SATIC PowerPerfect™ ES230AU

Single-Phase 230-V Electricity Conditioner

SATIC PowerPerfect™ ES230AU {ES1PN} description / code

Made in Montana • Made in USA • UL - E337361 - Open Energy Management Equipment 3ZJ9
FCC - Approved (UL Tested for Compliance) • RoHS – lead-free
CE - Low Voltage Directive 2006/95/EC • CE - Electromagnetic Compatibility (EMC) 2004/108/EC

SATIC PowerPerfect™ ES230AU highlights

- 230-volt single-phase electricity conditioner
- general enclosure: indoor
- electrical harmonics elimination (THD reduction)
- dual mode electrical protection
- self-healing metalized harmonic rectifiers
- robust Integrated surge protection
- EMI/RFI noise reduction 0-50 dB
- low power losses, < 0.5 watts per 1000 VAR
- box size 127 mm × 116 mm × 86 mm
- EMF/EMR reduction
- voltage stabilization
- power factor correction

SATIC PowerPerfect™ ES230AU characteristics

max AC voltage (charge potential)	300 volts
input power frequency	50 Hz
wire rating	2-cord 60277 IEC 52
plugs into 16-A branch circuit outlet	L-N
operating temperature	-55 °C to +90 °C
operating humidity	5% to 95%, non-condensing
operating altitude	up to 5000 m
seismic capability (meets or exceeds specifications)	IBC 2021 & UBC Zone 4

SATIC PowerPerfect™ ES230AU harmonic rectifier circuit qualities

total unit reactive capacitance @ 300 V (L-N)	60 µF
reactive bank composition	18 power-factor correction modules
reactive power	0.997 kVAR @230V_{RMS}, 50 Hz

SATIC PowerPerfect™ ES230AU harmonic dissipations - PFC module specifications

tangent of loss angle: C > 1 µF at 1 kHz	≤ 30×10^{-4}
rated voltage pulse slope (d*V*/d*t*)	150 V/ µs
RC between leads	> 5000 s
withstanding (DC) voltage	1850 V
EMI/RMI filtering attenuation	up to 50 dB from 10 kHz to 100 MHz
cut-in current	10 mA

SATIC PowerPerfect™ ES230AU surge suppression

continuous AC RMS voltage	250 $volts_{RMS}$
continuous AC voltage amplitude	429 volts
max clamping RMS voltage	650 $volts_{RMS}$
surge energy protection	3,900 joules × 1,000 µs

E337361

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