Charging of electric vehicles at a standard wall socket or a wall box requires protection devices against DC fault currents to avoid electric shock. Installed type A residual current circuit-breakers (RCCBs) are unable to identify and deactivate DC fault currents.

benvac differential current sensors offer the opportunity to save the cost and space for a costly type B RCCB in IC-CPD or wall boxes.

- avoids hazardous situations with DC fault currents
- protects RCCB type A from saturation
- saves costly type B RCCD
- volume optimized
- AC/DC-current sensitivity at low cost
- self-monitoring and test functions
- robust mechanical design suitable for IC-CPD

The photo shows the IEC versions only.

benvac is a joint development of Bender GmbH & Co. KG and VACUUMSCHMELZE.
APPLICATIONS (MODE 2 AND MODE 3)
- IC-CPD in charging cables for electric vehicles (EV) and plug-in hybrid electric vehicles (PHEV)
- Wallboxes for charging EV and PHEV
- Charging piles for charging EV and PHEV
- Inductive charging for EV and PHEV

<table>
<thead>
<tr>
<th>Mode</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Standard</td>
<td>IEC 62752/UL 2231</td>
<td>IEC 61851-1/-21/-22</td>
</tr>
<tr>
<td>Power class</td>
<td>1ph 16 A (3.7 kW) 3ph 16 A (11 kW) 3ph 32 A (22 kW)</td>
<td>1ph 16 A (3.7 kW) 3ph 63 A (43 kW)</td>
</tr>
</tbody>
</table>
GENERAL BLOCK DIAGRAM OF AN IC-CPD

GENERAL BLOCK DIAGRAM OF PUBLIC CHARGING STATIONS

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