PS48120/1800

DC Power Systems
for Business-Critical Continuity

Integrative DC Power Series -48VDC up to 6.96kW

Features

- Provide up to 6.96kW Max
- Front access design for installation and maintenance
- Wide input voltager range from 85Vac to 300Vac
- Wide working temperature of rectifier module:-40℃ ~ +70℃
- Work in poor electric power environment
- Rectifiers adopt DSP control technology, wtih high power density
- Low voltage battery disconnection to protect batteries
- Easily expandable with more power or/and feature when new demand arise
- Self-contained surge protection for AC,DC and signal
- Hot swap of rectifier and monitoring modules
- Utilize CE/UL approved rectifier R48-1800A

DPC48-3

PS48120/1800

Introduction

PS48120/1800 system is optimized for access, transmission, railway station, wireless base station power application. This system offers advanced features, DSP control technology, intelligent battery monitoring, remote monitoring and low voltage battery disconnection. The system comes fully equipped with integrated AC and DC distribution.

Cost-effective for possible demand and future-proof, flexible and scalable system that can be configured to meet current demand and future expansion. DPC48-3 can be selected for 6V,12V,24V output.

PS48120/1800

System Electrical Specifications	
Nominal Input Votage	220Vac/1 phase
Nominal Output Votage	-48Vdc
Input Votage	85V-300Vac , two-way input, switched manually (X1, X6 System)
	125V-285Vac , two-way input, switched automatically (X2 System)
Frequency Range	45 - 65Hz
Output Power(max)	6.96kW

AC Distribution	
Input	2×63A/2P
Rectifier MCB	4×16A/1P X1,X2 System (None in X6 System)
Output	1×16A/1P X2 System (None in X1, X6 System)

DC distribution		Remark
Battery	100A×2	Fuse
DC Output 7 Output	1×63A/1P，2×32A/1P，1×10A/1P	MCB
	1×100A NT00,1×50A NT00,1×6A NT00	FUSE

DC/DC Converter DPC48-3			
Input voltage range:	43VDC-60VDC		
Output voltage(Nominal):	24V,12V,6V		
Output voltage range:	22-28.5V,11-14.2V,5.5-7.1V		
Output power:	6V	12V	24V
	0W	0W	0W
	30W	100W	100W
	60W	200W	200W

Notes: 1. 3 output voltage can be choosed discretionarily.
2. Only one output power can be choosed for each output voltage.

Mechanical Parameters		
X1, X6 System	600W×600D×2000H(mm)	≤110kg (excluding rectifiers and SCU)
X2 System	600W×600D×2000H(mm)	≤120kg (excluding rectifiers and SCU)

EMERSON
Network Power

PS48120/1800

DC Power Systems
for Business-Critical Continuity

M500D Monitoring module

Features
Intelligent batterymanagement
Visual and audible alarms
Alarm history log
RS232/Modem, User configurable digital inputs
Hot Swapable and dry contacts

M500D Monitoring Module

R48-1800A Rectifier module

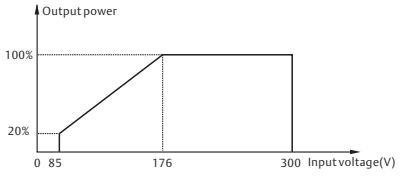
General	
Safety	CE, UL UL/ EN/ IEC 60950-2000
EMC	EN 55022 Class B
Dimensions	87.9×85.3×272mm（H×W×D）
Weight	≤2.0kg
Enclosure	IP 20

R48-1800A Rectifier module

Input characteristics	Range	Unit	Comments
Voltage	85～300（power decrease linearly below 176Vac）	Vac	Single phase
Line frequency	45～65	Hz	
Power Factor	0.99		
Efficiency	91	%	

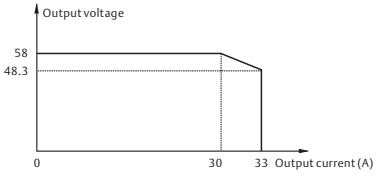
Output characteristics			
Voltage	-42～-58	Vdc	
Power	1740	W	30A@-58V
Current	0～33	A	
Load regulation	≤0.5	%	
Line regulation	≤0.1	%	
Load share	≤±0.9	A	
Peak to peak noise	≤100	mV pk-pk	(0 - 20 MHz)
Psophometric weighted noise	≤2	mV	
THD	≤5	%	

Rectifier output power and input voltage relationship



Environment conditions	
Operating temperature	-40℃～+70℃(full power to +45℃)
Storage temperature	- 40 ～ + 70 ℃
Relative humidity	≤90% RH
Elevation	≤2000 m

Output Current and Output voltage relationship



Protection characteristics
Short circuit protection at constant current
Output over-voltage protection, voltage set point selectable
Input over-voltage protection, automatically recoverable
Input under-voltage protection, automatically recoverable
Over-temperature protection , > 98℃ protection, automatically recover

Emerson Network Power.
The global leader in enabling business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power
- Monitoring
- Outside Plant
- Power Switching&Controls
- Precision Cooling
- Racks and Integrated Cabinets
- Services
- Surge Protection

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