eSure™ Rectifier  
R48-3200e

**Description**

The eSure™ R48-3200e rectifier converts standard AC supply voltages into stable nominal-48V DC voltage adjustable to the needs of the application. The R48-3200e is a constant power rectifier designed with the latest patented switch-mode technology using DSP (Digital Signaling Processor) functionality for efficient operation.

For a higher load capacity, rectifiers can be connected in parallel and intelligent control can be added with the help of a separate controller.
Technical Specifications, R48-3200e

**AC Input**
- Input Voltage, Nominal: 200 to 250 V AC
- Input Voltage, Permitted Variation: 85 to 300 V AC
- Line Frequency: 45 to 65 Hz
- Max Input Current: 17 A
- Power Factor: 0.99
- THD (Total Harmonic Distortion): <5% from 50 to 100% of rated load

**DC Output**
- Output Voltage, Adjustment Range: -42 to -58 V DC
- Output Power: 3200W at Vout >48VDC
- Output Power, Derated for Input Voltage: See Diagram
- Output Current: 67A
- Output Current limit set Point: 0 to 67 A
- Efficiency: 96.8% peak
- Psophometric noise (system): <2 mV typical
- Temperature Derating: See diagram

**Control and Monitoring**
- Rectifier Alarm and Signaling: Alarm and status reported via CAN bus to system Controller
- Visual Indications: Green LED = Normal operation; Yellow LED = Alarm; Red LED = Failure; Flashing red LED = Fan failure

**Environmental**
- Temperature Range, Operating: -40 to +75°C, -40 to +167°F
- Temperature Range, Storage: -40 to +75°C, -40 to +167°F
- Relative Humidity: 0 to 95%
- Altitude: 2000 m, 6560 ft at full power
- EMC: ETSI EN 300 386 class B, FCC CFR 47 Part 15 class B, Telcordia GR-1089-CORE class B
- Safety: IEC 60950, EN 60950, UL 60950

**Mechanics**
- Dimensions (H × W × D): 132 × 85.3 × 287 mm / 5.2 × 3.36 × 11.3 inches
- Weight: 3.1 kg / 6.8 lbs

**Other parts**
- Controller Units: See separate ACU/ACU+ and SCU/SCU+ datasheets

**Ordering information**
- Description: Product name
- Rectifier 48V, 3200W: R48-3200e

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