Power relays for professional use
Monostable, bistable, intelligent
Technical information

MPR20, MPR10, HPR10 power relays

The MPR20, MPR10 and HPR10 power relays are innovative products designed for switching high current loads and for battery management. They can be installed in both 12V and 24 on-board electrical systems. Due to their compact and extremely robust enclosures and versatile mounting options, they are ideal for demanding applications in utility vehicles.

The MPR20 is the most energy-efficient monostable power relay. The reduction of the holding power and the pull-in power allows direct connection to the controller and provides additional cost and environmental advantages.

The MPR10 is the lightest bistable high current relay. Materials of superior quality and a specially compact and light-weight design allow extremely flexible use in utility vehicles.

The HPR10 is the most intelligent power relay. An active electronic control unit for signal conditioning completes the benefits. Other functions such as level or pulse control, voltage monitoring etc. can be configured individually as per customer’s request. Please visit our online relay configurator.

www.e-t-a.de/relay_configurator

### Technical data

<table>
<thead>
<tr>
<th>Relay type</th>
<th>MPR20 monostable</th>
<th>MPR10 bistable</th>
<th>HPR10 intelligent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage ratings</td>
<td>DC 12 V / DC 24 V</td>
<td></td>
<td></td>
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<tr>
<td>Current ratings</td>
<td>100/200/300 A</td>
<td></td>
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<tr>
<td>Ampacity</td>
<td>2 x \text{IN} _20s</td>
<td></td>
<td></td>
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<tr>
<td>Typical life (mechanical)</td>
<td>&gt; 100,000</td>
<td></td>
<td></td>
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<tr>
<td>Temperature range</td>
<td>-40 °C...+85 °C</td>
<td></td>
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</tr>
<tr>
<td>Pull-in current 12 V/24 V</td>
<td>2.4 A</td>
<td>4.5 A/2.3 A</td>
<td>4.5 A/2.3 A</td>
</tr>
<tr>
<td>Release current 12 V/24 V</td>
<td>–</td>
<td>4.5 A/2.5 A</td>
<td>4.5 A/2.5 A</td>
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<tr>
<td>Holding current 12 V/24 V</td>
<td>0.2 A/0.1 A</td>
<td>0 A</td>
<td>8 A/5 A</td>
</tr>
</tbody>
</table>

### Your benefits

- Reduced power consumption and CO₂ emission values due to minimal energy requirement
- Flexible installation for demanding applications due to light, compact, robust and water- and dust-proof design (IP67, IP6k9k)
- Maximum endurance and permanent availability due to wear-free switching operations

### Typical applications

- Buses, trucks, construction machinery, agricultural vehicles and forestry equipment as well as specialty vehicles
- Air-conditioning, compressors, battery management, exhaust aftertreatment SCRT

### Standards

- ISO 16750
- IATF 16949
- ECE R118
- ECE R10
- ASIL upon request

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