



## Charging Rectifier type PRX

1,0kW to 5,4kW – 24/48/110/220V<sub>DC</sub>

*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 PRX

## General

PRX is a complete unit consisting of charging rectifier and monitoring unit. The rectifier can be equipped with one or two rectifier modules of plug-in type. The monitoring unit is a functionally independent unit that communicates with rectifier modules via a serial interface.

## Enclosure

Type: Wall mounting cabinet  
 Cable inlet: From below  
 Height: 400 mm  
 Width: 274 mm  
 Depth: 333 mm  
 Weight: 18 kg (fully equipped)  
 Color: RAL 7035 light grey  
 Class of enclosure: IP21  
 Ventilation: Temperature controlled fans in the 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

## Input AC

Frequency: 50 – 60 Hz  
 Power factor: > 0.99 at 230 V<sub>AC</sub>, full load  
 Connection: 0.5 – 10 mm<sup>2</sup>  
 Other: See table 1 & 2



PRX in open service position

## Output DC

Output voltage, nominal: 24/48/110/220 V<sub>DC</sub>  
 Connection: 1.5 – 35 mm<sup>2</sup>  
 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: < 0.1 %<sub>RMS</sub>  
 Other: See table 1 & 2

## Monitoring unit type PCM2

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



Monitoring unit type PCM2

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

## Complete Charging Rectifier

PRX			Rectifier module	
Model	U <sub>NOM</sub> (V <sub>DC</sub> )	I <sub>RATED</sub> (A)	Number	I <sub>RATED</sub> (A)
PRX 24/36	24	36	1	36
PRX 24/2x36		72	2	36
PRX 24/70		70	1	70
PRX 48/18	48	18	1	18
PRX 48/2x18		36	2	18
PRX 48/50		50	1	50
PRX 110/8	110	8	1	8
PRX 110/2x8		16	2	8
PRX 110/16		16	1	16
PRX 110/2x16		32	2	16
PRX 110/22	110	22	1	22
PRX 110/2x22		44	2	22
PRX 220/10		10	1	10
PRX 220/2x10	220	20	2	10

Table 1, Ratings

## Rectifier module

Output data				Input data			Power loss**
U <sub>NOM</sub>	U <sub>RANGE</sub>	I <sub>RATED</sub>	Output Power	Input voltage range	Mains power *	Mains current *	
V <sub>DC</sub>	V <sub>DC</sub>	A	W <sub>MAX</sub>	V <sub>AC</sub>	VA	A <sub>ARMS</sub>	W
24	22-33	36	1000	90-290	1150	6	150
		70	2000	90-290	2200	12	175
48	42-63	18	1000	90-290	1150	6	135
		50	2700	90-290	2900	15	210
110	100-158	8	1000	90-290	1150	6	135
		16	2000	90-290	2200	12	160
		22	2700	90-290	2900	15	200
220	187-292	10	2475	90-290	2700	14	200

Table 2, Ratings, \* maximum at 195VAC, \*\* type at 230VAC and full load



The information in this document may be changed without notice



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