PROTECT MIP

MODULAR SWITCH-MODE INDUSTRIAL APPLICATIONS RECTIFIER

Output rating from single rectifier:
24 VDC; 50 A
48 VDC; 40 A
120 VDC; 15 A

AEG Power Solutions rectifiers assure permanent availability of your global industrial applications.

State of the art switch mode technology, Protect MIP rectifier system is designed to be compact, simple to use and easy to maintain. It allows you to benefit from low electromagnetic pollution and high efficiency, resulting in a cost effective system with reduced operating costs, short delivery time and prepared for easy integration in cabinet.

Application

Provides permanent DC power availability in combination with a parallel battery. Supplying a full range of DC consumers including constant voltage and current sources. The Protect MIP can charge a wide variety of batteries, including: vented lead-acid, valve regulated lead-acid (VRLA) or nickel-cadmium (NiCd) batteries. The Protect MIP can furthermore be used as a direct power supply without batteries.

Key features

» Compact 19 inch design
» Sinusoidal input current and low harmonics
» High efficiency; reducing operating costs
» Low voltage ripple to prolong battery life time
» Robust due to very wide operating input voltage (80 to 280 VAC)
» Reliable operation due to advanced protection (input, output, temperature, current, power) and high MTBF
» Soft start
» Adjustable output voltage
» Automatic stop on high and low mains voltage with automatic re-start
» Self-protection against high temperature conditions via automatic output power de-rating
» Easy to operate: compact, light, LCD display, clear LED indications
» Ready to use; off-the-shelf
» Control and alarm functions for remote management
» ROHS compliant
» Easy maintenance

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SPECIFICATION

TYPE	24 V/50 A	48 V/40 A	120 V/15 A
Part number	8000029681	8000029682	8000029683
INPUT			
Nominal input voltage	230 V ±20 % (+20 % -60 % functional)		
Frequency	50 Hz or 60 Hz, ±5 %		
Current consumption	7.5 A	10 A	10 A
Inrush current	1,5 nominal peak current		
THDI	< 5 %		
Power factor	0,99		
OUTPUT			
Output voltage	24 V	48 V	120 V
Setting range	17 – 29 V	34 – 58 V	85 – 145 V
Output current	50 A	40 A	15 A
Voltage ripple	<200 mV peak to peak (30 MHz Bandwidth)		
Efficiency (%)	88	90	91
Line and load regulation	<2 %		
Dynamic response	≤ 5 % for 10 % - 90 % - 10 % - 90 %, recovery to normal regulation limits < 5 ms		
Short circuit response	Permanently short circuit proof, 1 x rated output current		
Characteristic line	Constant current/constant voltage (I/U as per IEC 478 1) during float charge		
MANAGEMENT			
Common alarm connection	1 Form C relay contact – Rating 60 VAC @ 2 A, 24 VDC @ 2 A & 60 VDC @ 0.1 A		
Control panel	Multi-functional LCD with 2 LEDs indicate system status		
PROTECTION			
Input/Battery/Load	Circuit Breaker		
Protection	The rectifier has built-in protection functions against short circuit, over and under AC input voltage, over and under DC output voltage as well as high temperature		
MECHANICAL			
Degree of protection	IP21		
Equipment colour	RAL 7035, powder coated, textured paint		
Dimensions & weight	176 x 482 x 380 mm (H x W x D), approx. 19 kg		
Connections	Rear cable entry to terminals		
ENVIRONMENTAL			
Type of cooling	Rectifier is forced air cooled with electronic speed control		
Operating temperature	0 °C to +40 °C with a de-rating of 1.25 %/°C between 40 °C and 55 °C // -25 °C to +70 °C		
Storage temperature	-25 °C to +70 °C		
Operating humidity	10 % to 95 % R H Non-Condensing		
Installation height	0 to 1000 m – de-rating @ 1 % per 100 m above 1000 m up to 3000 m		
STANDARDS			
Safety	EN 60950-1		
EMC	EN 55022 Level B, EN 61000.6-1,2,3,4, EN 61000.3-2, EN 61000.3-3, EN21000, IEC 60146-1-1 Class B 2kV		
Environment	ROHS		
Approvals & Certification	CE		
OPTIONS			
Batteries: Lead Acid, VRLA, NiCd	Yes – possible to connect		
Relay board	Included		
Communication interface	RS232/RS485 – Modbus/Profibus/TCP IP		
Service option	Installation, commissioning, preventative maintenance, maintenance, 24/7 hotline, battery monitoring, training		

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Approach your local AEG Power Solutions representative for further support. Contact details can be found on:

www.aegps.com

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