

SSL20C Series

Single Output External Power Supply

- 4.65 x 2.40 x 1.08 inch enclosure
- 20 W continuous external power supply
- Molded UL94V-0 plastic enclosure
- Overvoltage and short circuit protection
- EN55022, FCC conducted and radiated emissions level B
- UL, CSA, VDE and CE safety approvals
- Available RoHS compliant



The SSL20C series is a 20 W universal input ac/dc external Class II power supply in a 4.65 x 2.40 x 1.08 inch plastic enclosure. The SSL20C represents the next generation of low cost external power supplies, suitable for a host of worldwide low power external power applications. The SSL20C provides up to 20 W under natural convection cooling. Standard features include universal ac input, overvoltage and short circuit protection and meets EN55022 level B for conducted emissions. The SSL20C has several output voltages available ranging from 5 V to 48 V. The series has full international safety approvals and carries the CE mark to provide pre-approved SELV outputs.

CE (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 (See Note 3)	Main output Line, load and temperature co-efficient	±5.0%
Overshoot/undershoot	Less than 10ms	10%
Transient response	Main output 70% to 100% full load step	±5.0% of nominal voltage
Overvoltage protection (See Note 5)	Auto-recovery	140% nominal
Short circuit protection		Continuous with auto-recovery
Minimum output current		0 A

INPUT SPECIFICATIONS

Input voltage range	Universal input	90-264 Vac
Input frequency range		47-63 Hz
Input current	90 Vac 264 Vac	0.6 Arms max. 0.3 Arms max.

EMC CHARACTERISTICS

Radiated emissions	EN55022, FCC	Level B
Conducted emissions	EN55022, FCC	Level B

GENERAL SPECIFICATIONS

Hold-up time	115 Vac @ full load	10 ms
Efficiency	115 Vac @ full load 5 V models only	70% typ. 65% typ.
Isolation voltage	Input/output	3000 Vac
Switching frequency	Fixed	72 kHz, Typ.
Approvals and standards (See Note 4)		EN60950, IEC950, UL1950 CSA C22.2 No. 950
Case material		General Electric Lexan, black
Flammability rating		UL94V-0
Weight		200 g (7 oz)
MTBF	MIL-HDBK-217F @ 25 °C	>150,000 hours

ENVIRONMENTAL SPECIFICATIONS

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

International Safety Standard Approvals

	VDE0805/EN60950/IEC950 File No. 129739G
	UL1950 File No. E136005
	CSA C22.2 No. 950 File No. LR41062

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

OUTPUT VOLTAGE	OUTPUT CURRENTS			RIPPLE ⁽²⁾	TOTAL REGULATION ⁽³⁾	OVP (MAX)	MODEL NUMBER ^(6,7)
	MIN	MAX	PEAK ⁽¹⁾				
+5 V	0 A	4.0 A	4.80 A	50 mV	4.75-5.25 V	7 V	SSL20C-7605J
+12 V	0 A	1.67 A	2.00 A	120 mV	11.4-12.6 V	16.8 V	SSL20C-7612J
+15 V	0 A	1.34 A	1.60 A	150 mV	14.25-15.75 V	21 V	SSL20C-7615J
+18 V	0 A	1.11 A	1.33 A	180 mV	17.1-18.9 V	25.2 V	SSL20C-7618J
+24 V	0 A	0.83 A	1.00 A	240 mV	22.8-25.2 V	33.6 V	SSL20C-7624J
+48 V	0 A	0.42 A	0.50 A	300 mV	45.6-50.4 V	64 V	SSL20C-7617J

Notes

- 1 Peak output current lasting less than 3 seconds and non repetitive. During peak loading output voltage may exceed total regulation limits.
- 2 20 MHz bandwidth, peak to peak, measured using 0.1 μ F ceramic capacitor in parallel with a 10 μ F tantalum capacitor at the point of output load.
- 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 This feature protects output circuitry from output overvoltage caused by internal PSU failure.
- 6 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.
- 7 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.

SINGLE OUTPUT PIN CONNECTIONS 2.5 MM JACK PLUG

Inner	V _A		SWITCHCRAFT Power
Outer	Return		Jack, P/N 712A or equiv.

INPUT CONNECTOR

IEC 320	two pins	C8 type	Rated at 2.5 A, 250 Vac
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