

## FEATURES:

- Diode isolated outputs for hot swap
- "Zero wire" slope program current sharing
- Self-aligning connector with solid metal, machined contacts
- Identical output performance as RMX-350 Series
- Dual converter design eliminates interaction between logic and auxiliary outputs
- Low ripple and noise on all outputs
- Dc power good signal
- True remote inhibit
- Monotonic turn-on and turn-off


## SPECIFICATIONS:

## INPUT

Dc Input: 40-60 Vdc. Internally fused for 13 A .
Efficiency: 75\% typical.
Low Input Provides TTL " 0 " when input is below 40 Vdc . OUTPUT
Adjustability: Outputs \#1 and 2, and 4 factory adjusted to nominal $\pm 0.2 \%$. Output \#3 tracks \#2; initial accuracy $\pm 3 \%$.
Line \& Load Reg: Outputs \#1, 2, and 4 hold $\pm 2 \%$ (with local sense) over dc input range and 0 to $100 \%$ load change (preprogrammed slope). Output \#3 requires $20 \%$ minimum load on outputs $\# 2$ and 3 to hold $\pm 5 \%$.
Ripple \& Noise: $1 \%$ p-p or 100 mV , whichever is greater.
Remote Sense (Output \#1): Compensates for 250 mV total line drop. Preprogrammed slope remains under $\pm 3 \%$ worst case. Open sense lead protection.
Temperature Coefficient (Outputs \#1, 2, and 4): 0.03\% per degree C.
Stability: $0.1 \%$ over 8 hours after 30 minutes warm-up.
Transient Response (Outputs \#1, 2, and 4): Output voltage returns to within $1 \%$ in less than $500 \mu$ s for a $50 \%$ load change (measured with rise time and fall time of $200 \mu \mathrm{~s}$ ). Peak transient does not exceed $5 \%$.
Overload Protection: All outputs are protected against overload and short circuit. Automatic recovery upon removal of fault. Overvoltage Protection (Outputs \#1 and 2): Protects load against power supply induced over voltage. Trip point is factory set so that output voltage cannot exceed $136 \%$ of nominal.
Peak Output Current: Dual current ratings define continuous and peak currents. The peak current shown can be delivered for a maximum period of 30 seconds.
Remote Inhibit: Contact closure to the negative sense line or a TTL level " 0 " turns off dc outputs.
Redundancy: Built-in OR-ing diodes, slope program current sharing on all outputs, and self aligning connector provide "hot swap" and " $N+1$ " capabilities. Current sharing remains within $10 \%$ of the unit's full output rating while units are in thermal equilibrium.
Remote Enable: Contact closure to common turns on dc outputs (recessed pin for "make last, break first" connection).
Dc Power Good: Provides a TTL "1" open collector when output \#1 is above 4.6 V nominal.
Reverse Voltage: Protected against reverse voltage up to supply current rating.

## ENVIRONMENTAL

Thermal Protection: Shuts down power supply if overheated. Automatic recovery.
Holdup Time: 20 ms minimum after removal of power at full load. Temperature Range: $0^{\circ}$ to $50^{\circ} \mathrm{C}$ at full ratings.
Safety Agencies: Most models are approved to UL1950; CSA
22.2 \#234; IEC 950 and TÜV EN60950, Class 1 SELV., CE 72/23/

EEC/93/68EEC (low voltage directive).
Conducted RFI: Meets FCC Part 15, Subpart J, Class A; EN55022 Class B and CISPR 22 Class B.
Cooling: Self-cooled by internal ball-bearing fan.
Output Isolation: Isolated from ground 50 Vdc .

## DC INPUT

| FUNCTION | 48 VDC | CONNECTOR |
| :--- | :--- | :--- |
| $\mathrm{J1-22}$ | +48 Vdc | See below |
| $\mathrm{J1-24}$ | -48 Vdc |  |
| $\mathrm{J1}-11$ | Safety Ground |  |

## DC OUTPUT

| FUNCTION | LOCATION | NOTES | CONNECTOR |
| :---: | :---: | :---: | :---: |
| Output \#1 | J1-10,20,30 | Main Output | Positronics \# |
|  | J1-9,19,29 | Rtn (common) |  |
| Output \#2 | J1-2 |  | Mates with panel mounted |
|  | J1-3 | Rtn (common) |  |
| Output \#3 | J1-4 |  | PLC30F1000 <br> connector using |
|  | J1-3 | Rtn (common) |  |
| Output \#4 | J1-5 | (+) Floating Output | crimp contacts <br> FC114N2 (14 to 16 AWG) |
|  | J1-6 | (-) Floating Output |  |

## STATUS AND CONTROL

| FUNCTION | LOCATION | NOTES | CONNECTOR |
| :--- | :--- | :--- | :--- |
| Remote Sense | J1-18 | Output \#1 Sense |  |
|  | J1-8 | Output \#1 Sense Rtn |  |
| Dc Power Good | J1-7 | Reference to common |  |
|  |  | when \#1 Sense Rtn is |  |
|  |  | terminated |  |

## TMX-350 Multiple Output, 48 Vdc Hot Swap

| Commercial Model | Power Out | Output No. | Output | Current | Total Regulation (A) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| TMX-354-1205 | 350 | 1 | +5 V | 50 A | $\pm 2 \%$ |
|  |  | 2 | +12 V | $8 / 12 \mathrm{~A} \mathrm{pk}$ | $\pm 2 \%$ |
|  | 3 | -12 V | 4 A | $\pm 5 \%$ |  |
| TMX-354-1224 | 4 | 5.2 V | 5 A | $\pm 2 \%$ |  |
|  | 350 | 1 | +5 V | 50 A | $\pm 2 \%$ |
|  |  | +12 V | $8 / 12 \mathrm{~A} \mathrm{pk}$ | $\pm 2 \%$ |  |
|  |  | -12 V | 4 A | $\pm 5 \%$ |  |

## TMX-350 MECHANICAL SPECIFICATIONS:

TMX-350
$3.8 \mathrm{lb}-1.7 \mathrm{~kg}$

Dimensions: Inches Millimeters


