

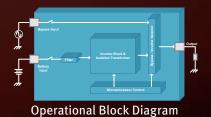
# NX series



Static inverter modules converts DC battery power to sinusoidal 230V AC power, to support your critical equipment in telecom and industrial systems. Because of their modular and robust structure, they offer a continuous and reliable power conversion.

EPI static inverter series are designed in a wide range of power and input / output voltage options. With its high inrush capacity, it is a very proper solution especially for industrial equipments. Semiconductor devices with latest technology used in EPI static inverter series provide high efficiency in power conversion.

Static inverter series takes all the advantage of microprocessor control. Thanks to the microprocessor, smart control and diagnostics are possible. For example, after detecting a short circuit at the output, static inverter protects itself, but it will retry to feed your load, after a specified time. Many of the operational parameters are programmable by the LCD display and keypad. Moreover, static inverter series offer optional communication interfaces, for site monitoring and remote control.



## **FEATURES**

#### **Key Features**

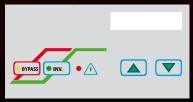
- Compact structure, rack mount
- Full sinusoidal output
- Microprocessor control
- Very high output surge capacity
- Input / Output isolation via output isolation transformer
- Bypass switch (optional)
- Programmable online / offline operation
- Easy control & monitoring via 2x16 character LCD display, status LEDs & keypad
- · RFI Filter at battery input

# **Protections**

- AC & DC input fuses & circuit breakers
- Overload shutdown
- Output overvoltage & under voltage disconnect
- Battery low voltage disconnect
- Battery high voltage disconnect
- Short circuit protection with automatic self retry
- Over temperature shutdown

## **Applications**

- Portable equipments
- Telecom systems
- Industrial systems
- Air conditioners
- Compressors



Front Panel with LCD Display







Technical Specification:						
24VDC INPUT	NX2415		NX2425		NX2430	
RATINGS (VA)	1500		2500		3000	
DC Input Voltage	20 - 40 VDC		20 - 40 VDC		20 - 40 VDC	
DC Input Current (maximum)	75 A		121 A		145 A	
Output Voltage (adjustable ±5%)	230 VAC		230 VAC		230 VAC	
Output Current	65 AAC		10.8 AAC		13.0 AAC	
Output Frequency (selectable)	50/60 Hz		50/60 Hz		50/60 Hz	
Crest Factor	2.5:1		2:1			
Source Capacity for 5 seconds	9 A		12 A		12 A	
Power Factor	0.75 (1125W)		0.75 (1875W)		0.75 (2250W)	
Voltage THD (@linear load)	<b>&lt;</b> 3%		<b>&lt;</b> 3%		<b>&lt;</b> 3%	
Efficiency (optimum)	> 84%		> 85%		> 85%	
48VDC INPUT	NX4820		NX4830		NX4850	
RATINGS (VA)	2000		3000		5000	
DC Input Voltage	40 - 80 VDC		40 - 80 VDC		40 - 80 VDC	
DC Input Current (maximum)	48 A		71 A		120 Å	
Output Voltage (adjustable ±5%)	230 VAC		230 VAC		230 VAC	
Output Current	8.7 AAC		13.0 AAC		21.7 AAC	
Output Frequency (selectable)	50/60 Hz		50/60 Hz		50/60 Hz	
Crest Factor			2:1			
Source Capacity for 5 seconds	16 A		24 A		25 A	
Power Factor	0.75 (1500W)		0.75 (2250W)		o.75 (3750W)	
Voltage THD (@linear load)	<b>&lt;</b> 3%		<b>&lt;</b> 3%		<b>‹</b> 3%	
Efficiency (optimum)	> 86%		>86%		> 86%	
110VDC INPUT	NX11030	NX	(11040	NX110!	50	NX110100
RATINGS (VA)	NX11030 3000		(11040 4000	NX110! 5000		NX110100 10000
		4				
RATINGS (VA)	3000	90 -	4000	5000	VDC	10000
RATINGS (VA) DC Input Voltage	<b>3000</b> 90 - 140 VDC	90 -	4000 140 VDC	<b>5000</b> 90 - 140 '	VDC	<b>10000</b> 90 - 140 VDC
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)	3000 90 - 140 VDC 29 A 230 VAC 13.0 AAC	90 - 23	4000 140 VDC 41 A	5000 90 - 140 \ 50 A	VDC AC	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)	3000 90 - 140 VDC 29 A 230 VAC	90 - 23	4000 140 VDC 41 A 30 VAC	5000 90 - 140 \ 50 A 230 VA	VDC NC	10000 90 - 140 VDC 97 A 230 VAC
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor	3000 90 - 140 VDC 29 A 230 VAC 13.0 AAC	90 - 23	4000 140 VDC 41 A 30 VAC	5000 90 - 140 \ 50 A 230 VA 21.7 AA	VDC NC	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds	3000 90 - 140 VDC 29 A 230 VAC 13.0 AAC 50/60 Hz 3:1 39 A	23 17. 50	4000 140 VDC 41 A 30 VAC 4.4 AAC 5/60 Hz 3:1 39 A	5000 90 - 140 V 50 A 230 VA 21.7 AA 50/60 I 3:1 39 A	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor	3000 90 - 140 VDC 29 A 230 VAC 13.0 AAC 50/60 Hz 3:1 39 A 0.75 (2250W)	90 - 23 17. 50	4000 140 VDC 41 A 30 VAC 4.4 AAC 9/60 Hz 3:1 39 A (3000W)	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W)
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)	3000 90 - 140 VDC 29 A 230 VAC 13.0 AAC 50/60 Hz 3:1 39 A 0.75 (2250W) < 3%	90 - 23 17. 50 0.75	4000 140 VDC 41 A 30 VAC .4 AAC 5/60 Hz 3:1 39 A (3000W)	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17. 50 0.75	4000 140 VDC 41 A 30 VAC 4.4 AAC 9/60 Hz 3:1 39 A (3000W)	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W)
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17. 50 0.75	4000 140 VDC 41 A 30 VAC .4 AAC 5/60 Hz 3:1 39 A (3000W)	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPECO	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17. 50 0.75	4000 140 VDC 41 A 30 VAC 4.4 AAC 6/60 Hz 3:1 39 A (3000W) < 3% 90%	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 <3% >91%	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17. 50 0.75	4000 140 VDC 41 A 30 VAC 44 AAC 6/60 Hz 3:1 39 A (3000W) 43%	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 <3% >91%	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPECO	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17: 50 0.75	4000 140 VDC 41 A 30 VAC 4.4 AAC 6/60 Hz 3:1 39 A (3000W) < 3% 90%	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \(\frac{3}{3}\) \(\frac{9}{2}\) 60°C -70°C	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPECOPERATION OPERATION	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17: 50 0.75	4000 140 VDC 41 A 30 VAC 4.4 AAC 0/60 Hz 3:1 39 A (3000W) < 3% 90% 0°C - -20°C -	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \text{ 3%} \text{ > 91%}  60°C -70°C condensing	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPECONERAL & ENVIRONMENTAL & ENVIRONMENTAL SPECONERAL & ENVIRONMENTAL &	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%	90 - 23 17: 50 0.75	4000 140 VDC 41 A 30 VAC .4 AAC ./60 Hz 3:1 39 A (3000W) < 3% 90% 0°C - -20°C - 0-90% non-	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \( \) 3% \( \) 91%  60°C - 70°C - condensing	VDC AC AC Hz	10000 90 - 140 VDC 97 A 230 VAC 43.5 AAC 50/60 Hz 3:1 63 A 0.75 (7500W) < 3%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPECONER Seconds  Operating Temperature  Storage Temperature  Relative Humudity  Cooling Method	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%  CIFICATIONS	90 - 23 17: 50 0.75	4000 140 VDC 41 A 30 VAC 3.4 AAC 6.60 Hz 3:1 39 A (3000W) < 3% 90% 0°C – -20°C - 0–90% non- Fan for IP2 x 16 character	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 < 3% > 91%  60°C - 70°C - condensing orced 20 er LCD Display	VDC AC AC Hz	10000  90 - 140 VDC  97 A  230 VAC  43.5 AAC  50/60 Hz  3:1  63 A  0.75 (7500W)  <3%  >92%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE  Operating Temperature  Storage Temperature  Relative Humudity  Cooling Method  Protection Degree	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%  CIFICATIONS	90 - 23 17: 50 0.75	4000 140 VDC 41 A 30 VAC 3.4 AAC 6.60 Hz 3:1 39 A (3000W) < 3% 90% 0°C – -20°C - 0–90% non- Fan for IP2 x 16 character	5000 90 - 140 \text{ 50 A} 230 VA 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \(\frac{3}{3}\) \(\frac{9}{2}\) 60°C -70°C condensing orced	VDC AC AC Hz	10000  90 - 140 VDC  97 A  230 VAC  43.5 AAC  50/60 Hz  3:1  63 A  0.75 (7500W)  <3%  >92%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE  Operating Temperature  Storage Temperature  Relative Humudity  Cooling Method  Protection Degree	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%  CIFICATIONS	90 - 23 17: 50 0.75	4000 140 VDC 41 A 30 VAC 3.4 AAC 6.60 Hz 3:1 39 A (3000W) < 3% 90% 0°C – -20°C - 0–90% non- Fan for IP2 x 16 character	5000 90 - 140 \text{ 50 A} 230 VA 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \(\frac{3}{3}\) \(\frac{9}{2}\) 60°C - 70°C condensing orced 20 er LCD Display & Common Al	VDC AC AC Hz	10000  90 - 140 VDC  97 A  230 VAC  43.5 AAC  50/60 Hz  3:1  63 A  0.75 (7500W)  <3%  >92%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE  Operating Temperature  Storage Temperature  Relative Humudity  Cooling Method  Protection Degree  Display & Indicators	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%  CIFICATIONS	90 - 23 17. 50 0.75  vitput OK	4000  140 VDC  41 A  30 VAC  4 AAC  6 60 Hz  39 A  (3000W)  < 3%  90%  0°C -  -20°C -  0-90% non-  Fan for IP2  x 16 character  & Input OK & Output & I	5000 90 - 140 \text{ 50 A} 230 VA 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \(\frac{3}{3}\) \(\frac{9}{2}\) 60°C - 70°C condensing orced 20 er LCD Display & Common Al	VDC AC AC Hz oW)	10000  90 - 140 VDC  97 A  230 VAC  43.5 AAC  50/60 Hz  3:1  63 A  0.75 (7500W)  <3%  >92%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE  Operating Temperature  Storage Temperature  Relative Humudity  Cooling Method  Protection Degree  Display & Indicators	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%  CIFICATIONS	90 - 23 17. 50 0.75  vitput OK	4000  140 VDC  41 A  30 VAC  4 AAC  6 60 Hz  39 A  (3000W)  < 3%  90%  0°C -  -20°C -  0-90% non-  Fan for IP2  x 16 character  & Input OK & Output & I	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \(\frac{3}{3}\) > 91%  60°C - 70°C condensing orced 20 er LCD Display & Common Al nput Fuse e & Overvolta	VDC AC AC Hz oW)	10000  90 - 140 VDC  97 A  230 VAC  43.5 AAC  50/60 Hz  3:1  63 A  0.75 (7500W)  <3%  >92%
RATINGS (VA)  DC Input Voltage  DC Input Current (maximum)  Output Voltage (adjustable ±5%)  Output Current  Output Frequency (selectable)  Crest Factor  Source Capacity for 5 seconds  Power Factor  Voltage THD (@linear load)  Efficiency (optimum)  GENERAL & ENVIRONMENTAL SPE  Operating Temperature  Storage Temperature  Relative Humudity  Cooling Method  Protection Degree  Display & Indicators	3000  90 - 140 VDC  29 A  230 VAC  13.0 AAC  50/60 Hz  3:1  39 A  0.75 (2250W)  < 3%  > 90%  CIFICATIONS	23 17. 50 0.75 3 1tput OK	4000  140 VDC  41 A  30 VAC  4.4 AAC  6.60 Hz  3:1  39 A  (3000W)  < 3%  90%  0°C -  -20°C -  0-90% non-  Fan fo  IP2  x 16 characte  (& Input OK &  Output & I  Undervoltage	5000 90 - 140 \text{ 50 A} 230 VA 21.7 AA 50/60 I 3:1 39 A 0.75 (375 \( \) 3% \( \) 91%  60°C - 70°C condensing orced 20 er LCD Display & Common Al nput Fuse e & Overvolta load	VDC AC AC Hz oW)	10000  90 - 140 VDC  97 A  230 VAC  43.5 AAC  50/60 Hz  3:1  63 A  0.75 (7500W)  <3%  >92%