

BSL600 Series

600 Watts

Single Output Switching Power Supply

Features:

- * Small 9.00 x 3.70 x 1.60" Package
- * Internal Ball Bearing Fans for Self-Cooled Operation
- * Dual Auxiliary Outputs
 - + 5V @ 4A
 - + 12V @ 500mA
- * Universal AC Input (47-63 Hz) with Active PFC
- * 100,000 hours MTBF (25°C Full Load Operation)
- * Optional -40°C Operating Temperature
- * International Safety Approvals & CE Mark
- * Class B Emissions
- * 3 Year Warranty



Input Specifications:

Input Range	Universal VAC (90-264 VAC) & 120-370 VDC
Input Frequency	47-63 Hz or DC
Inrush Current	25A @ 115VAC / 50A @ 230VAC max (cold start)
Input Current	9A@ 90 VAC / 3.5A@ 200 VAC Maximum
Input Reflected Ripple	FCC 68 part 15 Class B
Efficiency	83% Typical @120VAC (depending on output model)
Input Protection	Single Fused (10 Amp / 250 V)
Hold-up Time	One Cycle Minimum @ 120 VAC and 80% load
Leakage Current	<750 μ A maximum @ 264 VAC
Harmonics	EN61000-3-2 Class D

Output Specifications:

Adjustment Range	V1 Only, $\pm 10\%$
Minimum Load	None
Regulation	V1 & V2 = 3% V3 = 8% max
Ripple / Noise	$\pm 1\%$ pk-pk max (20MHz)
Transient Response	+/- 5% Deviation / < 1msec recovery
Set-Point Accuracy	$\pm 2\%$
Short Circuit Protection	Continuous
Over Load Protection	120-150%, auto-recovery (see app note, sect 1.1)
Over Voltage Protection	120-150%, Latch off (see app note, sect 1.2)

Emissions Standards

FCC Part 15J, Part 2	Within Class B Limits
EN55022 / CISPR22	Within Class B Limits

Status / Control Signals

* AC FAIL	TTL Signal
* REMOTE ON/OFF	Inhibit is Standard, Optional Enable Function
* REMOTE SENSE	Optional, compensates for <250mV
* POWER GOOD	TTL Signal

Electromagnetic Compatibility:

Electrostatic Discharge	EN61000-4-2, ± 4 KV Contact / ± 8 KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, ± 2 KV
Surges	EN61000-4-5, ± 2 KV Line-Earth, ± 1 KV Line-Line
Conducted Immunity	EN61000-4-6, 0.15 - 800MHz, 10V, 80% AM
Voltage Dips	EN61000-4-11, 95% Dip & 10ms, 30% Dip & 500ms
Voltage Interruptions	EN61000-4-11, 95% Reduction, 5s
Radiated Emissions	FCC 68 part 15 Class B
Conducted Emissions	FCC 68 part 15 Class B
Harmonic Current	EN61000-3-2 Class D
Fluctuations & Flicker	EN61000-3-3

Environmental Specifications:

Operating Temp	0 ~ 50°C (De-Rate 2.5%/1°C Rise To +70°C)
Storage Temp	-20 ~ +85°C
Cooling	Internal Ball Bearing Fans
Temp Co-Efficient	0.4% per °C
Humidity	5 to 95% RH Non-Condensing
Vibration	3 Axes 1 Oct/min, 5 min at 4 Res. 0.75G Pk, 5-500Hz
Shock	20G Peak Acceleration
Reliability	>100k hours MTBF (Full Load and 25°C Operation)

International Safety Approvals

Qualified to Meet	UL 60950-1, File # 158470
	EN60950-1
	CB Report
	CE Mark (LVD)

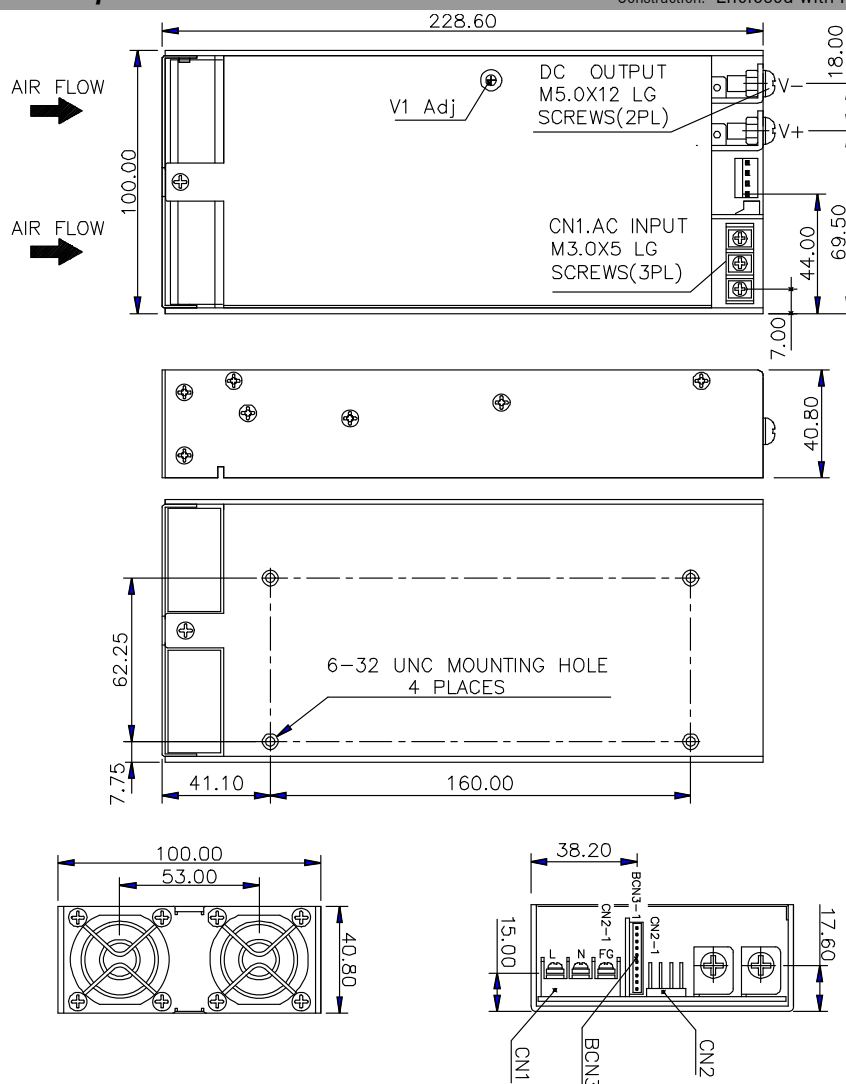
Output Table:

Model Number	Power	V1	A1	V2	A2	V3	A3
BSL600-12V	530W	12VDC	42.0A	5VDC	4A	12VDC	0.5A
BSL600-15V	566W	15VDC	36.0A	5VDC	4A	12VDC	0.5A
BSL600-24V	578W	24VDC	23.0A	5VDC	4A	12VDC	0.5A
BSL600-28V	586W	28VDC	20.0A	5VDC	4A	12VDC	0.5A
BSL600-36V	602W	36VDC	16.0A	5VDC	4A	12VDC	0.5A
BSL600-48V	626W	48VDC	12.5A	5VDC	4A	12VDC	0.5A

Mechanical Specifications:

Construction: Enclosed with Fan

Weight: 2.827 lb / 1.285 kg



CN1 Input Terminal Block / M3 Screws

CN2 Connector

Mates with Molex 09-52-4044 (5239 series) or equivalent

CN2-1	V2
CN2-2	V2
CN2-3	V2-RTN
CN2-4	V2-RTN

CN3 Connector

Mates with Molex 50-37-5103 (5264series) or equivalent

CN3-1	V3
CN3-2	V2
CN3-3	V2
CN3-4	V2-V3-RTN
CN3-5	V2-V3-RTN
CN3-6	AC FAIL
CN3-7	Remote On/Off
CN3-8	VS+ / V1 Remote Sense
CN3-9	Power Good
CN3-10	Signal Ground (V1-RTN)