

RADIWARM

Technical Specification: Radiwarm Signature Electric Range

Company Profile:

We're an independent British company based in Halifax, West Yorkshire and we've been manufacturing and selling water-filled and sand silica-filled electric radiators for almost 20 years. We pride ourselves on our knowledge and enthusiasm and like to think that we leave behind a little bit of Yorkshire warmth wherever we go, or wherever you find our products.

The **Radiwarm Signature Electric Range** is a fully sealed, water-filled electric radiator offering hassle-free, energy-efficient heating. It eliminates the need for plumbing, and it is available with an optional **Low Surface Temperature (LST) Cover** for added safety in sensitive environments. Ideal for residential, commercial, and healthcare applications, it provides consistent, reliable heat with minimal installation effort.

1. Product Overview

- **Product Name:** Signature Electric Radiator (with LST Cover Option)
- **Product Type:** Electric Water-Filled Radiator with Optional Low Surface Temperature (LST) Cover
- **Manufacturing Origin:** Manufactured in the UK
- **Heating System:** Pre-filled, fully sealed water-based electric radiator
- **Application:** Suitable for residential, commercial, healthcare, and educational environments (including bathrooms and damp areas)
- **Compliance:**
 - **Lot 20 Compliant:** Eco-design directive compliance for energy efficiency
 - **IP44 Rating:** Rated for use in wet zone 2 (suitable for bathrooms and damp areas)

2. Key Features and Benefits

- **Fully Sealed Design:** No need for plumbing, flushing, bleeding, or topping up, simplifying installation and maintenance.
- **Energy Efficiency:** 100% efficient, providing the full energy input as heat output.
- **Recyclability:** The radiator is made from recyclable materials, making it eco-friendly.
- **Smart Control Capabilities:**
 - Remote programming via web app
 - Adaptive start function
 - Holiday mode
 - Frost protection
 - Setback mode
 - Open window detection
- **Safety Features:**
 - **LST (Low Surface Temperature) Option:** Available for environments such as nurseries, healthcare facilities, and other safety-sensitive spaces.
 - **Five-Year Warranty** on shell, **Two-Year Warranty** on electronics.



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- **Plug and Play:** Comes with a 1.9-meter cable and fused 13-amp plug, simplifying installation.

3. Radiator Dimensions and Heat Outputs

Model	Nominal Heat Output (kW)	Height (mm)	Length (mm)	Depth (mm)	Max Continuous Heat Output (kW)	Boiler Capacity - Peak Electrical Draw (kW)	Electricity Consumption in Standby Mode (kW)
4100	1.100	400	1000	100	1.100	1.5	<0.0005
4140	1.625	400	1400	100	1.625	2.0	<0.0005
4160	1.840	400	1600	100	1.840	2.0	<0.0005
6040	0.383	600	400	100	0.383	0.9	<0.0005
6060	0.790	600	600	100	0.790	0.9	<0.0005
6080	1.138	600	800	100	1.138	1.5	<0.0005
6100	1.480	600	1000	100	1.480	2.0	<0.0005
6120	1.900	600	1200	100	1.900	2.0	<0.0005

4. Material Specifications

- **Body Material:** High-quality steel with a corrosion-resistant coating, designed for durability and high heat transfer efficiency.
- **Water-Filled Design:** Pre-filled with specially treated water for effective heat distribution.
- **Finish:** WHITE RAL9016.

5. Performance Specifications

- **Heating Efficiency:**
 - 100% energy-efficient heating output.
 - Provides consistent heat even in areas with temperature fluctuations.
- **Max Continuous Heat Output:** Matches the nominal heat output for continuous operation.
- **Electrical Consumption:**
 - Peak electrical draw ranges from **0.9 kW** to **2.0 kW** depending on model.
 - **Standby power consumption** is extremely low (<0.0005 kW) to ensure minimal energy waste.
- **Energy Efficiency Compliance:** Meets **Lot 20** eco-design directive, ensuring high energy efficiency standards.



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6. Installation Requirements

- **Mounting:** Wall-mounted, with brackets included for safe and secure installation.
- **Electrical Connection:**
 - Requires a standard British electrical socket (13-amp plug included).
 - Ideal for retrofit and quick installation without the need for professional plumbing.
- **LST (Low Surface Temperature) Option:** Available for use in safety-critical environments, ensuring that the radiator surface temperature remains below safe levels to prevent burns or injuries.
- **Clearance Requirements:** Ensure adequate clearance for air circulation, typically around 50 mm on all sides (as per manufacturer guidelines).

7. Safety and Compliance

- **IP44 Rated:** Protected against water splashes, making it suitable for wet zone 2 (including bathrooms and other damp areas).
- **CE Certification:** Conforms to European safety standards for electrical equipment.
- **Safety Features:**
 - Overheat protection
 - Frost protection
 - Overload protection
- **Warranty:**
 - **5-Year Warranty** on the radiator shell.
 - **2-Year Warranty** on electrical components (3 years with registration)

8. Smart Control Features

- **Remote Programming:** Control the radiator remotely via a web app.
- **Adaptive Start:** Optimizes heating performance based on usage patterns, ensuring energy-efficient operation.
- **Holiday Mode:** Automatically reduces power consumption when the building is unoccupied.
- **Frost Protection:** Maintains a minimum temperature to avoid freezing in unoccupied spaces.
- **Setback Mode:** Reduces heat output when the temperature exceeds a set threshold, preventing overheating.
- **Open Window Detection:** Automatically adjusts the heat output when a window is opened to maintain efficiency.



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9. Environmental Impact

- **Sustainability:** The radiator is 100% recyclable and designed to minimize its environmental footprint.
- **Energy Savings:** Reduces energy consumption compared to traditional heating systems, contributing to lower overall energy bills and carbon footprint.

Conclusion:

The **Aqua Electric Range** offers architects and developers a highly efficient, safe, and easy-to-install heating solution for a wide range of applications. Whether for residential, commercial, or healthcare settings, it ensures maximum comfort with minimal disruption.

Contact Details:

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