

## SL &amp; SLM Series



- Industrial (SL) & Medical (SLM) Versions
- Output Voltages from 12 V to 96 V
- Power Factor Corrected
- Remote On/Off
- Current Share
- Power Fail Signal
- Overtemperature Protection

## Specification

## Input

Input Voltage	• 90-264 VAC (125-360 VDC)
Input Frequency	• 44-66 Hz
Input Current	• 300 W models: 4.4 A at 90 VAC 1.8 A at 230 VAC 600 W models: 8.9 A at 90 VAC 3.5 A at 230 VAC
Inrush Current	• 100 A at 230 VAC
Power Factor	• 0.9 typical
Earth Leakage Current	• SL models: <2.5 mA at 264 VAC/50 Hz SLM models: <100 $\mu$ A at 264 VAC/50 Hz
Input Protection	• 10 A HRC fuse

## Output

Output Voltage	• See table
Output Voltage Trim	• See table
Initial Set Accuracy	• $\pm 1\%$ max
Minimum Load	• No minimum load required
Start Up Delay	• 600 ms max
Start Up Rise Time	• 150 ms max
Hold Up Time	• 18 ms min
Line Regulation	• <0.5% V min to V max
Load Regulation	• <2.0% for a 0-100% load change
Transient Response	• 2% max deviation, recovery to within 0.25% in 1 ms for a 10% load change
Ripple & Noise	• 1% pk-pk max, 20 MHz BW
Overvoltage Protection	• 120% approx Vnom
Overtemperature Protection	• Fitted to 600 W models only, recycle mains to reset
Overload Protection	• 110% typical, constant current
Short Circuit Protection	• Constant current
Temperature Coefficient	• 0.02%/°C
Remote On/Off	• Output inhibited by shorting ROF pin to 0 V
Current Share	• Allows up to 5 units to share within 5%

## General

Efficiency	• 85% typical
Isolation	• 6000 VDC Input to Output (Y caps disconnected) 2200 VDC Input to Ground 2200 VDC Output to Chassis
Switching Frequency	• 30-35 kHz PFC, 45-55 kHz PWM
Signals	• AC OK - TTL compatible signal is high with reference to 0 V when AC is OK
MTBF	• 105 kHrs typical per MIL-HDBK-217E at +20 °C. Consult office for each model

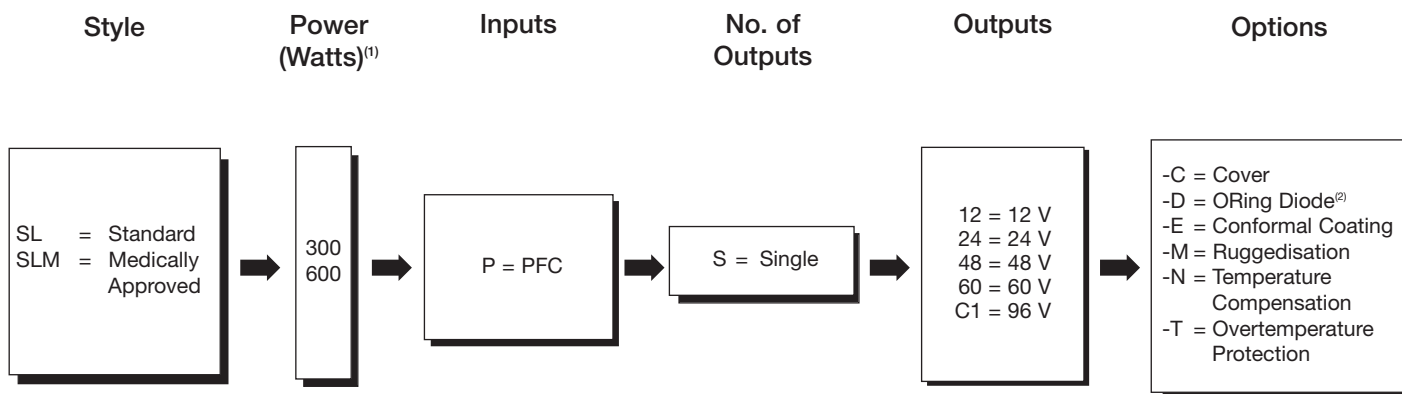
## Environmental

Operating Temperature	• -20 °C to +70 °C, derate from +40 °C to 50% power at +70 °C
Operating Humidity	• Up to 90% RH, non-condensing
Storage Temperature	• -25 °C to +85 °C
Operating Altitude	• 3000 m
Shock	• Non operating. 100 mm drop on to chassis face
Vibration	• Operating 5-50 Hz 0.05 mm pk-pk, 50-100 Hz 0.025 mm pk-pk
Airflow Direction	• Where fitted, fans blow air into the unit

## EMC &amp; Safety

Emissions	• EN55022, level B conducted EN55022, level A radiated
Harmonic Currents	• EN61000-3-2, class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, level 3 Perf Criteria A
Radiated Immunity	• EN61000-4-3, level 3 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 3 Perf Criteria A
Surge	• EN61000-4-5, level 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, level 3 Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms Perf Criteria A, B, B
Safety Approvals	• SL: UL60950, CSA22.2 No.60950 SLM: UL2601-1, CSA C22.2 No.60601-1

## Model Numbering

SL & SLM Series **XP**

## EXAMPLE:

SL 300 P S 24 - C

SL = Standard  
300 = PowerC = Safety Cover Fitted  
24 = Output 24 VDC  
S = Single Output  
P = PFC Input

## Notes

1. 300 W models are convection-cooled. 600 W models are fan-cooled.
2. Not available on 12 V output.

## Models and Ratings

Nominal Output Voltage <sup>(2,3)</sup>	Output Voltage Trim	OVP Setting Typical <sup>(1)</sup>	Output Current		Code
			300 W	600 W	
12 V	11-14 V	15.3 V	25.0 A	50.0 A	12
24 V	22-29 V	30.7 V	12.0 A	25.0 A	24
36 V	33-42 V	45.9 V	8.0 A	16.5 A	36
48 V	44-57 V	61.2 V	6.0 A	12.5 A	48
60 V	55-70 V	76.5 V	5.0 A	10.0 A	60
96 V	88-114 V	127.5 V	3.0 A	6.0 A	C1

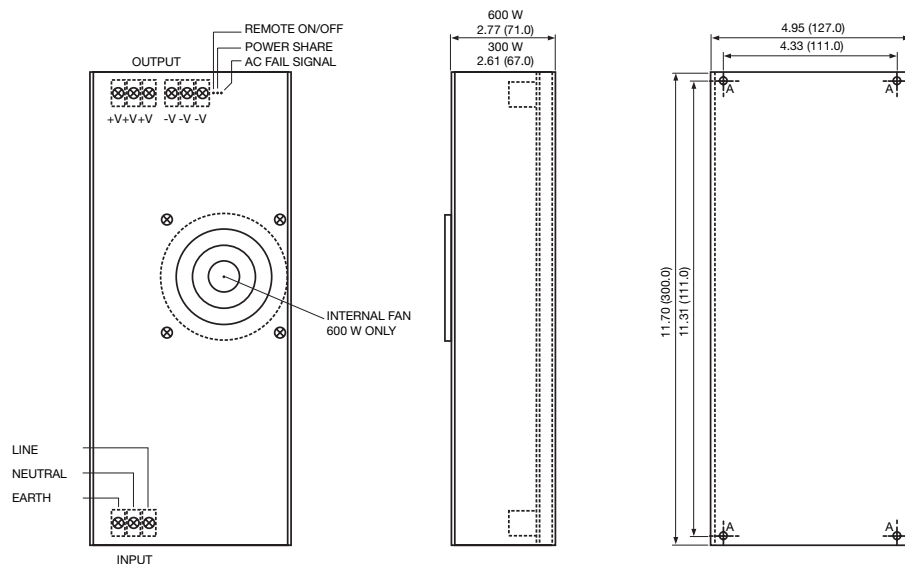
## Notes

1. Overvoltage protection is by the inverter shutdown method and can only be reset by disconnecting the input voltage.
2. Output characteristic constant voltage - constant current type, ideal for non-linear loads.
3. Other output voltages available, consult sales for details.

## Mechanical Details

All dimensions are in inches (mm)

Weight: 300 W models - 3.75 lbs (1.7 kg)  
600 W models - 4.19 lbs (1.9 kg)



## Input connectors:

0.37" (9.5mm) pitch M4 barrier block.

## Signals:

3 X 0.04" (3 X 1.0mm) pins 1.0" (25.4mm) pitch (ROF, power share and AC fail).

## Fixings (ref 'A'):

M3 ISO Metric (Screws must not penetrate unit by more than 0.20" (5.0mm)).