

60 Watts

ECP Series



GREEN-POWER

- Low Profile Design
- Compact Size, 4" x 2"
- IT & Medical Approvals
- Single, Dual and Triple Output
- <0.5 W No Load Input Power
- Peak Load Capability
- 3 Year Warranty

Specification

Input

Input Voltage	• 85-264 VAC, derate from 100% load at 90 VAC to 90% load at 85 VAC
Input Frequency	• 47-63 Hz
Input Current	• 0.85 A max at 115 VAC
Inrush Current	• 100 A max at 230 VAC, cold start at 25 °C
Power Factor	• EN61000-3-2, class A
No Load Input Power	• <0.5 W
Earth Leakage Current	• <250 µA at 264 VAC, 60 Hz
Input Protection	• Internal T2 A/250 V fuse in both line and neutral

Output

Output Voltage	• See table
Output Voltage Trim	• ±10% on V1 only, output 2 on multi output models will track by the same percentage
Minimum Load	• 10% minimum load required on all outputs of multi output models
Start Up Delay	• 1.3 s max
Start Up Rise Time	• 15 ms typical
Hold Up Time	• 16 ms min at full load at 115 VAC
Total Regulation	• Output 1: 2% from 0% load to 100% load Output 2: 5% from 20% load to 100% load Output 3: 5% from 10% load to 100% load
Remote Sense	• Fitted to US05 version, compensates for 0.5 V drop
Transient Response	• 4% max deviation, recovering to less than 1% within 500 µs for 50% step load change at 1 A/µs
Ripple & Noise	• 1% pk-pk (2% for US05 version), measured with 20 MHz bandwidth
Overvoltage Protection	• 115-140% of nominal output voltage on V1 only, recycle input to reset
Overload Protection	• 120-160% of nominal power
Short Circuit Protection	• Trip and restart (hiccup mode)
Temperature Coefficient	• ±0.02%/°C max

General

Efficiency	• 88% typical at 230 VAC and full load
Isolation	• 4000 VAC Input to Output 2 x MOPP 1500 VAC Input to Ground 1 x MOPP 500 VDC Output to Ground
Switching Frequency	• 30-130 kHz variable
MTBF	• >400 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• -20 °C to +70 °C, derate from 100% load at 50 °C to 50% load at 70 °C
Cooling	• Natural convection
Operating Humidity	• 5% to 95% RH, non condensing
Operating Altitude	• 3000 m max
Storage Temperature	• -40 °C to +85 °C
Shock	• 30 g pk, half sine, 6 axes
Vibration	• 2 g rms, 5 Hz to 500 Hz, 3 axes

EMC & Safety

Emissions	• EN55011/22, level B conducted & level A radiated
Harmonic Currents	• EN61000-3-2, class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, ±4 kV indirect contact, Perf Criteria A
Radiated Immunity	• EN61000-4-3, 3 V/m, Perf Criteria A
EFT / Burst	• EN61000-4-4, level 3 Perf Criteria A
Surge	• EN61000-4-5, installation class 3, Perf Criteria A
Conducted Immunity	• EN61000-4-6, 3 V Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B EN60601-1-2, 30% 500 ms, 60% 100 ms, 100% 10 ms, 100% 5000 ms, Perf Criteria A, A, A, B
Safety Approvals	• EN60950-1, cUL60950-1, IEC60950-1, EN60601-1, ANSI/AAMI ES60601-1, CSA22.2 No.60601-1 Including Risk Management, IEC60601-1

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