РМі1100пс-24 РМі1600пс-48 РМі1600пс-60 РМі1600пс-110 РМі1600пс-125 РМі1600пс-220

## NATURAL COOLED MODULAR SWITCH-MODE INDUSTRIAL APPLICATIONS RECTIFIERS



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

State of the art natural cooled switch mode technology PMi rectifiers provide secure DC power in combination with a parallel battery, for supply of all types of DC loads. The rectifier delivers 1100W to 1600W output power at 24/48/60/110/125/220VDC with a single phase, semi-wide input voltage range.

The rectifier modules are suitable for charging many types of batteries including: vented lead-acid, valve regulated lead-acid (VRLA) or nickel-cadmium batteries (NiCd). PMi rectifiers may operate either with a system controller or as stand-alone modules, with or without parallel-connected batteries.

The rectifiers can be used in Protect MIP systems.

## **Key features**

- » Convection cooled
- » High reliability and robust design
- » Constant output power characteristics
- » Nominal 230 VAC input, range 140–290 VAC
- » Active load current sharing
- » Internal over temperature protection
- » Digital communication over CAN bus with VIDI controller
- » Full front access to all connections
- » Silent and low maintenance
- » EMC: EN 300 386:2005
- » Safety: IEC/EN 60950-1



SPECIFICATION	PMi1100nc-24	PMi1600nc-48	PMi1600nc-60	PMi1600nc-110	PMi1600nc-125	PMi1600nc-220
AC INPUT						
Input range	140 VAC – 290 VAC (nominal 180 – 275 VAC)					
Start-up voltage	180 VAC					
Reduced output power (active limitation)	140 – 180 VAC, derating factor 1 %/1VAC					
Input frequency range	45 to 65 Hz					
Maximum current (at 180 VAC, full load)	6.9 A	9.7 A	9.8 A	9.6 A	9.6 A	9.6 A
Power factor (typical @ 230 VAC)	0.99 A					
Input protection	Varistor a	Mains fuse Varistor and gas discharge tube for transient surge protection Automatic shut-off above 290VAC (restart at 280VAC)				
DC OUTPUT						
Output voltage range	21 - 30 VDC	42 - 58 VDC	51 - 72 VDC	97 - 132 VDC	97 - 145 VDC	189 - 265 VDC
Output voltage factory set-up	27.3 VAC	54.5 VAC	68.1 VAC	123.6 VAC	136.8 VAC	245.3 VAC
Maximum output current	45.8 A @ 24 V	32.7 A @ 48 V	26.7 A @ 60 V	14.5 A @ 110 V	12.8 A @ 125 V	7.2 A @ 220 V
Constant output power	1100 W	1600 W	1600 W	1600 W	1600 W	1600 W
Hold-up time @ full load, output voltage from nominal to minimum	> 20 ms					
Static voltage regulation (load, line & temp.)	+/- 0.3%					
Dynamic load regulation	±4.0% for 10 %-90 % or 90 %-10 % load step, recovery time < 1.0ms					
Ripple and noise	< 100 mVp-p					
Output protection	Overvoltage shutdown, Current limit/short circuit protection, Power limiting, Internal over temperature protection					
FEATURES						
Efficiency, typical (at 50-85 % load)	90 %	92 %	91 %	> 92 %	> 92 %	> 92 %
Load current share	±5 % from true average current between modules					
Rectifier Alarms	Mains fault alarm (high / low), Low output voltage alarm, Overvoltage shutdown alarm, Rectifier fault alarm, Temperature alarm					perature alarm
		·		ON, no faults		

Red LED: rectifier fault

## Visual indications

Blinking Green LED: communication error (controller not present)
Blinking Red LED: temporary failure (e.g. mains fault, over temperature)
Yellow LED: test mode
Blinking Yellow LED: LED test

Energy save operation mode	See VIDI controller manual			
MECHANICAL				
Dimensions (H x W x D)	230 × 83 × 350 mm			
Weight	4.60 kg			
Enclosure	IP 20/IEC 529			
CONNECTIONS				
Connector, AC	Appliance plug IEC 320/10 A male			
Connector, DC	FCI TwinBlade™ Power IO connector			
Connector, PowerCAN	2*RJ45			
ENVIRONMENTAL				
Cooling	Natural convection			
Acoustic noise	< 40 dB (A)			
Operating temp (min/max)	-20/+50 °C			
Storage temperature (min/max)	-40/+70 °C			
Humidity (max)	95 % (relative humidity, non condensing)			
Altitude (max)	2000 m above sea level			
APPLICABLE STANDARDS				
EMC	ETSI EN 300 386:2005			
Environmental	Operation: ETS 300 019-2-3 cl T3.2 Storage: ETS 300 019-2-1 cl T1.2 Transportation: ETS 300 019-2-2 cl T2.3			
Safety	IEC/EN 60950-1 ed.2 (2005-12)			
Approvals	CE-market, CB-certified			
ROHS, WEEE	2002/95/EC			
Quality	Manufacture and design under control of ISO 9001, ISO 14001			

## **AEG Power Solutions**

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

