



Applications

- Remote Electronics (Fiber)
- Central Offices
- MTSO
- Cellular
- CATV

Features

- 342 - 528VAC Input
- Hot Bus Plug-In Capability
- World Wide Safety Agency Approved
- Front Access Design
- Power Factor Corrected
- Full 2 Year Warranty
- 9.9 Watts per Cubic Inch
- Shelf Mounted
- Insert / Extract Handle
- V/A Digital Meter

Product Overview

OVERVIEW

TDI-Telecommunications Power Systems sets a new industry standard for switchmode rectifiers. Evolved from our GEMINI series, our rectifiers establish the benchmark for reliability with a field proven design. The light weight, compact modules feature power factor correction, automatic load sharing, current walk-in and international power input. Each module is equipped with representative telecommunication and cellular alarm outputs, and digital meters. The hot bus plug-in capability allows for easy removal and replacement of rectifiers without interrupting the power bus or system operation.

DESIGN FEATURES

The 125 amp rectifier module is a highly reliable unit that is designed to be user friendly and minimize installation, maintenance, and system downtime. The front panel features a user interface that includes a, AC ON/FAULT LED, output voltage adjustment, bar chart/ammeter, and the AC ON / OFF circuit breaker. The breaker is linked to the module handle to ensure that it is in the off position when the rectifier is withdrawn from the rack assembly.

Powering the Information Age

TDI - Telecommunications Power Systems

36 A Newburgh Road • Hackettstown, NJ 07840 • Phone: 908.979.0088 • Fax: 908.979.0466 • www.tdipower.com/tps

Specifications

INPUT

Input Voltage: 342-528 Volts AC, 47-63 Hz, Single Phase
Input Current: 23 Amps RMS maximum at low line, rated power
Peak Inrush Current: 60 Amps maximum
Power Factor: 0.98
Harmonic Distortion: Less than 8% total harmonic distortion at full load and less than 5% for each harmonic
Efficiency: 91% at normal line, full load

OUTPUT

Output Voltage: Adjustable from -50 to -59 Volts
 DC Rectifiers are set to -54 Volts at the factory
Output Current: 125 Amps
Output Power: 7000 Watts maximum
Line Regulation: Less than $\pm 0.25\%$
Load Regulation: $\pm 0.2\%$ from 10% to full load. $\pm 2\%$ from no load to 10% load.
Walk-In: 5 seconds from -50 volts to -56 volts.
Parallelability: May be paralleled with other like units for increased output.

PROTECTION

Overvoltage: Shutdown occurs if the output voltage exceeds the overvoltage set point. Reset is by re-cycling input power. Rectifiers are factory set to -60 volts.
Overcurrent: 138 Amps maximum. Short circuit protected.
Overtemperature: An internal thermostat turns the rectifier off if the heat sink temperature exceeds 105C. Recovery is automatic when the unit cools.

CONTROLS

AC On/Fault: A multi-colored front panel LED will be illuminated green for normal operation and will turn orange if the rectifier has a low output voltage while AC input Voltage is present.
Voltage Adjust: The output voltage adjustment potentiometer is located on the front panel. The voltmeter displays "voltage reference." This aids in aligning all installed rectifiers to the same setpoint without powering down any units.

Volts/Amps Meter: A front panel meter measures output current or rectifier voltage setpoint, selectable via a front panel switch. An amp bar graph is standard.
AC on/off: The input circuit breaker is mounted on the front panel and is protected from accidental operation by the handle assembly. The breaker is also linked to the handle to ensure that it is in the OFF position when the rectifier is withdrawn from the rack assembly.

ENVIRONMENTAL

Cooling: All units are forced convection cooled with a constant speed internal fan drawing cool air from the front and exhausting warm air out the rear of the unit.
Heat Dissipation: 3875 BTU/hour
Operating Temperature: 0 to +50C
Humidity: 0% to 95% non-condensing
Operating Altitude: -200 to +13,000 ft.

MECHANICAL

Height: 8.75" (5 RU)
Width: 5.25"
Length: 15.5"
Weight: 33 lbs.

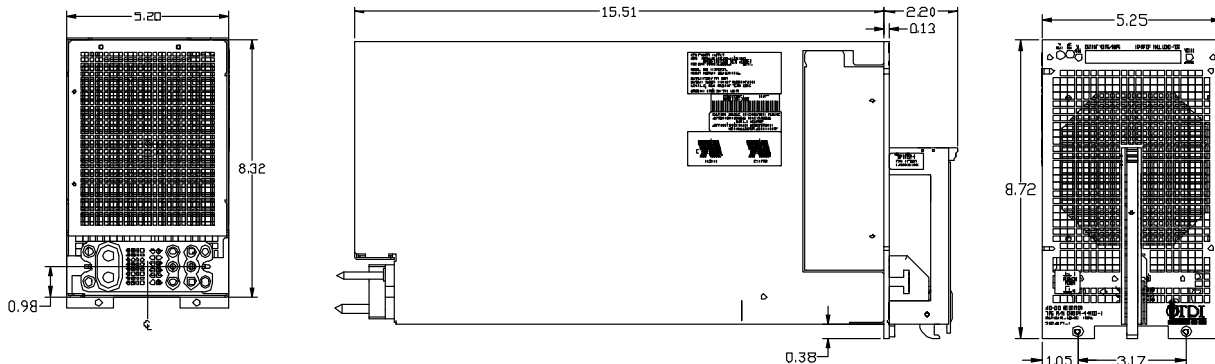
RELIABILITY

MTBF: Designed to meet 250,000 hours minimum

AGENCY COMPLIANCE

EMI: Radiated and conducted noise on the input meets FCC Part 15, Subpart j, Class A
Safety: This unit is designed to meet UL1950, IEC950, CSA 22.2#234 and CE marking (LVD only)

Outline



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