ARTESYN TECHNOLOGIES

SCL25 SERIES

Single and dual output

[2 YEAR WARRANTY]

CE (LVD / RoHS)

- **6.32 x 3.35 x 1.5 inch enclosure**
- **25W external power supply**
- **Molded UL94V-0 plastic enclosure**
- **Output connector options**
- **Stand alone 'listed' equipment**
- **Short circuit protection**
- **EN55022, EN55011 conducted emissions level B**
- **UL, CSA and VDE safety approvals**
- **Available RoHS compliant**

The SCL25 series is a 25W universal input AC/DC external power supply in a 6.32 x 3.35 x 1.5 inch plastic enclosure. The SCL25 series has a single output and dual output model in a low profile package providing a pre-approved external power solution for a host of worldwide low power portable and desktop applications. The SCL25 provides 25W of output power with free air convection cooling which can peak at 30W for 60 seconds. Standard features include universal input, 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 SCL25 series is designed for use in low power, and desktop data networking, computer and industrial applications requiring external power adapters in a low profile package.

SPECIFICATION

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

OUTPUT SPECIFICATIONS		
Line regulation LL to HL, FL	Single outputs Multi's: +5V output Multi's: aux. outputs	±0.5% ±0.5% ±1.0%
Total regulation No load to full load (See Note 5)	Single outputs Multi's: +5V output Multi's: aux. outputs	±4.0% +6.0%/-4.0% +7%/-5%
Overshoot/Undershoot	At turn on	10%
Transient response	+5V output (40% FL to 60% full load step)	±250mV max. dev., 1ms recovery to 1.0%
Temperature coefficient		±0.02%/°C, max.
Overvoltage protection	+5V Output (See Note 8)	6.25V ±0.65V
Output power limit	Primary power limited	80W Pin max. 40W Pout min.
Short circuit protection		Continuous with auto-restart
Green LED indicator	(See Note 6)	Normally ON
INPUT SPECIFICATIONS		
Input voltage range	Universal input	90 to 264VAC
Input frequency range		47Hz to 63Hz
Input surge current		36A max.
Safety ground leakage current	110VAC, 60Hz 230VAC, 50Hz	0.2mA 0.4mA
EMC CHARACTERISTICS		
Radiated noise	EN55022, EN55011, FCC P15	Level B
Conducted noise	EN55022, EN55011, FCC P15	Level B
Electrostatic discharge	EN61000-4-2	Level 4
Electrostat. air discharge	IEC801-2	Level 3
RF field susceptibility	IEC801-3	Level 2
Electrical fast transients/bursts	EN61000-4-4	Level 3
Surge susceptibility	EN61000-4-5	Level 3

GENERAL SPECIFICATIONS		
Hold-up time	110VAC 230VAC	10ms 60ms
Efficiency	110VAC and 230VAC	70% typical
Isolation voltage	Input/output Input/chassis	3000VAC 1500VAC
Switching frequency	Variable	35kHz to 80kHz
Approvals and standards		VDE0805, EN60950 IEC950, UL1950, BABT CSA C22.2 No. 950
Case Material		General Electric Lexan, Black
Flammability rated		UL94V-0
Weight		450g (15.9oz)
MTBF	MIL-HDBK-217F	150,000 hours
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance	Operating, full load, no derating	0°C to +40°C
	Non-operating	–40°C to +85°C
	0°C to +40°C ambient, convection cooled	25W
	Peak (0°C to +40°C, max. 60s) (See Note 3)	30W
Relative humidity	Non-condensing	5% to 95% RH
Altitude	Operating Non-operating	10,000 feet max. 30,000 feet max.
Vibration (5Hz to 500Hz)	Three orthogonal axes random vibration, 10 minute test for each axis	2.4G rms

25 Watt AC/DC external power supplies

OUTPUT VOLTAGE	OUTPUT CURRENTS			RIPPLE [4]	TOTAL REGULATION [5]	MODEL NUMBER [9]
	MIN [1]	MAX [2]	PEAK [3]			
+5V (1)	0A	2.5A	4.0A	50mV	+6.0%, –4.0%	SCL25-7618J
+12V (2)	0A	1.0A	2.0A	120mV	+7.0%, –5.0%	
+24V (1)	0A	1.0A	1.3A	240mV	±4.0%	SCL25-7624J

Notes

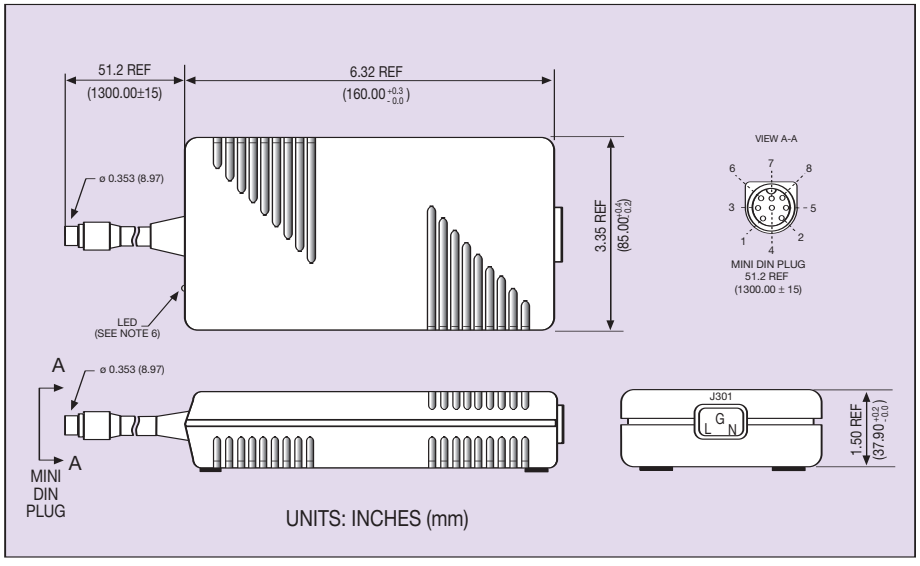
1 Although the SCL25 models will operate with no load on the outputs, some components temperatures increase under this condition. To maximize reliability, a minimum total load of 4W is required.
2 Natural convection cooling, 25W maximum.
3 Peak output current lasting less than 60 seconds with duty cycle less than 5%. During peak loading, output voltage may exceed total regulation limits.
4 50MHz bandwidth, peak to peak, measured differentially.
5 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.
For the dual output model to maintain stated regulation:

$$0.25 \le I(1) \le 5, \text{ for } \frac{I(1)}{I(2)} > 0.3A$$

$$0.50 \le I(1) \le 5, \text{ for } \frac{I(1)}{I(2)} < 0.3A$$

6 The green LED is ON to indicate the presence of output (1). The LED turns off during output short circuit condition.
7 To help maintain the power supply safety approvals, the IEC320/C13 input connector cable must be rated minimum 3.0A 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/C13 (or compatible) input connector cable. The IEC320/C13 input (or compatible) connector cable can be sourced locally, e.g. Qual Electronics, Radio Shack, etc. or other non affiliated distributors.
8 Overvoltage protection is standard on the -7624J model and 5V output (single and multiple output) models.
9 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.

PIN CONNECTIONS MINI DIN PLUG			
OUTPUT PIN NO.	SINGLE OUTPUT	DUAL OUTPUT	MATING CONNECTOR
1	V_A	V_A	AMP Shielded Miniature circular DIN Plug 8 Pin P/N 749179-1 or equivalent
2	V_A	V_A	
3	V_A	V_A	
4	V_A	V_B	
5	Return	Return	
6	Return	Return	
7	Return	Return	
8	Return	Return	



International Safety Standard Approvals

VDE0805/EN60950/IEC950 File No. 10401-3336-1083
Licence No. 1083

UL1950 File No. E136005

CSA C22.2 No. 950 File No. LR41062

Certification pending