



IECEX ExTAG Training Workshop
Umhlanga, South Africa
September 5th, 2016

Use of IECEx Certificates of Conformity

Peter Thurnherr



- **Manufacturing (incl. OD 24)**
- **Service Facility**
- **Installations**
- **Accredited Inspection Body**



IEC 60079-17

Edition 5.0 2013-11

INTERNATIONAL STANDARD

NORME
INTERNATIONALE



IEC 60079-14

Edition 5.0 2013-11

INTERNATIONAL STANDARD

NORME
INTERNATIONALE



Explosive atmospheres –
Part 14: Electrical installations design, selection and erection



Documentation – Equipment

The following documents are available for the identification:

- **Marking**
(according IEC 60079-0)
- **IECEX Certificate of Conformity**
(Online system!)
- **Instruction manual**
(according IEC 60079-0)



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 BVS 14.0068X	Issue No.:	0	Certificate history:	
Status:	Current				
Date of issue:	2014-07-04	Page 1 of 4			
Applicant:	thuba EHB Ltd. Blauensteinstraße 16 40115 Basel Switzerland				
Electrical Apparatus: Optional accessory:	Hand and machine lamp type "L" "d" "m" "m" "m" "m"				
Type of Protection:	Equipment protection by flameproof enclosures "d". Equipment dust ignition protection by enclosure "t"				
Marking:	Ex d IIC T5 Gb Ex tb IIIC T95°C Db				
Approved for issue on behalf of the IECEx Certification Body:	H.-Ch. Simanski				
Position:	Head of Certification Body				
Signature: (for printed version)					
Date:	4.7.2014				

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: **DEKRA EXAM GmbH**
Dimmendahlstrasse 9
44809 Bochum





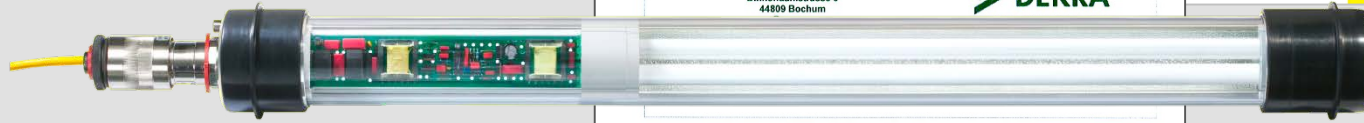
Explosiongeschützte
Fluoreszenz-Hand- und
Maschinenleuchten


Luminaire fluorescents anti-
déflagrants pour l'éclairage de
machines et pour baladeuses



Explosionproof
Fluorescent Hand and
Machine Lamps



Edition March 2008



CE 0158  II 2 G II 2 D	50-400 Hz	1725.2010
	Typ: ML 70d 55 833	110-240 VAC/DC
BVS 1416X ATEX E 1 X 06	Ex d IIC T5 Gb	T20 up to 60°C
IECEX BVS 1416X	Ex tb IIIC T95°C Db	IP 68

 
 thuba Ltd.
 CH-4015 Basel
 Made In Switzerland
 + 41 61 307 80 00
www.thuba.com



Selection of equipment

EPL	Type of protection	Code	Standard
Gb	Flameproof enclosure	d, db	IEC 60079-1
	Pressurization	p, pxb, pyb	IEC 60079-2
	Powder filling	q	IEC 60079-5
	Liquid immersion	ob	IEC 60079-6
	Increased safety	e, eb	IEC 60079-7



INTERNATIONAL ELECTROTECHNICAL COMMISSION SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SYSTEM)

- Information ▾
- Publications ▾
- Members' Area ▾
- Certificates & Licences ▾
- Meetings & Events ▾
- Contact
- Home

News Releases

Poland to host IECEX event

Third IECEX International Conference to take place in Europe

The ultimate safeguard in Ex areas

IECEX is a trusted partner for the Ex industry

Raising awareness on high-risk mining operations

IECEX and AFSEC international seminar in DRC

Lighting up Ex areas

IECEX certifies new generation of LED-based lighting solutions

Global safety and security

IECEX helps minimize risks in the Ex sector

Minimizing risks

IECEX ensures the safety of personnel and



Meetings of the IECEX System 2016 Umhlanga, South Africa, 5-9 September 2016

Following the kind invitation received from the South African IECEX National Committee, we are pleased to confirm that the 2016 Annual IECEX Meetings will take place in Umhlanga, (near Durban) South Africa

[More information from the meetings website](#)

Quick Links

View IECEX Certificates and Licences (CoC Online)

Certification Bodies (ExCBs) - Equipment

Certification Bodies (ExCBs) - Service Facilities

Certification Bodies (ExCBs) - Certified Persons

Certification Bodies (ExCBs) - Conformity Mark

IECEX Recognised Training Providers (RTPs)

ExTAG Decision Sheets List

IEC TC24 & IECEX Meeting Schedule

Featured

[Christchurch Meetings Group Photo](#)

[Meetings of the IECEX System 2015, Christchurch, New Zealand, 14-18 September](#)

[IECEX International Conference was held in Gdansk, Poland, April 2015](#)

[IECEX systems endorsed by UNECE](#)

[IECEX mobile apps](#)

CERTIFIED EQUIPMENT

CONFORMITY MARK LICENSES

CERTIFIED SERVICE FACILITIES

CERTIFIED PERSONS

TOOLS

▼ Information

IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System)

IECEX Certificates of Conformity Scheme enables:

IECEX Certification Bodies to issue new IECEX Certificates On-line.

Full Public access to consult, view and print issued IECEX Certificates.

[Click here for a link to the INSTRUCTIONS FOR USE.](#)

This facility will be maintained for a short time to allow users to transition to using this new Search Tool page.

For any questions, please contact [Mr. Chris Agius](#), IECEX Secretary.



Enter your criteria

IECEX documents:

Certificates ▼

Issued year:

- All - ▼

Status:

- All - ▼

ExCBs:

- All - ▼

Certificate/ExTR/QAR number:

BVS 16.0027X

Standard:

Applicant/ Manufacturer:

- All - ▼

Name:

For Ex Certificates only:

Equipment:

Type of protection:

✖ Reset

➔ Search

Total Certificates found : 1

Prev

Certificate no.

◇ Date

◇ ExCB

◇ Location

◇ Equipment

◇ Applicant

◇ Standards

IECEX BVS 16.0027X
issue 0

2016-06-14

BVS

Switzerland

Power distribution, switch and control
gear assembly type SAPzc *** 7 ** ** *

Thuba Ltd.

IEC 60079-0 (Ed.6
IEC 60079-11 (Ed.6
IEC 60079-2 (Ed.6

Enter your criteria

IECEX documents: Issued year: Status:

ExCBs: Certificate/ExTR/QAR number: Standard:

Applicant/ Manufacturer: Name:

For Ex Certificates only: Equipment: Type of protection:

Total Certificates found : 59

Certificate no.	◆ Date	◆ ExCB	◆ Location	◆ Equipment	◆ Applicant	◆ Standards	◆ Files
IECEX BKI 07.0040X issue 1	2011-09-21	BKI	Switzerland	Flange heating	Thuba Ltd.	IEC 60079-0 (Ed.4.0), IEC 60079-1 (Ed. 5), IEC 60079-7 (Ed.3)	
IECEX BVS 09.0039 issue 1	2015-09-08	BVS	Switzerland	Keyboard type KB 108, type KB 108-TB or type KB 108-TP	Thuba Ag	IEC 60079-0 (Ed.6.0), IEC 60079-11 (Ed.6.0)	
IECEX BVS 12.0019X issue 2	2014-09-29	BVS	Switzerland	Ex connector type CONeb	Thuba Ltd.	IEC 60079-0 (Ed.6.0), IEC 60079-7 (Ed.4)	
IECEX BVS 15.0029 issue 0	2015-03-18	BVS	Switzerland	Machine lamp type ML**tb ** ****	Thuba Ehb Ltd.	IEC 60079-0 (Ed.6.0), IEC 60079-31 (Ed.2)	
IECEX BVS 14.0026 issue 0	2014-03-17	BVS	Switzerland	Explosion proof pluggable connection for antenna wires type Nexans ***eb	Thuba Ltd.	IEC 60079-0 (Ed.6.0), IEC 60079-7 (Ed.4)	
IECEX BVS 12.0087 issue 1	2014-08-07	BVS	Switzerland	Pressurized Oil Trace Monitor Type Sigrist OilGuard *Ex	Thuba Ltd.	IEC 60079-0 (Ed.6.0), IEC 60079-11 (Ed.6.0), IEC 60079-2 (Ed.5)	
IECEX BVS 13.0127X issue 0	2013-12-13	BVS	Switzerland	Interface module TIF13	Thuba Ag	IEC 60079-0 (Ed.6.0), IEC 60079-11 (Ed.6.0)	
IECEX BVS 12.0019X issue 1	2014-02-04	BVS	Switzerland	Ex connector type CONeb	Thuba Ltd.	IEC 60079-0 (Ed.5), IEC 60079-7 (Ed.4)	
IECEX BVS 13.0024 issue 0	2013-03-04	BVS	Switzerland	Machine lamp type ML**tc ** ****	Thuba Ltd.	IEC 60079-0 (Ed.6.0), IEC 60079-31 (Ed.1)	



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 BVS 16.0026U	Issue No: 0	<u>Certificate history:</u> Issue No. 0 (2016-05-10)
Status:	Current	Page 1 of 4	
Date of Issue:	2016-05-10		
Applicant:	thuba Ltd. Blauensteinerstrasse 16 4015 Basel Switzerland		
Equipment:	Empty enclosure type eCAM ** ** **		
<i>Optional accessory:</i>			
Type of Protection:	Equipment dust ignition protection by enclosure "t", Equipment protection by increased safety "e"		
Marking:	Ex eb IIC Gb Ex tb IIIC Db		



Additional requirements for type of protection “e” – Increased safety

15.1 General (IEC 60079-14:2013)

Only Ex “e” equipment having a complete certificate shall be installed.

Ex “e” enclosures and components having only a component certificate, i.e. marked with a “U”, shall not be installed in the hazardous area unless part of an assembly of components (now being referred to as an equipment) when the components in the equipment are permitted by a full Ex certificate which may contain an “X” and the equipment label carries full Ex marking including temperature class.



IECEX Certificate of Conformity



Certificate No.: IECEx BVS 16.0027X
Annex
Page 1 of 3

Subject and Type

Power distribution, switch and control gear assembly type SAnA *¹⁾ *²⁾ *³⁾ 7⁴⁾ ** ** *⁵⁾

1) 3 = Control system 830

4 = Control system 840

2) Manufacturer code

3) Enclosure material

1: stainless steel

3: polyester

6: aluminium

7: sheet steel

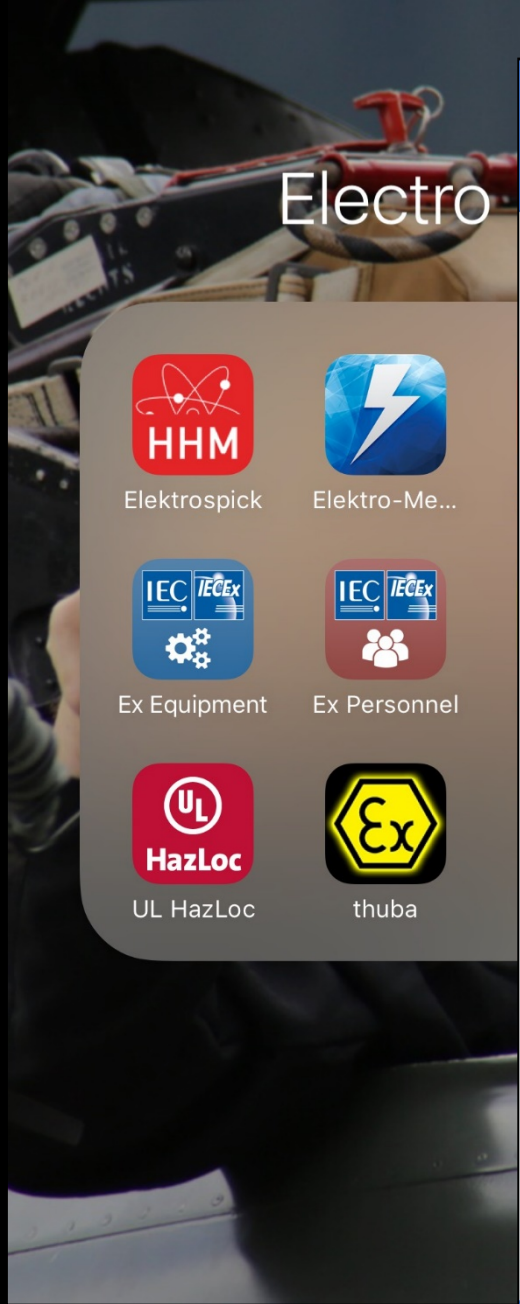
4) Variant

7: controls

5) Dimensions (width, length, height [cm])

Description

The Power distribution, switch and control gear assembly type SApzc *** 7 ** ** * consists of a separately certified enclosure or a welded enclosure (stainless steel or sheet steel type pCam ** ** **) and is built in type of protection pressurized enclosure "pzc". The enclosure can be equipped with different separately certified or industrial version (only inside of the pressurized enclosure) measurement, control, regulating and switching devices as well as terminals for non-intrinsically safe and intrinsically safe circuits



Electro



Elektrospick



Elektro-Me...



Ex Equipment



Ex Personnel



UL HazLoc



thuba



Ex Equipment

IECEX

2015-11-8



IECEX

IECEX is the IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres. It uses quality assessment specifications that are based



Search: bvs 16.0055X



Keyword

1 certificate

IECEX BVS 16.0055X

Issue No: 0

Applicant Name:

thuba Ltd.



Apparatus:

Interface type SB 060*-**-*



IECEX BVS 16.0055X

Status:

Current

Date of Issue:

2016-08-31

Issuer:

DEKRA EXAM GmbH

Applicant:

thuba Ltd.

Electrical Apparatus:

Interface type SB 060*-**-*

Type of Protection:

Equipment protection by intrinsic safety "i"

Marking:

[Ex ib Gb] IIC
[Ex ib Db] IIIC



IECEX BVS 16.0055X

Applicant:

thuba Ltd.

Electrical Apparatus:

Interface type SB 060*-**-*

Type of Protection:

Equipment protection by intrinsic safety "i"

Marking:

[Ex ib Gb] IIC
[Ex ib Db] IIIC

Standards:

IEC 60079-0 : 2011 Explosive atmospheres -
Edition: 6.0 Part 0: General
requirements

IEC 60079-11 : 2011-06 Explosive
Edition: 6.0 atmospheres - Part
11: Equipment protection by intrinsic safety 'i'



(11-06)

11-06

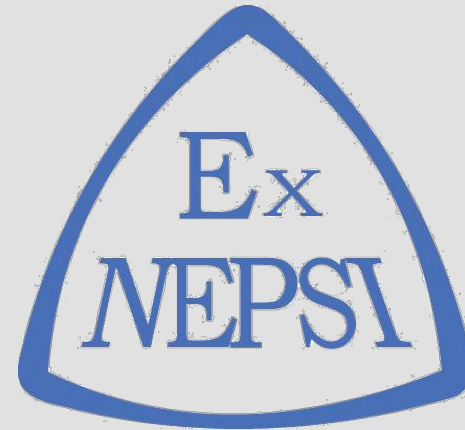


HAKIS





EAC





Who do we issue
Certificates of Conformity
for?



For the ExCB?



For the manufacturer?



Or maybe for the user
after all.



4.4.1.2 IEC standards (IEC 60079-14:2013)

The requirements given in this standard are based on the ***current editions of the IEC standards*** in the IEC 60079 series. If equipment is not certified in accordance with current editions of the IEC 60079 series it may not be compatible with the requirements given in this standard. It may be required that additional measures should be applied to ensure safe operation.

Type

PL 612



II2GD Exell ExtD A21 T6 T80

X0117X
0028X



T amb -50°C to +40°C

IP 66/67

DO NOT OPEN WHEN ENERGISED

Max. Dissipated Wattage

4.1 W

550 V

37 A

2



The manufacturers sell
the user an "X" for a "U".



Typical equipment



Symbol picture



Responsibility of user

- **IP-Protection, for example IP 6X for Group IIIC**
- **to use a suitable enclosure**
- **environmental conditions**
- **risk of mechanical impact**
- **to avoid electrostatic charge**
- **if EPL Gc, pollution degree 2 shall be considered**

**Marking of the complete equipment?
(including enclosure)**



Symbol picture

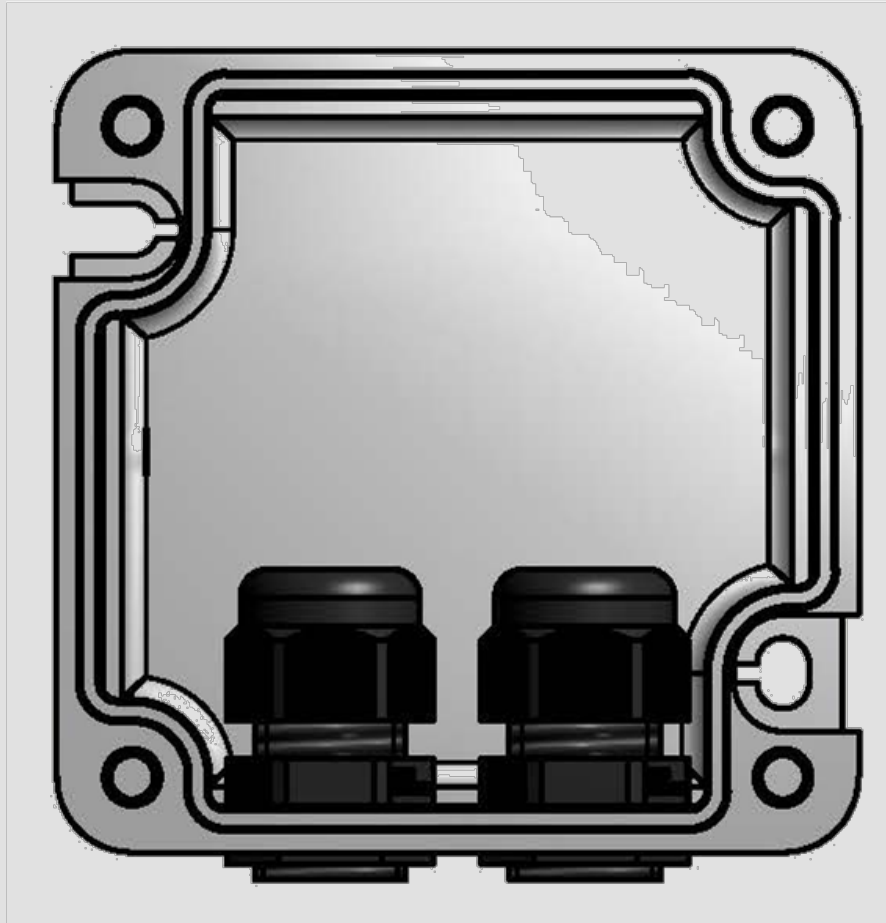


Mechanically protected

Types with a low impact force

shall be mounted into the enclosure

in such a way that they are mechanically protected against impact force.



Symbol picture



Thank you for your attention!