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RECTIFIER MODULE

DZY Series

DZY-48/75H I

FEATURES

High effciency 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 / 5G 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 Tolerances: 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	≥97% at Nominal Input
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

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	73W×312D×133H (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

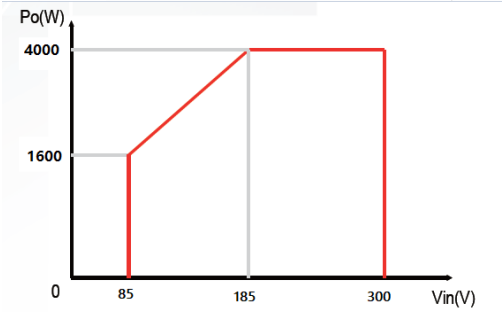

Fig1 output power vs. input voltage

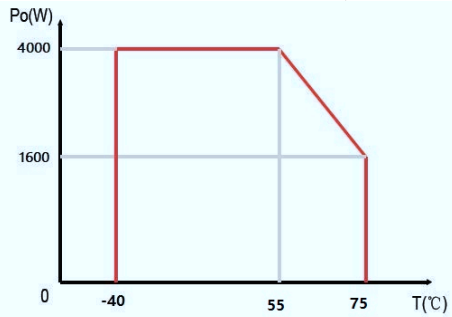

Fig2 output power vs. ambient temp

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*Subject to change without notice.