

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 EU - Type Examination Certificate **Baseefa12ATEX0214X – Issue 2**
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Series 80 GO Switch**

5 Manufacturer: **Topworx Incorporated**

6 Address: **3300 Fern Valley Road, Louisville, Kentucky, 40213 United States of America**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa12ATEX0214X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0: 2018 EN 60079-11: 2012

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

 **See Certificate Schedule**

SGS Fimko Oy Customer Reference No. **2191**


Project File No. **21/0357**

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Schedule

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Certificate Number Baseefa12ATEX0214X – Issue 2

15 Description of Product

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.

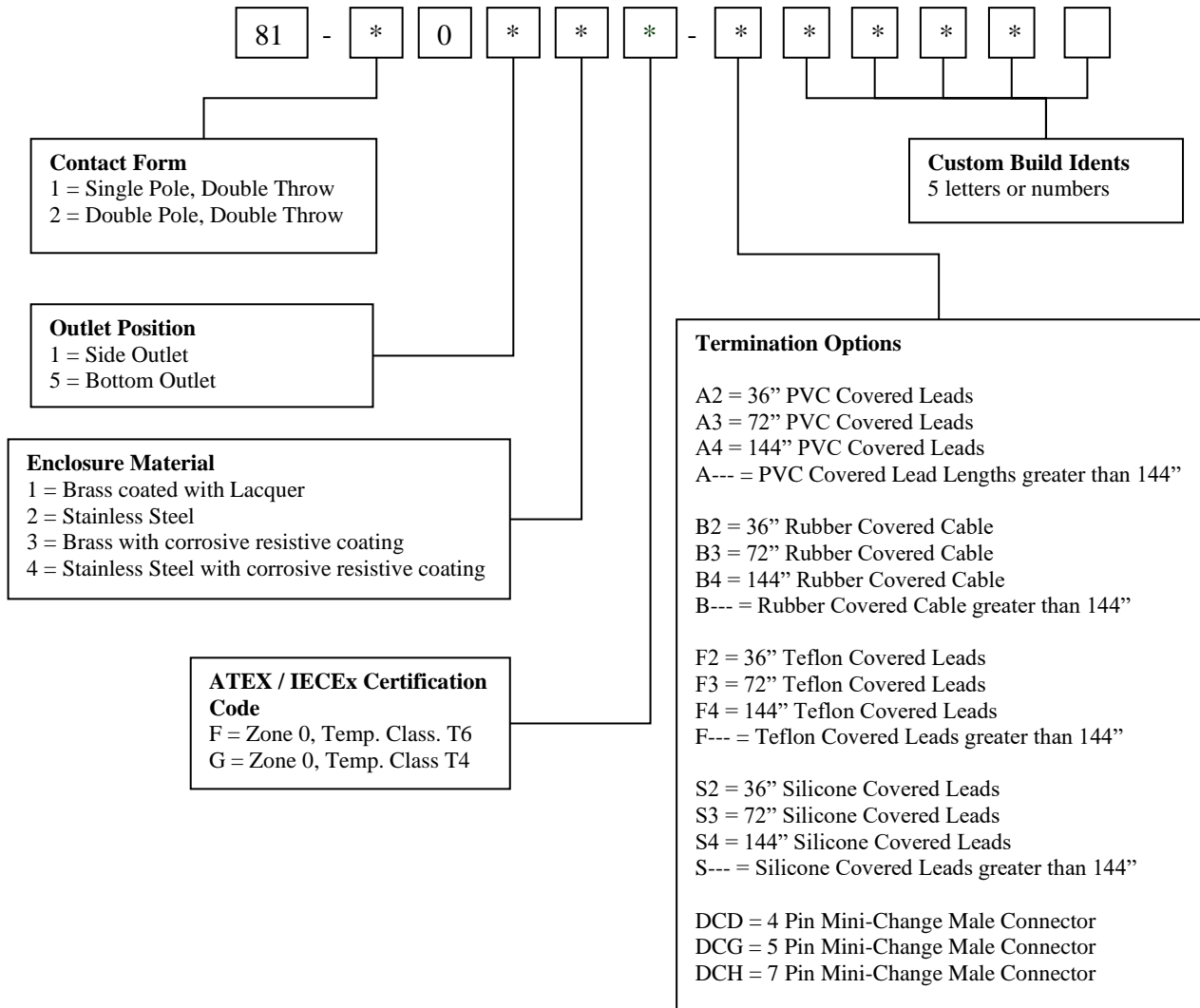
The switches comprise a rectangular stainless steel or lacquered brass enclosure housing the switch mechanism sealed in the top of the enclosure with the sensing magnets located below. These, and the integral connections to the switch mechanism are potted in the enclosure with external connections to 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 position, 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.

The Series 80 GO Switch model range covered by this certificate is defined on the next page: -

'F' & 'G' Model Range



Input Parameters:

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

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

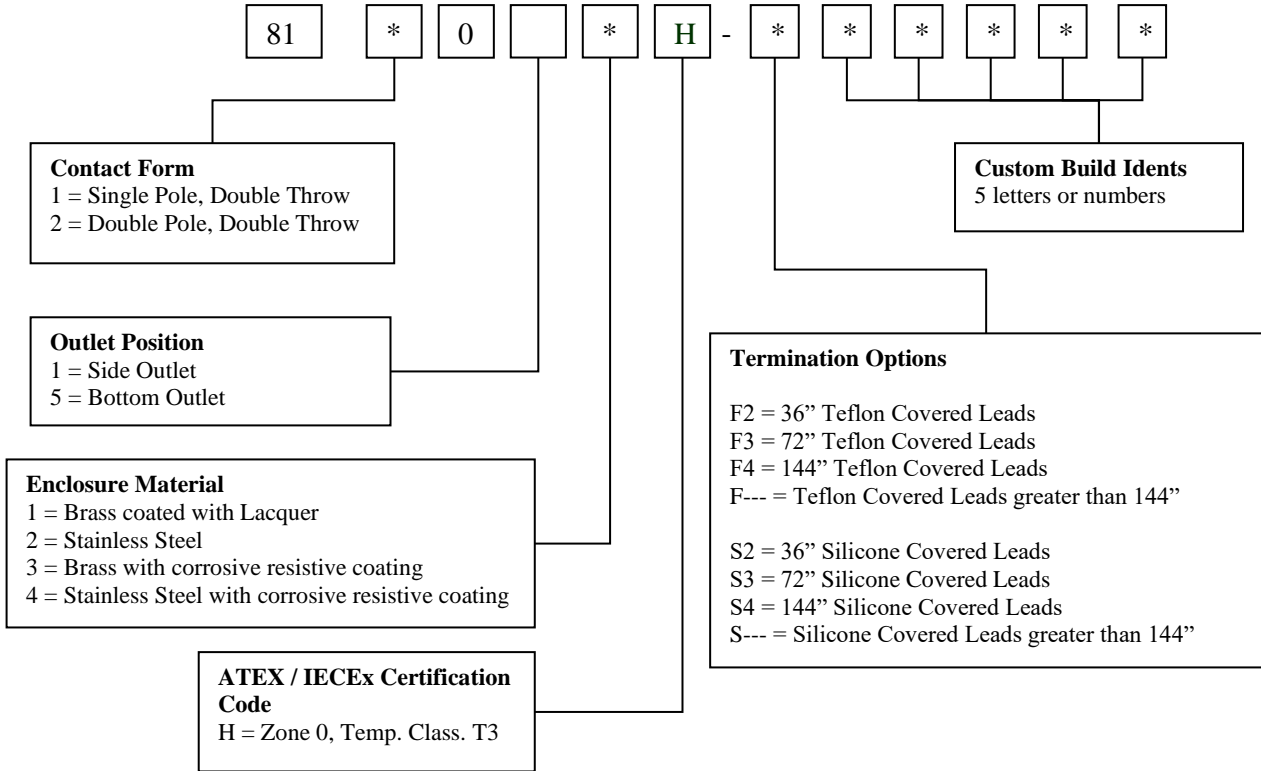
$$I_i = 0.25A \quad L_i = 0$$

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



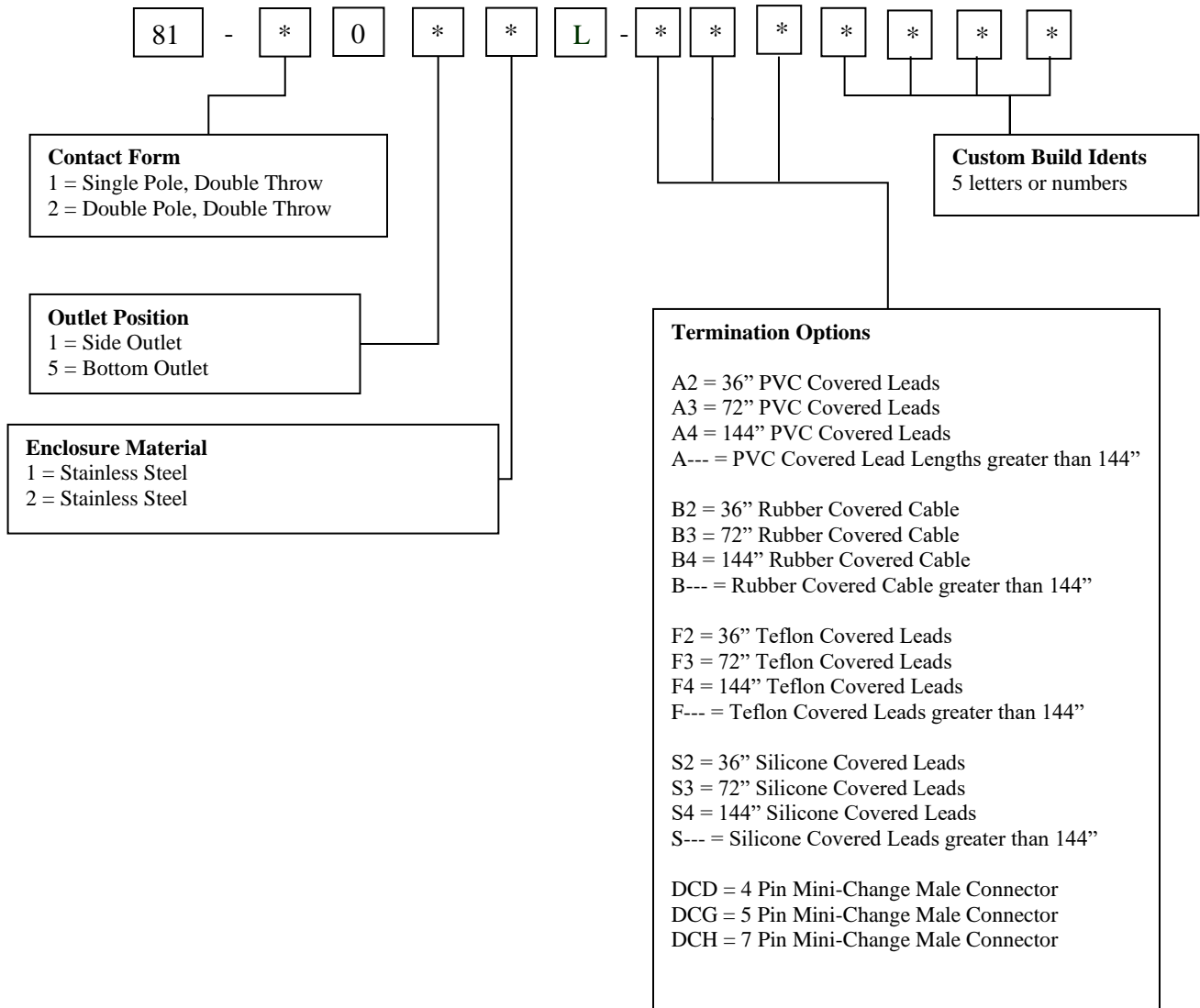
Input Parameters:

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

The seventh character in the model number defines the temperature classification and associated ambient temperature range of the model. These are as follows: -

80 Series models with a 'F' as the seventh character in the model number	⊕ II 1 GD	Ex ia IIC T6 Ga (-40°C ≤ T _a ≤ 50°C) Ex ia IIIC T ₂₀₀ 85°C Da (-40°C ≤ T _a ≤ 50°C)
80 Series models with a 'G' as the seventh character in the model number	⊕ II 1 GD	Ex ia IIC T4 Ga (-40°C ≤ T _a ≤ 100°C) Ex ia IIIC T ₂₀₀ 135°C Da (-40°C ≤ T _a ≤ 50°C)
80 Series models with a 'H' as the seventh character in the model number	⊕ II 1 GD	Ex ia IIC T3 Ga (-40°C ≤ T _a ≤ 150°C) Ex ia IIIC T ₂₀₀ 200°C Da (-40°C ≤ T _a ≤ 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'

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

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

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

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

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

16 Report Number

See Certificate History

17 Specific Conditions of Use

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.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
CERT-ES-09232-1	1 of 1	AA	10/27/2022	Label, 80 Series ATEX/IECEX/UKEX
CERT-ES-9584-1	1 of 1	AA	05/05/2023	Label, 80 Series ATEX/UL

These drawings are common to BAS21UKEX0668X.

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
CERT-ES-03565-1	1 of 1	2	05/14/2015	80 Series Master Assembly
CERT-S-DP-0581	1 of 1	1	02/04/13	80 Series Switch Assembly
ES-01094-1	1 of 1	2	9/8/08	80 Series 304 S.S. Conduit Hub for Hazardous Loc.
S-DP-0592A	1 of 1	15	2/09/05	80 Series Enclosure (Brass) for Models: 81 -__ 5 __ -__
S-DP-0592B	1 of 1	12	5/11/2012	80 Series Enclosure (S.S) for Models
S-DP-0592C	1 of 1	4	2/09/05	80 Series Enclosure (Brass) for Models: 81 -__ 1 __ -__
S-DP-0592D	1 of 1	5	5/14/2012	80 Series Enclosure (S.S) for Models
S-S10-0037	1 of 1	3	05/14/04	Coined Can Top
S-S10-0195	1 of 1	8	5/14/07	10 Series Switch Can Top 304 S.S.

These drawings are common to IECEx BAS 12.0115X.

20 Certificate History

Certificate No.	Date	Comments
Baseefa12ATEX0214X	8 February 2013	The release of the prime certificate. The associated test and assessment is documented in Certification Report No. GB/BAS/ExTR12.0268/00.
Baseefa12ATEX0214X Issue 1	9 June 2015	<p>i) To permit the equipment name to be changed from ‘Series 80 Leverless Limit Switches’ to ‘Series 80 GO Switch’. The Equipment Title and Certificate Schedule were revised to list the new name. This change does not affect the original assessment.</p> <p>ii) To permit the addition of variants of the Series 80 GO Switch fitted with a silicone covered cable. The fitting of the silicone cable does not affect input parameters or the previous test and assessment of the equipment. The certificate schedule have been updated to list the new variants denoted by an ‘S’ in the model number.</p> <p>iii) To permit the minimum ambient temperature of the ‘F’ models to be changed from -20°C to -40°C. This change does not affect the original assessment.</p> <p>iii) To confirm the current design of all variants of the Series 80 GO Switch were reviewed against the requirements of EN 60079-0: 2012 + A11: 2013 in respect of the differences from EN 60079-0: 2012, and none of the differences affect the equipment. The standards listed on page 1 of the certificate were updated.</p> <p>The above test and assessment is documented in IECEx ExTR No. GB/BAS/ExTR15.0138/00.</p>
Baseefa12ATEX0214X Issue 2	12 September 2023	This issue of the certificate confirms the current design meets the requirements of EN IEC 60079-0: 2018 and EN 60079-11: 2012 including the revision of the equipment marking in accordance with these standards. Additionally, the variation introduces an additional marking plate that may be fitted containing markings not ratified by SGS Baseefa Limited. The test and assessment is documented in IECEx ExTR No. GB/BAS/ExTR22.0194/00 and held with Project No. 21/0357.
For drawings applicable to each issue, see original of that issue.		