Managing DC Link Energy

24 Volt Emergency Power Supply

NEV
24 Volt Emergency Power Supply
NEV

The NEV is used to supply the 24 V DC circuit with mains independent electrical voltage. For this purpose, the NEV makes use of the energy of a supply unit, namely the dynamic energy supply DEV or the dynamic energy storage combination DEK.

Under severe voltage fluctuations or when power fails, the NEV provides energy to its secured 24 volt circuit. The time depends primarily on the load and the available energy from the supply unit. The settings of the supply unit also have an impact on the duration of the supply of electrical energy.

However, the NEV is not designed for continuous operation. The power supply that provides the continuous supply is normally connected as a power source to the NEV. The consumers on the circuit to be secured are connected to the NEV. This is automatically used to teach the NEV about the externally connected voltage and thus to support the voltage level.

Active 24-Volt support power supply

- space-saving
- without further manual configuration
- no keys
- provides support when power failures or -interruptions occur

Technical Specifications NEV

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical power ratings</td>
<td>22 VDC...26 VDC</td>
</tr>
<tr>
<td>Input voltage (terminal X2)</td>
<td>6A (up to 150VA) for failure operation</td>
</tr>
<tr>
<td>Rated current</td>
<td>5A (up to 120VA) for mains operation</td>
</tr>
<tr>
<td>Standby power dissipation</td>
<td>≤ 1 W</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>III (altitude up to 2000 m above sea level)</td>
</tr>
<tr>
<td></td>
<td>II (altitude about 2000 m above sea level)</td>
</tr>
<tr>
<td>Immunity to interference</td>
<td>Industries in accordance with</td>
</tr>
<tr>
<td></td>
<td>EN 6100-6-2-205 and EN 6100-6-4-2007</td>
</tr>
<tr>
<td>Dimensions and weight</td>
<td>275 x 90 x 60 mm</td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>aprr. 1.0 kg</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
</tr>
<tr>
<td>Environmental conditions</td>
<td></td>
</tr>
<tr>
<td>Environmental temperature</td>
<td>-10° C to +85° C (transport, storage)</td>
</tr>
<tr>
<td></td>
<td>0° C to +40° C (operation)</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>≤ 95% (transport, storage)</td>
</tr>
<tr>
<td></td>
<td>≤ 85% (operation)</td>
</tr>
<tr>
<td>Cooling type</td>
<td>Air cooled (convection)</td>
</tr>
<tr>
<td>Protection level</td>
<td>housing IP20</td>
</tr>
<tr>
<td>Degree of pollution installation location</td>
<td>2</td>
</tr>
</tbody>
</table>

Installation dimensions and holes (mm)

Simple to install on the supply unit
24 Volt Emergency Power Supply

**Parameters**

- **Technical Specifications NEV**
  - Active 24-Volt support
  - space-saving
  - without further manual configuration
  - no keys
  - provides support when power failures or -interruptions occur

**Simple connections I (bottom)**
1. Connection of external power supply and the 24-volt circuit (X2) that must be secured
2. Signal terminals (X3)
3. Interface RS 422 (optional)

**Simple connections II (top)**
1. Reverse polarity secured interface to connect the power supply unit (X1)
2. Reverse polarity secured interface to connect another NEV (X1)

**Labelling (front)**
1. Installation position
2. Type label
3. Hazard notice
4. Pin assignment/device status

**Wiring Diagram**
1. NEV
2. Consumer, secured
   - 22...26 VDC, max. 6 A (150 VA)
3. Consumer, unsecured
4. 24 V mains power supply
5. Power supply unit

Connect two or more NEV to a DEV / DEK, an EM or a combination thereof

Several NEV units may also be connected to one unit or the combination by using an extension. For this purpose, each additional NEV is connected by means of connector X1 of the NEV using the connection cable.

No further EM may be connected to plug X1 of the NEV.

Important to note! The NEV-outputs must not be connected in parallel!

Ensure that no device is loaded with more than 6A/150VA.

**Electrical power ratings**
- **Input voltage (terminal X2)** 22 VDC...26 VDC
- **Rated current** 6A (up to 150VA) for failure operation
  - 5A (up to 120VA) for mains operation
- **Standby power dissipation** < 1 W
- **Overvoltage category** III (altitude up to 2000 m above sea level)
  - II (altitude about 2000 m above sea level)
- **Immunity to interference** Industries in accordance with EN 6100-6-2-2005 and EN 6100-6-4-2007

**Dimensions and weight**
- **Dimensions H x W x D** 275 x 90 x 60 mm
- **Weight** appr. 1.0 kg

**Environmental conditions**
- **Environmental temperature** -10° C to +85° C (transport, storage)
  - 0° C to +40° C (operation)
- **Relative humidity** 
  - £95% (transport, storage)
  - £85% (operation)
- **Cooling type** Air cooled (convection)
- **Protection level housing** IP20
- **Degree of pollution installation location** 2
Managing DC Link Energy

Energy storage solutions and safe brake resistors in wire-wound and PTC technology

We offer:

- **Tested product quality**
- **Certified processes**
  - we undergo regular inspections by third parties
- **Individual application support**
  - owing to our modular system we can offer more than 60,000 solutions
- **Machine-specific implementation**
  - we match our products with your machines
- **High reaction rate**
  - we provide you with a suitable offer in the shortest possible time
- **Short delivery times**
  - all components are in stock
- **On-time deliveries every time**
  - we deliver on schedule in optimal lot sizes
- **Reliable partner**
  - we strive for long-term business relationships
- **Direct customer relationships**

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We look forward to hearing from you!

KOCH

Michael Koch GmbH, Zum Grenzgraben 28, D-76698 Ubstadt-Weiher
Phone (+49) 7251 / 96 26 20, Fax (+49) 7251 / 96 26 21
www.brakeenergy.com, mail@brakeenergy.com

Subject to technical changes. MK_PRO_NEV_ENG_R00_0