

# INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BAS 11.0097X		Issue No: 1	Certificate history:	
Status:	Current		Page 1 of 4	Issue No. 1 (2012-09-12) Issue No. 0 (2011-08-25)	
Date of Issue:	2012-09-12				
Applicant:	Extronics Limited 1 Dalton Way Midpoint 18 Middlewich Cheshire CW10 0HU United Kingdom				
Equipment:	Type iBATT100 Battery Container				
Optional accessory:					
Type of Protection:	Increased safety				
Marking:	Ex e IIC T6 -20°C ≤ Ta ≤ 55°C Gb	IP43			
Approved for issue on behalf of the Certification Body:	PIECEx	R S Sinclair			
Position:		General Manager			
Signature: (for printed version)					
Date:	-				
<ol> <li>This certificate and schedule may only be reproduced in full.</li> <li>This certificate is not transferable and remains the property of the issuing body.</li> <li>The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.</li> </ol>					
Certificate issued by:					
Baseefa Rockhead Business Park Staden Lane Buxton Derbyshire SK17 9RZ United Kingdom		Baseefa	)		



Certificate No:	IECEx BAS 11.0097X	Issue No: 1
Date of Issue:	2012-09-12	Page 2 of 4
Manufacturer:	Extronics Limited 1 Dalton Way Midpoint 18 Middlewich Cheshire CW10 0HU United Kingdom	

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition:5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the

Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/BAS/ExTR11.0189/00

GB/BAS/ExTR12.0227/00

Quality Assessment Report:

GB/SIR/QAR08.0025/03



 Certificate No:
 IECEx BAS 11.0097X
 Issue No: 1

 Date of Issue:
 2012-09-12
 Page 3 of 4

 Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Type iBATT100 Battery Container consists of a fabricated stainless steel or mild steel enclosure 612mm by 515mm by 371mm with a hinged front cover secured by 4 x  $\frac{1}{2}$  turn locks. There are labyrinth vents with foam mesh on the top and bottom side of the enclosure. The inner surface of the enclosure is covered with an epoxy spray coating

The enclosure contains two 12 volt lead acid batteries connected in series with a rated capacity of 135Ah. The maximum charging current is 40.5A and the maximum discharge current is 160A. The batteries sit horizontally on shelves and are clamped in place.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. If charging takes place within the hazardous area the charging circuit must meet the requirements of IEC 60079?7 and have its own appropriate IECEx certification. The maximum charging current must be limited to 40.5A.

2. Any load connected to these batteries must include a fuse rated no more than 160A in the supply line. If the fuse is located in a hazardous area it must be appropriately certified.

3. If the batteries are to be disconnected in a hazardous area then an appropriately certified means of isolation must be provided.

4. These batteries must not be subjected to mechanical shock.

5. If charging takes place in a hazardous area the charging circuit must meet the requirements of IEC 60079?7 and have its own appropriate IECEx certification. Constant voltage charging is recommended but if constant current charging is applied the maximum charging current is 15.4A.

6. Any load connected to these batteries must include a fuse rated no more than 300A in the supply line. If the fuse is located in a hazardous area it must be appropriately certified.

7. Discharge of the SBS300 batteries must be isolated when the voltage per cell drops below 1.6V.



Certificate No:

IECEx BAS 11.0097X

Issue No: 1

Date of Issue: 2012-09-12

Page 4 of 4

### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

### Variation 1.1

To allow the use of up to two FIAMM Type 12FLB540 batteries in each enclosure. These may be used to replace FIAMM Type 12FLB500 batteries covered by the original certification without changing the certification label. Condition of Certification 2 is modified to allow any fuse up to the specified value to be used.

#### Variation 1.2

To allow the use of up to four 2 volt Enersys Type SBS300 batteries in each enclosure with a rated capacity of 310Ah. The designation of the product then becomes a **Type iBATT101 Battery Container**. Constant voltage charging is recommended but if constant current charging is applied the maximum charging current is 15.4A. The maximum discharge current is 300A.

#### Variation 1.3

The bottom vent in the enclosure is no longer needed resulting in an increased IP rating of IP43.

Conditions of certification 1 and 2 on the original certificate do not apply to this configuration and are replaced by Conditions of Certification 5 and 6.

Condition of certification 7 applies only to the Type iBATT101 Battery Container.

The ambient temperature range for the Type iBATT101 Battery Container is -20°C to +50°C.

ExTR: GB/BAS/ExTR12.0227/00

File Reference: 12/0409