

Who We Are

PSP is a company specialized in custom design, manufacturing and servicing of power electronics equipment for ICT, industrial, oil & gas and energy applications. PSP R&D department is one of the most complete regarding the different disciplines in the field of power conversion.

Long experience in semiconductors and magnetic component design is combined with the most advanced digital regulation algorithms and microcontroller programming know-how. PSP has a leading position in the oil and gas market thanks to its proven customizing expertise and continuous pursuit of excellence in a state-of-the-art product. However, wide experience in several branches of power electronics such as UPS systems for data centers and inverters make PSP a leader in this technology not only for oil and gas applications.



Services

With over 40 years of expertise in power electronic systems, PSP is renowned for its unparalleled services and technical support in critical application environments. The reliability of your installed power solution is supported by a global service team renowned for its short response time and trouble shooting efficiency. Choosing PSP preventive maintenance options gives you the ultimate peace of mind reassuring complete cost control, security and uninterrupted power supply in utmost critical situations.



Listening to our customers
and
delivering state-of-the-art, tailored
systems has been our vocation
for more than
45 years



PSP.RM/RMR INDUSTRIAL CHARGERS

PSP RM Industrial Charger
Three Phase Input
Single Configuration
24-480V DC, 30-1000A

PSP RMR Industrial Charger
Three Phase Input
Redundant and Parallel
Configurations
24-480V DC, 50-2000A



Engineering is Our Business

Rectifier and Charger solutions engineered by PSP Power Solutions have been protecting oil and gas infrastructure, power stations and other industrial applications for more than 40 years.

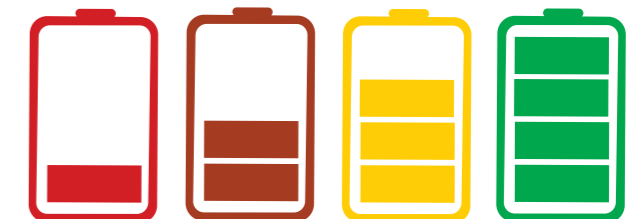
Designed for all industrial applications

PSP.RM/RMR, the latest generation of our Chargers product range is extremely robust, both electrically and mechanically. It is custom-designed for use in harsh industrial environments to meet the toughest product customization requirements:

- » Specific mechanical protection degree
- » Specific input and output voltage
- » Customized documentation

PSP Chargers for Industrial Applications

- » Oil and gas (Petrochemicals, Offshore, Onshore, Pipelines)
- » Energy and electricity generation (Power generation, Transmission, Distribution)
- » Water (Desalination, Treatment)
- » Instrumentation and process control (Chemicals, mining, steel, paper)
- » Emergency lighting
- » Telecommunication systems



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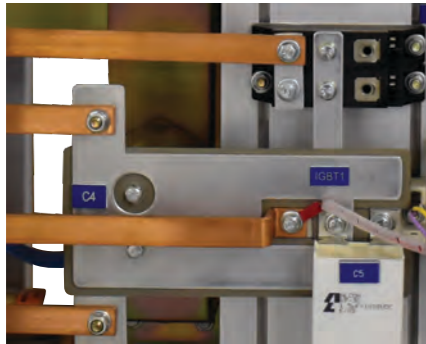
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PSP. RM/RMR Specification

Features and Benefits

- Full set of battery charging methods
- 6-pulse or 12-pulse THYRISTOR rectifier bridge
- High personalization grade with new mimic for signals, alarms, meters
- History events continuous monitoring
- Comprehensive set of communication options
- Higher mean time between failures
- Lower maintenance service in comparison with traditional designs
- Load voltage regulation with very high resolution
- Custom design for high power applications
- Custom design of parallel and redundant configurations



Model-Single & Redundant	RM2430-400	RM4830-400	RM11030-400	RM22030-400	RM40030-400
Model - Parallel	RMR24100-1000	RMR48100-1000	RMR110100-1000	RMR220100-1000	RMR400100-1000
Nominal Output Voltage	24V	48V	110V	220V	400V
Selectable Voltage Range	18-33V	35-65V	90-160V	180-300V	350-550V
RECTIFIER UNIT	60 and 12 Plus Topology				
Output Current (Single & Redundant)	30-1000 A	30-1000 A	30-1000 A	30-1000 A	30-1000 A
Output Current (Parallel)	50-2000 A	50-2000 A	50-2000 A	50-2000 A	50-2000 A
Nominal Ac input Voltage	380/400 V, +10%, -15% (3pH.)				
Line & Load Regulation	< ± 1 %				
Ripple Without Battery	< ± 1 %				
Frequency	50Hz ± 6Hz				
Charging Characteristic	IU in acc.DIN 41773 (Others On Request)				
Charging Modes	<ol style="list-style-type: none"> 1. Float (2.23 (V/C) for Lead Acid and 1.4 (V/c) for NiCad Battery) 2. Boost/Equalize (2.33 (V/C) for Lead Acid and 1.5 (V/c) for NiCad Battery) 3. Initial (2.7 (V/C) for Lead Acid and 1.7 (V/c) for NiCad Battery) 4. Automatic mode: Time-Current-Voltage-Energy 5. Free Mode 				
Efficiency	Up to 93%				
DROPPER UNIT	Equipped with new Generation of Dropper unit				
Efficiency	Up to 98%				
Load Regulation	<±1%				



General Data	
Dimensions WxD (mm)	Height is 2100 mm or 1600 mm, width varies with output voltage range and rating
	600x600 600x600 900x600 900x900
Color	Ral 7035 , Ral 7032
Operating temperature	-10°C up to +50°C
Storage temperature	-20°C up to +70°C
Altitude	<2000 m (according to EN 62040)
Humidity	95% non condensing
Audible noise at 1 meter (dBA)	<60 dBA) - depends on rating
Cooling	Natural Ventilation
Protection degree (IEC 60529)	IP20 / IP21 / IP42 (other options)
Connectivity	SPDT contact relay card Optional: Rs485 Modbus - RTU serial ports Ethernet SNMPWEB adapter, Remote monitoring software
INDICATORS & ALARMS	<ul style="list-style-type: none"> RECTIFIER/DROPPER FAIL INPUT AC ABNORMAL OVER HEAT ALARM/TRIP OVER LOAD/SHORT CIRCUIT BATTERY/OUTPUT DC LOW/HIGH WEAK /DEAD BATTERY RECTIFIER/DROPPER ON/OFF FREQUENCY HIGH/LOW DC EARTH FAULT INPUT SEQUENCE / PHASE FAIL AC/DC BREAKER POSITION INDICATOR RECTIFIER/DROPPER/BATTERY CURRENT LIMIT BATTERY TEST/DIS. & STATUS CHARGING MODE LOAD SHARE FAIL BATT. REVERSE CONNECTION
	<p>10" Touchable LED on Front Panel & Free Contact</p>