Low-voltage hybrid systems

48V battery

PRODUCT BENEFITS

- Compact battery design enables flexible mounting e.g. underneath the seat
- Passive cooling enables noiseless operation and easier integration into the vehicle since no additional cooling supply is required
- Reliable cell performance and long lifetime, even at high operating temperature
- ASIL-C-compliant functional safety and easy integration into electronic system architectures guaranteed
Low-voltage hybrid systems

90 mm

The low height of the 48 V battery allows flexible mounting within the vehicle.

**TASK**
Along with the boost recuperation machine and the DC/DC converter, the 48 V battery is the central component in the 48 V system. It stores recovered braking energy, subsequently delivering it directly to the electric drive and supplying the vehicle electrical system.

**FUNCTION**
During deceleration, the boost recuperation machine recovers energy which is then stored in the battery. This energy can be used to provide boost assist or for the stabilization of the boardnet.

**passive**
Passive cooling enables a compact design and contributes to cost optimization.

**noiseless**
The 48 V battery is nearly noiseless thanks to its passive cooling, which increases vehicle comfort.

### TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Dimension (L × W × H)</th>
<th>309 mm × 175 mm × 90 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>6 kg</td>
</tr>
<tr>
<td>Capacity</td>
<td>8 Ah</td>
</tr>
<tr>
<td>Charge power¹ (10 s)</td>
<td>14 kW</td>
</tr>
<tr>
<td>Discharge power¹ (10 s)</td>
<td>11 kW</td>
</tr>
</tbody>
</table>

¹ 25 °C, 50% SOC