

SIFA100 SERIES



100W Open Frame Power Supply for Industrial Equipment

- Wide Input Voltage 90 to 260 VAC, 47 to 63Hz
- Single Output
- Output voltage available from 3 to 50 VDC
- Input Surge Current and Overload protection
- Over Voltage Protection (Crowbar Design)
- Class I Insulation
- Operating temperature -20~70°C
- Active Power Factor Correction
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal
- Size: 3"x5"x1.18"

3 Year Warranty

Approvals:    

Single Output

| Product Number | Output Voltage | Output Current | Total Regulation | Maximum Output Power |
|----------------|----------------|-----------------|------------------|----------------------|
| SIFA100-S01 | 3 - 5 VDC | 18.00 - 10.80 A | 5% | 54W |
| SIFA100-S02 | 5 - 6 VDC | 14.00 - 11.66 A | 5% | 70W |
| SIFA100-S03 | 6 - 9 VDC | 13.33 - 8.88 A | 5% | 80W |
| SIFA100-S04 | 9 - 11 VDC | 11.11 - 9.09 A | 5% | 100W |
| SIFA100-S05 | 11 - 13 VDC | 9.09 - 7.69 A | 3% | 100W |
| SIFA100-S06 | 13 - 16 VDC | 7.69 - 6.25 A | 3% | 100W |
| SIFA100-S07 | 16 - 21 VDC | 6.25 - 4.76 A | 3% | 100W |
| SIFA100-S08 | 21 - 27 VDC | 4.76 - 3.70 A | 2% | 100W |
| SIFA100-S09 | 27 - 33 VDC | 3.70 - 3.03 A | 2% | 100W |
| SIFA100-S10 | 33 - 40 VDC | 3.03 - 2.50 A | 2% | 100W |
| SIFA100-S11 | 40 - 50 VDC | 2.50 - 2.00 A | 2% | 100W |

Electrical Characteristics

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|---------------------------------|--|-------|------|------|------|
| Input Voltage | Operating Voltage | 90 | | 260 | VAC |
| Input Frequency | | 47 | | 63 | Hz |
| Power Factor Correction | Io = Full load, Vin = 90-260VAC | 0.95 | 0.91 | 1.0 | |
| Output Power Range | Vin=90 to 264VAC | 0 | | 100 | W |
| Input Current (Low Line) | Io=Full load, Vin=115VAC | | | 2.0 | A |
| Input Current (High Line) | Io=Full load, Vin=230VAC | | | 1.0 | A |
| Low Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=115VAC | | 44 | 50 | A |
| High Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=230VAC | | 85 | 100 | A |
| Efficiency | Io=Full Load, Vin=230VAC | 70 | 80 | 85 | % |
| Line Regulation | Io=Full Load | | 0.5 | 1 | % |
| Load Regulation | Vin=230VAC | | 3 | 5 | % |
| Over Voltage Protection | | 112 | | 132 | % |
| Over Current Protection | | 110 | | 150 | % |
| Transient Response | Io=Full Load to Half Load, Vin=100VAC | | | 4 | mS |
| Hold-Up Time | Io=Full Load, Vin=110VAC | 16 | | | mS |
| Start Up Time | Io=Full Load, Vin=100VAC | 0.3 | 1 | 2 | S |
| * Ripple & Noise (Peak to Peak) | Full Load, Vin=90VAC | | 0.5 | 1 | % |
| Safety Ground Leakage Current | Io=Full Load, Vin=240VAC | | 0.4 | 0.75 | mA |
| Temperature Coefficient | All output | -0.04 | | 0.04 | %/°C |

* Note: The Ripple & Noise which is under 3.3VDC at 2% max

Conditions

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|---|-----------------|------|------|------|------|
| Operating Temperature | | -20 | 50 | 70 | °C |
| Storage Temperature | | -40 | | 85 | °C |
| Relative Humidity | | 5 | | 95 | % |
| Operating Temperature at 25°C, Calculated per MIL-HDBK-217F | | 0.1M | | | Hrs |
| De-rate linearly from 100% load at 50°C to 50% load at 70°C | | | | | |

Approvals and Compliance

| Parameter | Test Conditions | Min. | Unit |
|--|----------------------|------|-------|
| Dielectric Withstanding Voltage for Primary to secondary | Primary to secondary | 4242 | VDC |
| Dielectric Withstanding Voltage for Primary to Ground | Primary to ground | 2121 | VDC |
| Isolation Resistance | Test Voltage=500VDC | 50 | MΩ |
| EMI requirements for CISPR-22 | Vin=220VAC | B | CLASS |
| EMI requirements for FCC PART-15 | Vin=110VAC | B | CLASS |

Mechanical

PIN CHART

| MODEL | PIN | | | | | | | | | | | | |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| SIFA100-SXX-13pin | OUT | OUT | OUT | OUT | OUT | OUT | RTN | RTN | RTN | RTN | RTN | RTN | N/C |

Note:

1. Dimensions are shown in inches or mm.
2. Weight: 345gs approx.
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal

