DZY-48/15 HI

FEATURES

High efficiency and highest power density
Typical 95%efficiency and 16.69W/in3 power density.

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 synthesize ensure suitable working environment and high reliability.

Disconnect mains when hazardous input
DZY-48/15 HI 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-48/15 HI is a digitalized rectifier module with outstanding reliability and world leading power density. 1U*2U size could save much space for the whole system; 1U high shelf could hold 5 pieces of rectifier modules. DZY HI, DZY HII and DZY HV 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
- HVIXUPS

SPECIFICATIONS

Input

AC supply	Nominal: 90V-300Vac (Nominal:220/230Vac)(Full Power@176-300Vac) Tolerances:85-300Vac 1ph
Frequency	45～65Hz
Input current	4A rms at nominal input 5A rms at 176Vac input
Power Factor	>0.99
Input protection	Varistors for transient protection
THD	<5% at 100% load;<10% at 50% load

DC Output

Output Voltage	Nominal output: -48VDC Standby test Range:-48VDC (42VDC - 58VDC)
Output power	850W at Nominal input
Output current	17.7A at Nominal input
Efficiency	Typical 95%
Current sharing	±5% unbalance of average current of all paralleled modules
Static Voltage Regulation	±0.6% from 10% to 100% load
Dynamic voltage regulation	±5% for 25%～50%～25% or 75%～50%～75% load variation, regulation time ＜200us
Holdup time	> 10 ms, (1 5 A when output voltage from 53.6V to 42V)
Ripple and Noise	<200mv p-p, 20MHz bandwidth <2.0mv rms 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 or low 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 (Tambient:25℃)
Acoustic noise	<55dBA at nominal input and full load (Tambient<30℃)
Operating temp	-40 to +75℃ (-40 to +167°F) -40 to +55°C (full load)
Storage temp	-40 to +85℃ (-40 to +185°F)
Humidity	Operating: 95% non-condensing Storage: 99% non-condensing
Dimensions	86.5W×249.2D×41H (mm)
Weight	1.5kg

Applicable Standards

Electrical Safety	IEC60950 UL60950
EMC	EN55022 Class B(emission) IEC61000-4-6(conducted immunity) IEC61000-4-3(radiated immunity) IEC61000-4-2(electrostatic discharge) IEC61000-4-4(fast transients) IEC61000-4-5(surge immunity) IEC61000-4-11 IEC61000-3-3
Harmonics	EN 61000-3-2
Environment	ETSI EN 300 019-2(-1,-2,-3) ETSI EN 300 132-2 Telcordia NEBS GR63 CORE Zone 4 RoHS compliant

Certificate

Europe	CE