## samlexamerica<sup>®</sup>

Desktop Switching Power Supply Built-in Battery Backup Circuit

Model SEC-1223BBM 13.8 VDC 120 VAC 23 Amps

## **Design Features**

SEC-1223581

FC

US

samlexpowe

- Advanced Switch Mode Technology
- Reliable, 12V Nominal DC Uninterruptible Power Source (DC UPS) in conjunction with external 12V Lead Acid Battery backup
- High efficiency, compact and portable
- Protected against short circuit, overload, over voltage and over temperature
   Cooling by temperature controlled fan improves efficiency and prolongs life of the fan
- UL safety listed as "Information Technology Equipment Power Supply" for USA (UL Standard ANSI/UL-60950-1) and for Canada (CSA Standard CAN/CSA-C22.2 No. 60950-1)
- Complies with FCC Part 15(B), Class B for limits on conducted and radiated Electromagnetic Interference (EMI)

|                                    | MODEL NO.   | SEC-1223BBM  |
|------------------------------------|---|--|
| AC INPUT                           | INPUT VOLTAGE   | 120 VAC Nominal (+6% / -10%), 60 Hz  |
|                                    | INPUT CURRENT AT: INPUT VOLTAGE: 120 VAC;<br>OUTPUT VOLTAGE: 13.8V; OUTPUT CURRENT: 23A | 5.5A @ 120 VAC   |
|                                    | INPUT CURRENT AT NO LOAD  | 53 mA ± 10%  |
|                                    | INRUSH CURRENT AT STARTUP   | 28A ± 5% for 2.8 ms  |
| DC OUTPUT                          | OUTPUT VOLTAGE  | Load Terminals: 13.8 VDC / Battery Terminals: 13.8 VDC   |
|                                    | OUTPUT VOLTAGE NOISE AND RIPPLE   | < 150 mV Peak to Peak  |
|                                    | CONTINUOUS OUTPUT CURRENT/<br>LOAD TERMINALS / BATTERY TERMINALS                        | 23A / 19A / 4A   |
|                                    | OUTPUT CURRENT LIMIT / LOAD<br>TERMINALS / BATTERY TERMINALS                            | 25A / 21A / 4A   |
|                                    | EFFICIENCY AT FULL LOAD   | 85% ± 5%   |
| EXTERNAL BATTERY<br>(NOT INCLUDED) | VOLTAGE / CAPACITY  | 12V / 40Ah to 100Ah; Lead Acid   |
| PROTECTIONS                        | SHORT CIRCUIT, OVERLOAD   | Output voltage drops; Auto reset   |
|                                    | OVER VOLTAGE  | Regulated by PWM Controller  |
|                                    | OVER TEMPERATURE  | Output shuts down (Internal hot spot $\ge$ 100°C / 212°F);<br>Auto reset on cooling down   |
| COOLING                            | FORCED AIR  | Temperature controlled fan (ON when internal hot spot $\ge$ 70°C / 158°F)  |
| FUSES                              | INTERNAL AC SIDE FUSE   | 5 mm x 20 mm Glass Fuse / 250V, 6.3A, Time Delay Type<br>Bussmann: "GDC-6.3"; LittelFuse - "21806.3"   |
|                                    | EXTERNAL DC SIDE FUSE FOR<br>EXTERNAL BATTERY (BY USER)                                 | <ul> <li>- 32V, 25A, Fast Acting</li> <li>- In series with Positive Battery Terminal and output terminal marked<br/>"Battery +"</li> <li>- Within 7" of the Battery Positive Terminal</li> </ul> |
| COMPLIANCE                         | SAFETY  | UL safety listed as "Information Technology Equipment Power Supply"<br>for USA (UL Standard ANSI/UL-60950-1) and for Canada (CSA Standard<br>CAN/CSA-C22.2 No. 60950-1)                          |
|                                    | ELECTRO MAGNETIC INTERFERENCE (EMI )  | FCC Part 15(B), Class B  |
|                                    | AC INPUT CONNECTION   | <ul> <li>"IEC 320-C14" Inlet Connector on the unit</li> <li>Detachable Power Cord with: "IEC 320-C13" Connector on one end<br/>&amp; NEMA5-15P Plug on the other end</li> </ul>                  |
| INPUT/OUTPUT<br>CONNECTIONS        | DC OUTPUT CONNECTORS FOR LOAD<br>AND BATTERY CONNECTIONS                                | Terminal with Tubular Hole - Diameter 5mm / 0.2"<br>and set screw (#10, 24 TPI, 5/16" long)  |
|                                    | BATTERY CABLES  | Minimum AWG #10 as per NEC Table 310.15(B)(17)<br>- Ampacity 40A (1.25 times Maximum current of 25A)<br>- Conductor temperature rating of 75°C / 167°F   |
| ENVIRONMENT                        | OPERATING TEMPERATURE RANGE   | 0°C to 40°C / 32°F to 104°F  |
|                                    | DIMENSIONS (W x D x H) MM/INCH  | 185 x 240.5 x 61 / 7.28 x 9.47 x 2.40  |
| GENERAL                            |   |  |

NOTE: Specifications are subject to change without notice

**3 YEAR WARRANTY** 

12001-SEC-1223BBM-0713