

SFL Series, 75–600 Watt

The SFL series is a DIN Rail switching power supply series that complements the Sola SDN™ products with more input voltage, output voltage and power levels to give an even broader range of industrial DC power solutions. These products are available in 12, 24 and 48 VDC output and 115/230 VAC Input. They feature pluggable screw connectors* (mating connectors are included in each box sold) for easy installation and service. The products feature a DIN Rail connection, front panel DC OK indicators, and easily accessible AC and DC connections.

For parallel operation with power sharing, a redundant version is available for the 300 W (24 V/12 A) and 600 W (24 V/24 A) models.



Features

- DIN Rail Mount regulated switch mode power supplies
- 12 V, 24 V, and 48 V outputs available from 1.5-24 A
- Easy-to-wire pluggable* and screw terminal connectors
- Output voltage adjustable
- Selectable input: 115/230 VAC
- UL1604 Listed for Class 1, Division 2 hazardous locations (except -RED versions)
- UL 508 Listed (except -RED versions). No derating necessary.
- Two year warranty

* Except 600 watt models.



- Fully Integrated Redundant models available:
 - **RED (For SFL24-24-100 and SFL12-24-100 only)**
Designed for N + 1 redundant power supply systems, these units provide active current sharing and allow up to 5 power supplies to be paralleled. Decoupling diodes and an alarm output to signal a unit failure are included in this option. Multiple units are required for redundancy.
- Models with optional battery back-up available:
 - **UDS (For SFL24-24-100 and SFL12-24-100 only)**
Contact Technical Services for details.

Selection Table

Catalog Number	Input Voltage Selectable	Output Power Maximum	Output Voltage Nominal	Output Current Maximum
SFL6-12-100 SFL1.5-48-100	115/230 VAC	75 Watt	12 VDC 48 VDC	6 A 1.5 A
SFL3-48-100	115/230 VAC	150 Watt	48 VDC	3 A
SFL12-24-100 SFL6-48-100	115/230 VAC	300 Watt	24 VDC 48 VDC	12 A 6 A
SFL24-24-100 SFL12-48-100	115/230 VAC	600 Watt	24 VDC 48 VDC	24 A 12 A
Redundant Models				
SFL12-24-100RED SFL24-24-100RED	115/230 VAC	300 Watt 600 Watt	24 VDC	12 A 24 A

SFL Specifications

Parameter	Value	
Input		
Input voltages nominal (user selectable)	93-132 VAC / 187-264 VAC	
f_{in} : Input Frequency	47-63 Hz	
Input current at full load (typical)	115 VAC	230 VAC
- 75 W (12 V/6 A, 24 V/3 A, 48 V/1.5 A)	1.7A	0.9 A
- 150 W (24 V/6 A, 48 V/3 A)	3.0A	1.7 A
- 300 W (24 V/12 A, 48 V/6 A)	5.4A	3.3 A
- 600 W (24 V/24 A, 48 V/12 A)	10.5A	6.4 A
Inrush current (max.)	115 VAC	230 VAC
- 75 W	16.5 A	33.0 A
- 150 W	35.0 A	70.0 A
- 300 W	35.0 A	70.0 A
- 600 W	70.0 A	80.0 A
Internal fuse (slow blow) not accessible		
- 75 W / 150 W	4.0 A	
- 300 W	6.3 A	
- 600 W	12.0 A	
Output		
Voltage Adjustment Range		
- 12 V models	12 – 14 VDC	
- 24 V models	24 – 28 VDC	
- 48 V models	48 – 52 VDC	
Output Regulation		
- Line voltage variation	±0.2% max.	
- Load variation 10–90%		
75W, 150W models	±1.0% max.	
300W, 600W models	±0.5% max.	
Ripple and noise (20 MHz bandwidth)	< 50 mVpp	
Electronic short circuit protection / current limitation	110 % typ. (constant current)	
Parallel Operation		
- SFL12-24-100RED	Up to 5 units	
- SFL24-24-100RED		
I_{MAX} : Overvoltage Protection, trigger point at	140% typical out nominal	
t_h : Holdup Time	min. 20 mS	

Parameter	Value	
General		
T_A : Operating Temperature Range Derating above 50°C	-25°C...+70°C 2%/°C	
T_s : Storage Temperature	-25°C...+85°C	
Humidity (non condensing)	95% rel H max.	
Switching Frequency		
- 75 W	100 kHz typical	
- 150 W/300 W/600 W	67 kHz typical	
Efficiency	>85%	
Operation Indication	LED, DC OK	
Isolation Voltage		
- Input/output	3,000 VAC (1 minute)	
- Input/case	2,000 VAC (1 minute)	
- Output/case	500 VAC (1 minute)	
Safety Class (IEC536)	Class 1	
Safety Standards Met	IEC950, EN60950, CE marked for LVD, UL60950 recognized and UL 508.	
Conducted EMI according to:	EN55022 Class B, EN55011 Class B, FCC-B	
Electromagnetic Susceptibility		
- Electrostatic discharge ESD.	EN61000-4-2	4 kV/8 kV
- RF field susceptibility.	EN61000-4-3	10 V/m
- Electrical fast transients/ bursts on mainsline.	EN61000-4-4	2 kV
- Immunity to conducted radio frequency disturbances above 9 kHz.	EN61000-4-6	10 V
- Mains frequency field	EN61000-4-8	30 A/m
Case protection according to IEC529	IP20	
Case material	Steel	
Mounting	Snap-on 35 mm DIN Rail as per EN50022 or Chassis mounting option available	

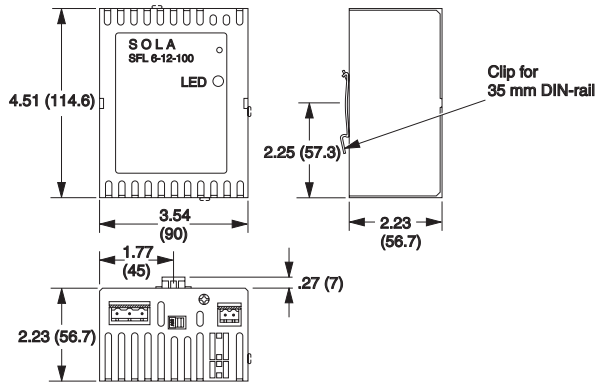
Mounting Brackets

For easy conversion to panel or chassis mounting.

Catalog Number	Output Power Maximum
SFL75-PMBRK	75 Watt
SFL150-PMBRK	150 Watt
SFL300-PMBRK	300 Watt
SFL600-PMBRK	600 Watt

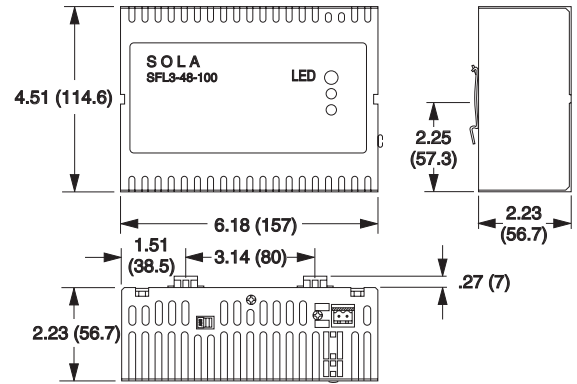
SFL Series Dimensions (inches/mm)

SFL 75 Watt (12 V/6 A, 48 V/1.5 A)



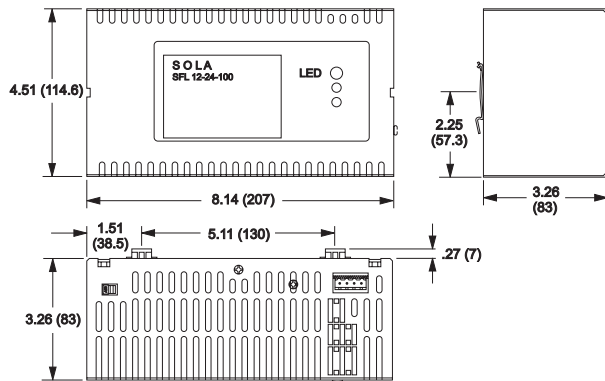
Weight: 1.06 lbs/480 g approx.

SFL 150 Watt (SFL 3-48-100)



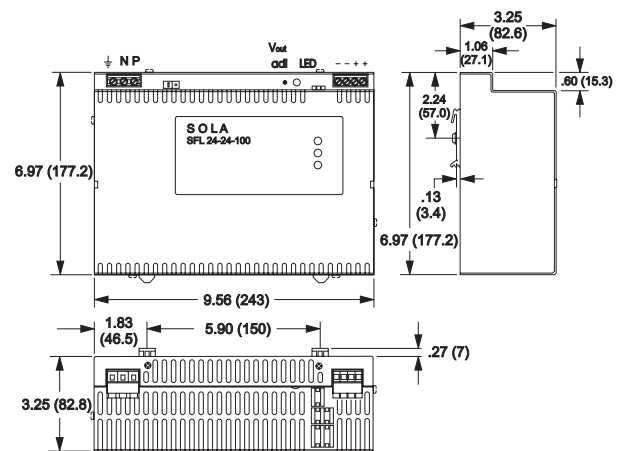
Weight: 1.6 lbs/800 g approx.

SFL 300 Watt (SFL12-24-100 [RED], SFL6-48-100)



Weight: 3.09 lbs/1400 g approx.

SFL 600 Watt (SFL 12-48-100, SFL 24-24-100[RED])



Weight: 4 lbs/2000 g approx.