Charging rectifier type PRX1
0.9kW to 11kW – 24/48/110/125V$_{DC}$

PRX is a complete charging rectifier including rectifier modules and monitoring unit for battery systems with high reliability requirements.

**Plug-in rectifier modules**
Provides flexibility by adjusting the output power, easy maintenance with hot swappable and high availability with parallel modules.

**Safe operation and high availability**
We support you with commissioning and service as well as education in handling and maintenance.

**Monitoring**
Monitoring of battery, rectifier and distribution, status and alarms distinctly on display, settings via clear menus for easy handling. Remote alarms via relays. Battery circuit test and monitoring of battery symmetry for early warning of battery failure.

**Battery status**
Battery circuit test and symmetry monitoring provides good conditions for early detection of errors in the battery. Battery temperature is monitored and automatically adjusts the float charging voltage.
Charging rectifier type PRX1

General
PRX1 is a complete charging rectifier in an enclosure including rectifier and monitoring unit. The rectifier can be equipped with up to four rectifier modules of plug-in type.

Enclosure
Type: FW12 - Wall mounted cabinet
F27 – Floor cabinet with 19" rack frame work
Cable entrance: FW12 - From bottom
F27 – From bottom or top
Dimensions (h/b/d): FW12 - 604/600/500 mm
F27 - 1361/600/600 mm
Color: RAL 7035 light grey
Class of enclosure: IP21
Ventilation: Temperature controlled fans in rectifier modules

Input AC
Input voltage: 230VAC 1-phase
Frequency: 47 – 63 Hz
Power factor: > 0.95 at 230 VAC, full load
Connection PRM1-W: Screw terminal, 0.2 – 6 mm²
Other: See table

Output DC
Output voltage, nominal: 24/48/110/125 VDC
Output current (Max***): 24VDC/240A
48VDC/200A
110VDC/40A
125VDC/36A
Connection: Double screw terminal, 0.75 – 35 mm²
Voltage regulation: < 0.5 % of nominal output voltage
< 1 % of rated current
< 0.1 % RMS
Current regulation: < 1 % of rated current
Current limit range: 0 – 100 % of rated current
Ripple voltage: < 0.1 % RMS
Other: See table

Environmental data
Ambient temperature:
- Operation, 0 to +40 °C
- Storage, -40 to +70 °C
Humidity: < 90 % RH, non-condensed
Altitude a.s.l.: < 2000 m

Monitoring unit type PCM2
Monitoring of the complete DC system.
Clear graphical display for showing and setting of alarms, operating data, etc.
Remote alarm via 4 freely configurable relays.

Distribution: Fuse monitoring, earth fault monitoring, external alarm
Battery: Temperature monitoring, battery circuit test, battery symmetry monitoring
Rectifier: Over/under voltage, rectifier fault, temperature compensated float charge, automatic equalizing charge

Standards
Safety: EN 50178
EMC, immunity: EN 61000-6-2
EMC, emission: EN 61000-6-4
IP: EN 60529

Option
Remote alarm: Relay 5-8
Class of enclosure: IP43

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<table>
<thead>
<tr>
<th>PRX1</th>
<th>Rectifier module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>U_Rated (VDC)</td>
</tr>
<tr>
<td>PRX1 24/80</td>
<td>24</td>
</tr>
<tr>
<td>PRX1 24/240***</td>
<td>240</td>
</tr>
<tr>
<td>PRX1 48/24</td>
<td>48</td>
</tr>
<tr>
<td>PRX1 48/75</td>
<td>75</td>
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<tr>
<td>PRX1 48/200***</td>
<td>200</td>
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<tr>
<td>PRX1 110/40</td>
<td>110</td>
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</tbody>
</table>

Table 1, Ratings *max @ 195VAC. ** type @ 230VAC
***Max 120A/100A @ 24/48VDC in enclosure of type FW12

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<table>
<thead>
<tr>
<th>Output data</th>
<th>Input data</th>
<th>Power loss**</th>
</tr>
</thead>
<tbody>
<tr>
<td>U_Rated (VDC)</td>
<td>I_Rated (A)</td>
<td>Power number</td>
</tr>
<tr>
<td>24 (21-28)</td>
<td>20</td>
<td>560</td>
</tr>
<tr>
<td>48 (42-56)</td>
<td>50</td>
<td>2800</td>
</tr>
</tbody>
</table>

Table 2, Ratings *max @ 195VAC, ** type @ 230VAC