SSL20 Series



Single, Dual and Triple Output

EXTERNAL AC/DC POWER SUPPLIES

15-20 W External AC/DC Power Supplies

1

- 4.21 x 2.24 x 0.98 inch enclosure
- 15-20 W external power supply
- Molded UL94V-0 plastic enclosure
- Stand alone 'listed' equipment
- Overvoltage and short circuit protection
- EN55022, EN55011, FCC conducted and radiated emissions level B
- UL, CSA and VDE safety approvals
- Available RoHS compliant

The SSL20 series is a 15-20 W universal input ac-dc external Class II power supply in a $4.21 \times 2.24 \times 0.98$ inch plastic enclosure. The SSL20 is a low cost series with five single output and two multiple output models in a very small package providing a preapproved external power solution for a host of worldwide low power portable and desktop applications. The SSL20 provides up to 20 W of output power with free air convection cooling. Standard features include universal input, overvoltage, short circuit protection and EN55022 conducted emissions level B. The series, with full international safety approval and the CE mark, provides pre-approved SELV outputs without the need for further safety approval or mechanical integration into the application system. The SSL20 series is designed for use in low power, portable and desktop data networking, computer and industrial applications requiring low cost external power adapters in a small package.



(E (LVD & EMC)

2 YEAR WARRANTY

All specifications are typical at nominal input, full load at 25 °C unless otherwise stated

SPECIFICATIONS

OUTPUT SPECIFICATIONS

Total regulation (Line and load)	Main output Auxiliary outputs	±2.0% ±5.0%
Overshoot/undershoot	At turn on	2.0%
Transient response	Main output 50% to 100% full load step	±5.0% max. dev., 1ms recovery to 1.0%
Temperature coefficient		±0.02%/°C, max.
Overvoltage protection	Main output	See table
Short circuit protection		Continuous with auto-restart
Minimum output current		See table

INPUT SPECIFICATIONS

Input voltage range	Universal input	90-264 Vdc
Input frequency range		47-440 Hz
Input current	90 Vac 230 Vac	0.6 Arms max. 0.3 Arms max.

EMC CHARACTERISTICS

Radiated emissions	EN55022/11, FCC part 15	Level B
Conducted emissions	EN55022/11, FCC part 15	Level B

GENERAL SPECIFICATIONS

Hold-up time	110 Vac @ full load	8 ms
Efficiency	110 Vac @ full load	70% typ.
Isolation voltage	Input/output	3000 Vac
Switching frequency	Fixed	60 kHz, ±10 kHz
Approvals and standards		50, IEC950, UL1950 CSA C22.2 No. 950
Case Material	General I	Electric Lexan, black
Flammability rating		UL94V-0
Weight		120 g (4.5 oz)
MTBF	MIL-HDBK-217F	150,000 hours min.

ENVIRONMENTAL SPECIFICATIONS

Thermal performance	Operating, full load Non-operating	0 °C to +40 °C -40 °C to +85 °C
	0°C to +40°C ambier	nt, Full load
	Peak	(See Note 1)
Relative humidity	Non-condensing	5% to 95% RH
Altitude	Operating Non-operating	10,000 feet max. 30,000 feet max.
Vibration (See Note 6)	5-500Hz	2.4 G rms
Shock	per MIL-STD-810E	516.4 Part IV

International Safety Standard Approvals



VDE0805/EN60950/IEC950 File No. 104722



US UL1950 File No. E136005



CSA C22.2 No. 950 File No. LR41062



Certification pending

SSL20 Series



Single, Dual and Triple Output

EXTERNAL AC/DC POWER SUPPLIES

15-20 W External AC/DC Power Supplies

2

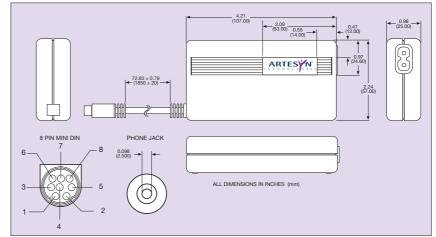
For the most current data and application support visit www.artesyn.com/powergroup/products.htm

OUTPUT	OUTPUT CURRENTS		S RIPPLE (2)		OVP	TOTAL	MODEL
VOLTAGE	MIN	MAX ⁽⁷⁾	PEAK (1)	- RIPPLE (2)	THRESHOLD (5)	REGULATION (3)	NUMBER (7,8,9)
+5 V (V _A)	0 A	4.0 A	4.5 A	50 mV	5.6-6.9 V	±2.0%	SSL20-7605J
+12 V (V _A)	0 A	1.67 A	1.9 A	120 mV	14-16.7 V	±2.0%	SSL20-7612J
+15 V (V _A)	0 A	1.33 A	1.5 A	150 mV	17.5-21 V	±2.0%	SSL20-7615J
+24 V (V _A)	0 A	0.83 A	1.0 A	150 mV	29-34.2 V	±2.0%	SSL20-7624J
+48 V (V _A)	0 A	0.42 A	0.5 A	150 mV	55-64 V	±2.0%	SSL20-7617J
+5 V (V _A)	0.2 A	1.2 A	1.5 A	50 mV	5.6-6.9 V	±2.0%	SSL20-7629J
+12 V (V _B)	0.1 A	0.8 A	1.2 A	120 mV		±5.0%	
+5 V (V _A)	0.2 A	1.0 A	1.5 A	50 mV	5.6-6.9 V	±2.0%	SSL20-7607J
+12 V (V _B)	0.1 A	0.8 A	1.2 A	120 mV		±5.0%	
-5 V (V _C)	0 A	0.1 A	1.0 A	50 mV		±5.0%	

Notes

- 1 Peak output current lasting less than 60 seconds with duty cycle less than 5.0%. During peak loading, output voltage may exceed total regulation limits.
- 2 20 MHz bandwidth, peak to peak, measured using a 12 inch twisted pair, terminated with 47 μF electrolytic capacitor.
- 3 Total regulation is defined as the static output regulation at 25 °C, including initial tolerance, line voltage within stated limits, load currents within stated limits, and output voltages adjusted to their factory settings.
- To help maintain the power supply safety approvals, the IEC320/C7 input connector cable must be rated minimum 3.0 A and approved by an applicable safety agency for the intended country of use. National and international variations on mains plugs, adapters and customer preference to lead length prevents Artesyn from supplying an IEC320/C7 (or compatible) input connector cable. The IEC320/C7 input (or compatible) connector cable can be sourced locally, e.g. Newark, Qual Electronics, Radio Shack, etc. or other non affiliated distributors.
- 5 Main output voltage protected by Zener diode.
- 6 Three orthogonal axes random vibration, 10 minute test for each axis.
- 7 Maximum output power of 20 Watts for single output models and 15 Watts for multiple output models.
- B The 'J' suffix indicates that these parts are Pb-free (RoHS 6/6) compliant. TSE RoHS 5/6 (non Pb-free) compliant versions may be available on special request, please contact your local sales representative for details
- 9 NOTICE: Some models do not support all options. Please contact your local Artesyn representative or use the on-line model number search tool at http://www.artesyn.com/powergroup/products.htm to find a suitable alternative.

MULTIPLE OUTPUT PIN CONNECTIONS MINI DIN PLUG				
OUTPUT PIN NO.	DUAL OUTPUT	TRIPLE OUTPUT	MATING CONNECTOR	
1	V _A	V _A		
2	V _A	V _A	AMP Shielded	
3	V _A	V _A	Miniature circular	
4	V _B	V _B	DIN Plug 8 Pin P/N	
5	Return	Vc	749179-1 or equiv.	
6	Return	Return		
7	Return	Return		
8	Return	Return		
SINGLE OUTPUT PIN CONNECTIONS 2.5 MM JACK PLUG				
Inner	V _A		SWITCHCRAFT Power	
Outer	Return		Jack, P/N 712A or equiv.	



Datasheet © Artesyn Technologies® 2005

The information and specifications contained in this datasheet are believed to be correct at time of publication. However, Artesyn Technologies accepts no responsibility for consequences arising from printing errors or inaccuracies. The information and specifications contained or described herein are subject to change in any manner at any time without notice. No rights under any patent accompany the sale of any such product(s) or information contained herein.

www.artesyn.com