



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

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|---------------------|--|-------------|-----------------------------|
| Certificate No.: | IECEX BAS 15.0136X | Page 1 of 4 | <u>Certificate history:</u> |
| Status: | Current | Issue No: 3 | Issue 2 (2021-03-31) |
| Date of Issue: | 2024-04-05 | | Issue 1 (2020-02-26) |
| Applicant: | Topworx Incorporated 3300 Fern Valley Road Louisville Kentucky 40213 United States of America | | Issue 0 (2016-01-29) |
| Equipment: | 70 Series Micro Junction | | |
| Optional accessory: | | | |
| Type of Protection: | Intrinsic Safety | | |
| Marking: | Ex ia IIC T6/T4/T3 Ga Ex ia IIIC T₂₀₀85°C/T₂₀₀135°C/T₂₀₀200°C Da | | |
| | See Schedule for actual markings & ambient temperature ranges | | |

Approved for issue on behalf of the IECEx
Certification Body:

P Oates

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

5/4/2024

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:

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

Asco Valve (Shanghai) Co. Limited
No.480, Xin Miao No.3 Road
Xiao Qiao Town
Song Jiang District
Shanghai 201612
China

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/ExTR15.0298/00](#)

[GB/BAS/ExTR21.0042/00](#)

[GB/SGS/ExTR24.0017/00](#)

Quality Assessment Reports:

[GB/SIR/QAR07.0025/12](#)

[GB/SIR/QAR07.0041/11](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The 70 Series Micro Junction is a magnetically operated single pole, double throw switch within the switch body which is actuated by the presence of an external ferrous body.

The switch consists of a tubular stainless steel enclosure in a variety of body styles, with differing external male threads and a thin section wall at the front end.

The rear end of the tubular enclosure is a hexagonal section with the terminals to the switches. The integral connection leads for the switches are connected to a terminal block allowing connections to be made via a user provided threaded cable gland of sufficient rating to ensure dust and gas exclusion in line with the enclosures IP66/68 rating.

The switches are rated up to 30V, 0.25A and may be used to switch a circuit from a certified Ex ia IIC intrinsically safe source. All connections to the 70 Series Micro Junction must form part of the same intrinsically safe circuit. The switched circuit is capable of withstanding a 500V test to earth.

The 70 Series Micro Junction does not require a connection to earth for safety purposes, but an earth connection is provided which is directly connected to the metallic enclosure and must be used with care in any intrinsically safe system.

Input Parameters: $U_i = 30V$, $I_i = 0.25A$

For additional information see Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The user must use an Equipment Certified Gland to maintain the ingress protection rating of the product and appropriate for the intended use.
2. The 70 Series Micro Junction does not require a connection to earth for safety purposes, but an earth connection is provided which is directly connected to the metallic enclosure and must be used with care in any intrinsically safe system.
3. All connections to the 70 Series Micro Junction must form part of the same intrinsically safe circuit.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 3.1

This issue of the certificate permits the addition of a new drawing describing an additional marking plate carrying third party certification.

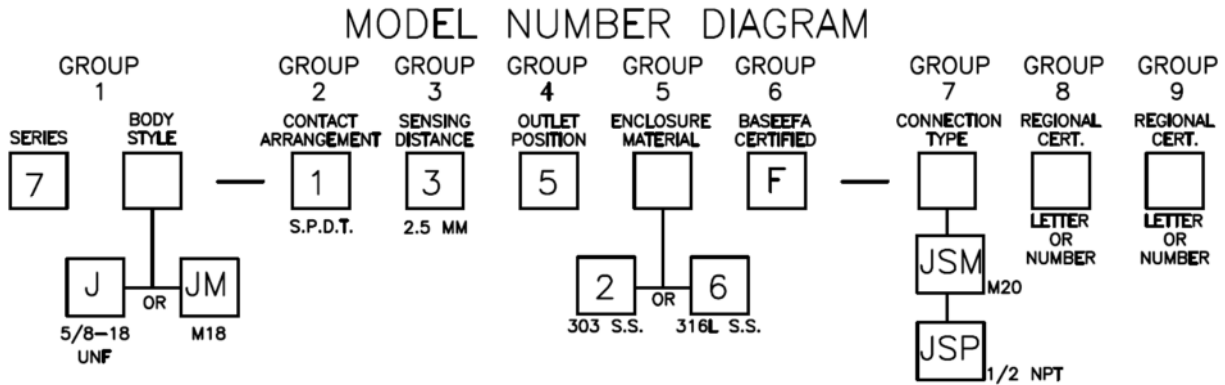
ExTR: **GB/BAS/ExTR24.0017/00**

File Reference: **24/0043**

Annex:

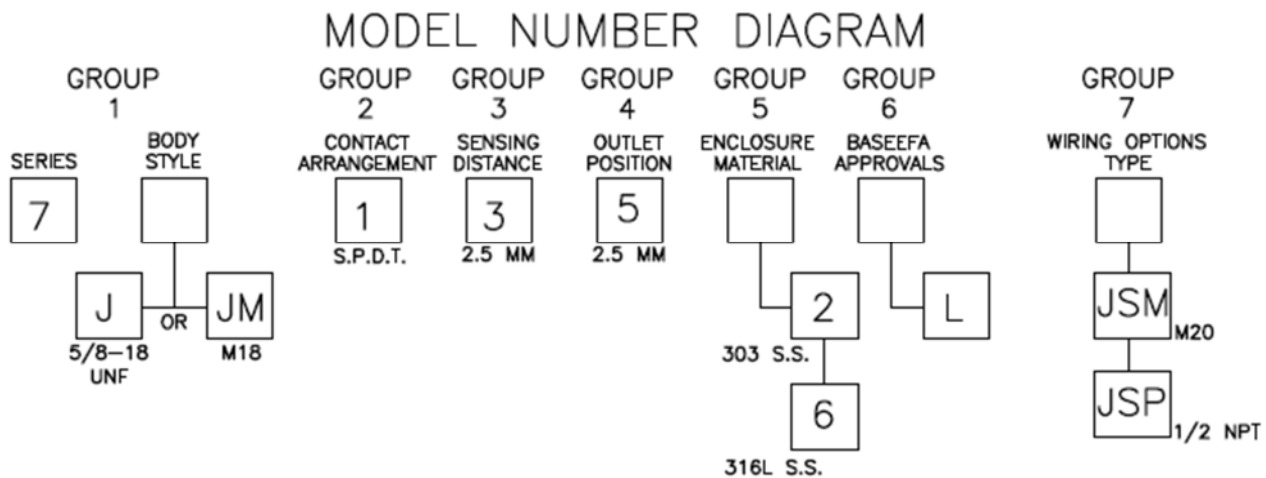
[IECEX BAS 15.0136X-03 Annex_1.pdf](#)

The switch model number is used to further describe each assembly as follows:



GROUP 6 of the Model Number (F, G or H) indicates the temperature classification, maximum surface temperature, and ambient temperature range of the equipment, which are as follows:

| GROUP 6 Character | Certification Marking |
|-------------------|---|
| F | Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +50°C) Ex ia IIIC T ₂₀₀ 85°C Da (-40°C ≤ Ta ≤ +50°C) |
| G | Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +100°C) Ex ia IIIC T ₂₀₀ 135°C Da (-40°C ≤ Ta ≤ +100°C) |
| H | Ex ia IIC T3 Ga (-40°C ≤ Ta ≤ +150°C) Ex ia IIIC T ₂₀₀ 200°C Da (-40°C ≤ Ta ≤ +150°C) |



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ANNEX to IECEx BAS 15.0136X

Issue No. 1

Date: 2 April 2024

When GROUP 6 of the model number is marked 'L' it denotes that the model is using the additional marking plate that carries third-party certification marks not ratified by SGS. For those carrying this character the model nomenclature is not relied upon to define the certification parameters. However, the marking is presented differently as summarised in the following table

| GROUP 6 Character | Certification Marking |
|-------------------|---|
| L | Ex ia IIC T6/T4/T3Ga Ex ia IIIC T ₂₀₀ 85°C/ T ₂₀₀ 135°C/ T ₂₀₀ 200°C Da (-40°C ≤ T _a ≤ +50°C/+100°C/+150°C) |