

RM2048XE 2.0KW 48V DC MODULAR RECTIFIER

With efficiency greater than 94%, the RM2048XE extended efficiency rectifier module gives considerable energy savings when compared to traditional telecom rectifiers of around 91%. Meaning a cost effective solution when weighing up CAPEX versus OPEX.

These intelligent modules can be easily paralleled for redundancy and higher current outputs. Designed for use in modern telecommunications networks they offer unrivalled power densities and a form factor that allows for the most efficient use of rack space.

“Plug and Play” installation and full “Hot Swap” capability allows for quick and easy system expansion by simply adding modules. Robust and reliable these rectifiers are forced air cooled by a temperature controlled, high reliability, monitored fan.

- Forced cooled.
- Thermally protected.
- Power factor corrected.
- Input/output voltage and current protected.
- Serial alarm and control interface.
- Microprocessor controlled.



SPECIFICATIONS



| | |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| AC Input | |
| Nominal: | 230V |
| Voltage Range: | 85-300V (175-275V not de-rating output power) |
| Frequency Range: | 45-65 Hz |
| Power Factor: | >0.99 |
| Efficiency: | >94% |
| Input Fuses: | HRC fuses in phase and neutral. |
| Maximum Input Current: | 12A |
| Protection: | |
| Input Voltage: | Auto shutdown, auto restart when correct voltage restored. |
| Input Inrush: | <2x maximum input current. |
| DC Output | |
| Output Ratings: | Constant power output from 48V to 58V |
| Nominal Voltage: | 48V |
| Rated Voltage: | 58V |
| Voltage Range: | 43-58V |
| Maximum Current: | 41.7A |
| Regulation: | |
| Line: | ±0.1% |
| Load: | ±0.5% (no load to full load) |
| Hold-up Time: | >15ms for 20% output voltage drop. |
| Start-up Time: | Start up delay 1 second. (varies with AC supply voltage) Walk-in delay 6 seconds at full output. (varies with DC output voltage) |
| Protection: | |
| Current Limit: | Adjustable to 50-100% of maximum rated current. |
| Over Temperature: | Automatic current turndown, backup shutdown protection. |
| Polarity Reversal: | Output fuse with crowbar diode. |
| Over voltage: | Adjustable limit. |
| Noise: (under nominal conditions) | |
| Ripple <100Hz: | <1mV rms unweighted. |
| Voice band 100Hz-5KHz: | <1mV rms psophometric. |
| Wide band 5kHz-1MHz: | <5mV rms unweighted. |
| Peak to Peak 0-20MHz: | <100mV peak to peak. |
| Isolation: | |
| Input to Output: | 4000V DC |
| Input to Chassis: | 3500V DC (VDR to chassis removed) |
| Output to Chassis: | 2100V DC |
| Environmental Requirements | |
| Ambient Temperature: | |
| Nominal: | 25+/-5°C |
| Range: | -30°C to +70°C (maximum output power is derated above +50°C) |
| Storage Temperature: | -30°C to +70°C |
| Humidity: | 5-98% RH (non-condensing) |
| Altitude: | <2500m, de-rate maximum ambient temperature by 4°C per 1000m above sea level. |
| Mechanical | |
| Dimensions, W, H, D: | 111.5mm , 44mm (1U), 282mm overall (rack depth 260mm) |
| Weight: | 1.5kg |
| Shipping Dimensions W, H, D: | 120mm, 52mm, 325mm |
| Shipping Weight: | 1.6kg |
| Cooling: | Forced cooled. |
| Compliances | |
| Electrical Safety: | EN 60950 |
| RF Emissions: | CISPR 22 Class B |
| RF Immunity: | CISPR 24 |
| AC Harmonics: | EN 61000-3-2 |
| AC Flicker and Fluctuation: | EN 61000-3-3 |
| RoHS: | 2002/95/EC |
| Consumer Safety: | CE |