



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

IECEX NEM 09.0002U issue No.:3

Certificate No.:

Certificate history:

[Issue No. 3 \(2011-3-11\)](#)

[Issue No. 2 \(2009-9-21\)](#)

[Issue No. 1 \(2009-7-3\)](#)

[Issue No. 0 \(2009-5-15\)](#)

Status:

Current

Date of Issue:

2011-03-11

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Applicant:

Barel AS
Kaiveien 2
N-9917 Kirkenes
Norway

Electrical Apparatus:
Optional accessory:

Encapsulated electronic ballast for fluorescent light

Type of Protection:

Encapsulated and Increased safety

Marking:

Ex eb mb IIC T5

*Approved for issue on behalf of the IECEx
Certification Body:*

Rolf Hoel

Position:

Certification Manager, Ex-products

*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](#).

Certificate issued by:

NEMKO
Gaustadalleen 30
Oslo N-0314
Norway





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Manufacturer: **Barel AS**
Kaiveien 2
N-9917 Kirkenes
Norway

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 Explosive atmospheres - Part 0: Equipment - General requirements
Edition: 5

IEC 60079-18 : 2004 Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
Edition: 2.0

IEC 60079-7 : 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition: 4

*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:
[NO/NEM/EXTR09.0004/02](#)

Quality Assessment Report:
[NO/NEM/QAR08.0001/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Encapsulated electronic ballast type HFX MULTI for T5 tubes. The ballast is for use in equipment with type of protection "e". The temperature of the Tc point must not be exceeded. Terminals on ballast are suitable for connection of wires 1.0-2.5mm².

Routine tests:

Routine test that shall be carried out by the manufacturer on all units:
Electric strength test according to relevant parts of clause 9 in IEC 60079-18:2004.
Each ballast shall be subjected to a visual inspection

Further Description in the Annex page 1 and 2.

CONDITIONS OF CERTIFICATION: NO



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

Issue 1: Issued due to a misprint in the table for Tc point for models HFX 118 E1003 and HFX 136 E1003. Correct values are HFX 118 E1003 Tc: 85°C and HFX 136 E1003 Tc: 82°C.

Issue 2: Issued due to a misprint in the battery voltage for model HFXE. All HFXE models have the possibility to connect batteries with voltage from 4,8-8,4VDC except for models HFXE 158 E1003, HFXE 258 E1003 and HFXE 158 E1004 which are listed with a battery voltage of 8,4VDC.

Issue 3: Type HFX MULTI for T5 tube fluorescent light. Minor changes on the printed circuit board.

Annexe: [ATT0CTJ6.doc](#)