



Charging Rectifier type PRX

0,56kW to 5,6kW – 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 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: 340 mm
 Width: 245 mm
 Depth: 227 mm
 Weight: 13 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: 47 – 63 Hz
 Power factor: > 0.95 vid 230 V_{AC}, full last
 Connection: 0.2 – 4 mm²
 Other: See table 1 & 2

Complete Charging Rectifier

PRX			Rectifier module	
Model	U _{NOM} (V _{DC})	I _{RATED} (A)	Number	I _{RATED} (A)
PRX 24/20	24	20	1	20
PRX 24/40		40	2	20
PRX 24/60		60	1	60
PRX 48/12	48	12	1	12
PRX 48/24		24	2	12
PRX 48/25		25	1	25
PRX 48/50-1		50	1	50
PRX 48/50-2		50	2	25
PRX 110/10	110	10	1	10
PRX 110/20		20	2	10
PRX 125/9	125	9	1	10
PRX 125/18		18	2	10

Table 1, Ratings

Rectifier module

Output data				Input data			Power loss** W
U _{NOM}	U _{RANGE}	I _{RATED}	Output Power	Input voltage range	Mains power*	Mains current*	
V _{DC}	V _{DC}	A	W _{MAX}	V _{AC}	VA	A _{RRMS}	
24	21-28	20	560	85-295	670	3.4	92
		60	1680	180-264	1960	10.0	187
48	42-56	12	672	85-295	800	4.1	92
		25	1400	85-295	1600	8.2	156
		50	2800	150-295	3150	16.1	312
110/125	97.5-145	10	1250	90-300	1410	7.2	139

Table 2, Ratings, * maximum at 195VAC, ** type at 230VAC



PRX in open service position

Output DC

Output voltage, nominal: 24/48/110/125 V_{DC}
 Connection: 0.75 – 35 mm²
 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 %_{RMS}
 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 61000-6-3

