



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx LCIE 16.0027U Issue No: 0 Certificate history:
Issue No. 0 (2016-10-13)

Status: **Current** Page 1 of 3

Date of Issue: **2016-10-13**

Applicant: **Appleton Group - ATX**
EIN, 35 rue André Durouchez,
CS 98017
80084 Amiens cedex 2
France

Equipment: **Battery Type: BATT**
Optional accessory:

Type of Protection: **Ex e**

Marking: Ex eb IIC Gb

Approved for issue on behalf of the IECEx
Certification Body:

Julien GAUTHIER

Position:

Certification Officer

Signature:
(for printed version)

Date:



1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France





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Manufacturer: **Appleton Group - ATX**
EIN, 35 rue André Durouchez,
CS 98017
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France

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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

*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:

[FR/LCIE/ExTR16.0037/00](#)

Quality Assessment Report:

[FR/LCI/QAR07.0008/07](#)

[FR/LCI/QAR07.0008/08](#)

[FR/LCI/QAR07.0008/09](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The component is a battery which operates in all positions and in continuous service.
Its function is to maintain a lighted tube or lighted LED Array during a power outage, for a Standard/Emergency luminaire.
See Annex for details

SCHEDULE OF LIMITATIONS

* During the use of this component, conductors shall be connected to an enclosure which has an adapted mode of protection.

* The certified switch shall be chosen in such a way to have an adapted mode of protection of the final use

See Annex for details

ROUTINE TESTS

According to clause 7.1 of IEC 60079-7 standard, each apparatus shall be submitted to a dielectric strength test carried out in accordance with clause 6.1

CONDITIONS OF CERTIFICATION: NO

Annex:

[LCIE 16.0027 U issue 00_Annex.pdf](#)



Annex 01 to Certificate IECEX LCIE 16.0027 U issue 00



FULL EQUIPMENT DESCRIPTION

The component is a battery which operates in all positions and in continuous service.
Its function is to maintain a lighted tube or lighted LED Array during a power outage, for a Standard/Emergency luminaire.

The enclosure contains 5 ARTS rechargeable cells type:

- Nickel-Cadmium (Ni-Cd) or,
- Nickel-Metal hydride (Ni-MH)

The characteristics of elements ARTS are the following ones:

Type: Nickel-Cadmium VNTDU

Un = 1,2V

Rated capacity = 4 Ah

Current of load = 600mA to 800mA

Maximal current of discharge = 2 A

Type: Nickel-Cadmium VTF70

Un = 1,2V

Rated capacity = 7 Ah

Current of load = 1200mA to 1400mA

Maximal current of discharge = 4,2 A

Type: Nickel-Metal hydride VHTD

Un = 1,2V

Rated capacity = 6 Ah

Current of load = 600mA

Maximal current of discharge = 1,2 A

Different chargers can be used:

- Standard/emergency boards HEP, ATX2xxEV UNI, 18-36 and 58W (4 Ah and 7 Ah)
- HEP-EVU5-80 26R UNI
- HEP-EVU5-80 SW 100V
- HEP-EVUL10W200 UNI

MARKING

The marking of the product shall include the following :

APPLETON - ATX

Address : ...

Type : BATT

Serial number : ...

Year of construction : ...

Type : Nickel-Cadmium (Ni-Cd)

Ex eb IIC Gb

IECEX LCIE 16.0027 U

Service temperature : -20°C to +70°C

Un = 6V

Rated capacity = 4 Ah

Current of load = 600mA to 800mA

Maximal current of discharge = 2 A

Or,

Un = 6V

Rated capacity = 7 Ah

Current of load = 1200mA to 1400mA

Maximal current of discharge = 4,2 A



Annex 01 to Certificate IECEX LCIE 16.0027 U issue 00



Type : Nickel-Metal Hydride (Ni-MH)

Ex eb IIC Gb
IECEX LCIE 16.0027 U
Service temperature : -40°C to +85C
Un = 6V
Rated capacity = 6 Ah
Current of load = 600mA
Maximal current of discharge = 1,2 A

RANGE DETAILS

There are 2 models of batteries :

Model A :

It is an enclosure which contains Ni-Cd or Ni-MH rechargeable battery made of 5 cells of 1,2 V.
The enclosure can be metallic or plastic.

Each extremity of metallic enclosure is closed by a sealing. The battery is held in position in the enclosure which filled with quartzite by 2 through-screws.

A valve allows the degassing during the assembly process.

When the enclosure of the battery is made of plastic, this battery shall never be handled in explosive atmosphere.

This model A is equipped with printed circuit board to maintain the removable connector which is used for the connection. This connector is a polarized connectors with a keying pin to safeguard against incorrect connection between cells and charger

Model B :

It is a cylindrical enclosure which contains Ni-Cd or Ni-MH rechargeable battery made of 5 cells of 1,2 V.

Only one extremity is closed by a sealing like model A and the other extremity is the enclosure.

A valve allows the degassing during the assembly process.

The wiring is solidary of the battery pack.

RATINGS

The characteristics of the batteries are the following ones:

Type: Nickel-Cadmium VNTDU

Un = 6V
Rated capacity = 4 Ah
Current of load = 600mA to 800mA
Maximal current of discharge = 2 A

Type: Nickel-Cadmium VTF70

Un = 6V
Rated capacity = 7 Ah
Current of load = 1200mA to 1400mA
Maximal current of discharge = 4,2 A

Type: Nickel-Metal hydride VHTD

Un = 6V
Rated capacity = 6 Ah
Current of load = 600mA
Maximal current of discharge = 1,2 A

FULL SCHEDULE OF LIMITATIONS

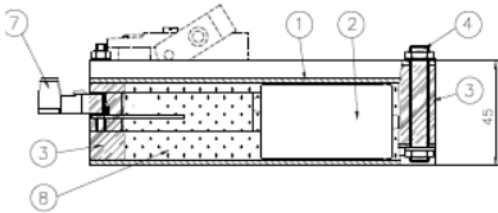
- During the use of this component, conductors shall be connected to an enclosure which has an adapted mode of protection.
- The certified switch shall be chosen in such a way to have an adapted mode of protection of the final use
- When the enclosure of the battery is made of plastic, this battery shall never be handled in explosive atmosphere.
- During the integration of the component into the final equipment, compliance with requirements of clauses 5.6.2.4.2; 5.6.2.11 and 5.6.4.1.1 of IEC 60079-7 standard shall be assessed.
- When the battery pack shall be integrated in an Ex enclosure, the termination compartment shall be dimensioned so that the conductors can be readily connected.

ROUTINE TESTS

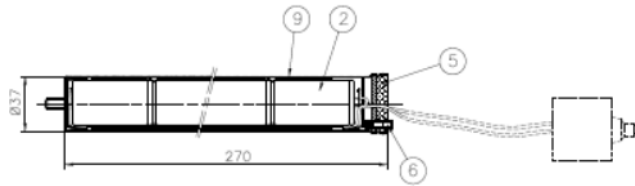
According to clause 7.1 of IEC 60079-7 standard, each above apparatus shall be submitted to a dielectric strength test carried out in accordance with clause 6.1

APPARATUS OVERVIEW

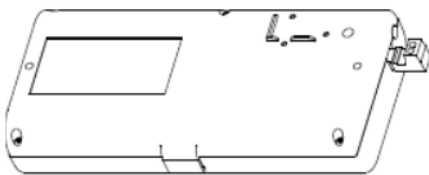
Model A (Metallic version)



Model B



Model A (Plastic version)



ADDITIONAL MANUFACTURING LOCATIONS

N/A