Unity Rectifier System

The Unity Rectifier System comprises a low profile 1.75” (1 RU) shelf which accommodates up to three 150 watt, -48 or +24 volt hot-swap rectifiers, plus an optional GMT fuse distribution panel. The system is scalable/adaptable for N, N+1 or N+2 configurations. Form C status contacts enable remote alarms for the rectifiers and fuse distribution circuits. Front panel OK/FAIL LED's allow monitoring status of each rectifier individually.

Unity Rectifier System

<table>
<thead>
<tr>
<th>Shelf</th>
<th>Input</th>
<th>Capacity</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>URS</td>
<td>115/230 VAC Nom.</td>
<td>3 Unity Rectifiers (-48 or +24 V), 1 GMT fuse panel</td>
<td>19/23” Rackmount, 1 RU</td>
<td>6.7 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rectifier</th>
<th>Input Amps @ Full Load 115/230V</th>
<th>Output Voltage</th>
<th>Output Amps Cont.</th>
<th>Watts</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR48-3</td>
<td>2.2/1.1</td>
<td>-54.4 VDC, adjustable 42-56 VDC</td>
<td>3</td>
<td>150</td>
<td>1 RU</td>
<td>1.9 lbs.</td>
</tr>
<tr>
<td>UR24-6</td>
<td>2.2/1.1</td>
<td>+27.2 VDC, adjustable 21-28 VDC</td>
<td>6</td>
<td>150</td>
<td>1 RU</td>
<td>1.9 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GMT Panel</th>
<th>Nominal Input/Output</th>
<th>Total Fuse Fuse Capacity</th>
<th>Total Current Capacity</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>UFP-5</td>
<td>-48 or +24 VDC</td>
<td>5</td>
<td>20A</td>
<td>1 RU</td>
<td>1 lbs.</td>
</tr>
</tbody>
</table>

Unity Stand-Alone Rectifier

Features
- 150 watt rectifier units - 48 or 24 volt, slide and lock into the Unity Shelf
- Shelf accommodates up to three rectifiers—450 watts total—plus an optional five-position GMT fuse panel
- Scalable/adaptable hot swap configuration: N, N+1, N+2
- Front panel status indicators, output voltage test points and adjustment potentiometers
- Individual or summary rectifier alarm contacts; Form C
- Summary fuse panel alarm contacts; Form C
- 115/230 VAC shelf/rectifier input
- GMT fuse panel: Five positions, easy rear panel wiring to loads, fuse access at front

Unity Rectifiers
Models: UR48-3, UR24-6
Input Voltage/Frequency/PF: 85-264 VAC* / 47-63 Hz. / .96-.98
Input Amperage: 2.2 amps @ 115V, 1.1 amps @ 230V
Output Voltage/Ampere*: UR48-3: -54.4 VDC, adjustable 42-56 VDC, 3 amps continuous
UR24-6: +27.2 VDC, adjustable 21-28 VDC, 6 amps continuous
*100 % output power available from 105 to 264 VAC; Derate output linearly from 100% @ 105 VAC to 80% @ 85 VAC
Efficiency: 83% per rectifier
Regulation/Ripple: +/-2% / UR24-6: 150 mV, UR48-3: 230 mV
Protection: Over-voltage, current limiting, over-tem., forced air cooling
Alarms/Indicators: Output failure contacts; Form C
Front panel LED indications: ‘DC OK/DC FAIL”
Front panel voltage test points and adjustment
Operating Temperature: -10°C to +60°C; 100 % load to +50°C;
Derate linearly to 80% load @ 60°C
Design Standards: EN55022 Class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, UL 1950
Approvals: UL Recognized 60950

Unity Rectifier Shelf
Model: URS
Input: 115/230 VAC nominal
Capacity: Up to Three Unity Rectifiers, -48 or +24 volt and one GMT Fuse Panel (UFP-5)
Mounting: 19” or 23” rack; center or flush mount

Unity Fuse Distribution Panel
Model: UFP-5
Voltage: -48 VDC or +24 VDC nominal (selectable by jumper)
Current: 20 amps max. total
Capacity: Five GMT fuses, 10 amps max. per individual fuse
Available Amperages: 1, 3, 5, 7.5, 10, 15 Amps
Alarms/Indicators: Output failure summary alarm contacts; Form C
Front panel blown fuse summary LED indicator

Unity Stand-Alone Rectifier
For applications that do not require rack-mounting or redundancy, the Unity is available as a stand-alone rectifier. A versatile flange permits a myriad of mounting options, such as on the side of rack rails, inside cabinets, on walls or under shelves, maximizing use of restricted spaces.

The unit comes with a 6’ power cord and a rear-mounted terminal block for easy wiring. Performance specifications are identical to single Unity Rectifiers detailed on this page.

Models: USAR48-3 and USAR24-6