# SPN100

## 100 WATT , Universal Input
## Fully Enclosed Switching Power Supply

## FEATURES

- POWER FACTOR CORRECTED
- UNIVERSAL INPUT (AC85-264V)
- OVERVOLTAGE PROTECTION
- OVERCURRENT PROTECTION
- LIGHTWEIGHT CONSTRUCTION
- METAL CHASSIS WITH COVER
- COMPACT, LOW-PROFILE PACKAGES
- 3 YEAR WARRANTY

## SAFETIES / EMI

FCC-B
EN 55022-B
VCCI-II

## ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load.

## INPUT SPECIFICATIONS

| | |
|---|---|
| Input Voltage | AC 85-264V |
| Input Frequency | 47 ~ 63 Hz |
| Input Current | 0.66 ~ 1.3A Typ |
| Inrush Current (100/230VAC cold start) | 15A ~ 25A |
| Power Factor | .99 |

## OUTPUT SPECIFICATIONS

| | |
|---|---|
| Output Voltage | See Chart |
| Output Adjustment | ± 10% |
| Efficiency | 79 ~ 87% |
| Over-Voltage Protection | 115 - 150% Manual Reset |
| Over-Current Protection | Automatic Recovery (105% min) |
| Ripple and Noise | 100 mVp-p max. |
| Hold-Up Time | 50 mS |
| Line/Load Regulation | See Chart |
| Rise Time | 800 - 1600 mS |
| Leakage Current (100/230VAC) | 0.75 mA |

## GENERAL SPECIFICATIONS

| | |
|---|---|
| MTBF | >140,000 Hours |
| Isolation Voltage | |
| Primary to Secondary | 3000VAC |
| Primary to Case | 1500VAC. |
| Secondary to Case | 500VAC. |
| Isolation Resistance | 100 M-Ohms min. |

## ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---|
| Operating Temperature | 0˚C~+60˚C Derates Linearly 2.5%/˚C After 50˚C |
| Cooling | Convection |
| Temperature Coefficient | 0.02% / ˚C |
| Humidity | 20-85% Rh (non-condensing) |
| Storage Temperature | -20˚C ~ +85˚C |
| Shock Vibration | Shock: 20G (3 directions each 3 times)<br>Vibration: 10 ~ 55Hz |

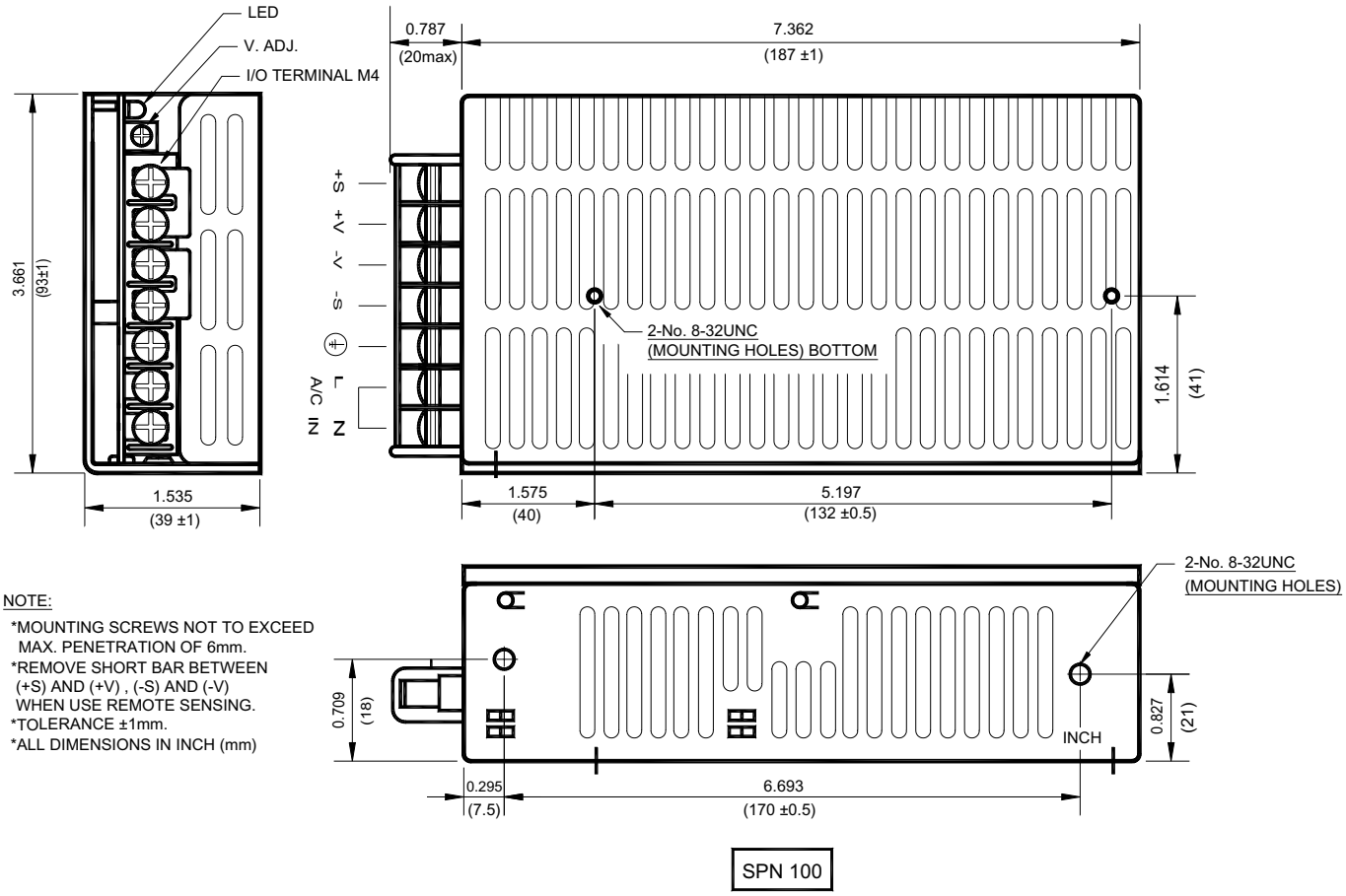
## PHYSICAL SPECIFICATIONS

Metal Enclosed - Terminal Block

# Series

| MODEL | OUTPUT VOLTAGE | CURRENT 85 ~ 264 VAC | EFFICIENCY 100VAC | EFFICIENCY 230VAC | LINE REGULATION (MV) MAX | LOAD REGULATION (mVmax) (0~100% Load) |
|---|---|---|---|---|---|---|
| **SPN100-05S** | 5 VDC | 20.0 A | 79% | 81% | 10 mVmax | 20 mVmax |
| **SPN100-12S** | 12 VDC | 8.6 A | 83% | 85% | 10 mVmax | 20 mVmax |
| **SPN100-15S** | 15 VDC | 7.0 A | 83% | 86% | 10 mVmax | 20 mVmax |
| **SPN100-24S** | 24 VDC | 4.4 A | 83% | 86% | 20 mVmax | 40 mVmax |
| **SPN100-48S** | 48 VDC | 2.2 A | 84% | 87% | 20 mVmax | 40 mVmax |

# SPN100




NOTE:

*MOUNTING SCREWS NOT TO EXCEED MAX. PENETRATION OF 6mm.
*REMOVE SHORT BAR BETWEEN (+S) AND (+V) , (-S) AND (-V) WHEN USE REMOTE SENSING.
*TOLERANCE ±1mm.
*ALL DIMENSIONS IN INCH (mm)

SPN 100

**NOTE:**
All specifications typical and nominal / full load and 25˚C unless otherwise noted.
Mounting screw lenght should not exceed 0.31 inches or 8 mm.
Avoid sustained operation in overload or dead short conditions.
Specifications subject to changes without notice.

- No. 8-32 mounting holes standard
- Dimensions in mm
- Terminal block or “pin” type connector available