

**SPECIFICATION SHEET**

**JFW MODEL 50MS-303**

**3 X 3 BLOCKING ELECTRO-MECHANICAL MATRIX SWITCH**

JFW Industries, Inc.  
Phone: 317-887-1340  
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www.jfwindustries.com

|  |   |
|--|---|
| Frequency Range                          | DC-6000 MHz   |
| Configuration                            | 3 x 3 Blocking Matrix<br>(see block diagram 092-7400)<br>(maximum of 3 active RF paths)<br>(unused input ports are reflective)<br>(unused output ports are reflective)<br>(all ports are bi-directional)<br>(the ADMIN password is located on rear panel)                     |
| Startup/Default States<br>(configurable) | All ports off at startup (see MATRIX command)<br>DHCP enabled (see NET command)<br>4 Ethernet users (see NET command)<br>Prompts off (see PROMPT command)<br><br>All of these default settings can be changed by user.<br>Unit can be configured for up to 12 Ethernet users. |
| Enclosure Type                           | 19 inch rack mount @ 3RU high   |
| Impedance                                | 50 Ohms nominal   |
| VSWR                                     | 1.3:1 typical<br>1.5:1 maximum  |
| Insertion Loss                           | 1.0 dB maximum DC-2500MHz<br>2.0 dB maximum 2500-6000MHz  |
| Isolation                                | Out to Out /In to Out / In to In<br>70 dB minimum DC-4000MHz<br>65 dB minimum 4000-6000MHz  |
| RF Input Power                           | 1 Watt average (Hot Switched)<br>90 Watts (Cold Switched)   |
| Switching Speed                          | 20 milliseconds<br>(after command is received and processed)<br>(3 milliseconds typical processing time)  |
| Manual Control                           | 20-Button Keypad and LCD display<br>(IP Address configurable via keypad)<br>(Net mask configurable via keypad)<br>(Gateway configurable via keypad)<br>(Baud rate configurable via keypad)  |
| Control (Remote)                         | Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)<br>RS-232 (up to 115200 Baud)   |

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Remote Command Format

Matrix Commands:

Matrix, Set Input, Set Output, Read Input, Read Output, Read All Inputs, Read All Outputs, Read Matrix Paths

System Commands:

Help, Identification, Store, Recall, Pause, Net, Serial, Close, Disconnect, MOTD, Date, Message, Restrict, IDENT, Name, Show Users, Reboot, Uptime, Prompt

RF Connector

N female

AC Supply

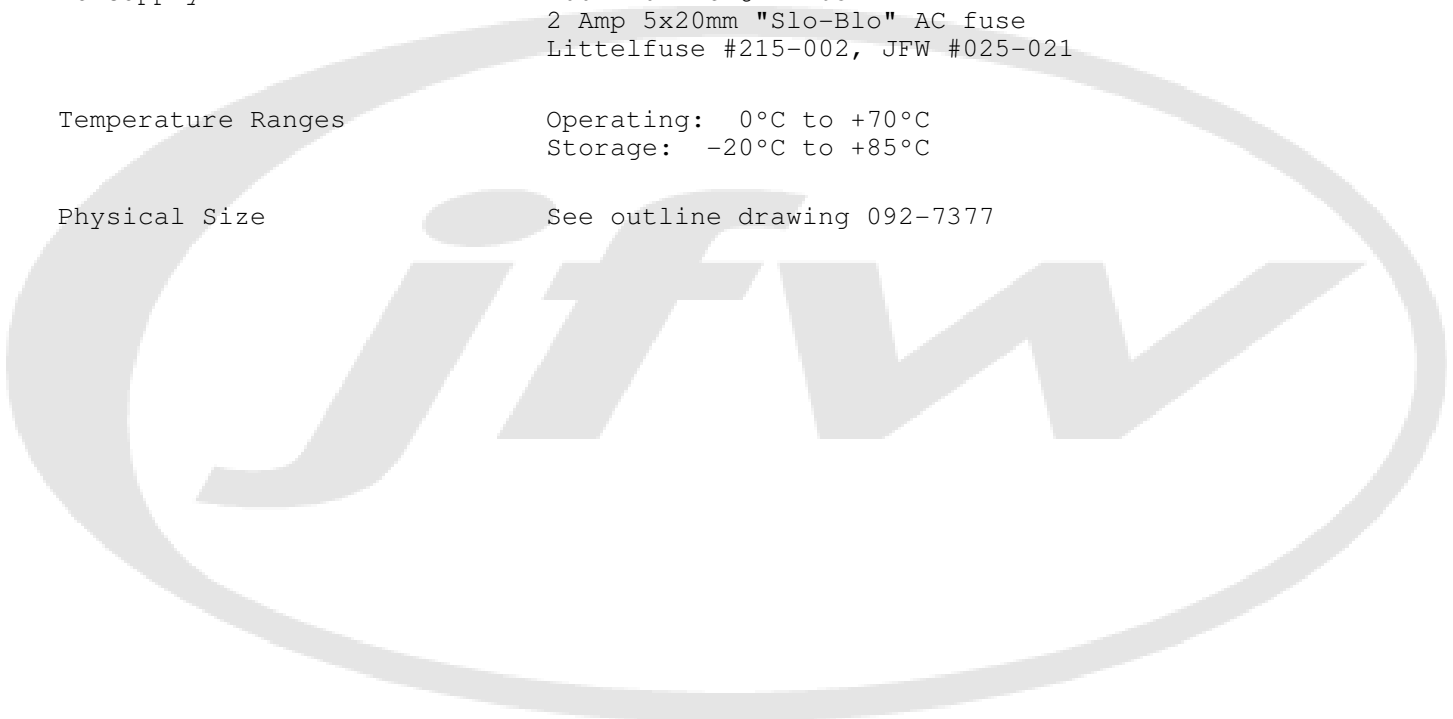
100-240 VAC @ 47-63 Hz  
2 Amp 5x20mm "Slo-Blo" AC fuse  
Littelfuse #215-002, JFW #025-021

Temperature Ranges

Operating: 0°C to +70°C  
Storage: -20°C to +85°C

Physical Size

See outline drawing 092-7377



| ECR/ECN # | DATE       | REV | APPR / DATE    | ECR/ECN # | DATE | REV | APPR / DATE |
|-----------|------------|-----|----------------|-----------|------|-----|-------------|
|           | 07/02/2012 |     | BAC 07/02/2012 |           |      |     |             |
| 24239     | 07/15/2015 | A   | TRS 07/15/2015 |           |      |     |             |