



国家防爆

Certificate number: CNEx22.0545X

防爆合格证

Electrical Apparatus for Explosive Atmospheres CERTIFICATE OF CONFORMITY

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

Product Switch boxes

Type TV*-*2***M*****

Marking See Annex

Standard(s) --

Drawing No. CERT-ES-03003-1, CERT-ES-02967-1, CERT-ES-04334-1

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 3836.8-2014 Explosive atmospheres - Part 8: Equipment protection by type of protection "n"
- GB12476.1-2013 Electrical apparatus for use in the presence of combustible dust - Part 1: General requirements
- GB12476.5-2013 Electrical apparatus for use in the presence of combustible dust - Part 5: Protection by enclosure "tD"

Note:
See Annex (3 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
Tel: 0377-63258564 Fax: 0377-63208175 Web: www.china-ex.com

注: 本证书仅对与认可文件和样品一致的产品有效。

登录网站或关注公众号查询真伪 2225 2122 7873 9684

Note: This certificate is only valid for products which are identical with the sample(s) tested and verified. Holder of this certificate has the responsibility to ensure the products comply with relevant standards.



国家防爆

防爆合格证 (附页)

Electrical Apparatus for Explosive Atmospheres CERTIFICATE OF CONFORMITY

1.This product has been certified, under certificate number IECEx SIR 12.0089X, issue 10, dated 2021-05-19.

2.Type designation:

TV*-2***M*****

TV	*	-	*	2	*	*	*	M	*	*	*	*	*	*****
1)	2)		3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)	14)

- 1) Enclosure
TV – Series
- 2) Enclosure Material
L – Aluminum
H – Stainless Steel
- 3) Sensor/Switch Supplement
See Tables Below
- 4) Area Classification
2 – Zone 2, Zone 22
- 5) Visual Display
X - Any letter or number
- 6) Shaft
L - 1" Extended Linear, 316L SS
N - NAMUR, 316L SS
- 7) Conduit Entries
X – Any letter or number
- 8) O-ring Option
M - Silicone
- 9) Pilot Type/Action
Blank or 0- No Pilot Devices
- 10) Spool Valve Material
Blank or 0 - No spool valve
- 11) Valve CV
Blank or 0 - No valve

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
Tel:0377 63298664 Fax:0377 63208175 Web:www.china-ex.com

注: 本证书仅对与认可文件和样品一致的产品有效。
Note: This certificate is only valid for products which are identical with the sample(s) tested and verified. Holder of this certificate has the responsibility to ensure the products comply with relevant standards.

防爆合格证 (附页)**Electrical Apparatus for Explosive Atmospheres
CERTIFICATE OF CONFORMITY**

国家防爆

Page 2 of 3

- 12) Manual Override
Blank or 0 - No PST Button
- 13) REGIONAL CERTS
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)
- 14) Custom Build Indents
6 digits (without relevance for explosion protection.)

3.The permitted internal devices are as follows:

Device	Style(Option 3)	Ambient temp. range
Two reed switches (nC) type HSR-634W only	P2	-40°C ~ +55°C
Two or four reed switches (nC) type LV ELE145 only	R2, R4	-40°C ~ +95°C
ASI module (nA) plus two reed switches (nC)	AS	-40°C ~ +85°C
Device Net module (nA) plus two reed switches (nC)	DN	-40°C ~ +85°C
Profibus module (nA) plus two reed switches (nC)	PB	-40°C ~ +85°C
Two reed switches (nC) plus TopWorx 4-20 mA Transmitter Module (nA) and associated potentiometer	PX, RX	-40°C ~ +55°C
TopWorx 4-20 mA Transmitter Module (nA) and associated potentiometer only	0X	-40°C ~ +55°C
Two or four Series 36 GO switches (nC), 120Vac/4A, 24Vdc/3A	G2/G4	-40°C ~ +80°C
Two or four Series 36 GO switches (nC), 120Vac/2A, 24Vdc/1A	Q2/Q4	-40°C ~ +80°C
LED Board, Q, P, R switch options	S	-40°C ~ +60°C
Series 36SD GO Switch module, 120Vac/4A, 24Vdc/3A	S2, S4	-40°C ~ +80°C
Series 36SD GO Switch module, 120Vac/2A, 24Vdc/1A	D2, D4	-40°C ~ +80°C

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
Tel:0377-63258564 Fax:0377-63208175 Web:www.china-ex.com

注: 本证书仅对与认可文件和样品一致的产品有效。

登录网站或关注公众号查询真伪

Note: This certificate is only valid for products which are identical with the sample(s) tested and verified. Holder of this certificate has the responsibility to ensure the products comply with relevant standards.

防爆合格证 (附页)

Electrical Apparatus for Explosive Atmospheres

CERTIFICATE OF CONFORMITY



国家防爆

Page 3 of 3

4.The marking is as follows:

Sensor (Option 3)	Certification code (gas)	Certification code (dust)	Ambient temperature range
P2	Ex nA nC IIC T6 Gc Ex nA nC IIC T4 Gc	Ex tD A22 T85°C IP66/68 Ex tD A22 T115°C IP66/68	-40°C ~ +55°C -40°C ~ +80°C
R2, R4	Ex nA nC IIC T3 Gc Ex nA nC IIC T3 Gc	Ex tD A22 T85°C IP66/68 Ex tD A22 T115°C IP66/68	-40°C ~ +60°C -40°C ~ +95°C
OX	Ex nA IIC T4 Gc	Ex tD A22 T70°C IP66/68	-40°C ~ +55°C
PX, RX	Ex nA nC IIC T4 Gc	Ex tD A22 T115°C IP66/68	-40°C ~ +55°C
Q2, Q4, G2, G4	Ex nA nC IIC T6 Gc Ex nA nC IIC T4 Gc	Ex tD A22 T85°C IP66/68 Ex tD A22 T115°C IP66/68	-40°C ~ +55°C -40°C ~ +80°C
AS, DN, PB	Ex nA nC IIC T4 Gc	Ex tD A22 T115°C IP66/68	-40°C ~ +85°C
S	Ex nA nC IIC T4 Gc	Not applicable	-40°C ~ +60°C
D2, D4, S2, S4	Ex nA nC IIC T6 Gc Ex nA nC IIC T4 Gc	Ex tD A22 T85°C IP66/68 Ex tD A22 T115°C IP66/68	-40°C ~ +55°C -40°C ~ +80°C

5.Ingress protection: IP66/IP68(1m/24h)

6.Specific conditions of safety use:

- 1) When fitted with an indicator dome, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
- 2) When the supply to the Series 36 & 36SD GO Switches do not exceed 60 VAC/85VDC, the supply shall be protected such that transients are limited to a maximum of 119 V. If the supply is above 60VAC / 85 VDC but not exceeding 120 VAC, the supply shall be protected such that the transients are limited to a maximum of 238 V.
- 3) The supply values, when option S LED board is fitted, are $U_{max} = 24V$, $I_{max} = 250 \text{ mA}$ and $P_{max} = 1.2W$.

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
Tel:0377-63288664 Fax:0377-63208175 Web:www.china-ex.com

注: 本证书仅对与认可文件和样品一致的产品有效。

登录网站或关注公众号查询真伪

Note: This certificate is only valid for products which are identical with the sample(s) tested and verified. Holder of this certificate has the responsibility to ensure the products comply with relevant standards.