RUGGED RACK MOUNT INVERTERS
3 PHASE PURE SINEWAVE OUTPUT
50 Hz  60 Hz  400 Hz OUTPUT

APPLICATIONS
Shelters
Tactical Systems
Shipboard Power
HMMWVs
Mobile Systems
Ground Support
Aircraft
Industrial

OPTIONAL COMPLIANCES
BY DESIGN OR TEST (See Notes)
MIL-STD-810
MIL-STD-1275 (1)
MIL-STD-461 (2)
MIL-STD-167
MIL-STD-704
MIL-S-901 (3)

NOTE: (1) May require additional external module. (2) May require external EMI Filter. (3) Requires external shock absorbers.
3Ø RACK MOUNT INVERTER 1U, 2U, 3U & 5U
Airborne Applications • Naval • Ground

APPLICATIONS

The NGLRK inverters are intended for industrial and military applications where DC voltage needs to be converted to 50 Hz, 60 Hz or 400 Hz, 3Ø. These inverters are used for running electronic loads such as computers, monitors, printers, telecom systems and radios from 24-270 VDC derived from batteries and field generators. They can also be used for hand tools & motors. These units can be further ruggedized for military grade shock, vibration, temperature and humidity. Utilizing field proven technology, this series of rugged pure sinewave DC-AC Inverters is suitable for harsh environments and can be optionally customized for unique sizes and shapes. The output is 4 wire WYE with 3 phases and a neutral line. It can work with totally unbalanced 3Ø loads.

- MILITARY SHELTERS
- GROUND SUPPORT
- TACTICAL SYSTEMS
- SHIP APPLICATIONS
- COMMUNICATIONS

FEATURES

- Crystal Controlled Frequency
- Compact and light weight, yet rugged and vehicle rated.
- 80-88% efficient.
- Tightly regulated output voltage and freq.
- Able to supply inrush current.
- Factory set to 50 Hz, 60 Hz or 400 Hz output.
- Capable of driving highly reactive loads
- Capable of driving highly capacitive loads such as non PFC switching power supplies.
- Very low harmonic distortion, THD<3%.
- Suitable for vehicle mounting.
- Fan cooled with air filter.

ELECTRICAL

Input Voltage (select): See Table
Output Voltage (select): See Table
Output Frequency: 50 Hz, 60 Hz or 400 Hz
Overload: 125% for 5 minutes
Output Waveform Sinewave: <3% THD
Output Regulation: ± 2.5%
MTBF: over 100,000 hours per field data
MTTR: 30 minutes
EMI: per MIL-STD-461E or F (Note 1)

PROTECTIVE FEATURES

- Overload
- Overvoltage
- Overtemperature

ENVIRONMENTAL

Operating Temperature: -20°C to +50°C
Storage Temperature: -40°C to + 85°C
Shock: 20g / 11 ms per MIL-STD-810
Vibration: per MIL-STD-810 for Airborne or Surface Vehicle and MIL-STD-167 Shipboard
Humidity: per MIL-STD-810 to 95% non condensing

Note:
1. EMI Compliance will require additional internal or external EMI filtering, specify requirements.

POPULAR OPTIONS

- MS Connector and Mates
- Chassis Slides
- Internal Electromechanical Transfer Switch
- EMI Filter (Input or Output)
- SNMP
- Remote ON/OFF
- Output Inhibit
- Input and Output Circuit Breakers
- Circuit Breaker Guards

APPLICATIONS

- MILITARY SHELTERS
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AVIONIC AUTOMATIC TEST EQUIPMENT SYSTEM

Note:
All images are for reference only. Actual product may be somewhat different.
3Ø RACK MOUNT INVERTER 1U, 2U, 3U & 5U
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Partial 3 Phase Model Selection - 300VA, 3KVA, 6KVA and 9KVA

<table>
<thead>
<tr>
<th>MODEL</th>
<th>KW/VA</th>
<th>OUTPUT FREQ. (Hz)</th>
<th>NOMINAL INPUT (VDC)</th>
<th>OUTPUT VOLTAGE (VAC)</th>
<th>WEIGHT</th>
<th>DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGLRK0.3K/X-YYY-ZZZ/ZZZ</td>
<td>0.3 KW 0.375 KVA</td>
<td>See &quot;X&quot; in Model</td>
<td>See &quot;YYY&quot; in Model</td>
<td>Select:</td>
<td>26 lb 12 kg</td>
<td>1.75&quot; x 19&quot; x 24&quot;</td>
</tr>
<tr>
<td>NGLRK3K/X-YYY-ZZZ/ZZZ</td>
<td>2.4 KW 3KVA</td>
<td>Select: 50</td>
<td>60</td>
<td>400</td>
<td>35 lb 16 kg</td>
<td>3.5&quot; x 19&quot; x 24&quot;</td>
</tr>
<tr>
<td>NGLRK5K/X-YYY-ZZZ/ZZZ</td>
<td>4.8 KW 5KVA</td>
<td>Select: 24</td>
<td>36</td>
<td>48</td>
<td>46 lb 21 kg</td>
<td>5.25&quot; x 19&quot; x 24&quot;</td>
</tr>
<tr>
<td>NGLRK6K/X-YYY-ZZZ/ZZZ</td>
<td>4.8 KW 6 KVA</td>
<td>Specialty frequencies also available. Consult Factory.</td>
<td>Specialty inputs also available. Consult Factory.</td>
<td>Specialty outputs also available. Consult Factory.</td>
<td>60 lb 27 kg</td>
<td>8.75&quot; x 19&quot; x 24&quot;</td>
</tr>
<tr>
<td>NGLRK9K/X-YYY-ZZZ/ZZZ</td>
<td>7.2 KW 9 KVA</td>
<td>Specialty frequencies also available. Consult Factory.</td>
<td>Specialty inputs also available. Consult Factory.</td>
<td>Specialty outputs also available. Consult Factory.</td>
<td>60 lb 27 kg</td>
<td>8.75&quot; x 19&quot; x 24&quot;</td>
</tr>
</tbody>
</table>

**DISCLAIMER**

Except where otherwise noted or superseded by process of law, Nova Electric accepts no responsibility or liability for any losses or damages of any kind arising out of the use of this catalog or any of its related functions.

**WARRANTY**

All products of Nova Electric are warranted for one year parts and labor. Repair is done at the Nova Electric service department.

**MODEL SELECTION**

NGLRK [K3/[X-YYYY-ZZZ/ZZZ]

1. OUTPUT POWER KVA SELECTION

<table>
<thead>
<tr>
<th>CODE</th>
<th>POWER (KVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3K</td>
<td>0.375 KVA</td>
</tr>
<tr>
<td>3K</td>
<td>3 KVA</td>
</tr>
<tr>
<td>5K</td>
<td>5KVA</td>
</tr>
<tr>
<td>6K</td>
<td>6KVA</td>
</tr>
<tr>
<td>9K</td>
<td>9KVA</td>
</tr>
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</table>

2. OUTPUT FREQUENCY SELECTION

<table>
<thead>
<tr>
<th>CODE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>50 Hz</td>
</tr>
<tr>
<td>6</td>
<td>60 Hz</td>
</tr>
<tr>
<td>4</td>
<td>400 Hz</td>
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3. INPUT VOLTAGE SELECTION

<table>
<thead>
<tr>
<th>NOMINAL RANGE</th>
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<tbody>
<tr>
<td>22-32</td>
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<tr>
<td>32-44</td>
</tr>
<tr>
<td>42-56</td>
</tr>
<tr>
<td>64-88</td>
</tr>
<tr>
<td>105-150</td>
</tr>
<tr>
<td>240-300</td>
</tr>
</tbody>
</table>

4. OUTPUT VOLTAGE SELECTION

<table>
<thead>
<tr>
<th>CODE</th>
<th>VOLTAGE</th>
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</thead>
<tbody>
<tr>
<td>115/200</td>
<td>115/200</td>
</tr>
<tr>
<td>120/208</td>
<td>120/208</td>
</tr>
<tr>
<td>220/380</td>
<td>220/380</td>
</tr>
<tr>
<td>230/400</td>
<td>230/400</td>
</tr>
<tr>
<td>240/415</td>
<td>240/415</td>
</tr>
</tbody>
</table>

Example:

NGLRK 0.3K / 6 - 36 - 120/208

Inverter Style Output Power KVA, 3 Phase Output Frequency Selection Input Voltage Selection Output Voltage Selection

Note: For custom shapes and sizes contact factory at (201) 385 - 0500
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OUTLINE DRAWINGS

1U

2U

3U

5U

Notes:
1. Chassis slides optional

Specifications subject to change without notice.