

# Industrial Grade PIV Series Inverters



**PIV Series, Sine Wave Inverters**, convert DC power to transient free sinusoidal AC power. The inverters are designed to provide AC power to loads which have high inrush currents and require close frequency control. The pulse width modulated Ferroresonant design provides a highly reliable, high efficiency inverter, with inherent noise rejection, input to output isolation, current limiting and static voltage regulation.

## Specifications:

**Input:**

**DC Voltage:** (See table)  
**DC Current:** (See table)

**Output:**

**Voltage:** 117 VAC, 60 Hz. (other voltages and frequencies are optional)  
**Power Factor:** Rated power is available over a range of 0.75 to unity.  
**Total Harmonic Distortion:** 5% maximum at nominal input voltage, full load and unity power factor.  
**Line Regulation:**  $\pm 1\%$  maximum for all input variations between low and high voltage, at half load.  
**Load Regulation:**  $\pm 2\%$  maximum for all load variations between no load and full load at nominal input voltage.  
**Regulation Envelope:**  $\pm 5\%$  maximum for any combination of line voltage, load current and temperature with specifications.  
**Frequency Stability:**  $\pm 0.05$  maximum, crystal controlled.  
**Peak Voltage Deviation:** Transient Deviation and Recovery (for change of 50% of rated load). Within 10% of steady state peak voltage. Recovery time with 100 milliseconds.  
**Efficiency:** 72 to 88%

**Mounting:** 19" or 23" reversible relay rack mount or wall mount

**MTBF:** 40,000 hours at 25C ambient temperature

**Service Access:** Front panel

**Environment:**

Cooling: Natural convection  
Operating temperature range: -10°C to +45°C  
Storage Temperature range: -40°C to 75°C  
Operating humidity: 0 to 90% relative humidity at 25°C, non-condensing.

**Protective Features:**

Input fuse to 1.5 kVA, Circuit Breaker for 2 kVA and above  
Low and high input voltage detection, with inverter turn off. Automatic restart  
Reverse polarity protection  
Output overload protection by circuit breaker.  
Electronic shut down protection for severe overload or short circuit with automatic restart after removal of overload or short circuit.

**Dimensions:**

Case Size A: 12.25" High / 17.0" Wide. / 11" Deep.  
Case Size B: 25.00" High / 17.2" Wide / 15" Deep.  
Inverters Install in 19" or 23" racks or may be wall mounted.

	300 VA	500 VA	750 VA	1200 VA	1500 VA	2000 VA	3000 VA
Nominal 24 Volts Range: 21 to 28 Volts	PIV 300-24	PIV 500-24	PIV 750-24	PIV 1200-24 *68 amp	PIV 1500-24 *85 amp	PIV 2000-24 *113 amp	PIV 3000-24 *169 amp
Nominal 48 Volts Range: 42 to 58 Volts	PIV 300-48	PIV 500-48	PIV 750-48	PIV 1200-48 *34 amp	PIV 1500-48 *42 amp	PIV 2000-48 *56 amp	PIV 3000-48 *84 amp
Nominal 120 Volts Range: 105 to 145 Volts	PIV 300-120	PIV 500-120	PIV 750-120	PIV 1200-120 *14 amp	PIV 1500-120 *17 amp	PIV 2000-120 *23 amp	PIV 3000-120 *34 amp
Nominal 240 Volts Range: 210 to 290 Volts	PIV 300-240	PIV 500-240	PIV 750-240	PIV 1200-240 *7 amp	PIV 1500-240 *9 amp	PIV 2000-240 *12 amp	PIV 3000-240 *17 amp
<b>Case Size</b>	A	A	A	A	A	B	C

\*DC Amps @ Low Voltage Cutoff