Operational Features

- Ultra-high efficiency up to 96%
- Wide input voltage ranges:
  - 9-20V (NQ20);
  - 9-40V (NQ40);
  - 9-60V (NQ60);
  - 9-90V (NQ90)
- Buck or Buck/Boost Mode available
- Maximum input/output currents up to 55A
- Suitable for use in Intermediate Bus Architectures
- On-board input and output filtering
- No minimum load requirement
- -40°C to +100°C Operating Temperature
- Remote sense and wide output voltage trim

BATTERY CHARGING

- Provides the power conversion platform for battery charging
- Output current limit is externally controlled for constant-current charging
- Current can be set with an external resistor or an active circuit
- Current analog signal provided for instrumentation and control functions
- Ideal diode output stage with zero back-drive currents prevents discharge of battery when not charging
- Output voltage set-point is independently controlled through trim pin
- Unit will smoothly transition between current and voltage modes as charging cycle needs charge

Protection/Control Features

- Input under-voltage lockout (UVLO)
- Output current limit (OCP) and short circuit protection
- Output over-voltage protection (OVP)
- Thermal shutdown (OTP)
- Output voltage trim
NiQor High-Voltage Non-Isolated DC-DC Converters

<table>
<thead>
<tr>
<th>Family</th>
<th>Input Voltage</th>
<th>Mode</th>
<th>Output Voltage</th>
<th>Package Size</th>
<th>Series</th>
<th>Thermal Design</th>
<th>Maximum Current</th>
<th>Options Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQ20</td>
<td>9-20V</td>
<td>T:</td>
<td>0-20V</td>
<td>E: Eighth Brick</td>
<td>HG</td>
<td>Encased, Flanged Baseplate</td>
<td>5A</td>
<td>Enable Logic: Standard (1/8 &amp; 1/4 only)</td>
</tr>
</tbody>
</table>