



**KELTECH'S SN SERIES ELECTRIC ON-DEMAND
TANKLESS EMERGENCY SHOWER HEATERS**

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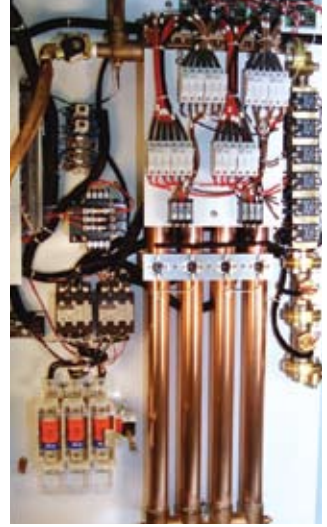
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**KELTECH'S SN SERIES ELECTRIC ON-DEMAND
TANKLESS EMERGENCY SHOWER HEATERS**

The SN series emergency shower heaters are the perfect solution for workers at risk from chemical injury. Custom designed to meet the needs of your safety shower application, Keltech emergency shower heaters perform when needed and provide an unlimited supply of warm water.

The SN series shower heaters can be paired with any high quality commercial safety shower that you specify. If you prefer, Keltech can provide you with a turnkey solution. If portability is an issue, Keltech also has a skid-based emergency shower system.

SN series safety shower systems are built upon the proven technology found in Keltech's CN and HL series of industrial water heaters. All Keltech SN series models meet the new ANSI Z358.1 standards for safety showers.



Keltech's SN series safety shower heaters are specifically designed to meet the new ANSI standards.



The Keltech SN series shower heaters are:

- *Compact* – SN shower heaters do not require large floor space and can be wall mounted
- *Easy to Install* – Just add water and power. All you need is access to one electrical connection and a cold water line
- *Safe* – The SN series includes redundant control and safety features
- *Wired to 480 or 600 Delta* – The SN series does not require a neutral
- *Built to Last* – All Keltech tankless water heating solutions feature rugged industrial components
- *Energy Efficient* – SN shower heaters perform on-demand requiring power and water only when needed
- *Easy to Maintain* – Keltech's SN shower heaters require minimal maintenance



The SN series shower heaters are built to last. All Keltech tankless water heating solutions feature rugged industrial components.

Keltech SN series safety shower heaters:

1. Meet the New ANSI Z358.1 standards

In a chemical injury emergency, time, temperature, and water flow are critical. Keltech's SN series tankless water heaters are designed exclusively for safety showers. Keltech's water heating systems quickly reach the required ANSI standards for tepid water temperatures in as little as 20 to 30 seconds. A Keltech tankless water heater provides a consistent flow of tepid water – 20 to 30 gallons of water per minute – for 15 minutes. Unlike tank based systems, Keltech heaters require no recovery time and can supply warm water indefinitely.

2. Include Redundant Safety Features

The safety of your employees is paramount. Keltech's SN series includes multiple safety features such as internal fusing, digital temperature control, Incoloy 800 sheathed heating elements, an externally mounted emergency stop button, and NEMA 4 water proof enclosures. The SN series is ETL/cETL approved and conforms to UL and CSA standards.

Perfect Temperature Range and Flow Rate

The SN eyewash and safety shower heaters provide an efficient and unique solution to the vastly different demands that are presented in a combined eyewash/safety shower. Keltech's control system is engineered to ensure that the water temperature is just right – not too hot and not too cold. Under constant flow and pressure, these temperatures stay within $\pm 1^{\circ}\text{F}$ of set point. If the water is too hot, some chemicals may react adversely and cause more injury. If the water is too cold, the injured employee may not stay in the shower long enough to safely remove the chemical.



Safety only circuits monitor for over temperature conditions and ensure individual chambers do not exceed ANSI standards.

Safety Features (continued)

No Latent Heat Issues

If the flow rate changes drastically, you and your employees will not have to be concerned with scalding. Using patented technology, the SN is able to sense the transition from a 20+ GPM safety shower to the 3 GPM eyewash and purges latent heat keeping the output temperature below 90°F. Keltech's patented system guarantees there will be no large temperature swings should the flow rate of the water be reduced. This heater is designed using a patented control that allows the heater to "dump" excess heat to maintain temperatures on low flow and high flow applications. This precise control ensures the output temperature will remain within ANSI specifications no matter the flow.

No Excessive Temperature Issues

Every SN series tankless water heater that Keltech engineers includes a separate set of circuits to monitor for "over temperature" conditions. Using dual PID control and purge processes, the SN heater is able to sense the low flow eyewash or high flow safety shower and adjust its controls accordingly to maintain temperature within "tepid" ANSI standards. Keltech's limit controllers ensure that individual chambers will not exceed the ANSI standards for tepid water temperature.

Emergency Stop Button

Every SN series that Keltech designs includes an external manual over ride emergency stop button.

3. Digital Temperature Control

The dual PID LED controller visually displays the set point and actual temperature in a digital display format on the front panel. The splash proof front panel is standard. The controller is preprogrammed to your specifications and automatically adjusts to maintain precise output.



Every SN series that Keltech custom designs includes a patented safety shower specific temperature control system.

Standard Features (continued)

4. Water-Cooled Solid-State Relay Switching

Water-cooled solid-state relay switching controls provide an infinitely variable power draw. All switching is done in a zero crossing package that precisely controls output temperature to +/- 1°F.

5. Reliable Performance and Minimal Maintenance

The SN series maintenance schedule falls within the normal ANSI requirements. The best feature of Keltech's tankless water heating system is never having to open its enclosure door.

6. Easy to Install

Keltech's SN series of tankless water heaters can be mounted almost anywhere. Just add water and power. All you need is access to one electrical connection and a cold water line. Freestanding units include a sturdy floor stand kit. However, standard NEMA enclosures can be wall mounted in the vertical position. This flexibility allows the tankless safety shower systems to be mounted near your existing shower and/or eyewash facilities.

7. Save Energy from Day One

The Keltech SN series safety shower systems perform on-demand. Because they are tankless, they only draw electricity and water when needed. Since there are no utilities to pay until the shower is used, utility costs are minimized. There's no need to keep a 300 gallon tank heated 24 hours a day, 365 days a year. There's also no need for expensive re-circulation loops. That saves your organization money while still putting the safety of your employees and technicians first.



*Water-cooled
solid-state relay
switching precisely
controls output
temperature
to +/- 1°F.*

Standard Features (continued)

8. Minimal Pressure Drop

Keltech's SN series feature large internal passageways that minimize pressure drop.

9. Incoloy Sheathed Heating Elements

Provides longer element life and no "tingle effect" for shower users.

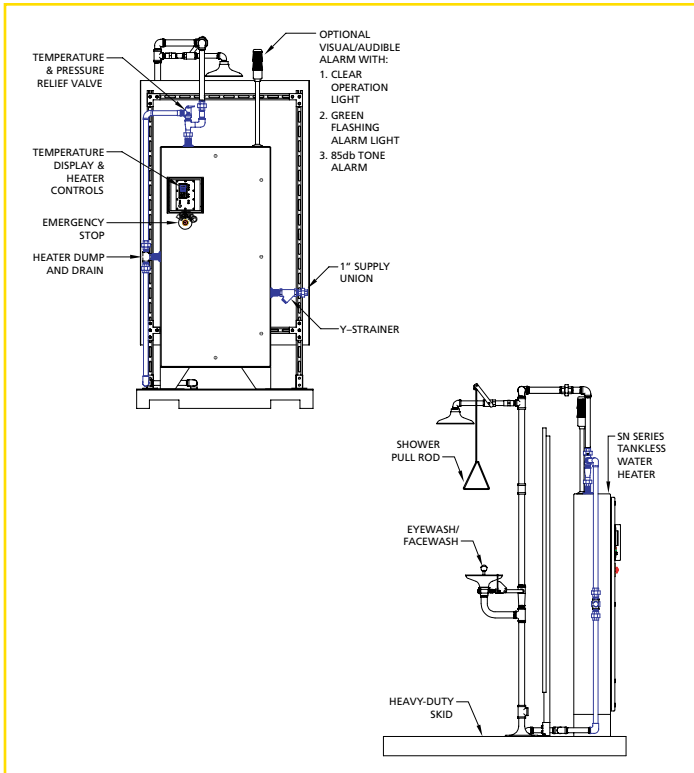


*Keltech SN series
safety showers use
no energy until the
safety shower is
activated.*

PORTABILITY MEANS FLEXIBILITY

The portable safety shower station is the perfect solution for situations where chemical injury at a location is a temporary risk. Keltech offers a complete safety shower station all in one compact, portable package. The SN shower station is easily installed in almost any location. Simply place the unit near or over a floor drain, connect the water supply, then connect the power supply and the SN shower station is ready for duty.

When hazardous work is complete, the forklift transportable unit can easily be moved to another location for duty or storage. No bulky water containers. No wasted energy. The Keltech SN series of safety shower systems provide portability that anti-scald valves and fixed plumbing cannot match.



Keltech safety shower systems provide portability that anti-scald valves and fixed plumbing cannot match.

Optional Features (continued)

ACTIVATION ALARMS

For showers in remote areas, the audible and/or visible alarm notifies key personnel that there has been a chemical spill or emergency situation.

GROUND FAULT

This safety feature detects electrical leakage from external sources to protect the equipment, electronics and the heat exchanger from being damaged in the event of a power fault.

FREEZE PROTECTION

Keltech's freeze protection option protects the heater and internal components in sub-zero conditions. It allows the unit to function at -23°F with an 11 mph wind.

INTERNAL FUSE DISCONNECT

Keltech has designed the SN series to include internal fusing so there's no need to run a separate box.

NEMA 4X

For harsh environments, Keltech can produce NEMA 4X corrosion proof enclosures made from stainless steel.



*Optional features
allow SN series
heaters to fit
perfectly into
almost any location.*