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 13.0073X issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2014-05-19**	Page 1 of 3

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

Electrical Apparatus: **Distribution panel POWERPLEX Size ...**
Optional accessory:

Type of Protection: **Ex d e , tb**

Marking: Ex d e IIB + H_2 T* Gb
Ex tb IIIC T* Db
or
Ex db eb IIB + H_2 T*
Ex tb IIIC T*
See complete marking in attached document : IECEx LCIE 13.0073 X issue 00-attachment

Approved for issue on behalf of the IECEx Certification Body: Marie-Elisabeth D'ORNANO

Position: Certification Officer

Signature: *(for printed version)*

Date: 19 MAI 2014

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.

Certificate issued by:
Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France
Documents relative to LCIE certification activites (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".

L C I E

IECEx Certificate of Conformity

Certificate No.: IECEx LCIE 13.0073X

Date of Issue: **2014-05-19** Issue No.: **0**

Manufacturer: **ATX**
EIN, 35 rue André Durouchez,
CS 98017
80084 Amiens cedex 2
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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
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:
FR/LCIE/ExTR13.0070/00

Quality Assessment Report:

FR/LCI/QAR07.0008/05

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

POWERPLEX is a range of six distribution panels with single or coupled configuration forming the defined combinations called Size A to Size F

POWERPLEX panel is an assembly of polyester enclosures type JBEP certified IECEx LCIE 13.0003X.

POWERPLEX panels standard layouts shows the possibilities A, B, C, D, E and F depending on the size and arrangement of enclosures (See details in attachment n°01)

ROUTINE VERIFICATIONS AND TESTS

Each apparatus shall be submitted before delivery to a dielectric strength test according to clause 7.1 of standard

IEC 60079-7.

CONDITIONS OF CERTIFICATION: YES as shown below:

- Ambient temperature ratings:

For standard model : T_{amb}: -25 °C to +40 °C or -25 °C to +55 °C
For optional model without switching device and standard model with cold switching device :
T_{amb}: -40 °C to +40 °C or -40 °C to +55 °C

- For temperature classification see details attached in document: IECEx LCIE 13.0073 X issue 00-attachment

- The internal wiring is done with PVC insulation conductors for ambient operating temperature of +40°C max.

- Beyond +40 °C to +55 °C, conductors must be chosen with insulation sheath compatible for a temperature of at least 100 °C.

- The connecting section of the internal wiring of distribution enclosures (8 M) shall be at least 6 mm^2.

- The total internal dissipated power per 8M enclosure must not exceed 17,6 W.However, for any configuration above 8 poles 20 A, the assembly must be in such a way one spacing separation is observed in between any breaker.Whatever the nominal current of branches, the total distribution current shall be in such a way not to exceed the maximum current permitted by the main breaker.

- Any cable glands, adaptors and/or plugs shall be certified with an IP degree compatible with the intended use.

- Conditions of certification of integrated certified apparatus come under the corresponding IECEx Certificates of Conformity.

Annex: IECEx LCIE 13.0073X issue 00 - attachment.pdf

IECEx LCIE 13.0073X issue 00
Attachment

General product information

POWERPLEX is a range of six distribution panels with single or coupled configuration forming the defined combinations called Size A to Size F.

The POWERPLEX panel is an assembly of polyester enclosures type JBEP already certified IECEx LCIE 13.0003X.

POWERPLEX panels standard layouts shows the possibilities A, B, C, D, E and F (see Figure 1).

The panels are made of:

- A power on enclosure fitted with a main breaker enclosure equipped with circuit breaker or a switch rated 250A max. The main breaker enclosure is IECEx certified Ex db eb IIB+H_2 through component certificate IECEx INE 13.0098U.

- Horizontal enclosures supporting the bus bars. The insulated bars support as defined in the BOM of the panels are from ROCHLING grade UTR material category I (IEC 60079-7 table 1) and are designed to fulfill the requirement for U= 800 V rms.

- Distribution enclosures equipped with three "8M" enclosures IECEx certified Ex db eb IIB+H_2 through component certificate IECEx INE 13.0097U.

- The distribution breakers are operated when the flip window is open.
  The live parts are IP 30 protected.
  Safety requirements for lifting the flip window are detailed in the manufacturer 's instruction manual (NT Powerplex/01)

- Connection boxes for field connection. These boxes are equipped with ABB's junction blocks type Z certified IECEx LCI 08.0031U (Configuration of these junction boxes is from the possibilities of JBEP certificates).

- The internal wiring is done with PVC insulation conductors for ambient operating temperature of 40 °C max.
  Beyond +40 °C to +55 °C, conductors must be chosen with insulation sheath compatible for a temperature of at least 100 °C.

  ✓ 150mm²: from the main breaker to the bus bars.
  ✓ 6 mm²: for the 8 MODULES distribution.

  The bundles of wires are placed on the side of each distribution enclosure

Complete marking

APPLETON ATX
Address : ...
Type : POWERPLEX Size ...
Serial number : ...
Year of construction : ...
Ex d e IIB + H_2 T* Gb or Ex db eb IIB + H_2 T*
Ex tb IIIC T* or Ex tb IIIC T* Db
IECEx LCIE 13.0073 X
T_{amb}: -25 °C to +40 °C or -25 °C to +55 °C
Rated voltage:
Rated current:
WARNING - DO NOT OPEN WHEN ENERGIZED (on all the covers)
T* : See temperatures table in page 3 of this attachment.

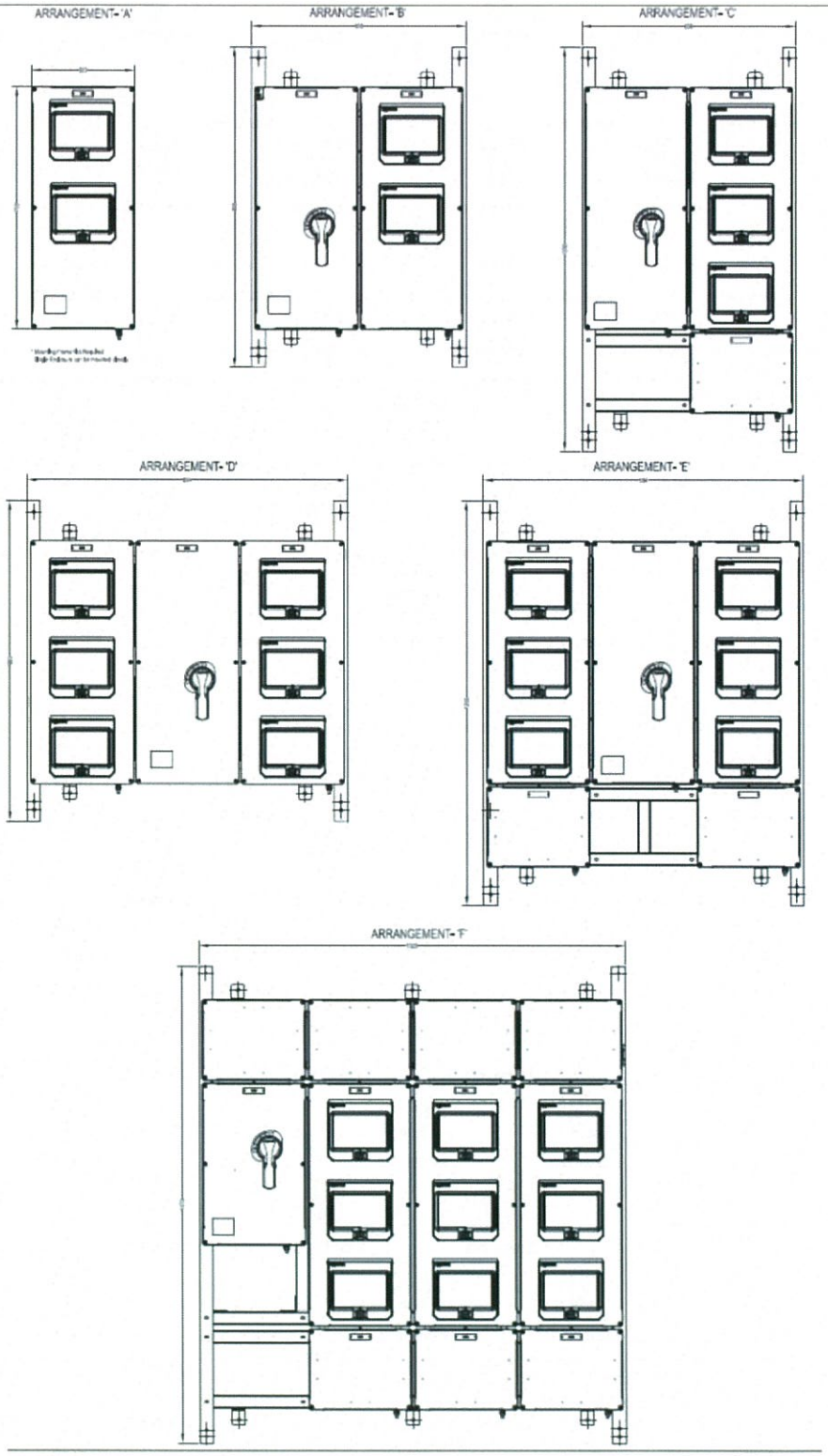

Fig 1: POWERPLEX panel-standard layouts

Conditions of certification (continued)

Temperature classification:

Main breaker		Ambient temperature			
Nominal rating (A)	Derating factor	+ 40 °C		+ 55 °C	
		Gas	Dust	Gas	Dust
250	80 % (200 A)	T5	T95 °C	T4	T100 °C
160	78 % (125 A)	T5	T95 °C	T4	T100 °C
100	0 (100 A)	T5	T95 °C	T4	T100 °C
63	0 (100 A)	T5	T95 °C	T4	T100 °C

The main breaker shall not be supply with a current value exceeding the values given in the "Derating factor" column of the above table.