Convenient and flexible installation
The range of N 125 power supplies from Siemens offers currents of 160 mA, 320 mA and 640 mA. All of them use the same housing, ensuring easy interchange and therefore fast and convenient upgrading of power supply to the building systems. Two 640 mA power supplies can be connected in parallel, thus delivering 1,280 mA to a maximum of 128 bus users in one line. Both power supplies can be installed in the same control panel – with no need for observing a certain clearance between the lines. What’s more, every N 125 is capable of powering consumers via the built-in DC 29 V power pack.

No extra battery required
All N 125 models operate not only on AC 102...253 V, but also on DC 176...270 V. This means that the power supplies are also suited for use in plants equipped with a central battery for backup, e.g. for emergency lighting. An existing emergency power supply system can also be used for powering the bus. The N 125 ensure that status, warning and alarm messages can always be forwarded via bus, even in the event of a general power failure or when operating in emergency mode.

Highlights
- Flexible exchange plus fast and easy upgrading – thanks to identical housings
- Straightforward installation – thanks to parallel connection, with no need for observing minimum clearances between the different power supplies
- Very versatile – owing to broad range of input voltage of DC 176...270 V (e.g. suited for power supply in emergency mode (DC 220 V)
- Compact supply permits additional infeed of KNX loads

Answers for infrastructure.
Reliable power supply in all situations

Application: Emergency lighting with security power supply

In normal operation, a central program checks automatically the operational readiness of the lamps and electronic ballasts of the emergency lamps. Fault status messages are forwarded to the building automation and control system. While in normal operation the emergency lamps can be included in the automatic general lighting system, faults or failures of automatic equipment or systems in emergency mode for general lighting, or a DALI power failure, are not allowed to impact security lighting in emergency mode.

In that mode, the security power supply of KNX and DALI and the N 125/x2 power supplies ensure that communication is maintained: Since emergency power supply delivers the bus voltage, status and error messages can still be sent via bus. If the N125/x2 is constantly powered by the security power supply, or in the event of a general power supply failure when changeover to the security power supply takes place within 100 ms, the KNX bus users can also be powered without interruption should the general power supply fail. For that purpose, the N 125/x2 feature integrated buffering, ensuring interruption-free changeover.

Application: Security power supply and KNX/DALI gateway with status message in emergency mode

<table>
<thead>
<tr>
<th>Normal operation</th>
<th>Emergency operation</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Lighting control with DALI
Feedback of error messages and of failure of lighting and ballasts to the building automation and control system
Monitoring of the number of operating hours for exchanging lamps

Key*
1 Changeover equipment
2 KNX line coupler
3 KNX power supply
4 KNX/DALI gateway
5 Security lamp
6 KNX binary input

*Possible combination of components
## Technical specifications

### Enclosure data

- Modular installation devices for mounting on TH35 mounting rail acc. to EN 60715

### Dimensions

- Dimensions (1 MW = 18 mm)
  - N 125/02: 4 MW
  - N 125/12: 4 MW
  - N 125/22: 4 MW

### Bus connection

- Integrated choke
- Bus connection via contact system to data rail
- Bus connection via bus terminal

### Outputs

<table>
<thead>
<tr>
<th>Rated operational voltage 50...60 Hz</th>
<th>AC V</th>
<th>DC V</th>
<th>AC V</th>
<th>DC V</th>
<th>AC V</th>
<th>DC V</th>
</tr>
</thead>
<tbody>
<tr>
<td>120...230</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
</tr>
</tbody>
</table>

- Output voltage, DC: 29 V
- Output current: 160 mA, 320 mA, 640 mA
- Additional unchoked output for 29 V DC, for powering a second bus line via an external choke (e.g. N 120/02)

## Selection and ordering data

<table>
<thead>
<tr>
<th>Type</th>
<th>Version</th>
<th>DT</th>
<th>Order No.</th>
<th>Price per PU (UNIT, SET, M)</th>
<th>PSY/ P. unit</th>
<th>PG</th>
<th>Weight per PU approx. kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 125/02</td>
<td>N 125/02</td>
<td>A</td>
<td>5WG1 125-1AB02</td>
<td>1 ST 030</td>
<td>0,298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N 125/12</td>
<td>N 125/12</td>
<td>A</td>
<td>5WG1 125-1AB12</td>
<td>1 ST 030</td>
<td>0,298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N 125/22</td>
<td>N 125/22</td>
<td>A</td>
<td>5WG1 125-1AB22</td>
<td>1 ST 030</td>
<td>0,298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You can order this quantity or a multiple thereof.
Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

“We are the preferred partner for energy-efficient, safe and secure buildings and infrastructure.”