

# Electrical Specifications

**Table A-1 XW Power System Electrical Specifications**

Model	XW6048-120/240-60	XW4548-120/240-60	XW4024-120/240-60
Continuous Output Power	6,000 W	4,500 W	4,000 W
Surge Rating (10 seconds) (stand-alone invert mode)	12,000 W	9,000 W	8,000 W
Surge Current (stand-alone invert mode)	L-n: 105 A <sub>rms</sub> (15 sec) L-L: 52.5 A <sub>rms</sub> (15 sec)	L-n: 75 A <sub>rms</sub> (20 sec) L-L: 40 A <sub>rms</sub> (20 sec)	L-n: 70 A <sub>rms</sub> (15 sec) L-L: 35 A <sub>rms</sub> (15 sec)
Waveform	True Sine Wave		
Idle Consumption—invert mode, no load	28 W	26 W	24 W
Idle Consumption—search mode	< 8 W		
AC Output Voltage	L-n: 120 Vac ±3% L-L: 240 Vac ±3%		
AC Input voltage range (Bypass/Charge Mode)	L-n: 80–150 Vac (120 V nominal) L-L: 160–270 Vac (240 V nominal)		
AC Input Current (maximum 75% imbalance between L1-n, L2-n)	L-n: 41.2 A L-L: 27.5 A	L-n: 30.9 A L-L: 20.6 A	L-n: 27.5 A L-L: 18.3 A
AC Input Breaker	60 A double-pole		
AC Input Frequency Range (Bypass/Charge Mode)	55–65 Hz (default) 44–70 Hz (allowable)		
AC1 voltage range—Grid-tie Sell Mode <sup>a</sup> (automatically adjusts when entering Grid-tie Sell Mode)	L-n: 108–130 ±1.5 Vac L-L: 214–260 ±3.0 Vac		
AC1 Frequency range—Grid-tie Sell Mode <sup>a</sup> (automatically adjusts when entering Grid-tie Sell Mode)	59.4–60.4 ±0.05 Hz		
AC Output Current (maximum 75% imbalance between L1-n, L2-n)	L-n: 37.5 A L-L: 25.0 A	L-n: 28.1 A L-L: 18.8 A	L-n: 25.0 A L-L: 16.7 A
Maximum Output Fault Current and Duration - Charger Mode	5,150 A peak ~1 ms	5,150 A peak ~1 ms	6500 A peak ~1 ms
Maximum Output Fault Current and Duration - Inverter Mode	925 A peak ~0.5 ms	925 A peak ~0.5 ms	25 A peak ~330 ms
Maximum Output Fault Current and Duration - Grid-Interactive Mode	425 A peak ~0.4 ms	425 A peak ~0.4 ms	80 A peak ~25 ms
AC Output Breaker	60 A double-pole		
AC Output Frequency	60.0 ±0.1 Hz		
Total Harmonic Distortion	< 5%		
Automatic Transfer Relay	60 A		
Auxiliary Relay Output	0–12 Vdc, maximum 250 mA DC		
CEC Weighted Efficiency	92.5%	93.0%	91%
CEC Power Rating	5,752 W	4,453 W	4,039 W
DC Input Voltage (Nominal)	50.4 Vdc	50.4 Vdc	25.2 Vdc

**Table A-1** XW Power System Electrical Specifications

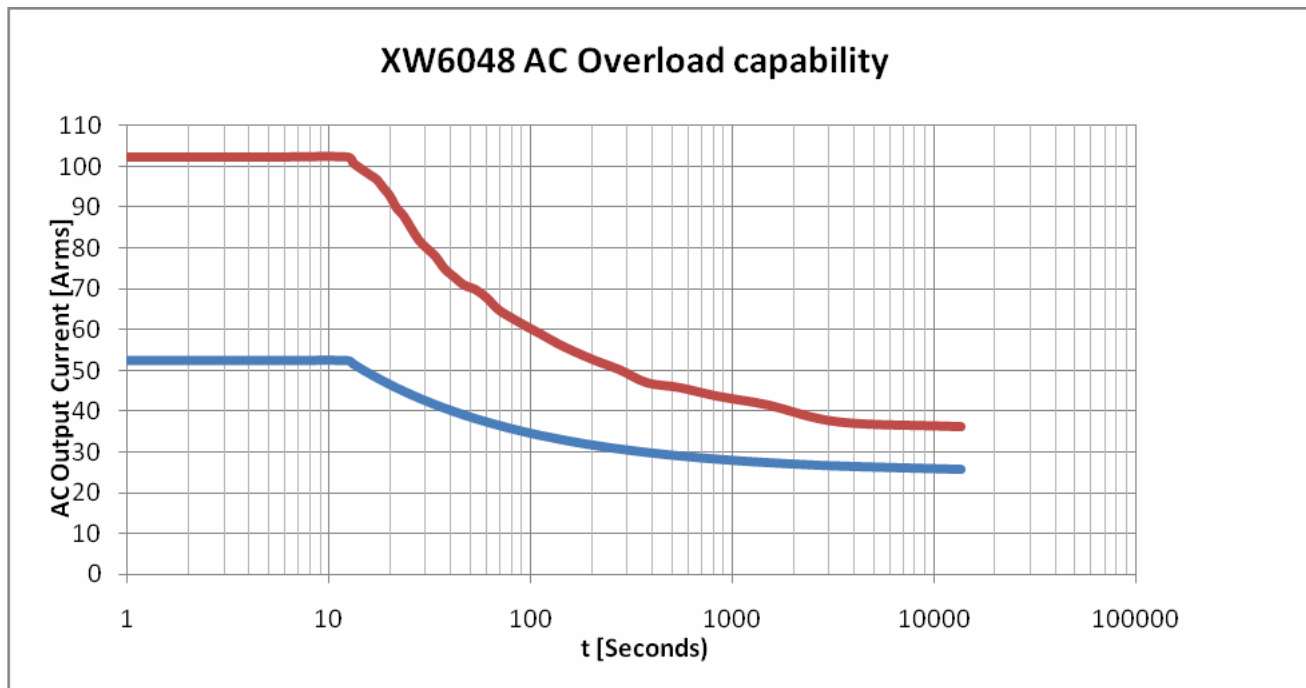
Model	XW6048-120/240-60	XW4548-120/240-60	XW4024-120/240-60
DC Input Voltage Range	44–64 Vdc	44–64 Vdc	22–32 Vdc
DC Current at Rated Power	130 A	96 A	178 A
Continuous Charge Rate at L-L voltage	100 A	85 A	150 A
Power Factor Corrected Charging	PF (0.98)		

a. This unit or system is provided with fixed trip limits and shall not be aggregated above 30 kW on a single Point of Common Connection

## XW Series Overload Capability

Loads presented to the inverter are seldom constant. Typically, large loads are operated for only short periods of time. In order to provide the maximum utility, Xantrex inverters are allowed to operate at power levels that exceed their continuous power ratings. This graph shows how loads that are larger than the inverter can sustain continuously can be operated for useful periods of time.

The length of time that the inverter can operate at high power is limited by temperature. When large loads are run, the inverter's temperature increases. At the point where more heat is created in the inverter than can be dissipated, its ability to operate becomes time limited.

**Figure A-1** XW Series AC Overload Capability

## Output Power Versus Ambient Temperature

When the internal temperature of the XW Series exceeds its rated range, the unit reduces its energy output to ensure maximum component ratings are not exceeded.

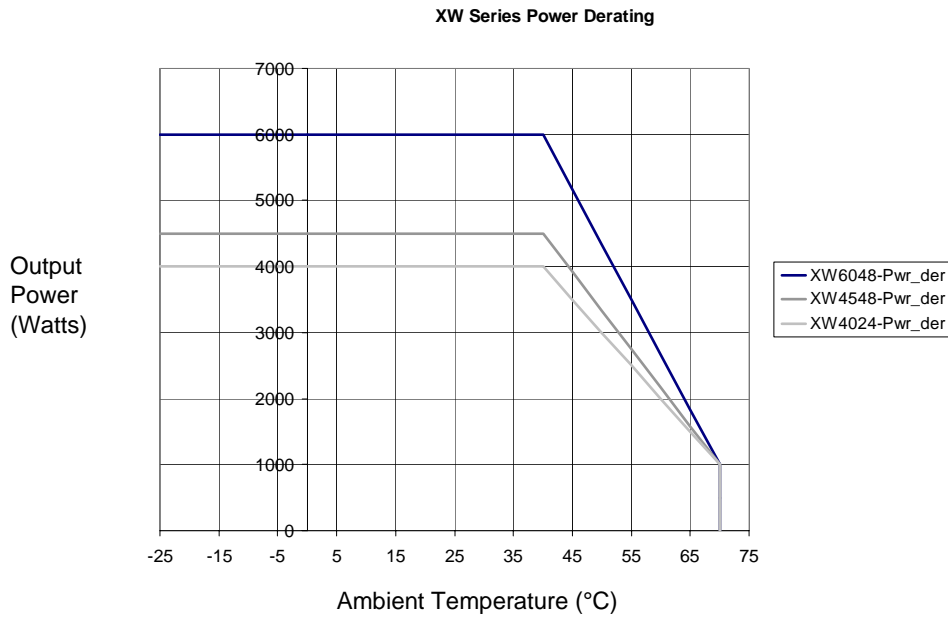


Figure A-4 Output Power Versus Ambient Temperature

## XW Series Efficiency

### Inverting Efficiency (Typical)

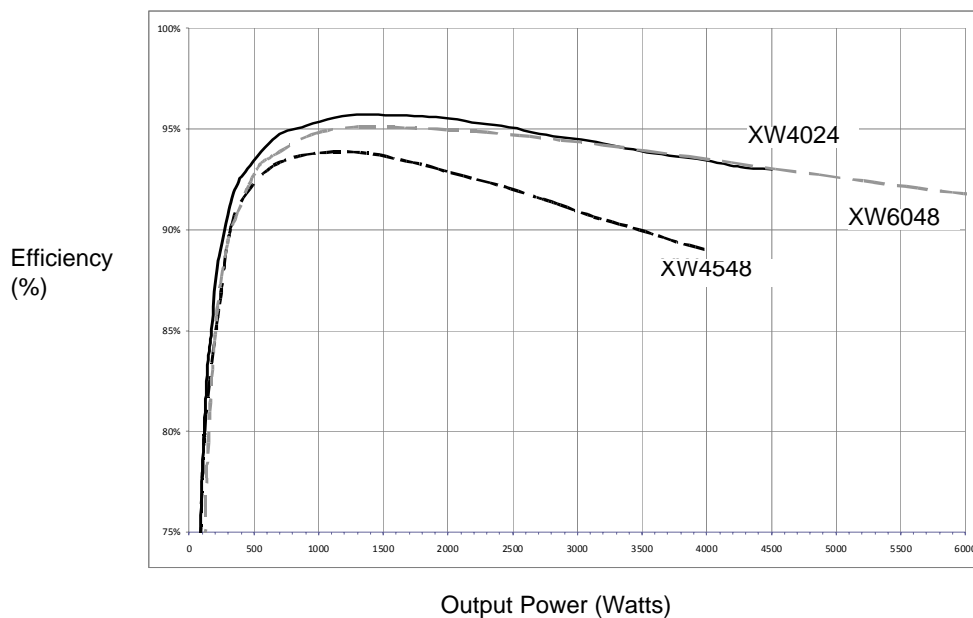


Figure A-5 Inverting Efficiency (Typical)