



RECTIFIER PSR06-W

In: 230V_{AC}
Out: 24/48/60/110V_{DC} (600W)

KEY FEATURES

- **Single-phase module with sinusoidal input current**
- **Wall cabinet version with enhanced functionality**
- **Outstanding dynamic performance and high overall efficiency**
- **Continuous short circuit proof**
- **Temperature compensation of the charging voltage**
- **Digital display for output voltage, output current and adjustment values**

PRODUCT DESCRIPTION

Rectifiers of the PSR-W series are characterized by a modern switching AC to DC power conversion technology combined with a flexible wall mounting concept.

Due to a modern technology the devices have a wide input voltage range, high efficiency and a compact design. The input current is sinusoidal with power factor 1.

A constant voltage/constant current control circuit performs the correction of output voltage deviations due to input voltage or load transient deviations within less than 1.5ms and permits constant current operation down to continuous short circuit.

A micro controller unit equipped with two control keys and digital displays at the front panel provides the permanent monitoring of input and output voltage, output current and temperature and offers easy adjustment and programming of output parameters and monitoring thresholds.

APPLICATIONS

Rectifier module for high power DC applications with or without battery in all areas of industry, power generation and power distribution.



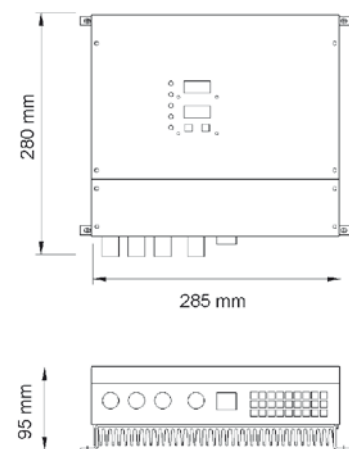
TECHNICAL DATA

Type	PSR06/24-20W	PSR06/48-10W	PSR06/60-8.2W	PSR06/110-4.5W
Article code	100-006-142.00	100-006-152.00	100-006-162.00	100-006-172.00
Nominal input voltage	230VAC +15/-20%			
Nominal input current	2.3AAC	←	←	←
Input frequency range	47– 63Hz			
Power factor	>0.95 at output power>25 % ; >0.99 at output power>50 %			
Total harmonic distortion	<8% input current			
Efficiency	≥89%	≥89%	≥90%	≥90%
External input fusing	6A gL	←	←	←
Nominal output voltage	24V _{DC}	48V _{DC}	60V _{DC}	108V _{DC}
Nominal output current	20.0 A _{DC} ±2% (10.0 to 20.0A adjustable)	10.0A _{DC} ±2% (5.0 to 10.0A adjustable)	8.2A _{DC} ±2% (4.1 to 8.2A adjustable)	4.5A _{DC} ±2% (2.3 to 4.5A adjustable)
Charge characteristic line	IV line acc. to DIN 41772/DIN 41773			
Output voltage (trickle charging)	27.2V _{DC} ±1% (23.4 to 28.8V adjustable)	54.5V _{DC} ±1% (46.6 to 57.6V adjustable)	68.1V _{DC} ±1% (58.5 to 72V adjustable)	122.6V _{DC} ±1% (105 to 130V adjustable)
Output voltage (boost charging)	28.8V _{DC} ±1% (24 to 30V adjustable)	57.6V _{DC} ±1% (48 to 60V adjustable)	72.0 V _{DC} ±1% (60to 73V adjustable)	129.6V _{DC} ±1% (108 to 135V adjustable)
Voltage ripple	≤20mV _{pp}	←	←	≤100mV _{pp}
Psophometric ripple acc. to CCITT-A	≤1.2mV _{rms}	≤1.8mV _{rms}	≤1.8mV _{rms}	---
Dynamic accuracy of the charging voltage	< 3% V _{nom} at load transients between 10% - 90% - 10% I _{nom} , recovery time t ≤1.5ms			
Short circuit protection	Continuously short circuit proof, 1x I _{nom}			
Parallel operation	Yes, <20 pieces, load sharing appr. 10% I _{nom}			
Internal decoupling at the output	no	←	←	←
LED signalling	Output voltage O.K. (green); output voltage low (green); output voltage high (red); constant current operation (yellow); general fault (red)			
Digital displays	Output voltage, output current , adjustment parameter indication			
Isolated signalling contacts	"General fault"			
Monitoring	Output voltage high/low, output voltage, output current, short circuit			
External functions	Boost charging, temperature compensation of the charging voltage, external sensor lead for the output voltage			
Ambient temperature	Operation: -20°C to +55°C, storage: -40°C to +85°C			
Climatic conditions	IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2			
Max. installation altitude	<1500m			
Audible noise	< 30dB (A) in 1m distance			
Construction	Wall cabinet for direct mounting			
Dimensions (W/H/D)	285/280/95mm			
Weight	approx. 6kg			
Cooling	Convection cooling			
Type of enclosure / Protection class	IP20 (mech.) / 1 (electr.)			
Surfaces	Front panel: powder coating RAL 7035, black imprint			
CE conformity	yes			
Compliance to safety standards	EN 60950-1, VDE 0100 part 410, VDE 0110, EN 50178, EN 60146			
Compliance to EMC standards	EN 55011, EN 55022 class „B“, EN 61000- 4 part 2- 5			

OPTIONS

Article	Article Code
Temperature sensor with 2 m cable	880-300-TMP.00
Temperature sensor with 4 m cable	880-300-TMP.01

DIMENSIONS



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