



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

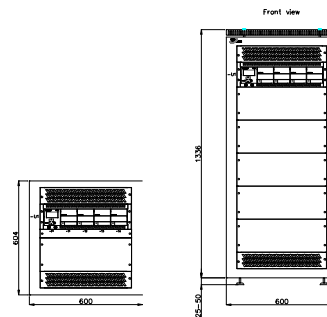
Input voltage: 230V_{AC} 1-phase
Frequency: 47 – 63 Hz
Power factor: > 0.95 at 230 V_{AC}, full load
Connection PRM1-W: Screw terminal, 0.2 – 6 mm²
Other: See table

Output DC

Output voltage, nominal: 24/48/110/125 V_{DC}
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 % 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



FW12

R47

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.



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
IP: EN 60529

Option

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



KRV 136GB-C

PRX1		Rectifier module		
Model	U _{NOM} (V _{DC})	I _{MAX} (A)	Number of modules	I _{RATED} (A)
PRX1 24/80	24	80	1-4	20
PRX1 24/240 ^{***}		240	1-4	60
PRX1 48/24	48	24	1-2	12
PRX1 48/75		75	1-3	25
PRX1 48/200 ^{***}		200	1-4	50
PRX1 110/40	110	40	1-4	10

Table 1, Ratings *max @ 195V_{AC}, ** type @ 230V_{AC}
***Max 120A/100A @ 24/48V_{DC} in enclosure of type FW12

Output data			Input data			Power loss ^{**} W
U _{NOM} V _{DC}	I _{RATED} A	Output power W _{MAX}	Input voltage range V _{AC}	Mains power* VA	Mains current** A _{RMS}	
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	1450	90-300	1410	7.2	139

Table 2, Ratings *max @ 195V_{AC}, ** type @ 230V_{AC}

