

防爆合格证

Electrical Apparatus for Explosive Atmospheres CERTIFICATE OF CONFORMITY



国家防爆

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

Product GO Switch

Type *1-****F-*****, *1-****G-*****, *1-****H-*****

Marking Ex ia IIC T6/T4/T3 Ga , Ex iaD 20 T85°C/T135°C/T200°C

Standard(s) --

Drawing No. CERT-ES-03480-1 , CERT-ES-03453-1 , CERT-ES-03452-1 , CERT-ES-03451-1 ,
CERT-ES-03483-1

The drawings, technical documents and the samples are verified and certified according to standard(s) for safety as below:

GB 3836.1-2010 Explosive atmospheres - Part 1: Equipment - General requirements
GB 3836.4-2010 Explosive atmospheres - Part 4: Equipment protection by intrinsic safety "i"
GB12476.1-2013 Electrical apparatus for use in the presence of combustible dust - Part 1: General requirements
GB12476.4-2010 Electrical apparatus for use in the presence of combustible dust - Part 4: Protection by intrinsic safety "iD"

Note:

See Annex (5 pages in total).

Director

Date:

2022-03-07

Valid until:

2027-03-06



南阳防爆电气研究所
NANYANG EXPLOSION PROTECTED ELECTRICAL APPARATUS RESEARCH INSTITUTE
国家防爆电气产品质量检验检测中心
CHINA NATIONAL QUALITY SURVEY AND TEST CENTER FOR EXPLOSION PROTECTED ELECTRICAL PRODUCTS
Address: No.20 North Zhongjing Rd, Nanyang, Henan (473008), P.R.China
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1.This product has been certified, under certificate number IECEx BAS 12.0106X, issue 1, dated 2015-06-09.

2.Type designation:

- *1-***F-*****, *1-***G-*****, *1-***H-*****

'F' or 'G' Model Range:

*1	-	*	*	*	*	F/G	-	*	*	*****
(1)		(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)

(1) Model:

11=Size 1½"Square × 4 9/16" Length(add ½"for bottom outlet)

21=Size 1½"Square × 3 13/16" Length (add ½" for bottom outlet)

(2) Contact Form:

1 = Single Pole, Double Throw

3 = Single Pole, Double Throw Latching

5 = Double Make, Double Break, 2 Circuit Form Z

6 = Double Make, Double Break, 2 Circuit Form Z Latching

(3) Sensing Range:

1 = Standard – 3/8"

2 = Extended – 9/16"

7 = Precision – ¼"

(4) Outlet Position:

1 = Behind Sensing Area

2 = Left of Sensing Area

3 = Right of Sensing Area

4 = Same Side as Sensing Area

5 = Bottom Outlet

(5) Enclosure Material

1 = Stainless Steel

2 = 316 Stainless Steel

(6) Certification Code

F = Zone 0, Temp. Class. T6

G = Zone 0, Temp. Class T4

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Certificate number: CNEx22.0556X

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(7) Wiring Options

00 = Terminal Block with 1/2"-14 NPT Conduit Entry

00M = Terminal Block with 20mm Conduit Entry

A2 or A2M= 3' PVC Covered Leads

A3 or A3M= 6' PVC Covered Leads

A4 or A4M= 12' PVC Covered Leads

A5 or A5M = 25' PVC Covered Leads

A6 or A6M = 50' PVC Covered Leads

A7 or A7M = 100' PVC Covered Leads

A8 or A8M = 250' PVC Covered Leads

B2 or B2M= 3' Rubber Covered Cable

B3 or B3M= 6' Rubber Covered Cable

B4 or B4M= 12' Rubber Covered Cable

B5 or B5M = 25' Rubber Covered Cable

B6 or B6M = 50' Rubber Covered Cable

B7 or B7M = 100' Rubber Covered Cable

B8 or B8M = 250' Rubber Covered Cable

F2 or F2M= 3' Teflon Covered Leads

F3 or F3M= 6' Teflon Covered Leads

F4 or F4M= 12' Teflon Covered Leads

F5 or F5M = 25' Teflon Covered Leads

F6 or F6M = 50' Teflon Covered Leads

F7 or F7M = 100' Teflon Covered Leads

F8 or F8M = 250' Teflon Covered Leads

S2 or S2M= 3' Silicone Covered Leads

S3 or S3M= 6' Silicone Covered Leads

S4 or S4M= 12' Silicone Covered Leads

S5 or S5M = 25' Silicone Covered Leads

S6 or S6M = 50' Silicone Covered Leads

S7 or S7M = 100' Silicone Covered Leads

S8 or S8M = 250' Silicone Covered Leads

DBA = 3 Pin Micro-Change Male Connector

DBD = 4 Pin Micro-Change Male Connector

DBG = 5 Pin Micro-Change Male Connector

DCA = 3 Pin Mini-Change Male Connector

DCD = 4 Pin Mini-Change Male Connector

DCG = 5 Pin Mini-Change Male Connector

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(8) Regional Cert

Blank: UL (North America), IECEx, ATEX

B: InMetro (Brazil)

K: KCs (Korea)

N: CCCEX (China)

P: PESO (India)

R: EAC (Eurasian Economic Union)

T: ITRI (China Taiwan)

(9) Custom Build Indents

6 digits (without relevance for explosion protection.)

Input Parameters:

Switch Variants with Wiring Options 00, DBA, DBD, DBG, DCA, DCD & DCG:

Ui=30V, Ci=0, Ii=0.25A, Li=0

Switch Variants with Wiring Options A*, B*, S* F*:

Ui=30V, Ci=33nF, Ii=0.25A, Li=200μH

'H' Model Range:

*1	-	*	*	*	*	H	-	*	*	*****
(1)		(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)

(1) Model:

11=Size 1½" Square x 4 9/16" Length(add ½" for bottom outlet)

21=Size 1½" Square x 3 13/16" Length (add ½" for bottom outlet)

(2) Contact Form:

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- (5) Enclosure Material
 - 1 = Stainless Steel
 - 2 = 316 Stainless Steel
- (6) H = Zone 0, Temp. Class. T3
- (7) Wiring Options
 - F2 or F2M = 3' Teflon Covered Leads
 - F3 or F3M = 6' Teflon Covered Leads
 - F4 or F4M = 12' Teflon Covered Leads
 - F5 or F5M = 25' Teflon Covered Leads
 - F6 or F6M = 50' Teflon Covered Leads
 - F7 or F7M = 100' Teflon Covered Leads
 - F8 or F8M = 250' Teflon Covered Leads
 - S2 or S2M = 3' Silicone Covered Leads
 - S3 or S3M = 6' Silicone Covered Leads
 - S4 or S4M = 12' Silicone Covered Leads
 - S5 or S5M = 25' Silicone Covered Leads
 - S6 or S6M = 50' Silicone Covered Leads
 - S7 or S7M = 100' Silicone Covered Leads
 - S8 or S8M = 250' Silicone Covered Leads
- (8) Regional Cert
 - Blank: UL (North America), IECEx, ATEX
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 - N: CCCEX (China)
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 - R: EAC (Eurasian Economic Union)
 - T: ITRI (China Taiwan)
- (9) Custom Build Indents
 - 6 digits (without relevance for explosion protection.)

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

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3. Model Temperature Classification:

10/20 Series models with a 'F' as the seventh character in the model number	Ex ia IIC T6 Ga(-40°C ≤ Ta ≤ +50°C) Ex iaD 20 T85°C(-40°C ≤ Ta ≤ +50°C)
10/20 Series models with a 'G' as the seventh character in the model number	Ex ia IIC T4 Ga(-40°C ≤ Ta ≤ +100°C) Ex iaD 20 T135°C(-40°C ≤ Ta ≤ +100°C)
10/20 Series models with a 'H' as the seventh character in the model number	Ex ia IIC T3 Ga(-40°C ≤ Ta ≤ +150°C) Ex iaD 20 T200°C(-40°C ≤ Ta ≤ +150°C)

4. Specific conditions of safety use:

- 1) Both contacts of the Double Throw and the separate poles of the Double Pole switch, within one switch 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) When using this product, it must be powered by an Ex ia IIC intrinsically safe power supply that meets the GB3836.4 standard and has obtained certification.
- 4) The flying leads must be terminated in a manner suitable for the zone of installation.
- 5) The terminal block variants of the equipment are fitted with a non-metallic cover that constitutes a potential electrostatic hazard and must only be cleaned with a damp cloth.

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