



Keltech® Electric Tankless Water Heaters

CLE SERIES

Fluid heating for emergency eyewash stations



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PRECISE. RELIABLE. DURABLE. TANKLESS.

BRADLEYCORP.COM



KELTECH ELECTRIC TANKLESS WATER HEATERS

Efficient. Precise. Fast.

Keltech is the recognized leader in commercial electric tankless water heating systems. Whether your application is industrial, hotels, stadiums, food processing, or safety, there is a Keltech tankless water heating solution. With unmatched quality and durability, Keltech manufactures the fastest, most reliable, and most efficient tankless water heaters in the industry.

Keltech tankless heaters are offered in a full line of products for an extensive range of applications as well as custom designs for unique environments. Keltech tankless water heaters have been on the market for over 25 years and are now an integral part of Bradley Corporation's water heating solutions. For 95 years, Bradley has manufactured commercial safety, water tempering, and washroom products. Today, Bradley is the industry's most comprehensive source of commercial and industrial plumbing fixtures, tankless water heaters, washroom accessories, partitions, emergency fixtures, and plastic lockers.

- **Save Energy**

Inefficient boiler systems have to generate heat and maintain temperature 24 hours per day, 7 days per week. Keltech tankless heaters only heat water when needed. And, Keltech's innovative controller is fully modulating so you only use the actual kW needed, not full power or stages.

- **Save Space**

A large commercial tank water heater requires a large space. Keltech tankless water heaters only require 3 square feet (0.3 square meters) of space to generate up to 491,000 BTUs.

- **Simple Installation**

Requires only one electrical connection and water. No pumps, no external fusing, and no design needs to be considered externally – it's all built into the heater.

- **Simple to Maintain**

No tank to maintain, no anodes, no softeners.

- **Simply the Best**

Built to the toughest standards with the highest quality materials and engineered to meet the world's most demanding applications.

CLE SERIES EMERGENCY EYEWASH APPLICATIONS



CLE Series

CLE Series heaters are designed specifically for emergency eyewash applications and are a perfect solution for workers at risk of chemical injury. Designed to meet ANSI Z358.1 standards, heaters activate only when needed and provide an unlimited supply of tepid water to meet the needs of your eyewash application. CLE Series heaters activate at 0.75 GPM (2.8 L-Min) and can handle water flow up to 10 GPM (37.8 L-Min).

Applications include emergency eye/face wash systems, hazardous chemical environments, scientific laboratories and manufacturing environments.

Whatever your specific application is, Keltech has a tankless heating solution.



kW Range
18 - 25 kW



Flow Range
0.75 - 10 GPM (2.8 - 37.8 L-Min)



Standard Voltages
480V, 600V 3-Phase Delta

Code Compliance & Certifications



Certified to
NSF/ANSI 372



Intertek

- **Lead-Free**

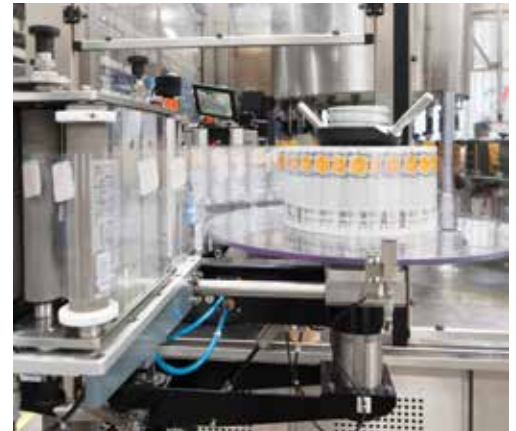
Brass/Copper heat exchangers certified to NSF/ANSI 372

- **Third-Party Certified**

ETL listed to UL499, UL50E, NFPA 496 (for hazardous locations)

C-ETL listed to CSA-C22.2 No.88

- **Compliant to NEC/NFPA 70 and Canadian Electrical Code C22.1**



STANDARD FEATURES

PID Temperature Controller

More energy efficient and reliable than traditional microprocessors, Keltech heaters hold temperature as demand changes regardless of incoming ground water temperature. Power is infinitely variable, with no fixed inputs. The PID controller makes it possible to modulate the amount of power applied to the elements while also dispersing the required power evenly across all elements. This unique feature increases the product's life cycle.

Simple Touch Operation

Digital LED screen with touch pad for easy operation shows set point and output temperature.



Precise Temperature Range & Flow

The electronic power modulation system can control outlet water temperature to within +/- 1°F (+/-0.56°C) over a wide range of flow rates. Precision temperature controls make Keltech tankless water heaters the preferred choice for safety applications.

Incoloy 800 Elements

Recognized for extending the life of the metal components.



Provides protection, durability and resistance to scaling from hard water. Water is only heated when flowing; this means sediment will not collect in the heat exchanger.

Low Watt Density Element

Extremely low wattage is applied per square inch of the element for improved heat transfer and reduced scaling which results in a longer lasting element.

Electrical Design

Requires only one service feed per unit. Includes internal fusing as standard, which provides superior protection. Units have a delta wiring system and do not require a neutral.

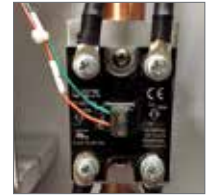


Independent & Redundant Safeties

Keltech emergency eyewash heaters include multiple features that ensure years of reliable service and the safety of your employees.

Liquid-Cooled Solid State Relays

Liquid-cooled, solid state relays provide silent switching



which has a faster response than mechanical relays to help maintain an accurate temperature. Relay switching controls also provide an infinitely variable power draw.

Auto Reset High Limit Switch

Internal circuit breakers monitor for over temperature conditions and ensure individual chambers do not exceed standards. Should the heater's safety circuits sense a problem prior to manual shut down, power is safely interrupted at a mechanical relay.

Bi-metal Manual Resets

Every heater that Keltech engineers includes a separate set of circuits that monitor over temperature conditions. Should overheating occur, each sector of the heat exchanger has a dedicated thermal switch that breaks power. Normal operation cannot be resumed until the safety switch is manually reset.



STANDARD FEATURES

NEMA 4 Enclosures

Standard wall cabinet enclosure is NEMA 4 rated and constructed of 16 gauge steel with corrosion resistant paint. The enclosure protects the components of the emergency eyewash heater from dust and water.

Minimal Pressure Drop

Keltech's best in industry low pressure drop reduces or eliminates the need & expense associated with adding pressure booster pumps.

Durable Plumbing Assembly

All units consist of brazed joints, a brass and copper heat exchanger, industrial-grade flow switch and brass castings/fittings at all directional changes.

Premium Materials

All waterways consist of high-quality copper and brass construction tested to 300 PSI (20.7



bar). Robust lead-free brass castings & flanges are CNC cut from solid brass blanks for precision fit. High-quality copper and brass construction extend the life of the heat exchanger.

Activation Requirements

On-demand heaters require a minimum flow rate for activation. Water heaters come standard with 0.75 GPM (2.8 L-Min) activation set point and can provide flow up to 10 GPM (37.8 L-Min). Minimum flow requirements provide maximum efficiency.



Reliable Performance & Minimal Maintenance

Heater maintenance schedule falls within the normal ANSI requirements. LED indicators, test buttons, & reset buttons on the front cover dramatically reduce the need to open the enclosure making maintenance or troubleshooting even easier.

Easy to Install

Heaters can be wall-mounted or floor-mounted with optional leg kit. Without a traditional tank the CLE Series saves space in any installation location.



OPTIONAL FEATURES

NEMA 4X Enclosures

For harsh environments, NEMA 4X watertight enclosures are available for an additional level of protection. Enclosures are made from 304 or 316 stainless steel.

Freeze Protection Package

For temperatures lower than 33°F (0.56°C), Keltech offers a freeze protection package. ENHT offers protection to -20°F (-29°C). Includes an internally insulated NEMA 4/4X enclosure and thermostatically controlled heater to maintain internal temperatures above freezing.

Internal Fused Disconnect

The internal fused disconnect interlocks with the enclosure door when energized, prohibiting access to a live cabinet. There is no need to install an external disconnect.

Integral Ground Fault

Detects electrical leakage from external sources and protects the equipment, electronics and heat exchanger by terminating power to the elements and disabling operation of the unit.

Activation Alarms

Keltech offers two levels of building communication alarm options:

- AL3 provides dry contacts that open to signal flow of water has activated the heater
- AL3-SL additionally activates a local audible and visual stack light alarm on the heater

Design on Demand™ Custom Solutions

CLE Series heaters are engineered for durability and performance in any safety eyewash application. And, when unique environments require innovative solutions, Bradley Engineers design custom systems for any heating need:

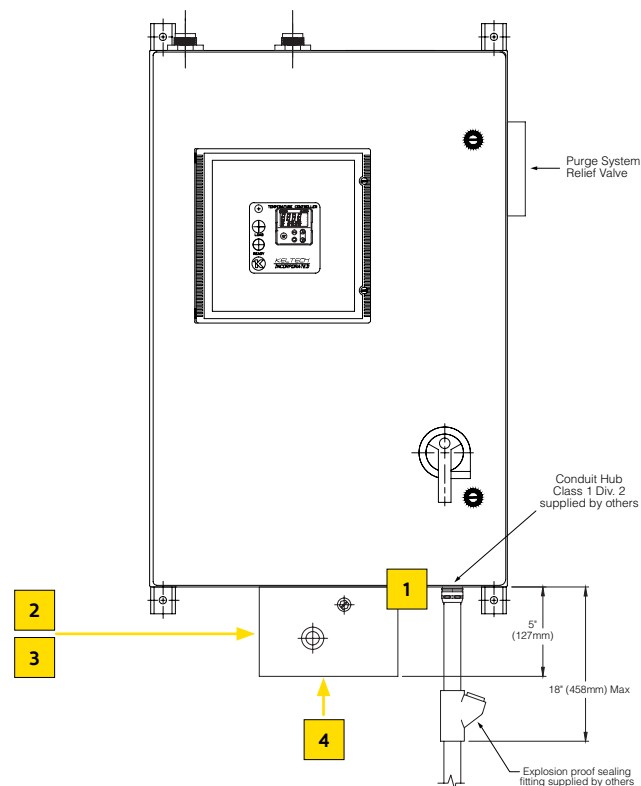
- When recirculation or a booster heater is needed, Keltech fully-modulating liquid-cooled heaters are the perfect solution.
- Custom solutions available for your unique application requirements.
- When the run is too long or pressure is too low, Keltech booster systems are pre-piped and ready to be installed in Series or in parallel.
- Work directly with a Keltech System Design Consultant.

OPTIONAL FEATURES

Explosion-Proof Purge System

CLE Series emergency eyewash heaters in NEMA 4/4X enclosures can be equipped with an explosion-proof purge system. The type of purge system determines the classification or division the enclosure will meet; CLE Series use a system that conforms to Class 1, Division 2 hazardous area standards. Electrical components installed in NEMA 4/4X enclosures allow the system to be pressurized by clean instrument air or inert gas. Heat, moisture, dust and corrosion are eliminated by providing the enclosure with a slow but continuous flow of inert gas or dry compressed air. This process removes flammable gases and/or prevents the accumulation of ignitable dusts within the protected enclosure. The purge system:

- Conforms to Class 1, Division 2 hazardous area standards; other class and division ratings may be available
- Reduces heat build-up in the enclosure
- Inhibits metal corrosion and reduces moisture buildup
- Provides continuous monitoring capabilities
- Eliminates large, heavy explosion-proof enclosures
- A constant supply of inert gas or clean air required



- 1** Suggested region for power entrance. Entrance hole and components to be provided by installer.
- 2** Purge control panel Class 1 Division 2.
- 3** Spark arrester with calibration orifice is located behind the purge control unit and through the bottom of the enclosure.
- 4** Purge gas/compressed air inlet fitting here.

All installation egress from panel must be sealed (electrical conduit) for proper explosion-proof installation.



BIM-REVIT models available on bradleycorp.com



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