



# 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](http://www.iecex.com)

Certificate No.: **IECEX BAS 12.0115X** Page 1 of 4 Certificate history:  
Status: **Current** Issue No: 3 [Issue 2 \(2015-06-09\)](#)  
Date of Issue: 2023-09-14 [Issue 1 \(2014-07-28\)](#)  
[Issue 0 \(2013-02-19\)](#)  
Applicant: **Topworx Incorporated**  
3300 Fern Valley Road  
Louisville  
Kentucky 40213  
**United States of America**  
Equipment: **Series 80 GO Switch**  
Optional accessory:  
Type of Protection: **Intrinsic Safety**  
Marking: **Ex ia IIC T3/T4/T6 Ga**  
**Ex ia IIIC T<sub>200</sub>200°C / T<sub>200</sub>135°C / T<sub>200</sub>85°C Da**  
**See certificate Annex for Specific markings and ambient temperature ranges**

Approved for issue on behalf of the IECEx  
Certification Body:

**R. S. Sinclair**

Position:

**Technical Manager**

Signature:  
(for printed version)

Date:  
(for printed version) 14.09.2023

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3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**SGS UK Limited**  
**Rockhead Business Park**  
**Staden Lane**  
**Buxton, Derbyshire SK17 9RZ**  
**United Kingdom**





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Manufacturer: **Topworx Incorporated**  
3300 Fern Valley Road  
Louisville  
Kentucky 40213  
**United States of America**

Manufacturing locations: **Topworx Incorporated**  
3300 Fern Valley Road  
Louisville  
Kentucky 40213  
**United States of America**

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

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 Reports:

[GB/BAS/ExTR12.0268/00](#)

[GB/BAS/ExTR15.0138/00](#)

[GB/BAS/ExTR22.0194/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0025/10](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Series 80 GO Switch are a range of magnetically operated switches which are actuated by the presence of an external ferrous body. The range includes a number of different switch configurations with single pole, double throw or double pole, double throw switches within a switch body.

The switches comprise a rectangular stainless steel or lacquered brass enclosure housing the switch mechanism sealed in the top of the enclosure with the sensing magnets located below. These, and the integral connections to the switch mechanism are potted in the enclosure with external connections to the switch made either by a threaded entry on the side or bottom of the switch enclosure. The switch is mounted in place using two mounting points that pass through the enclosure.

The switches are rated up to 30V peak a.c. or d.c., 0.25A and may be used to switch a circuit from a certified Ex ia IIC intrinsically safe source. All switch contacts within one limit switch assembly must form part of the same intrinsically safe circuit. The switched circuit is capable of withstanding a 500V test to earth.

The Series 80 GO Switch are available with both single or double pole switch configurations, and either a side or bottom external connection outlet positions, all with either plug and socket or integral lead external connection options. When fitted with the integral leads, the external connections must be terminated within an enclosure provided with protection suitable for the zone of installation. In terms of intrinsic safety, all variants of the Series 80 GO Switch are identical with exception of the potting used on the 'H' high temperature variants is suitable for the higher ambient temperature.

See Certificate Annex for details of the model range, temperature classification and input parameters.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

1. All switch contacts within one limit switch assembly must form part of the same intrinsically safe circuit.
2. The proximity switches do not require a connection to earth for safety purposes, but an earth connection is provided which is directly connected to the metallic enclosure. Normally an intrinsically safe circuit may be earthed at one point only. If the earth connection is used, the implication of this must be fully considered in any installation, e.g. by use of a galvanically isolated interface.
3. The switch must be supplied from a certified Ex ia IIC intrinsically safe source.
4. The flying leads must be terminated in a manner suitable for the zone of installation.
5. Prior to installation of the installer must inspect the device for damage to the applied coating that may expose the brass enclosure and install the device in a manner that protects or prevents impact to the enclosure of the device. Consult manufacturer should there be any damage to the applied coating exposing the brass enclosure.



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

### Variation 3.1

To confirm compliance to the requirements of IEC 60079-0, Edition 7.

### Variation 3.2

Updating the marking and Annex to reflect new marking requirements for EPL Da.

### Variation 3.3

Introduction of new Specific Condition of Use

ExTR: **GB/BAS/ExTR22.0194/00**

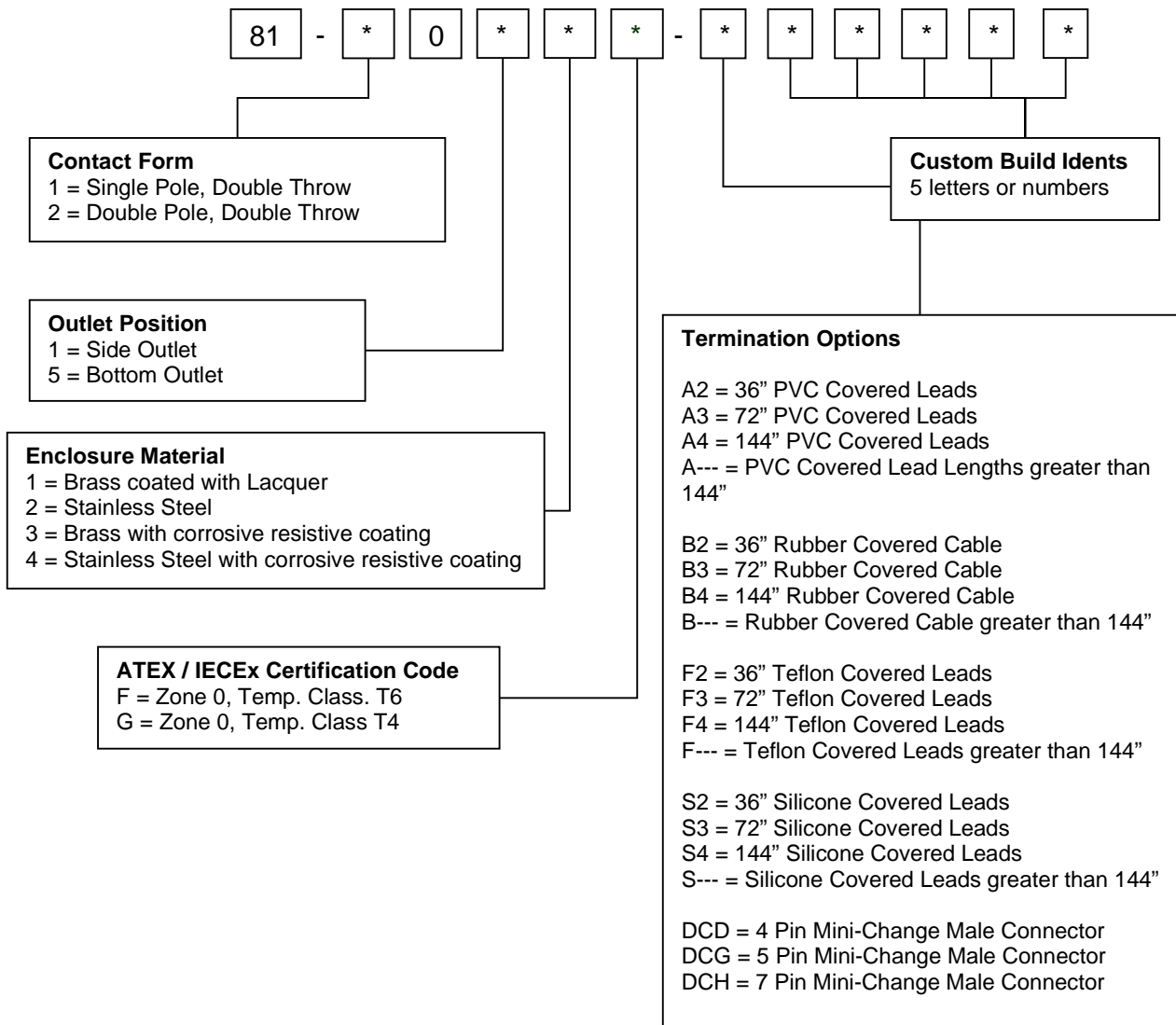
File Reference: **21/0357**

## Annex:

[IECEX BAS 12.0115X Annex Issue 3.pdf](#)

**Series 80 GO Switch Leverless Limit Switch**

**'F' and 'G' Model Range**



**Input Parameters:**

**Switch Variants with Termination Options 'DCD', 'DCG' & 'DCH'**

$$U_i = 30V \quad C_i = 0$$

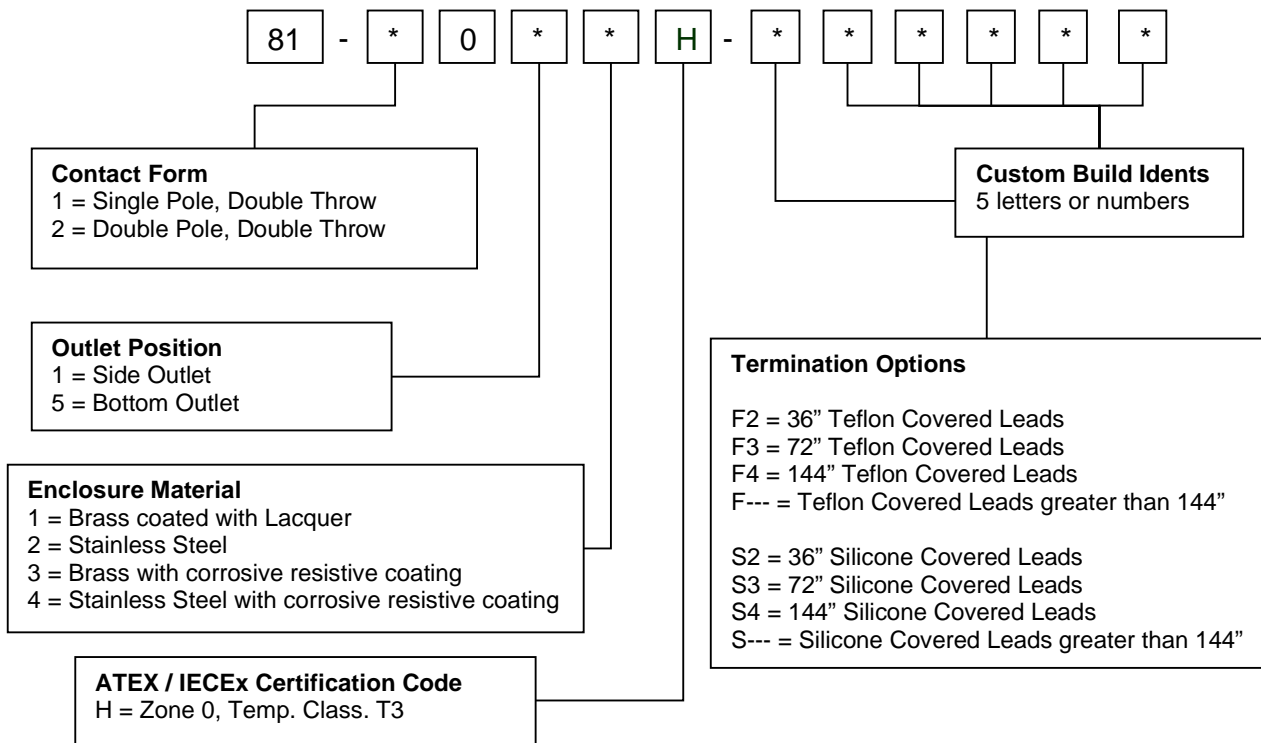
$$I_i = 0.25A \quad L_i = 0$$

**Switch Variants with Wiring Options 'A\*', 'B\*', 'F\*' & 'S\*'**

$$U_i = 30V \quad C_i = 33nF$$

$$I_i = 0.25A \quad L_i = 200\mu H$$

**'H' Model Range**



**Input Parameters:**

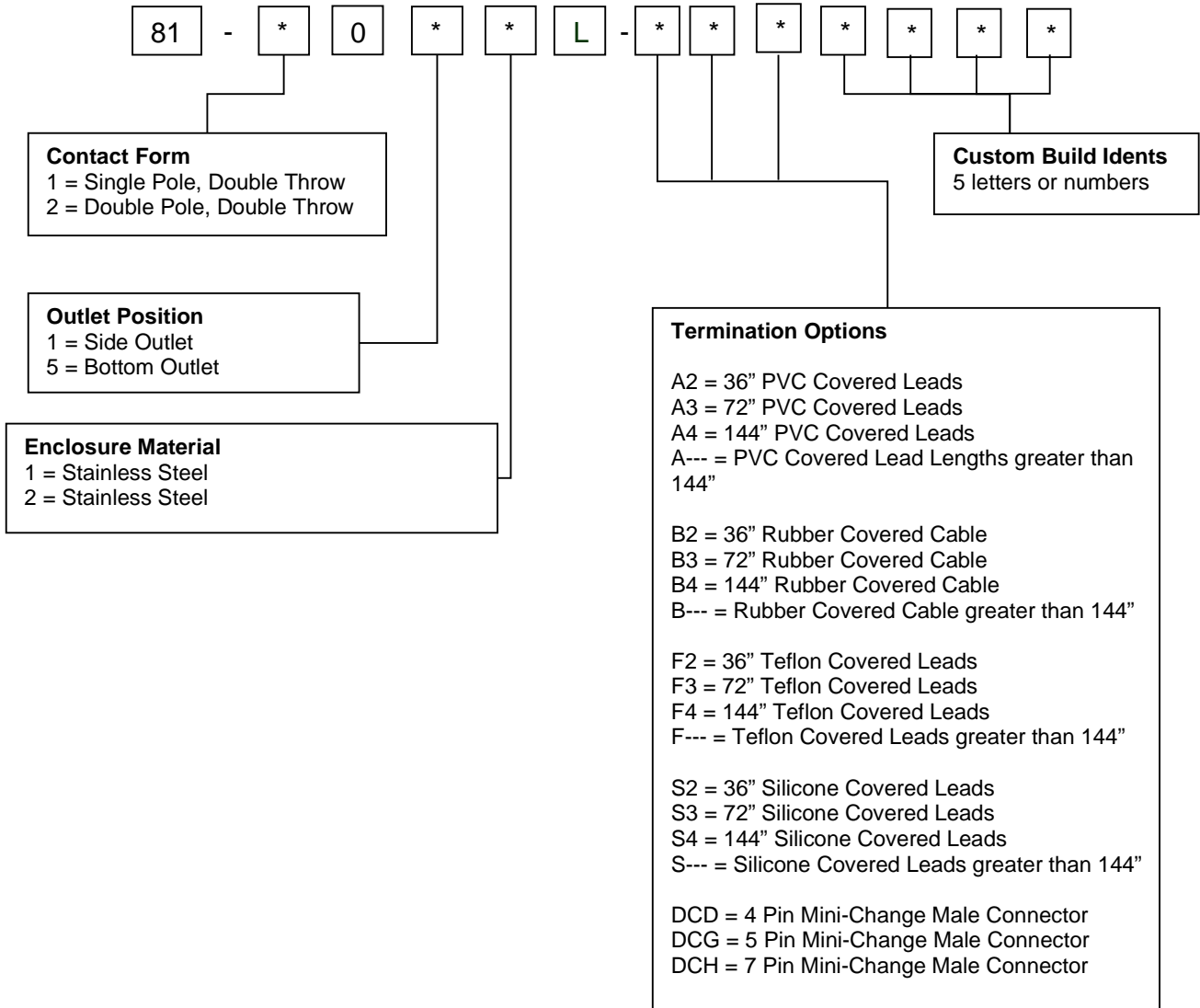
$$U_i = 30V \quad C_i = 33nF$$

$$I_i = 0.25A \quad L_i = 200\mu H$$

**Model Temperature Classification**

80 Series models with a 'F' as the seventh character in the model number	Ex ia IIC T6 Ga (-40°C ≤ T <sub>a</sub> ≤ 50°C) Ex ia IIIC T <sub>200</sub> 85°C Da (-40°C ≤ T <sub>a</sub> ≤ 50°C)
80 Series models with a 'G' as the seventh character in the model number	Ex ia IIC T4 Ga (-40°C ≤ T <sub>a</sub> ≤ 100°C) Ex ia IIIC T <sub>200</sub> 135°C Da (-40°C ≤ T <sub>a</sub> ≤ 100°C)
80 Series models with a 'H' as the seventh character in the model number	Ex ia IIC T3 Ga (-40°C ≤ T <sub>a</sub> ≤ 150°C) Ex ia IIIC T <sub>200</sub> 200°C Da (-40°C ≤ T <sub>a</sub> ≤ 150°C)

**'F' and 'G' Model Range – Additionally Marked**



The model range described here includes an alternative label that carries third-party certification marks not ratified by SGS Baseefa. These models are identified by the inclusion of an "L" as the sixth character of the model number. For those carrying this character the model nomenclature is not relied upon to define the certification parameters.

**Input Parameters:**

**Switch Variants with Termination Options 'DCD', 'DCG' & 'DCH'**

$$U_i = 30V \quad C_i = 0$$

$$I_i = 0.25A \quad L_i = 0$$

**SGS Baseefa Limited**  
Rockhead Business Park  
Staden lane, Buxton, Derbyshire  
SK17 9RZ  
United Kingdom



SGS

ANNEX to IECEx BAS 12.0115X

Issue No. 3

Date: 12 September 2023

Switch Variants with Wiring Options 'A\*', 'B\*', 'F\*' & 'S\*'

$U_i = 30V$        $C_i = 33nF$   
 $I_i = 0.25A$      $L_i = 200\mu H$