

### **APPLICATIONS**

The Haws® 9321CE compact indoor Instantaneous Electric Water Heater is designed to provide immediate tepid water for safety showers and eyewashes. In accordance with EN 15154 guidelines, tepid water, ideally between 20°C and 25°C, ensures that victims can use the emergency equipment for the recommended 15 minutes without the risk of hypothermia or scalding.

Capable of delivering between 9.5 and 114 liters per minute of tepid water, the 9321CE can feed either a combination safety shower or multiple eyewash stations. When activated, the instantaneous heater quickly heats the water to the set tepid temperature in a matter of seconds. The predictive control algorithm ensures precise temperature control (+/-1°C at steady state flow) of the tepid water.

The 9321CE compact indoor Instantaneous Water Heater simplifies installation by integrating directly into the cold water supply pipe for the safety equipment, eliminating the need for a thermostatic mixing valve. It is a safe and smart solution, providing endless tepid water for indoor-installed emergency equipment across the industries.





### **KEY FEATURES**

### **CE Certification**

The CE certification affirms the conformity of instantaneous water heater 9321CE with European health, safety, and environmental protection standards

### Parabolic Heat Design

The Parabolic Heat Design<sup>TM</sup> enables fast water heating and minimal pressure drop

### **Precise Temperature Control**

Predictive control algorithm and diverse safety features for precise temperature control

#### **Updatable Firmware**

Field programmable and updatable firmware provide flexibility for future adaptations

### **High Operational Reliability**

Thermo-optical sensor for monitoring infrared elements ensures high operational reliability

### **Protection Against Entrained Air**

Thermo-optical sensor for protection against entrained air or improper commissioning

### **Powder-coated Cabinet**

Powder-coated cabinet made of cold rolled steel allows for indoor installation

### Space saving

Ideal choice for space-conscious indoor installations due to compact design and wall-mounting feature

## TECHNICAL INFORMATION

Cabinet:	powder-coated, cold rolled steel
Voltage:	400 V
Rated power:	50/75/100/120 kW
Flow rate:	max. 114 liters per minute (I/min)
Optimum operation pressure:	4.1 – 6.2 bar
Standard temperature setting:	29.4°C
Dimensions (H x W x D):	665 x 432 x 261 mm
Cold water inlet:	1 1/4" NPT(M)
Tepid water outlet:	1 1/4" NPT(M)

# model **9321CE**Instantaneous Water Heater

### **BENEFITS**

### INCREASED EMPLOYEE SAFETY

Tepid water allows employees to remain in the water flush for the required 15 minutes without the risk of hypothermia or scalding.

### REDUCED ENERGY CONSUMPTION

The instantaneous water heater not only reduces energy consumption but also promotes sustainability. By consuming power only when actively heating water, it minimizes unnecessary energy usage, contributing to a greener and more eco-friendly approach.

# LOW ENERGY AND MAINTENANCE COSTS

The low energy and maintenance costs of this system contribute to a sustainable approach by eliminating the need for continuously heated water in stand-by systems. By efficiently using energy only when necessary, the system reduces overall energy consumption, resulting in lower carbon emissions and environmental impact.

## REDUCED LEGIONELLA RISK AND IMPROVED HYGIENE

By eliminating standing tepid water in the system, the risk of Legionella growth is reduced, promoting a healthier environment with improved overall hygiene.

### SPACE-EFFICIENT DESIGN

Compared to alternative solutions, the instantaneous heater has a small footprint as it eliminates the need for boilers, pumps, and tepid water loops.

### FLEXIBLE INSTALLATION

9321CE can be mounted on a wall above or near the emergency equipment to free up floor space.

### **EASY INTEGRATION**

The Instantaneous Water Heater only requires a power cable, making it simple to integrate into existing solutions.

### RELIABLE AND SAFE OPERATION

Maintains the defined water temperature (+/- 1°C at steady state flow) without the need for additional tanks, valves, pumps, or other features.

## COMPLIANCE WITH STANDARDS

The instantaneous water heater complies with the CE standard and is suitable for use with eye wash stations and emergency showers according to EN 15154 or ANSI.Z358.

# model **9321CE**Instantaneous Water <u>Heater</u>

### 9321CE SELECTION CHART

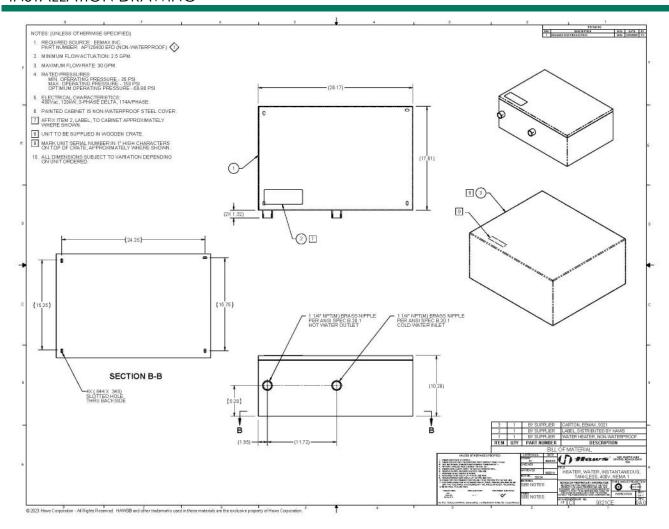
### Steps to Select the Correct Version of your 9321CE Heater:

- Determine the desired water temperature increase: Calculate the temperature difference between the desired outlet temperature and the inlet temperature.
- 2. Determine the maximum flow rate: Consider the requirements of the downstream eyewashes and emergency shower(s).
- 3. Refer to the table below: Find the corresponding electrical power requirement for the heater based on the determined temperature increase and maximum flow rate.

By following these steps, you can accurately select the right version of the 9321CE heater for your specific needs.

		Temperature Rise [°C]									
		Eyewash Applications				Safety Shower Applications					
Voltage	Rating	11 l/min	15 l/min	19 l/min	23 I/min	76 l/min	87 I/min	98 I/min	114 l/min		
400 V	50 kW	63 °C	47 °C	38 °C	32 °C	9 ℃	8 ℃	7 °C	6℃		
400 V	75 kW	•	71 °C	57 °C	47 °C	14 °C	12 °C	11 °C	9 ℃		
400 V	100 kW	•	•	76 °C	63 °C	19 °C	16 °C	15 °C	13 ℃		
400 V	120 kW	•	•	•	76 °C	23 °C	20 °C	18 °C	15 °C		

### INSTALLATION DRAWING





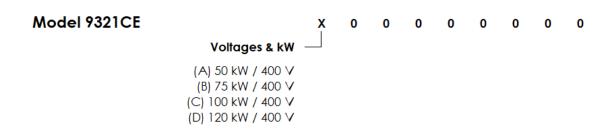
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### **OPTIONS**

The CE certified instantaneous heater 9321CE is available in 400 V and offers four power ratings (50 kW, 75 kW, 100 kW, and 120 kW). These options provide flexibility to adapt the heater to meet specific onsite requirements based on the desired temperature increase and maximal flow rate. Options are factory installed. It is important to note that options are not available as retrofits.

### MODEL CONFIGURATION

Complete your custom configuration by selecting the options and their corresponding number. Please place the number in the allocated order to complete your configuration.



Your model configuration: \_ 0 0 . 0 0 0 . 0 0 0

If you have any queries, please do not hesitate to contact Haws EMEA at +41 34 420 60 00 or info@haws.ch.