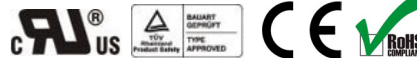




### Features:

- Universal Input 90 – 240 VAC
- Single Output
- 3 VDC to 48 VDC Output Available
- Input Surge Current Protection
- Over-Current Protection
- Over-Voltage Protection
- 100% Burn-In
- RoHS Compliant



### Input

|                               |  |
|-------------------------------|--|
| Input Voltage                 | 90 to 264 VAC                              |
| Input Frequency               | 47 to 63Hz                                 |
| Input Current                 | 0.8A Max. at 115VAC<br>0.5A Max. at 230VAC |
| Safety Ground Leakage Current | 0.75mA Max. @ 240VAC, Full Load            |

### Output

|                          |   |
|--------------------------|---|
| Output Voltage & Current | <b>See Chart</b>                                |
| Ripple & Noise (P-P)     | 1% Max., Full Load @ 90VAC Input                |
| Over-Voltage Protection  | Set at 112 - 132% of Nominal Output Voltage     |
| Over-Current Protection  | Set at 110 - 150% of Nominal Output Current     |
| Temperature Coefficient  | ± 0.04% / °C Max.                               |
| Transient Response       | Full Load to Half Load @ 100VAC Input: 4mS Max. |

### Environmental

|                       |  |
|-----------------------|--|
| Operating Temperature | 0°C to 70°C                                |
| Derating              | Derated from 100% at +40°C to 50% at +70°C |
| Storage Temperature   | -40°C to 85°C                              |
| Relative Humidity     | 5% to 95% Non-Condensing                   |

### Electrical

|                                  |  |
|----------------------------------|--|
| Efficiency                       | 88% Max.   |
| Hold-Up Time                     | 12mS Min.  |
| Line Regulation                  | ±1% Max. at Full Load  |
| Load Regulation                  | ±5% Max. at 230VAC   |
| Inrush Current                   | 15A @ 115VAC Max.<br>30A @ 230VAC Max. at 25°C Cold Start    |
| Withstanding Voltage             | 4242 VDC from Input to Output, 2121 VDC from Input to Ground |
| Insulation Resistance            | 50 MΩ Min. from Output to Ground                             |
| Mean Time Between Failure (MTBF) | 100,000 Hours Min., Full Load at 25°C Ambient                |

### Safety

|                  |  |
|------------------|--|
| EMI Requirements | Meets Conduction Limits of:<br>(A) CISPR-22 Class B<br>(B) FCC Part 15 Class B |
| Safety Standards | Meets or Exceeds:<br>(A) UR Listed<br>(B) TUV<br>(C) CB<br>(D) CE              |

### Single Output Voltage and Current Chart

| Model Number** | Output Voltage | Output Current | Total Regulation | Maximum Output Power |
|----------------|----------------|----------------|------------------|----------------------|
| SF31P1XXR      | 5 - 6 VDC      | 4.00 - 3.33 A  | 5%               | 20W                  |
| SF31P1XXR      | 6 - 8 VDC      | 3.83 - 2.87 A  | 5%               | 23W                  |
| SF31P1XXR      | 8 - 11 VDC     | 3.38 - 2.45 A  | 5%               | 27W                  |
| SF31P1XXR      | 11 - 13 VDC    | 2.73 - 2.30 A  | 5%               | 30W                  |
| SF31P1XXR      | 14 - 16 VDC    | 2.14 - 1.88 A  | 5%               | 30W                  |
| SF31P1XXR      | 17 - 21 VDC    | 1.76 - 1.43 A  | 5%               | 30W                  |
| SF31P1XXR      | 22 - 27 VDC    | 1.36 - 1.11 A  | 3%               | 30W                  |
| SF31P1XXR      | 28 - 33 VDC    | 1.07 - 0.90 A  | 3%               | 30W                  |
| SF31P1XXR      | 34 - 40 VDC    | 0.88 - 0.75 A  | 3%               | 30W                  |
| SF31P1XXR      | 41 - 48 VDC    | 0.73 - 0.62 A  | 3%               | 30W                  |

\*\* To Determine Part Number:

- Replace "XX" with Required Output Voltage (5VDC = "05", 12VDC = "12", 48VDC = "48", etc.)

Example: SF31P124R indicates a 24VDC Unit.

### Pin Connection

| Pin        | 1      | 2      | 3      | 4      |
|------------|--------|--------|--------|--------|
| Connection | Output | Output | Return | Return |

