

CL25 SERIES

Single, dual and triple outputs

For new design -ins refer to the SCL25 series instead



- 90VAC to 264VAC Universal Input
- Short Circuit Protected
- VDE, UL, CSA and BABT Approved
- VDE0871 Level B Conducted Noise
- 25W Continuous, 35W Peak Output Power
- Stand alone "listed" equipment

The CL25 Series of 25W (35W peak) external switching power supplies enables the system specifier to optimise the design for several reasons. Firstly, because the power supply offers pre-approved SELV outputs, the submission of the apparatus for safety approval is simplified. Secondly, the task of integrating the power supply into the mechanical design is eliminated, presenting further savings by ensuring a shorter and simpler design cycle. These advantages are complemented by Universal Input, IEC950, UL, CSA and BABT approvals, to complete a worldwide packaged power solution suitable for a wide variety of low power, desktop applications.

[2 YEAR WARRANTY]



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: +5.1V output Multi's: aux. outputs	±0.5% ±0.5% ±1.0%
Overshoot/undershoot	At turn-on	10%
Transient response	+5.1V (40% to 60% full load step)	±250mV max. dev. 1ms recovery to 1%
Temperature coefficient	All outputs	±0.025%/°C
Overvoltage protection	+5V output only	6.25V ±0.75V
Output power limit	Primary power limited	45W Pin max.
Short circuit protection		Continuous with auto restart
Minimum output current		0A
INPUT SPECIFICATIONS		
Input voltage range		90 to 264VAC 120 to 370VDC
Input frequency range		47 to 440Hz
Input surge current	110VAC 230VAC	12A max. 24A max.
Safety ground leakage current	110VAC, 60Hz 230VAC, 50Hz	1mA max. 2mA max.
ELECTROMAGNETIC COMPATIBILITY SPECIFICATIONS		
Radiated noise	EN55022, EN55011, FCC	Level A
Conducted noise	EN55022, EN55011, FCC	Level B
Electrostatic discharge	EN61000-4-2	Level 4
Electrostat. air discharge	IEC801-2	Level 3
RF field susceptibility	IEC801-3	Level 3
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	45kHz to 85kHz
Approvals and standards	Safety	VDE0805, EN60950 BABT, IEC950, UL1950 CSA C22.2 No. 950
Case material		ABS plastic
Material flammability		UL94-5V
Weight		500g (17.65oz)
MTBF	MIL-HDBK-217E	150,000 hours
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance	Operating Non-operating 0°C to +40°C ambient, convection cooled Peak (0°C to 40°C, max. 60s), See Note 1	0°C to +40°C -40°C to +85°C 25W 35W
Relative humidity	Non-condensing	5% to 95% RH
Altitude	Operating Non-operating	10,000 feet max. 30,000 feet max.
Vibration	5Hz to 500Hz	2.4G rms (approx.)

International Safety Standard Approvals

VDE0805/EN60950/IEC950 File No. 10401-3336-1071
Licence No. 90353, 79517 and 1071

UL1950 File No. E136005

CSA C22.2 No. 950 File No. LR41062C/LR50913/LR101320

Certificate No. 606008

25 Watt AC/DC external power supplies

OUTPUT VOLTAGE	OUTPUT CURRENT		RIPPLE ⁽²⁾	TOTAL REGULATION ⁽³⁾	MODEL NUMBER
	MAX	PEAK ⁽¹⁾			
5.1V	5.0A	6.0A	100mV	±4.0%	CL25-7605 ⁽⁵⁾
9.5V	2.5A	3.2A	95mV	±4.0%	CL25-7614
12.0V	2.0A	2.5A	120mV	±4.0%	CL25-7612
16V	1.5A	2.0A	160mV	±4.0%	CL25-7616
24.0V	1.0A	1.5A	240mV	±4.0%	CL25-7624
48.0V	0.5A	0.7A	240mV	±4.0%	CL25-7617
+5.1V (A)	2.5A	4.0A	50mV	±3.0%	CL25-7618
±12.0V (B) ⁽⁴⁾	1.0A	2.0A	120mV	±3.0%	
+5.1V (A)	2.5A	4.0A	50mV	±3.0%	CL25-7619 ⁽⁵⁾
±15V (B) ⁽⁴⁾	0.8A	1.5A	150mV	±3.0%	
+5.1V (A)	2.5A	4.0A	50mV	±3.0%	CL25-7620 ⁽⁵⁾
±24V (B) ⁽⁴⁾	0.5A	1.0A	240mV	±3.0%	
+5.1V (A)	2.0A	4.0A	50mV	±4.0%	CL25-7608 ⁽⁵⁾
+12V (B)	1.0A	2.0A	120mV	±5.0%	
-12V (C)	0.2A	1.0A	120mV	±5.0%	
+5.1V (A)	2.0A	4.0A	50mV	±4.0%	CL25-7610 ⁽⁵⁾
+15V (B)	0.5A	1.5A	150mV	±5.0%	
-15V(C)	0.2A	1.0A	150mV	±5.0%	

Notes

- 1 Peak output current lasting less than 60 seconds with duty cycle <5%. During peak loading outputs may exceed total regulation limits.
- 2 50MHz bandwidth, peak-to-peak, measured differentially.
- 3 Total regulation is defined as the static output regulation at 25°C, including initial tolerance, line voltage within stated limits and load currents within stated limits.
- 4 Output B of dual models is a floating output. Polarity is referenced by user.
- 5 The output cable length is reduced to 24" for all multiple output models and for the CL25-7605.
- 6 To maintain user-system safety approvals, the input power cable must be appropriately rated and approved.

PIN NUMBER	SINGLE OUTPUT	DUAL OUTPUT	TRIPLE OUTPUT
Pin 1	V _A	V _A	V _A
Pin 2	V _A	V _A	V _A
Pin 3	V _A	V _A	V _A
Pin 4	V _A	V _B ⁺	V _B
Pin 5	Return	V _B ⁻	V _C
Pin 6	Return	Return	Return
Pin 7	Return	Return	Return
Pin 8	Return	Return	Return

