



제2023-000600-01-1호(1/2)

안전인증서

Topworx Incorporated

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

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제84조 및 같은 법 시행규칙 제110조제1항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Proximity Switches

형식·모델(용량·등급) / 인증번호

7***5****(Ex tb IIIC T85 °C/T135 °C/T200 °C Db) / 23-KA4BO-0077X

인 증 기 준

고용노동부고시 제2021-22호

인 증 조 건

1. 제조공장

·본 인증서는 '3300 Fern Valley Road, Louisville Kentucky 40213, United States of America'에서 생산하는 제품에 한함.

2. 제품개요

·자기 인력의 원리로 동작하는 근접 스위침입.

·제품정격

-S.P.D.T 스위치: 240 Vac, 2 A / 120 Vac, 4 A / 24 Vdc, 3 A

-D.P.D.T 스위치(7G2*5****, 7GM2*5****, 7I2*5****만 해당): 120 Vac, 3 A / 24 Vdc, 1 A

·사용주위온도: 별첨 1의 케이블 및 온도등급에 따른 사용주위온도 참고

3. 인증범위: 본 인증서는 별첨 2의 제품형식 인증범위에 한하여 유효함.

4. 안전한 사용을 위한 조건

·당 기기의 인출된 케이블은 기계적으로 보호되어야 하고, 적절한 접속함에 결선되어야 할 것.

·외부 접지는 나사결합 또는 케이블그라운드/전선관으로 유지되어야 할 것.

5. 인증(변경)사항: 없음.

6. 그 밖의 사항

·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

·본 안전인증서는 반드시 관련 IECEx 인증서(IECEx BAS 08.0122X Issue No.8)와 함께 사용

2023 년 1 월 26 일

한국산업기술시험원장





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인 증 조 건

[별첨 1] 케이블 및 온도등급에 따른 사용주위온도

온도등급	T85 °C	T135 °C	T200 °C
케이블 형식	PVC leads	Teflon leads	Peek leads
사용주위온도	-40 °C ≤ Ta ≤ +50 °C	-40 °C ≤ Ta ≤ +100 °C	-40 °C ≤ Ta ≤ +150 °C

[별첨 2] 제품형식 인증범위

- 7(a)(b)(c)5(d)(e)(f)(g)
- (a): 1, 1M 3, 3M, 5, 5M, 7, G, GM, I
- (b): 1, 2
- (c): 3, 4, 5, 6
- (d): 2, 3, 4, 6
- (e): T, 9
- (f): A, B, F, H
- (g): 2, 3, 4



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안전인증서

Certificate of Safety

Topworx Incorporated

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

The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 84 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 1 of Article 110 of ENFORCEMENT ORDINANCE OF the same ACT.

Electrical Equipment

Proximity Switches

Model (Marking) / Certificate No.

7***5****(Ex tb IIIC T85 °C/T135 °C/T200 °C Db) / 23-KA4BO-0077X

Applied standards

Announcement No. 2021-22 of Ministry of Employment and Labor

Conditions of Certification

1. Manufacturing location(s)

·This certificate is valid only for the specified products produced at '3300 Fern Valley Road, Louisville Kentucky 40213, United States of America'.

2. Description of equipment

·The proximity switches operate on the principle of magnetic attraction.

·Ratings

-S.P.D.T switch: 240 Vac, 2 A / 120 Vac, 4 A / 24 Vdc, 3 A

-D.P.D.T switch(only 7G2*5****, 7GM2*5****, 7I2*5****): 120 Vac, 3 A / 24 Vdc, 1 A

·See annex A for ambient temperature according to temperature class and cable type.

3. Scope of certification: This certificate is valid only for the models in the annex B.

4. Special conditions for safe use

·The integral supply cables must be mechanically protected and terminated in a suitable terminal or junction facility.

·An external earth bonding connection may be maintained by either the external mounting thread and/or the internal cable gland/conduit entry thread.

5. Details of certificate changes: None.

6. Details of the others

·Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.

·This certificate shall be used with the related IECEx certificate (IECEx BAS 08.0122X Issue No.8).

Date of Issue: 2023-01-26

한국산업기술시험원
KOREA TESTING LABORATORY





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Conditions of Certification

[Annex A] Ambient temperature according to temperature class and cable type

Temperature class	T85 °C	T135 °C	T200 °C
Cable type	PVC leads	Teflon leads	Peek leads
Ambient temperature	$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	$-40\text{ °C} \leq T_a \leq +100\text{ °C}$	$-40\text{ °C} \leq T_a \leq +150\text{ °C}$

[Annex B] Model classification code

·7(a)(b)(c)5(d)(e)(f)(g)

-(a): 1, 1M 3, 3M, 5, 5M, 7, G, GM, I

-(b): 1, 2

-(c): 3, 4, 5, 6

-(d): 2, 3, 4, 6

-(e): T, 9

-(f): A, B, F, H

-(g): 2, 3, 4