To Elevate Your System

with an intelligent power controller family that simplifies your application while offering cutting-edge features
Modular and Smart Design
Easy to Use and Service

- Easy to read real character pixel display
- Quick access to SCRs minimizes production downtime
- Simple to configure with ASPYRE® configuration PC software and plug and play access via USB device port
- Intuitive application wizard automatically recommends controller configuration settings based on load type
- Intelligent troubleshooting with built-in diagnostics
- Easy to access replaceable semiconductor fuses
Improved Process Control
For a Wide Variety of Load Types

> 20 firing combinations to align with a variety of load types
> Advanced control modes protect heater from damage on start up and extends overall heater element life
> Six available power control modes to maximize thermal performance
> Multiple digital and analog I/O to increase system control functionality

Closed-Loop Temperature Control

Without Power Control Feedback

With ASPYRE Power Control Feedback

Power feedback can immediately adjust thermal performance to keep temperature constant

www.watlow.com/asurye
UL® 508 rating results in reduced labor and project costs

Smaller footprint and less weight than legacy power controllers reduces cabinet space and shipping expenses

Integrated design reduces system complexity, inventory and labor to install and wire

ASPYRE DT features SCR switching, voltage sensor, data logging, Wi-Fi, current sensor, semiconductor fusing, user interface, communications, relay alarm, cooling fan, back-up power supply and more in one device
Communication Access to Important Data

Connectivity for Automation

- USB device port (file transfers - configuration or data log)
- Data logging
- Wireless Wi-Fi and mobile application
- Communication protocols: 485 Modbus® RTU (up to 2), Modbus® TCP, Ethernet IP, Profibus DP, Profinet
- 4-20mA retransmit
Industry-Leading Design
For High Quality and Reliability

High Performance Validated With Stringent Testing

> 3 year factory warranty
> Robust SCR design with high I²t rating
> Passes rigorous Watlow test standards
> Agency compliance - UL®, CE, RoHS, W.E.E.E.
> 100KA SCCR rating
> UL® 508 rating
> UL® 508 shortens project schedules, agency testing and expenses

Meets or Exceeds Industrial Test Standards

<table>
<thead>
<tr>
<th>EN 61326</th>
<th>Electrical equipment for measurement, control, and laboratory use - EMC requirements</th>
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<tr>
<td>EN 61326-1</td>
<td>Electrical equipment for measurement, control, and laboratory use - EMC requirements Updated 61000-4-3 to 3 GHz, Updated 61000-4-11 dips test, required by Feb 1, 2009.</td>
</tr>
<tr>
<td>EN 61000-4-2</td>
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<td>EN 61000-4-6</td>
<td>Conducted disturbances induced by radio-frequency fields.</td>
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<td>EN 61000-4-11</td>
<td>Voltage dips, short interruptions and voltage variations immunity test.</td>
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<tr>
<td>EN 55011</td>
<td>Limits and methods of measurement of radio disturbance characteristics of Industrial, Scientific, and medical (ISM) radio-frequency equipment.</td>
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<td>Limits for harmonic current emissions (equipment £ 16 A per phase)</td>
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<td>EN 61000-3-3</td>
<td>Limitation of voltage fluctuations and flicker in low-voltage supply systems with equipment with rated current £ 16 A.</td>
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Megohm heater circuit precheck

Reduces start up costs and production delays

Megohm Test Procedure

WATLOW ELECTRIC MFG CO.
WATROD™ Circulation Heater Installation & Maintenance Manual
I&M NUMBER: 316-42-5-1

1. Megohm precheck
   During shipping and/or storage, the possibility of absorption by the insulation material within the element is possible. To ensure proper megohm values, a minimum 500 VDC megohm meter (Megger) should be used to ensure that the megohm reading taken on the heater element when the heater is at room temperature is greater than 10 megohms when the system is deenergized. If several units are interconnected, the megohm of the heater is obtained by taking the reading and dividing by the number of interconnected elements. This reading should be greater than 10 megohms.

   If a low megohm value exists, two alternative methods can be used to remedy the situation. The best method is to remove all terminal hardware, including the thermostat if provided, and bake out the heater at no higher than 250°F (120°C) overnight or until an acceptable reading is reached. The second method is to energize the unit at low voltage in air until the megohm is at an acceptable reading. Care should be taken to prevent the heater sheath from exceeding 750°F (398°C) for Incoloy® and steel elements and 400°F (204°C) for copper elements. Both of these methods should be performed with the heater out of the tank.

Watlow process heater bundle
Find out more about Watlow and how we can provide thermal solutions for your company:

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E-mail: inquiry@watlow.com
Website: www.watlow.com