000 litre Hydraulic Accumulators
1. 1000 litre Hydraulic Accumulator
2. 1000 litre Hydraulic Accumulator

We hereby certify that the above equipment has been tested in accordance with our Standard Operating Procedures and have recorded the test as being satisfactory.

SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a hydraulic test has been carried out on the above named equipment and the test was recorded as being satisfactory.

SIGNATURE (on behalf of Inspecting Authority) NAME (PRINT)

SIGNATURE (on behalf of Client) NAME (PRINT)

OVF083/1

GREENS POWER LIMITED
Registered in England No. 5067893
Registered office as above



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Spares/Service Fax: +44(0)1924 377515

Lifting Valves Test Certificate

Greens Power Reference No: SVL3036

Site Name: Sutton Ltd, Duncroft

Date of Lift/Test: 5th March 2012

Description of Equipment Lifted:

SAFETY VALVES BOILER NO 1

SV3108/1

SV3109/1


SV3224/1

46.5 Bar


47.2 Bar


44 Bar

We hereby certify that the above equipment has been lifted/tested in accordance with our Standard Operating Procedures and have recorded the lift/test as being satisfactory.

 6-3-12
SIGNATURE (on behalf of Greens Power Limited) NAME (PRINT)

We, the undersigned, certify as witnesses that a lift/test has been carried out on the above named equipment and the lift/test was recorded as being satisfactory.

 6/4/2012
SIGNATURE (on behalf of Client)


NAME (PRINT)

OVF157



GREENS

Raines House
Denby Dale Road
Wakefield
WF1 1HR
England
Registered No. 5067893

Telephone: +44 (0)1924 203970
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EC DECLARATION OF CONFORMITY

Greens Power Reference No: OVL3036A

Client: Ascot Environmental Limited
Client Purchase Order Ref: 27746 Job No. 06/409
Project: 2 off Waste Heat Boilers (W2E) Dargavel

Description of Goods:-

The manufacture of the following items:-

2 off Boiler Sets comprising:

Primary Evaporator
Secondary Evaporator
Primary Superheater
Secondary Superheater
Economiser

We hereby certify that the above equipment has been manufactured in accordance with BS EN 12952 and the Pressure Equipment Directive 97/23/EC and the requirements specified by the contract documents.

FOR GREENS POWER LIMITED

NAME (PRINT)

POSITION:

SIGNATURE

DATE

Notifying Body: Lloyds

OVF043/2