

POWER PERFECT PLUG-IN

ES120V PLUG-IN ELECTRICITY CONDITIONER



ES120V Plug-in Series Accreditations



Description /Code

Made in Montana • Made in USA • UL - E337361 - Closed Energy Management Equipment 3ZJ9 • FCC - Approved (UL Tested for Compliance) • CE - Low Voltage Directive 2006/95/EC
 • CE - Electromagnetic Compatibility (EMC) 2004/108/EC
 • RoHS - Lead Free - Restriction of Hazardous Substances

Power Perfect Plug-in {ES120V} Highlights

- 120 Volt Single Phase Electricity Conditioner
- Unit Size 5.25" x 3.75" x 2"
- Low Power Losses, < 0.5 Watts per 1000 VAR
- Operating Temperature Range of -55oC to +90oC
- General Enclosure: Plug-in Unif
- Circuit Zone Electrical Protection
- Self-healing metalized Harmonic Rectifiers
- NEMA 5-15 plug (two flat parallel blades w/ground pin)
- EMI/RFI Noise Reduction 0-50 dB
- Power Factor Compensation
- Voltage Moderation
- Robust Integrated Surge Suppression
- Electrical Harmonics Elimination (THD Reduction)
- EMF/EMR Elimination

Power Perfect Plug-in {ES120V} Characteristics

Max AC Voltage (Charge Potential)	300 Volts
Single Phase Voltages Available	120 Volts, USA (300 Volt line-to-neutral MAX)
Input Power Frequency	50/60 Hz
Current Requirements @ 120 Volts	0.85 Amps
Operating Temperature	-55°C to +90°C
Operating Humidity	5% to 95%, Noncondensing
Operating Altitude	Up to 16,000 ft (5000m)
Seismic Withstand Capability (Meet or Exceed Specifications)	IBC 2006, CBC 2007, UBC Zone 4

Harmonic Rectifier {ES120V} Circuit Qualities

Total Unit Reactive Power @ 300 V	(L1-N)	20 μF
Per Circuit Reactive Power @ 300 V	(L1-N)	20 μF
Reactive Bank Composition		6 PFC Modules

Harmonic Dissipations - PFC Module Specs.

Tangent of Loss Angle: C > 1 μF at 1 kHz	<= 30 * 10 ⁻⁴
Rated Voltage Pulse Slope (dV/dt)	150 V/ μs
RC Between Leads	>5000 s
Withstanding (DC) Voltage (Cut-off Current 10 mA)	1850 V
EMI/RMI Filtering Attenuation	Up to 50 dB from 10 kHz to 100 MHz
Protection Modes	L1-N

Surge Suppression

Voltage	(Continuous)	150	Volts _{RMS}
	(Max Clamping)	424	Volts _{DC}
		650	Volts _{RMS}
Current	(Peak Surge)	6500	Amps
	(Rating)	6500	Amps
Transient Dissipation Potential Each Circuit	(Surge Energy)	1300	Joules/μs
Protection Modes	(Single Circuit)	L1-N	

*NEMA 5-15 plug two flat parallel blades w/ ground pin

