

# Electrical Equipment for Explosive Atmospheres

## Certificate of Type Verification

Applicant	TopWorx Inc.																							
Applicant address	3300 Fern Valley Road Louisville, Kentucky 40213 USA	TEL	+1-502-969-8000																					
Manufacturer	1. TopWorx Inc. 2. Emerson Machinery Equipment (Shenzhen) Co. Ltd. 3. Emerson Automation Fluid Control & Pneumatics Poland Sp. z o. o. (Emerson AFCP Poland Sp. z o.o.)																							
Manufacturer address	1. 3300 Fern Valley Road Louisville, Kentucky 40213 USA 2. 101 Building 2, COFCO Park, Honglang North 2nd Road, Xin'an Street Bao'an District, Shenzhen 51801 China 3. Kurczaki 132 Lodz 93-331 Poland	TEL																						
Name of product Type	Switchboxes Type DXP and DXS																							
Ex marking	Ex db IIC T6...T3 Gb Ex db IIB+H <sub>2</sub> T6...T3 Gb Ex tb IIIC T85°C...T135°C Db																							
Certificate No.	(ITRI)2021 07-00175X																							
Date of first issue	August 30, 2021																							
Date of Renewal																								
Valid period	August 30, 2021 to August 29, 2024																							
Standards:	CNS 3376-0 : 2014 / IEC 60079-0 : 2011 IEC 60079-1 : 2014 IEC 60079-31 : 2013																							
Ratings:	Up to 240 V, 15 A.																							
Ambient temperature:	-60°C ~ +60°C (T6) -60°C ~ +75°C (T5) -60°C ~ +110°C (T4) -60°C ~ +175°C (T3) -50°C ~ +60°C (T85°C) -50°C ~ +75°C (T100°C) -50°C ~ +110°C (T135°C)																							
Main components:	Lower casting, upper casting, shaft, switch, O-ring, flame arrestor, indicator																							
Type variants:	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>(1)</td><td>(2)</td><td>(3)</td><td>(4)</td><td>(5)</td><td>(6)</td><td>(7)</td><td>(8)</td><td>(9)</td><td>(10)</td> </tr> <tr> <td>DX</td><td>P</td><td>-</td><td>*</td><td>*</td><td>1</td><td>*</td><td>*</td><td>*</td><td>B</td><td>*</td> </tr> </table> <p>(1)Series : DX            (2)Enclosure material : P : aluminum ; S : stainless 316SS            (5)Area class : 1 : IIB+H<sub>2</sub> ; C : IIC            (9)O-ring : B : BUNA ; E : EPDM ; S : Silicone S7395/S7426-60 ; V : VITON            Column (3), (4), (6), (7), (8), (10) are not related to Ex protection.</p>			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	DX	P	-	*	*	1	*	*	*	B	*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)															
DX	P	-	*	*	1	*	*	*	B	*														



Certificate issued by

**Industrial Technology Research Institute**  
 195 Sec. 4, Chung Hsing Rd., Chutung, Hsinchu, 31057, Taiwan



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Applicant	TopWorx Inc.
Specific conditions of use:	<p>Cable glands or blanking plugs for enclosure entries are not provided with the equipment. For safe use, certified cable glands or blanking plugs with proper type of protections shall be correctly fitted to maintain the integrity of specified protections. The IIC enclosure are excluded from use in carbon disulphide atmospheres. The air pressure to the valve block, when fitted, shall not exceed 10.0 bar. For ambient temperature above 110°C, the degrees of ingress protection IP66 and IP67 may not be maintained.</p> <p>The slotted hexagonal head cover screws are not of standard form; they shall only be replaced with identical screws sourced from the equipment manufacturer. The hexagonal head cover screws are to be replaced only with stainless A2-70 or A4-80 screws to CNS 4234-1.</p> <p>Cover fasteners are to be tightened to a torque value of 10.85 Nm (8 ft/lbs) minimum. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.</p>
Routine tests:	The manufacturer shall conduct a routine overpressure test on each aluminum enclosure marked with ambient temperature -60°C at the pressures of 28 bar (Group IIC) or 19.1 bar (Group IIB+H <sub>2</sub> ) for at least 10 s as required by Clause 16.1 of IEC 60079-1 : 2014.
Approval reference:	The Type Verification for this project is based on the IECEx Certificate (IECEX SIR 07.0093X Issue 15) issued by Sira Certification Service (SIRA), UK and the associate test reports (GB/SIR/ExTR08.0031/00, GB/SIR/ExTR09.0066/00, GB/SIR/ExTR11.0263/00, GB/SIR/ExTR11.0298/00, GB/SIR/ExTR12.0194/00, GB/SIR/ExTR12.0234/00, GB/SIR/ExTR12.0317/00, GB/SIR/ExTR12.0318/00, GB/SIR/ExTR13.0334/00, GB/SIR/ExTR14.0112/00, GB/SIR/ExTR18.0097/00, GB/SIR/ExTR19.0053/00, GB/SIR/ExTR20.0142/00, GB/SIR/ExTR20.0214/00, GB/SIR/ExTR21.0088/00, GB/CSAE/ExTR21.0022/00)
Certificate history:	Issue 1 (B202100284) (2021-08-30)

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