

RECTIFIER / DC SYSTEM *SFP range*

24Vdc;	75-150A
48Vdc;	41-83A
60Vdc;	33-66A
110Vdc;	18-36A

Product Description

The SFP rectifier range is using the latest design in high frequency switch mode technology featuring a sinusoidal input current and an extremely high efficiency also at low load situations

The basic power chassis is provided with 2 rectifier slots which allows easy extension of the output power or increased reliability by N+1 redundancy in the power electronics.

The unit can be delivered either as a wall mounted chassis or integrated in a sheet steel cabinet together with a battery to form a complete DC UPS-system. In both cases a DC distribution can be integrated optionally.

The FP^{smart} controller comes with a high resolution TFT screen and controls all typical parameters as high, low battery voltage, rectifier fault, earth fault, tripped fuse etc.



Applications

Rectifier module for DC power supply facilities with or without battery in all areas of telecommunication, industry, power generation and power distribution.

Key features

- **Very compact design**
- **Wide input voltage range**
- **Sinusoidal input current (PFC)**
- **High efficiency**
- **Excellent dynamic behaviour**
- **Very Low ripple voltage**
- **Digital control with TFT display**
- **Temperature compensated battery charging**



DATASHEET
SFP DC-SYSTEMS

TECHNICAL DATA			RECTIFIER	
Nominal output voltage	24Vdc	48Vdc	60Vdc	110Vdc
Nominal output current	75A / 150A	41A / 83A	33A / 66A	18A / 36A
Nominal input voltage	230 Vac			
Input voltage range	85 – 300Vac (176 – 275Vac nominal).			
Max. input current	12A / 24A			
Recommended input protection	16A / 25A			
Input frequency range	0-63 Hz			
Input power factor	>0.99 at Pnom >50%			
Total harmonic distortion	<5% at noninal input and max. output			
Efficiency	>94% at 20-100% load			
Charge characteristic	IU according DIN41772/DIN41773, power limited			
Charge voltage range	21.7-36.0Vdc	43.4-72.0Vdc	43.4-72.0Vdc	89.2-171.6Vdc
Default setting charge voltage	26.7Vdc	53.5Vdc	67Vdc	122.6Vdc
Nominal output current	67.4A / 134.8A	37.3A / 74.7A	29.8A / 59.7A	16.3A / 32,6A
Voltage ripple	≤100mVpp	≤150mVpp		≤500mVpp
Static stability output voltage	±0.5% of Unom at 10%-100% load			
Dynamic stability output voltage	<5% Unom at load step 10%-80%-10% load; regulation time ≤ 50ms			
Short circuit protection	Continuous short circuit proof; 1x Inom			
Parallel operation	Yes, with load sharing ≤ 5% Inom			
Internal decoupling at the output	no (option)			
Local monitoring;	Display and keys, WEB interface via standard browser using WebPower			
Remote monitoring;	WebPower (WEB Interface, SNMP protocol and email)			
Alarm Relays;	3x Potential free change over contacts (NO, NC, C); max 130Vdc,1A/40W			
Visual Indications	Green LED – System ON			
	Yellow LED – Minor alarm(s)			
	Red LED – Major alarm(s)			
	Graphical TFT high contrast, high resolution colour display			
Inputs	6 x digital or analogue inputs			
Current Measurements;	Battery current			
	Rectifier current			
	Calculated load current			
Alarms;	Rectifier Failure			
	Low DC voltage alarm			
	High DC voltage alarms			
	DC Earth fault alarm			
	Temperature alarm			
	Mains failure alarm			
	Battery remaining capacity alarm			
	Load/battery MCB tripped alarm			
Ambient temperature	Operation: -40°C to +45°C, storage: -40°C to +80°C			
Cooling	Forced ventilation			
Audible noise	<40dBA at 1m distance			
Type of enclosures (standard)	Wallbox for direct mounting			
Dimensions wallbox	452 (w) / 450 (h) /200 (d) mm			
Weight wallbox	app. 9 kg (2 rectifiers)			
Protection class wallbox	IP20			
Optional enclosures	Sheetsteel cabinet with internal battery			
Dimensions cabinet K1	600 (w) / 400 (d) / 800 (h) mm			
Dimensions cabinet K2	600 (w) / 400 (d) / 1200 (h) mm			
Weight K1/K2	Depending on rating and battery size			
Protection class	IP23 / IP20 with opened door			
Colour	RAL 7035			
CE conformity	Yes			
Compliance to safety standards	EN60950-1			
Compliance to EMC standards	EN55011, EN55022, class "B"; EN61000-6-1, -2, -3, -4			
Connections	AC input, DC output and 3x alarmcontacts			