Single, Dual and Triple Output



EXTERNAL AC/DC POWER SUPPLIES 15-20 W External AC/DC Power Supplies

- 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 x 2.24 x 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 pre-approved 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.

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

OUTPUT SPECIFICATIONS

| OUTPUT SPECIFICATIO | NS | |
|---|--|---|
| Total regulation (Line and load) | Main output Auxiliary output | ±2.0% s ±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 | S | |
| 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 CHARACTERISTI | cs | |
| Radiated emissions Conducted emissions | EN55022/11, F0 EN55022/11, F0 | |

| GENERAL SPECIFICA | TIONS | | | |
|------------------------------|---|--|--|--|
| Hold-up time | 110 Vac @ full load 8 | | | |
| 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 E | 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 ambie | 0 °C to +40 °C -40 °C to +85 °C ent, Full load | | |

| | 0°C to +40°C ambier convection cooled | 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

UL1950 File No. E136005

CSA C22.2 No. 950 File No. LR41062

Certification pending

(SF

(LVD & EMC)

2 YEAR WARRANTY

SPECIFICATIONS

Single, Dual and Triple Output



2

EXTERNAL AC/DC POWER SUPPLIES 15-20

15-20 W External AC/DC Power Supplies

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

| OUTPUT | OUTPUT CURRENTS | | S BIPPLE ⁽²⁾ | | OVP | TOTAL | MODEL |
|-------------------------|-----------------|--------------------|-------------------------|--------|--------------------------|---------------------------|----------------|
| VOLTAGE | MIN | MAX ⁽⁷⁾ | PEAK ⁽¹⁾ | | 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.
- 4 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. 8 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.

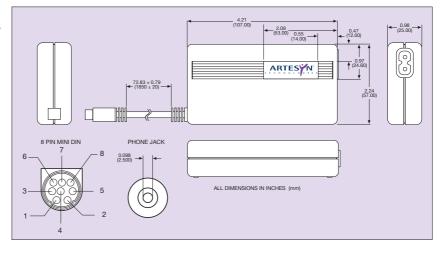
MULTIPLE OUTPUT PIN CONNECTIONS MINI DIN PLUG

| OUTPUT PIN NO. | DUAL OUTPUT | TRIPLE OUTPUT |
|-------------------|----------------|------------------|
| 1 | V _A | V _A |
| 2 | VA | V _A |
| 3 | VA | V _A |
| 4 | VB | VB |
| 5 | Return | Vc |
| 6 | Return | Return |
| 7 | Return | Return |
| 8 | Return | Return |

AMP Shielded Miniature circular DIN Plug 8 Pin P/N 749179-1 or equiv.

MATING CONNECTOR

| 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.