

Charging Rectifier type PRX



Compact modular charging rectifier

- With built-in monitoring and rectifier modules in wall-mounting cabinet, width 245 mm, depth 227 mm, height 340 mm.
- Plug-in rectifier modules for output power flexibility, easy service due to hot swap modules and high availability due to parallel operation.
- 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 faults.
- Safe operation and high availability. We support you with commissioning and service as well as education in handling and maintenance.

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Technical data

General

PRX is a complete charging rectifier including rectifier modules and monitoring unit. The rectifier can be equipped with up to four rectifier modules of plug-in type. The monitoring unit is a functionally separate unit who communicates with the rectifier modules via a serial interface.

Enclosure

Type:	Mall-mounting cabinet
Cable inlet:	From below
Height:	340 mm
Width:	245 mm
Depth:	227 mm
Weight:	13 kg (fully equipped)
Colour:	RAL 7035 light grey
Class of enclosure:	IP21
Ventilation:	Temperature controlled fans in rectifier modules, otherwise natural convection

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

Input AC

Frequency:	47 – 63 Hz
Power factor:	> 0.95 at 230 VAC, full load
Connection:	0.2 – 4 mm ²
Other:	See table

Complete charging rectifier

PRX			Rectifier module		
Model	U _{NOM} (V _{DC})	I _{RATED} (A)	Number	I _{RATED} (A)	Model
PRX 24/20	24	20	1	20	L0500B-IW
PRX 24/40		40	2	20	L0500B-IW
PRX 24/60		60	1	60	V1500B
PRX 48/12	48	12	1	12	L0600A-IW
PRX 48/24		24	2	12	L0600A-IW
PRX 48/25		25	1	25	L1250A-IW
PRX 48/50-1		50	1	50	L2500A-IW
PRX 48/50-2		50	2	25	L1250A-IW
PRX 110/10	110	10	1	10	L1250K
PRX 110/20		20	2	10	L1250K
PRX 125/9	125	9	1	10	L1250K
PRX 125/18		18	2	10	L1250K

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PRX in open service position

Output DC

Output voltage, nominal:	24/48/110/125 VDC
Connection:	0.75 – 35 mm ²
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

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 equalising charge

Standards

Safety:	EN 50178
EMC, immunity:	EN 61000-6-2
EMC, emission:	EN 61000-6-3

Rectifier module



Output data				Input data			Power loss**	Model designation
U_{NOM} V_{DC}	U_{RANGE} 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	L0500B-IW
		60	1680	180-264	1960	10.0	187	V1500B
48	42-56	12	672	85-295	800	4.1	92	L0600A-IW
		25	1400	85-295	1600	8.2	156	L1250A-IW
		50	2800	150-295	3150	16.1	312	L2500A-IW
110/125	97.5-145	10	1250	90-300	1410	7.2	139	L1250K

* maximum at 195 V_{AC}

** type at 230 V_{AC} and full load