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DZY-48/75H I



## FEATURES

### High efficiency and highest power density

Typical 96 %

### Digitalized control

Digitalized Primary and secondary controls could realize excellent monitoring and regulation.

### High reliability design

One fan front-to-back air flow with latest thermal solution and experienced electric synthetize ensure suitable working environment and high reliability.

### Disconnect mains when hazardous input

DZY-48/75H I will disconnect mains to protect itself when it can not sustain the input voltage.

### Excellent EMC performance

Lower interference and excellent susceptibility give module better reliability

## INTRODUCTION

DZY-48/75H I is a digitalized rectifier module with outstanding reliability. Over 96 % power efficiency and automatic sleep function could save much energy consumption. DZY series and Smart Power series rectifier module and the power system is a big family of -48V DC power system which could cover global demand for telecom applications with wide operating temperature and wide input voltage range.

## APPLICATIONS

- Wireless communication
- Broadband and network access
- Satellite communication ground station
- 3G /4G base station
- Telecom roadside cabinets

- Switch Mode Power System
- Remote Monitoring System
- Renewable Energy Solution

- Distribution Cabinet
- DC/DC Converter
- Hybrid Power System

- Inverter
- UPS/EPS
- HVDC UPS

## SPECIFICATIONS

### Input

AC supply	Nominal: 220/240Vac 1ph Tolerance: 85-300Vac 1ph
Frequency	50-60Hz
Input current	≤18Arms at nominal input <23Arms at 185Vac input
Power Factor	>0.99
Input protection	Varistors for transient protection
THD	<5% at 50-100% load

### DC Output

Output voltage	Nominal output: 48VDC Standby test range: 42-58VDC
Output power	4000W at nominal input Constant Power: >53.6VDC Derating below: 1520W at 85Vac
Output current	83.3A maximum
Efficiency	Typical:95.5%
Current sharing	±5% unbalance of average current of all paralleled modules
Static Voltage Regulation	±0.5% from 5% to 100% load
Dynamic voltage regulation	±5% for 25-50% or 50-75%load variation, regulation time <200us
Holdup time	>10ms, (50A when output voltage from 53.6V to 43.2V)
Ripple and Noise	<200mV p-p, 20MHz bandwidth <2.0mVrms psophometric
Output protection	Overvoltage shutdown Short circuit proof High temperature protection Output fuse

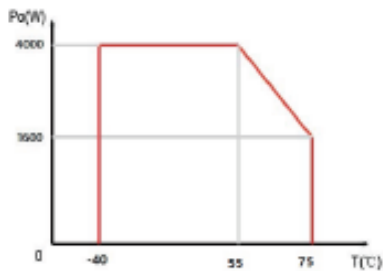


Fig2 output power vs. ambient temp

### Other Specifications

Alarm	Mains over or under voltage Mains over voltage disconnection High ambient temperature Short on output from outside
Cooling	One fan (front to back airflow)
Fan speed	Temperature and output current regulated
MTBF	>100,000 hours
Acoustic noise	<55dBA at nominal input and full load (Tambient<3°C)
Operating temp	-40 to +75°C (full load), 55-75 °Cderating
Storage temp	-40 to +85 °C (-40 to +185°F)
Humidity	Operating: <95% non-condensing Storage: <99% non-condensing
Dimensions	73Wx312Dx133H (mm)
Weight	2.5kg

### Applicable Standards

Electrical Safety EN 62368-1:2014/A11:2017

EMC  
EN 55032:2012  
EN 55032:2015  
EN 55032:2017  
EN 61000-3-2:2014  
EN 61000-3-3:2013

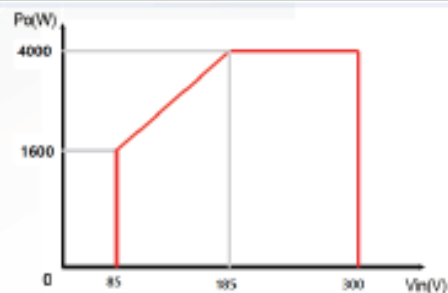


Fig1 output power vs. input voltage