



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx BVS 20.0081X** Page 1 of 5 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2021-01-13

Applicant: **thuba Ltd.**
Stockbrunnenrain 9
4123 Allschwil
Switzerland

Equipment: **Explosionproof switchgear assemblies type SAnR * * * * ***

Optional accessory:

Type of Protection: **Intrinsic safety "i", Type of protection "n"**

Marking: Ex nR * IIC T6, T5, T4 Gc
Ex nR * [ic] IIC T6, T5, T4 Gc
Ex nR * [ib Gb] IIC T6, T5, T4 Gc
Ex nR * [ia Ga] IIC T6, T5, T4 Gc

Optional the marking can be amplified with the types of protection of the separately certified components, for example "d/db", "e/eb", "ma/mb" and/or "ia/ib".

Approved for issue on behalf of the IECEx
Certification Body:

Dr Michael Wittler

Position:

Deputy Head of Certification Body

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



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Manufacturer: **thuba Ltd.**
Stockbrunnenrain 9
4123 Allschwil
Switzerland

Manufacturing
locations:

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 equipment 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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

This Certificate **does not** indicate compliance with 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:

[DE/BVS/ExTR15.0088/02](#)

Quality Assessment Report:

[DE/BVS/QAR13.0010/09](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

Explosionproof switchgear assemblies type Serie SAnR *1) *2) *3) ** ** **4)

1) Manufacturer code

2) Enclosure material

1 = Stainless steel

3 = Polyester

7 = Steel

3) Variant

7: controls

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

Description

The explosionproof switchgear assemblies type SAnR * * * * * consist of a separately certified empty enclosure equipped with different monitoring, control and switch equipment (separately certified or industrial version) as well as terminals for intrinsically and non-intrinsically safe circuits.

The explosionproof switchgear assemblies type SAnR * * * * * is designed in type of protection "nR". The empty enclosure is made of polyester.

SPECIFIC CONDITIONS OF USE: YES as shown below:

For the use of equipment in type of protection Intrinsic Safety "i" IEC 60079-11 the distances between intrinsically safe and non-intrinsically safe circuits shall fulfil the requirements according to IEC 60079-11.



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Equipment (continued):

Listing of separately certified components with standard status, which can be installed at the enclosure:

Manufacturer	Subject and type	Certificate	Standards
thuba Ltd.	Empty enclosure eCam ** ** *	IECEX BVS 16.0026U	IEC 60079-0:2011 IEC 60079-7:2015 ²
Cooper Crouse-Hinds GmbH (Eaton)	Empty enclosure GHG 60 ...R...	IECEX PTB 11.0030U	IEC 60079-0:2017 IEC 60079-7:2015
Bartec-Varnost d.o.o.	Empty enclosure 07-5184-****/**** 07-5185-****/****	IECEX PTB 09.0008U	IEC 60079-0:2017 IEC 60079-7 :2017
R. Stahl AG	Rotary actuator Type 8604/1	IECEX PTB 13.0047U	IEC 60079-0:2017 IEC 60079-7:2015
Cooper Crouse-Hinds GmbH (Eaton)	Switch block GHG 41. R	IECEX IBE 14.0005U	IEC 60079-0:2011 ¹ IEC 60079-1:2014 IEC 60079-7:2015 ²
Cooper Crouse-Hinds GmbH (Eaton)	Signal lamp GHG 41. R	IECEX IBE 13.0031U	IEC 60079-0:2011 ¹ IEC 60079-1:2014 IEC 60079-7:2015 IEC 60079-11:2011
Cooper Crouse-Hinds GmbH (Eaton)	Measuring instrument AM45, AM72; VM45, VM72 GHG 41* ****R****	IECEX BVS 14.0082U	IEC 60079-0:2017 IEC 60079-7:2017 ² IEC 60079-11:2011
Cooper Crouse-Hinds GmbH (Eaton)	Automation flap type GHG 610 14** R****	IECEX PTB 11.0020U	IEC 60079-0:2011 ¹ IEC 60079-7:2015
Cooper Crouse-Hinds GmbH (Eaton)	Switch base type Type GHG 23. ...R....	IECEX BVS 13.0108U	IEC 60079-0:2011 ¹ IEC 60079-1:2014 IEC 60079-7:2015 ² IEC 60079-11:2011
Cooper Crouse-Hinds GmbH (Eaton)	Switch base GHG 2...R....	IECEX BVS 14.0047U	IEC 60079-0:2011 ¹ IEC 60079-1:2007 ¹ IEC 60079-7:2006 ²
thuba Ltd.	Control and signalling device ZBWE..., ZBW4B..., ZBW5A..., XBW...	IECEX INE 17.0009U	IEC 60079-0:2011 ¹ IEC 60079-1:2014 IEC 60079-7:2015 ²
thuba Ltd.	Monitoring, control and switch equipment ZBWV/L/R..., XLW..., XAW5..	IECEX INE 17.0010U	IEC 60079-0:2011 ¹ IEC 60079-7:2015 ² IEC 60079-18:2009

¹ No applicable technical differences

² Fulfil the requirements according IEC 60079-15



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Additional information:

Parameters

Rated voltage	max. 800 V
Rated current	max. 400 A
Rated cross-section	max. 240 mm ²
Earthing connection	max. 120 mm ²
Ambient temperature range	max. -55 °C up to +100 °C (depends on the mounting equipment)
IP protection degree	IP66

The rated values will be determinate by the manufacturer depending on the used electrical equipment and according to the relevant standard.