

Watlow MI Band Heaters do not adhere to an individual UL recognition.

However, they are constructed in accordance with ISO/IEC 17050-1 & ISO/IEC 17050-2.

They adhere to the 2014/35/EU +2/26/2014 CE Low Voltage Directive.

The object of the declarations described above is in conformity with the relevant Union harmonization legislation:

Applicable Standards:

Safety: EN 60204-1:2018 – Safety of Machinery – Electrical Equipment of Machines Part 1

Statement for EN 60204-1: 2018 European & International Standard (IEC 6024-1) for machine safety, designed for CE marking and compliance with the Machinery Directive.

EN 60204-1:2018 (Safety of machinery – Electrical equipment of machines) is not directly "equivalent" to a single UL recognition, but it is considered technically similar to, and often harmonized with, UL 508A (Standard for Industrial Control Panels) and NFPA 79 (Electrical Standard for Industrial Machinery) in the United States.

Because EN 60204-1:2018 (6th Edition) and UL/NFPA standards have evolved, many requirements—such as component testing, grounding, and safety circuits—are similar, allowing for easier compliance across regions.

Watlow have been selling band heaters in the U.S. and North America since the 1970s, with excellent operating longevity and electrical integrity when installed and used as a component within a properly engineered heating system that complies with applicable laws, codes, and safety requirements. The U.S. market does not inherently require UL listing or component recognition for a heating component unless such certification is specified as part of the engineered system's design, manufacture, or intended use.

Regulatory requirements are typically application specific.

These products are industrial process heating components and not consumer goods, medical devices, or standalone systems.

Responsibility lies with the customer's system engineer/designer and the supervising authority to assess suitability for the specific application, including operating conditions, risks, and safety requirements at the installation site.

Third-party testing recognized standards can help qualify a component against generalized performance thresholds, but it cannot guarantee safe, compliant, or successful application at the system level.

The geometry, dimensions, and construction of mineral-insulated band heaters inherently fail to meet minimum UL requirements for insulation thickness, insulation resistance, and leakage current.

This limitation is not unique to Watlow; comparable competitive products of similar construction also do not meet these UL requirements.

Importantly, the absence of UL recognition for a heater component does not automatically prevent an overall device from achieving UL listing.

This is commonly demonstrated with Watlow 1/8" cartridge heaters, which themselves are not UL-recognized, yet are frequently used in UL-listed devices.

In such cases, systems pass UL evaluation because the heaters are properly grounded, guarded, isolated, controlled, and current-limited in accordance with the applicable device classification and standard.

The mineral-insulated band heater's geometry, dimensions, and construction do not meet UL minimum requirements for insulation thickness, insulation resistance, and leakage current.

Additionally, Watlow has not identified sufficient value in pursuing UL classification for this product family, including establishing subclass criteria, demonstrating compliance, and maintaining UL files even if such criteria could be agreed upon.

Conducting a documented risk assessment is a common and accepted approach to certification challenges. This method focuses on actual system-level risks, rather than assuming that UL certification of a single component replaces comprehensive evaluation of the overall device, operating envelope, and environment.

To support this, the primary construction-related risk factors for this heater type include:

Higher leakage current during operation, which may trip GFI/GFCI protection or create hazardous current levels within a device

Sensitivity to atmospheric moisture, which can accumulate on or within the mineral insulation, reducing insulation resistance and dielectric strength

Potential failure mechanisms, including arc-fault discharge involving molten metal and heated insulation material until power is interrupted

Signed on behalf of Watlow Manufacturer & Sensemaster, Authorized Distributer:

