

IECEx Certificate of Conformity

Dipl. -Ing. Klauspeter Graffi

Vauspet 12,06

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx TUR 22.0055X** Page 1 of 4 Certificate history:

Issue No: 0 Status: Current

Date of Issue: 2025-12-06

Applicant: JPCI Controls (Foshan Gaoming) Co. Ltd.

No.10, Pengshan Road, Hecheng Street

Gaoming District Guangdong Province Foshan City 528531

China

Equipment: Ex Thermal Protector, UX Series and UZ Series

Optional accessory:

Type of Protection: mb

Ex mb IIC T3 Gb Marking:

Ex mb IIIC T150°C Db(for model UX Series)

Ex mb IIC T4 Gb

Ex mb IIIC T125°C Db(for model UZ Series)

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Head of Certification Body**

Signature:

(for printed version)

(for printed version)

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Certificate issued by:

TUV Rheinland Industrie Service GmbH Am Grauen Stein 51105 Cologne **Germany**





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Certificate No.: IECEx TUR 22.0055X Page 2 of 4

Date of issue: 2025-12-06 Issue No: 0

Manufacturer: JPCI Controls (Foshan Gaoming) Co. Ltd.

No.10, Pengshan Road, Hecheng Street Gaoming District

Guangdong Province Foshan City 528531

China

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"

Edition:4.1

IEC 60079-18:2014 Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"

Edition:4.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/TUR/ExTR22.0055/00

Quality Assessment Report:

DE/TUR/QAR24.0016/01



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Date of issue: 2025-12-06 Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

General Description for Ex Thermal Protector:

UX Series Ex Thermal Protector, consists of enclosure, ceramic insulation enclosure, bimetal over-current and over-temperature protector, silicone filling, silicone insulated cables etc,and the cable are directly led out. This device used with oven-current and over-temperature protector inside which has passed UL and CE certification. UL certificate No.: E42562 (PEPI),E254470 (VICTOR); VDE certificate No.: 8723-4510-1004 (PEPI). TUV certificate No.: R 50063371(VICTOR).

UZ Series Ex Thermal Protector, consists of enclosure, ceramic insulation enclosure, bimetal over-current and over-temperature protector, epoxy filling, XLPE insulated cables etc, and the cable are directly led out. This device used with over-current and over-temperature protector inside which has passed UL and CE certification. UL certificate No.: E42562 (PEPI), E254470 (VICTOR); VDE certificate No.: 8723-4510-1004 (PEPI). TUV certificate No.: R 50063371 (VICTOR).

<u>Principle of over-current protection:</u> the current passes through the enclosure terminal and bimetal sheet, and then connected to the electrical appliances (such as motors, transformers, etc.) through the terminals on the bottom plate to form a circuit. The protector will cut off the power supply within the setting time when the electrical appliances with over-current or the locked rotor current (LRA) is higher than the tripped-off setting value of the protector, so that the electrical appliances are protected.

<u>Temperature protection principle:</u> the current passes through the enclosure terminal and bimetal sheet, and then connected to the electrical appliances (such as motors, transformers, etc.) through the terminals on the bottom plate to form a circuit. When the electrical appliances did not work normally and makes the ambient temperature is too high, the heat is transferred to the bimetal sheet and up to the tripped-off temperature which calibrated, and caused the electrical contacts opened quickly and cut off the circuit. When the temperature decreased to the reset temperature, the bimetal sheet resets and quickly closes the electrical contacts and connect the circuit, continue the cyclic operation.

Mainly used for motor thermal protection, heat tracing and high temperature safety alarms in hazardous areas such as explosive gas and dust environments.

UX Series Ex Limiters is protected by Type "mb" and is suitable for use in gas hazardous areas, zone 1 and zone 2, gas grouping IIC (Hydrogen/Acetylene, the highest protection group) with temperature group T3, and also suitable for use in dust hazardous areas, zone 21 and zone 22, the dust group is IIIC (electric conductive dust, the highest protection group) with the maximum surface is 150°C.

UZ Series is protected by Type "mb" and is suitable for use in gas hazardous areas, zone 1 and zone 2, gas grouping IIC (Hydrogen/ Acetylene, the highest protection group) with temperature group T4, and also suitable for use in dust hazardous areas, zone 21 and zone 22, the dust group is IIIC (electric conductive dust, the highest protection group) with the maximum surface is 125°C.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. No direct mechanical impact and vibration to be expected during normal service, and the additional mechanical protection may be required for this purpose.
- Ex Limiters are not intended exposure to the UV lights.
- 3. Additional clamping devices or other equivalent methods should be used for the external connections of Ex Limiters to prevent any unexpected pull force applied. The clamping device should be as close to the external connection of Ex Limiters as possible.
- 4. When the enclosure is obviously damaged, the Ex Thermal Protector should be stopped immediately.
- 5. The Ex Thermal Protector is not intended to be installed on the surface of objects with a temperature rise of more than 0.5°C per minute.
- 6. Electrical connections and regular maintenance are performed in accordance with standard IEC/EN 60079-14 and IEC/EN 60079-17, or equivalent national standards.
- 7. The electrical connection at the end of the cable can be carried out in a safe area or in an enclosure suitable for the protection level, and the professional personnel are strongly recommended to perform this work. For safety, additional mechanical protection maybe required to the cable in order to prevent possible mechanical damage.
- 3. Permitted supply short-circuit current:22.2 A for PEPI Thermostat model J(B) and 16A for VICTOR Thermostat model V7AM.
- 9. Function of Ex Limiters was certified by the general industrial standards under full loads and maximum short-circuit conditions, and it is the manufacturer's responsibilities for the function warranty.

Annex:



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Attachment to Certificate IECEx TUR 22.0055X Revison 0

Attachment to Certificate IECEx TUR 22.0055X

Device: Ex Thermal Protector
Type: UX Series and UZ Series

Manufacturer: JPCI Controls (Foshan Gaoming) Co., Ltd.

Address: No.10, Pengshan Road, Hecheng Street, Gaoming District, Foshan

City,528531 Guangdong, P.R.China

General product information:

General Description for Ex Thermal Protector:

UX Series Ex Thermal Protector, consists of enclosure, ceramic insulation enclosure, bimetal over-current and over-temperature protector, silicone filling, silicone insulated cables etc,and the cable are directly led out. This device used with oven-current and over-temperature protector inside which has passed UL and CE certification. UL certificate No.: E42562 (PEPI),E254470 (VICTOR); VDE certificate No.: 8723-4510-1004 (PEPI). TUV certificate No.: R 50063371(VICTOR).

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Mainly used for motor thermal protection, heat tracing and high temperature safety alarms in hazardous areas such as explosive gas and dust environments.



Attachment to Certificate IECEx TUR 22.0055X Revison 0

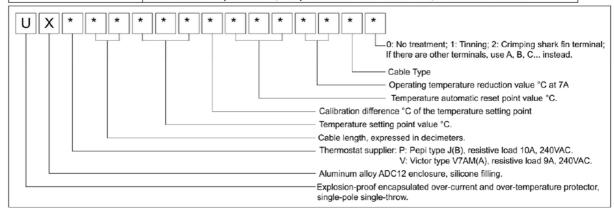
UX Series Ex Limiters is protected by Type "mb" and is suitable for use in gas hazardous areas, zone 1 and zone 2, gas grouping IIC (Hydrogen/Acetylene, the highest protection group) with temperature group T3, and also suitable for use in dust hazardous areas, zone 21 and zone 22, the dust group is IIIC (electric conductive dust, the highest protection group) with the maximum surface is 150°C.

UZ Series is protected by Type "mb" and is suitable for use in gas hazardous areas, zone 1 and zone 2, gas grouping IIC (Hydrogen/Acetylene, the highest protection group) with temperature group T4, and also suitable for use in dust hazardous areas, zone 21 and zone 22, the dust group is IIIC (electric conductive dust, the highest protection group) with the maximum surface is 125°C.

Model Designation:

Model UX Series:

Model name	Description						
UXP******B0	Aluminum alloy enclosure, PEPI J (B) type of over-current and						
	over-temperature protector, H05SS-F silicone insulated cable, ZR340						
	silicone encapsulation, strip 6mm on the wire end, without terminal.						
UXV*******B0	Aluminum alloy enclosure, VICTOR-V7AM(A) type of over-current and						
	over-temperature protector, H05SS-F silicone insulated cable, ZR340						
	silicone encapsulation, strip 6mm on the wire end, without terminal.						
UXP******B1	Aluminum alloy enclosure, PEPI J (B) type of over-current and						
	over-temperature protector, H05SS-F silicone insulated cable, ZR340						
	silicone encapsulation, strip 6mm on the wire end, without terminal.						
UXV*******B1	Aluminum alloy enclosure, VICTOR-V7AM(A) type of over-current and						
	over-temperature protector, H05SS-F silicone insulated cable, ZR340						
	silicone encapsulation, strip 6mm on the wire end, without terminal.						

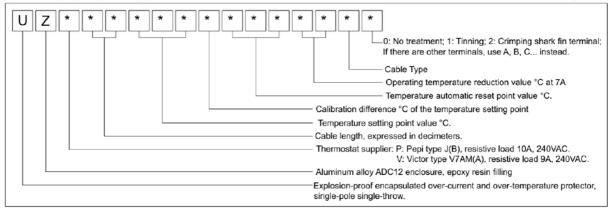


Model UZ Series:



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Model name	Description					
UZP******B0	Aluminum alloy enclosure, PEPI J (B) type of over-current and over-temperature protector, XLPE insulated cable, 6637/A, B epoxy encapsulation, strip 6mm on the wire end, without terminal.					
UZV******B0	Aluminum alloy enclosure, VICTOR-V7AM(A) type of over-current and over-temperature protector, H05SS-F silicone insulated cable, 6637/A, B epoxy encapsulation, strip 6mm on the wire end, without terminal.					
UZP*******B1	Aluminum alloy enclosure, PEPI J (B) type of over-current and over-temperature protector, H05SS-F silicone insulated cable, 6637/A, B epoxy encapsulation, strip 6mm on the wire end, without terminal.					
UZV*******B1	Aluminum alloy enclosure, VICTOR-V7AM(A) type of over-current and over-temperature protector, H05SS-F silicone insulated cable, 6637/A, B epoxy encapsulation, strip 6mm on the wire end, without terminal.					



Technical Parameters:

Electrical data:

Electrical data.										
Maximum electric rating						Electrical life (cycles)				
Resistive load	esistive load 6A, 240VAC				10000					
Inductive load		3A, 240VAC			10000					
Open	Reset	Open	Reset		Open	Reset				

Permitted supply short-circuit current:22.2 A for PEPI Thermostat model J(B) and 16A for VICTOR Thermostat model V7AM.

Environmental data:

Ex Limiters UX Series: EPL Gb/IIC T3& EPL Db/IIIC T150°C Temperature measurement range:5°C to +130°C(Tolerance: ±5°C)

Ambient temperature range: -30°C to +100°C

Ex Limiters UZ Series: EPL Gb/IIC T4& EPL Db/IIIC T125°C Temperature measurement range:5°C to +100°C(Tolerance: ±5°C)

Ambient temperature range:-30°C to +90°C