Charging Rectifier type PRX3
9kW to 54kW - 110/125/220/440V_{DC}

PRX3 is a complete modular charging rectifier including rectifier modules and monitoring unit for critical systems with high reliability.

**Plug-in rectifier modules**
Easy to increase output power by additional modules and ease of service by hot swap modules. High availability due to parallel operation.

**Safe operation and high availability**
Powerful design with soft switch IGBT technology. Built-in active AC power protection for over- and under voltage. Long-life design with speed controlled and monitored fans. Low noise level and low weight.

**System monitoring**
Covers battery, rectifier and distribution. Status and alarms distinctly on display, settings by menus for easy handling.

**Battery status**
Battery circuit test and monitoring of battery symmetry for early warning of battery faults. Battery temperature is monitored and automatically adjusts the float charging voltage.

www.kraftpowercon.com
Charging Rectifier type PRX3

General
PRX3 is a complete modular charging rectifier for systems with high reliability. It can be equipped with one or more rectifier modules of type PRM3 with possibility to be swapped during operation. The monitoring unit is a stand-alone unit and communicates with the modules through a serial interface. PRX3 is available in three types of cabinets where the choice mainly depends on the desired output power.

Enclosure
Type: Floor cabinet
Cable inlet: Above or below
Dimensions F27 (h/w/d): 1360/600/600 mm
(mounted in 19” fixed rack frame)
Dimensions F41 (h/w/d): 2000/600/480 mm
(mounted in 19” fixed rack frame)
Dimensions S39 (h/w/d): 2100/840/654 mm
(mounted in 19” hinged door frame)
Color: RAL 7035 light grey
Class of enclosure: IP21
Ventilation: Temperature controlled fans in rectifier modules, otherwise natural convection

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

Input AC
Input Voltage: 3x380/415VAC, ±10%
Frequency: 45 – 65 Hz
Power factor: > 0.97 at 3x400 VAC, full load
Other: See table

Output DC
Output voltage, nominal: 110/125/220/440 VDC
Voltage regulation: < 0.5 % of nominal output voltage
< 1 % within 3 seconds, 0-100 / 100-10 % load change
Current regulation: < 1 % of rated current
Current limit range: 0 – 100 % of rated current
Ripple voltage: < 0.2 % RMS
Efficiency: >92%
Other: See table

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

Options
Input Voltage: 3x220VAC, 3x480VAC
Remote alarm: Relay 5-8
Class of enclosure: IP43

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<table>
<thead>
<tr>
<th>Model</th>
<th>Output data</th>
<th>Input data</th>
<th>Rect. module</th>
<th>Cabinet type/Weight</th>
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* max at 3x340 VAC
** typical at 3x3400 VDC and full load

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