DCR Power Controller Features

- Compact DIN rail mounted design
- Universal Input
  - UL 24 - 600VAC
  - CE 24 - 660VAC
  - 45 - 65Hz
- Up to 600 VAC (90% of AC Input)
- MODBUS RTU or 4-20mA digital output
- Selectable constant voltage operation
- Constant current operation
- 5 Selectable Amperage output (0 – 2.5 A, 0 – 4.0 A, 0 – 6.5 A, 0 – 10.0 A, and 0 – 15 A)
- 24 VDC input to control electronics and maintains critical communications
- Compact touch safe fully-enclosed design
- Soft start protection - Dedicated run/stop bit
- Microprocessor controlled
- On-board diagnostics
- Designed and Manufactured in the USA
- Retrofit version available for G2 users

For additional information on this DC rectifier and other IONPURE products visit our website at www.ionpure.com
Specifications

**AC INPUT**
- Line Voltage (auto ranging)²
  - UL: 24 - 600 VAC
  - CE: 24 - 660 VAC
- Phase: Single
- Frequency (auto ranging): 45 - 65 Hz

**DC INPUT**
- Voltage: 24V
- Current/Amperage: 0.1 A

**DC OUTPUT**
- Voltage: 20 - 600 VDC
- Current/Amperage: 0 - 15 A
- Selectable Amperage Ranges
  - 0 - 2.5 A
  - 0 - 4.0 A
  - 0 - 6.5 A
  - 0 - 10.0 A
  - 0 - 15.0 A

**Communications**
- Programming port: USB
- Fieldbus Protocol: MODBUS RTU (RS-485)³
- Connections: RJ-45 (2x)
- Terminating resistor: dip switch enable
- Positioning: 16-Position rotary dial
- Parameters: All settable parameters and monitor parameters such as setpoint, current, voltage, warnings, faults, etc.
- Connection To External Devices: PLC/HMI or IONPURE Touch Panel Display via fieldbus 0-5VDC for the retrofit version

**Operating Environment**
- Cooling: Heatsink and Natural Convection
- Surrounding Air Temperature: 0 - 50°C (32 - 122°F)
- Altitude: < 6000 ft
- Relative Humidity: < 95% (non-condensing)
- Storage Temperature: -15 - 70°C (5 - 158°F)

**Protections**
- Line Transients: Dual DVDT Network
- Over-voltage: MOV + Voltage Limiting
- Under-Voltage: Output alarm
- Over Temperature: Manual Restart
- Ground: Heatsink screw
- Printed circuit Board: Conformal Coated
- Touch Safe: Fully enclosed

**Ordering Information and Physical Specifications**

<table>
<thead>
<tr>
<th>Order #</th>
<th>Model #</th>
<th>Description</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>W2T827123</td>
<td>IP-DCR600V15A-M</td>
<td>DC RECTIFIER, 600VDC 15A DIN Rail mountable with MODBUS communication</td>
<td>1.4 in (35.6 mm)</td>
<td>6.0 in (152.4 mm)</td>
<td>5.2 in (132.4 mm)</td>
</tr>
<tr>
<td>W2T827122</td>
<td>IP-DCR600V15A-R2</td>
<td>Retrofit DCR Rectifier, 600VDC 15A w/ 0-5 VDC communication / Replacement for G2 and PCB power controllers</td>
<td>4.0 in (101.6 mm)</td>
<td>6.0 in (152.4 mm)</td>
<td>5.34 in (135.6 mm)</td>
</tr>
<tr>
<td>W2T829935</td>
<td>IP-POWERDSP-TP</td>
<td>4.3” Touch Panel Display</td>
<td>5.04 in (128 mm)</td>
<td>4.02 in (102 mm)</td>
<td>1.26 in (32 mm)</td>
</tr>
</tbody>
</table>

¹ Display not compatible with retrofit version (-R2). Use G2 Display (IP-POWERDSP-G2)
² Requires isolation transformer to allow proper grounding of ED/CEDI module cathode
³ Not available on retrofit version (-R2)

© 2016 Evoqua Water Technologies LLC   Subject to change without notice   ION-DCRCEDIPwrC-DS-0416

IONPURE and NEXED are trademarks of Evoqua and its subsidiaries or affiliates in some countries. MODBUS is a registered trademark of Schneider Electric, USA, Inc. All other Trademarks are those of their respective owners.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.