



RSM 48/100



## RSM 48/100 Modular Switched Mode Rectifier

The RSM 48/100 switched mode rectifier offers the largest current capacity in the RSM class, making it an ideal powering choice for larger communications applications.

**Concentrated power output** The RSM 48/100 provides up to 110A in just three rack units of space. It is available in a universal cabinet for 19" and 23" rack mounting.

**Local and remote monitoring/control** Each RSM 48/100 rectifier contains an intelligent computer microprocessor with built-in diagnostics that allows you to monitor and control your system from a local or remote location. The unit's front panel LCD and soft-touch keys make it easy to program various system settings and alarms, while remote computer communications are possible through an RS-232 or RS-485 serial interface.

**Wide AC input range** The RSM 48/100 is available in three input voltage ranges (all three-phase input): choose from 184 to 264 VAC, 323 to 456 VAC, or 370 to 530 VAC; for standard AC input of 208, 380, 480 VAC respectively.

**Outstanding conversion efficiency** The RSM 48/100 complies with most international standards and specifications, providing conversion efficiencies and power factor greater than 90%.

**Comprehensive alarms, protection and control** The RSM 48/100 has a comprehensive range of standard alarms and protective features such as: input transient suppression, soft start, current limit, high voltage protection, phase fail, over temperature protection and more.

Maximum output power of 6kW

Features intelligent microprocessor control

Wide range 3-phase AC input

Supports local and remote communications

Features demand-based fan cooling

**Adjustable forced sharing control** Rectifiers can be easily programmed to share load current with the forced sharing feature, ensuring maximum rectifier life and accurate voltage regulation.

**Unrivaled durability** Whether your equipment's located in a central office, cell site or roadside enclosure, RSM 48/100 rectifier systems are built to perform in the most hostile environmental conditions. Low temperature startup and high temperature operation are guaranteed through special attention to thermal design. Argus' unique demand-based cooling system automatically increases or decreases fan speed based on the unit's internal temperature.

**High quality products backed by a solid warranty** In addition to being ISO 9000 registered, Argus' manufacturing center employs a rigorous quality control program to ensure all products meet the highest quality standards. Each product is designed with premium grade electronic components and is backed by a comprehensive factory parts and service warranty.



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| Specifications   | Standards   |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
|--|---|----------------|----------------|------------|------------|--|------------------|------------|------------|--|----------------------|-------------|-------------|----|--------------|-------|---|----|------------------------------------|----|------------------------------------|----|-------------------------------|-----|--|----|-------------|
| <p><b>Electrical</b></p> <p>Input voltage: 184 to 264 VAC (3Ø)<br/>323 to 456 VAC (3Ø)<br/>370 to 530 VAC (3Ø)</p> <p>Input frequency: 47 to 63Hz</p> <p>Power: 6000 Watts</p> <p>Power factor: &gt;0.90 True<br/>(50 to 100% load)</p> <p>Efficiency: 91% min.<br/>(50 to 100% load)</p> <p>Output voltage: 42 to 60 VDC</p> <p>Output current: 110A Max.</p> <p>Regulation:<br/>Static: ±25mV, line and load<br/>(zero slope)<br/>Dynamic: &lt;1% deviation for 50<br/>to 100% load step<br/>&lt;2% deviation for 10<br/>to 90% load step</p> <p>Response time: &lt;2mSec to 0.1% of<br/>output</p> <p>Output noise:<br/>Voice band: &lt;22 dBBrnC w/ batteries<br/>Wide band: &lt;10mV RMS<br/>(10kHz to 10MHz)<br/>&lt;150mV pk to pk<br/>(10kHz to 100MHz)</p> <p>EMI: See standards<br/>Acoustic noise: &lt;60dBa at 1m (3 ft)</p> <p>TIF: (Current) &lt;250 at 100% load</p> <hr/> <p><b>Mechanical</b></p> <p>Cooling: Redundant fan cooling<br/>(Air filters optional)</p> <p>Dimensions: 130 H x 419 W x 381 D<br/>mm (inches) (5.1" H x 16.5" W x 15" D)</p> <p>Mounting: Fits all 19" &amp; 23" racks,<br/>center or flush mount</p> <p>Weight: 21.0 kg (46 lb.)</p> | <p>The RSM 48/100 rectifier is designed to meet the following specifications:</p> <p>CSA: 22.2, -107.1, -220, -234, -1402<br/>CSA/NRTL/C: 950-M93<br/>(excluding List 10)</p> <p>FCC: Part 15, Subpart B, Class A<br/>(excluding List 10) [EMI]</p> <p>ANSI/IEEE: C62.41 Cat B Power line surge<br/>IEC: 950; EN55022 Class A EMI<br/>(CISPR22)</p> <p>UL: 1950</p> <hr/> <p style="background-color: #003366; color: white; padding: 5px;"><b>Ordering Information</b></p> <p style="background-color: #003366; color: white; padding: 5px;">To order, please specify part number and list options required.</p> <hr/> <p><b>Power Modules</b></p> <table border="0"> <tr> <td><b>Part #:</b></td> <td><b>Model#:</b></td> </tr> <tr> <td>010-522-20</td> <td>RSM 48/100</td> </tr> <tr> <td></td> <td>w/ options below</td> </tr> <tr> <td>010-546-20</td> <td>RSM 48/100</td> </tr> <tr> <td></td> <td>440/460/480 VAC (3Ø)</td> </tr> </table> <hr/> <table border="0"> <thead> <tr> <th>List Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0*</td> <td>Basic module</td> </tr> <tr> <td>19/23</td> <td>19" or 23" center mount, 1" or 1 3/4" rack mounting</td> </tr> <tr> <td>21</td> <td>19" flush mount, 1 3/4" rack mount</td> </tr> <tr> <td>40</td> <td>Std. temp. operation (0° to 60° C)</td> </tr> <tr> <td>42</td> <td>Ext. temp. operation (-40° C)</td> </tr> <tr> <td>55*</td> <td>Argus overlay and software (gray/gray)</td> </tr> <tr> <td>80</td> <td>Fan Filters</td> </tr> </tbody> </table> <p>For 010-522-20 only:</p> <p>9 208/220/240 VAC, 3 phase input<br/>10 380/415 VAC, 3 phase input</p> <p>* Default option</p> <hr/> <p><b>Accessories</b></p> <p>018-533-20 RS485/RS232 Converter Module (One per Power Plant may be required).</p> <p>037-001-20**Kit, Connectors (One per rectifier may be required)</p> <p>037-002-20 Kit, Relay Interface Module (One per rectifier may be used)</p> <p>** Consult factory for list options</p> | <b>Part #:</b> | <b>Model#:</b> | 010-522-20 | RSM 48/100 |  | w/ options below | 010-546-20 | RSM 48/100 |  | 440/460/480 VAC (3Ø) | List Option | Description | 0* | Basic module | 19/23 | 19" or 23" center mount, 1" or 1 3/4" rack mounting | 21 | 19" flush mount, 1 3/4" rack mount | 40 | Std. temp. operation (0° to 60° C) | 42 | Ext. temp. operation (-40° C) | 55* | Argus overlay and software (gray/gray) | 80 | Fan Filters |
| <b>Part #:</b>   | <b>Model#:</b>  |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
| 010-522-20   | RSM 48/100  |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
|  | w/ options below  |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
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|  | 440/460/480 VAC (3Ø)  |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
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| 19/23  | 19" or 23" center mount, 1" or 1 3/4" rack mounting   |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
| 21   | 19" flush mount, 1 3/4" rack mount  |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
| 40   | Std. temp. operation (0° to 60° C)  |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
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| 80   | Fan Filters   |                |                |            |            |  |                  |            |            |  |                      |             |             |    |              |       |   |    |                                    |    |                                    |    |                               |     |  |    |             |
| <p>Connections:</p> <p>Input: Amp CPC3 (010-522-20)<br/>7 pin male connector<br/>4 position terminal block (010-546-20)</p> <p>Chassis ground: Compression lug<br/>2.5 to 10mm<sup>2</sup><br/>(#14 to #8 AWG)</p> <p>Output : Anderson SB175 blue connector</p> <p>Alarms/controls: 9 pin female D conn</p> <p>Sense lines: 4 pin AMP Mate-N Lok male connector</p> <p>RS 485 SCI: 9 pin male connector</p> <hr/> <p><b>Environmental</b></p> <p>Temperature: 0° to 60°C (32° to 140°F) [standard]<br/>-40° to 60°C (-40° to 140°F) [optional]</p> <p>Humidity: 0 to 95% R.H. non-condensing</p> <p>Elevation: -500 to 2800m (-1640 to 9186 ft)</p> <hr/> <p><b>Features</b></p> <p>Indicators: Power On LED<br/>Module fail LED<br/>General Alarm LED<br/>2 x 16 character LCD display</p> <p>Alarms: Module fail<br/>AC fail<br/>(General alarm)</p> <p>Front Panel Controls: Up (Adjustment/Scroll) key<br/>Down (Adjustment/Scroll) key<br/>Enter/Select (Float/Equalize) key</p> <p>Remote controls: Equalize<br/>Shutdown (also functions as restart)<br/>Remote communications access (via RS 485 SCI)</p> <p>Paralleling: Slope 0 to -2% and Forced paralleling</p>     | <p style="background-color: #003366; color: white; padding: 5px;"><b>Ordering Information</b></p> <p style="background-color: #003366; color: white; padding: 5px;">To order, please specify part number and list options required.</p> <hr/> <p><b>Power Modules</b></p> <table border="0"> <tr> <td><b>Part #:</b></td> <td><b>Model#:</b></td> </tr> <tr> <td>010-522-20</td> <td>RSM 48/100</td> </tr> <tr> <td></td> <td>w/ options below</td> </tr> <tr> <td>010-546-20</td> <td>RSM 48/100</td> </tr> <tr> <td></td> <td>440/460/480 VAC (3Ø)</td> </tr> </table> <hr/> <table border="0"> <thead> <tr> <th>List Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0*</td> <td>Basic module</td> </tr> <tr> <td>19/23</td> <td>19" or 23" center mount, 1" or 1 3/4" rack mounting</td> </tr> <tr> <td>21</td> <td>19" flush mount, 1 3/4" rack mount</td> </tr> <tr> <td>40</td> <td>Std. temp. operation (0° to 60° C)</td> </tr> <tr> <td>42</td> <td>Ext. temp. operation (-40° C)</td> </tr> <tr> <td>55*</td> <td>Argus overlay and software (gray/gray)</td> </tr> <tr> <td>80</td> <td>Fan Filters</td> </tr> </tbody> </table> <p>For 010-522-20 only:</p> <p>9 208/220/240 VAC, 3 phase input<br/>10 380/415 VAC, 3 phase input</p> <p>* Default option</p> <hr/> <p><b>Accessories</b></p> <p>018-533-20 RS485/RS232 Converter Module (One per Power Plant may be required).</p> <p>037-001-20**Kit, Connectors (One per rectifier may be required)</p> <p>037-002-20 Kit, Relay Interface Module (One per rectifier may be used)</p> <p>** Consult factory for list options</p>   | <b>Part #:</b> | <b>Model#:</b> | 010-522-20 | RSM 48/100 |  | w/ options below | 010-546-20 | RSM 48/100 |  | 440/460/480 VAC (3Ø) | List Option | Description | 0* | Basic module | 19/23 | 19" or 23" center mount, 1" or 1 3/4" rack mounting | 21 | 19" flush mount, 1 3/4" rack mount | 40 | Std. temp. operation (0° to 60° C) | 42 | Ext. temp. operation (-40° C) | 55* | Argus overlay and software (gray/gray) | 80 | Fan Filters |
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Due to continuing product improvements, Argus reserves the right to change specifications without notice.