



# Certificate of Compliance

**Certificate:** 80044488

**Master Contract:** 204450

**Project:** 80190142


**Date Issued:** April 26, 2024

**Issued to:** Sun Yeh Electrical Ind. Co., Ltd.  
No 68 Lane 854, Sec.1, Shatian Rd.  
Dadu Dist., Taichung City 432403  
Taiwan

**Attention:** Ms. HsinHui Lin

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



**Issued by:**   
Eddie Lee

## **PRODUCTS**

CLASS - 3228 02 VALVES-Actuators - For Hazardous Locations

CLASS - 3228 82 VALVES-Actuators - For Hazardous Locations-Certified to U.S. Standard

**Ex db IIB T4 Gb (For Canada)**

**Ex tb IIIC T130°C Db (For Canada)**

**Type 4X**

**Class I, Zone 1, AEx db IIB T4 Gb (For US)**

**Zone 21, AEx tb IIIC T130°C Db (For US)**

**IP68 (72h, 7m)**

Model LE-X1-X2-X3 series Explosion-proof Linear Valve Actuators, rated 240 Vac max, 1 A max, -30°C ≤ Tamb ≤ 65°C, T4, IP 68 (72h, 7m).

Where:

LE-X1-X2-X3

L stands for Linear Valve Actuators.

E stands for Explosion-proof.



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X1 stands for thrust (kg).

X2 stands for voltage

(D24 stands for 24VDC,

24 stands for 24VAC,

100 stands for 100VAC,

N=110 to 120 stands for one specific voltage among 110~120VAC,

200 stands for 200VAC,

N=220 to 240 stands for specific voltage among 220~240VAC.

X3 stands for controlling method

M stands for Modulating,

F stands for Floating.

**Duty cycle information**

Models Series	Duty Type	Duty Cycle
LE-250-X2-X3	Floating	75% (108 secs ON, 36 secs OFF)
LE-500-X2-X3	Floating	75% (108 secs ON, 36 secs OFF)
LE-1000-X2-X3	Floating	75% (216 secs ON, 72 secs OFF)
LE-2000-X2-X3	Floating	75% (216 secs ON, 72 secs OFF)
LE-250-X2-X3	Modulating	75% (108 secs ON, 36 secs OFF)
LE-500-X2-X3	Modulating	75% (108 secs ON, 36 secs OFF)
LE-1000-X2-X3	Modulating	75% (216 secs ON, 72 secs OFF)
LE-2000-X2-X3	Modulating	75% (216 secs ON, 72 secs OFF)

**Specific Conditions of Use:**

1. The end-user must ensure that any cable entry device used must maintain the IP rating of the enclosure.
2. The end user must ensure that any cable and cable entry devices used with the equipment are suitable for use at temperatures above 90°C.
3. The flamepaths in this equipment are different to the standard dimensions given in IEC 60079-1. If specific flamepath dimensions are required then the manufacturer (OEM) must be contacted.



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**APPLICABLE REQUIREMENTS**

CSA C22.2 No. 94.2-07	Enclosures for Electrical Equipment, Environmental Considerations
CSA C22.2 No. 139-13	Electrically Operated Valves
CAN/CSA-C22.2 No. 60079-0:19 <i>February 2019</i>	Explosive atmospheres – Part 0: Equipment – General requirements
CAN/CSA-C22.2 No. 60079-1:16 <i>May 2016</i>	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”
CAN/CSA-C22.2 No. 60079-31:15 <i>Second Edition (October 2015)</i>	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure “t”
ANSI/UL 50E <i>First Edition (September 4, 2007)</i>	Enclosures for Electrical Equipment, Environmental Considerations
UL 429 <i>Seventh Edition (November 6, 2013)</i>	Electrically Operated Valves
ANSI/UL 60079-0 <i>Seventh Edition (March 26, 2019)</i>	Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/UL 60079-1 <i>Seventh Edition (September 18, 2016)</i>	Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-31 <i>Second Edition (2015.06.12)</i>	UL Standard for Safety Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t”



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
80190142	April 26 2024	Based on IECEx ExTR package to update CSA report 80044088, LE series to: i. Postal code change from 43244 to 432403. ii. Warning plate change YIELD STRESS value from “ $\geq 700\text{MPa}$ ” to “ $\geq 450\text{Mpa}$ ”. iii. For the middle plate, adjust dimension from $\varnothing 140(-0.05 \text{ to } +0)$ into $\varnothing 140(-0.1 \text{ to } +0)$ iv. For the middle plate, adjust the accuracy of the bearing hole from $\varnothing 25.4(+0.01 \text{ to } +0.03)$ to $\varnothing 25(+0.01 \text{ to } +0.03)$ v. Adjust the accuracy for the worm gear from JIS Level 4 to JIS Level 6 vi. Cancel the accuracy of the drive shaft vii. Material change for the Handwheel from Plastic (N6) to ADC10. viii. To remove CAN/CSA C22.2 No.0 and CSA/UL 60529
80044488	January 07, 2021	Model Certification Service for SunYeh Model LE Series Valve Actuators to be used in Class I, Zone 1, AEx db IIB; and Zone 21, AEx tb IIIC hazardous locations, based on the IECEx certificate package.