

TCP-RK SERIES 1000 & 2000-WATT SINGLE OUTPUT SWITCHING POWER SUPPLIES 19" W x 14.2" D x 3.5" H POWER FACTOR CORRECTED



2U High

APPLICATIONS

The TCP-RK series of Power Factor Corrected AC-DC power supplies provides highly regulated output power. Rugged construction and superior quality make this power supply ideal for harsh environment applications. Available in standard, modified or fully custom configurations, for industrial, commercial, COTS, ruggedized and Military applications.

AVAILABLE OPTIONS

- Slides for mounting
- Parallel Operation
- ORing Diode for Redundant Operation
- Mating connectors
- Ruggedized for shock & vibration
- 400Hz Operation
- Conformal Coating

SAFETY AND EMISSIONS

- Designed to meet UL/cUL60950-1
- Designed to meet TUV EN60950-1
- Designed to meet CB Report (IEC 60950-1)
- Designed to meet CE Mark (LVD)
- Designed to meet EN55022 Class B (CISPR 22 B)

INPUT SPECIFICATIONS:

Input: Universal AC Input Range 90-264VAC/127-370VDC

Input Frequency: 47-63Hz

Inrush Current: 25A max at 115VAC/40A at 230 VAC (cold start)

Input Current: 12A max @ 115VAC 6A max @ 230VAC

Efficiency: 83-90% typical (depending on model)

Hold-up time: 16ms at full load (minimum)

Leakage Current: <2.0mA maximum @ 240 VAC

Harmonics: EN 61000-3-2, -3 Class D Compliant (0.99 PF Typical) at full load

OUTPUT SPECIFICATIONS:

Adjustment Range: $\pm 10\%$ (minimum)

Minimum Load: none

Regulation: Line $\pm 0.5\%$ Load $\pm 0.5\%$

Ripple/Noise: 150mV peak to peak maximum (20 MHz)

Set Point Accuracy: $\pm 1\%$ (except 5V $\pm 2\%$) (maximum)

Output voltage adj: $\pm 10\%$ minimum

Overcurrent Protection: 105-125% automatic recovery Constant Current
Overvoltage Protection: 115-140% of V1 nominal

Overtemperature Protection: Heatsink Temp. $90^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Auto Recovery

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature: -20°C to $+50^{\circ}\text{C}$. Derate to 50% at $+70^{\circ}\text{C}$

Storage Temperature: -40°C to $+85^{\circ}\text{C}$ max 95% Relative Humidity

Cooling: Internal ball bearing DC fan

Humidity: 20-90% RH non condensing

Vibration: 10-500Hz, 2G 10min
1cycle for 60 min (3 axes)

Shock: 20G Peak Acceleration

Weight: Approx: 35 LBS

Size: 19" x 14.2" x 3.50"

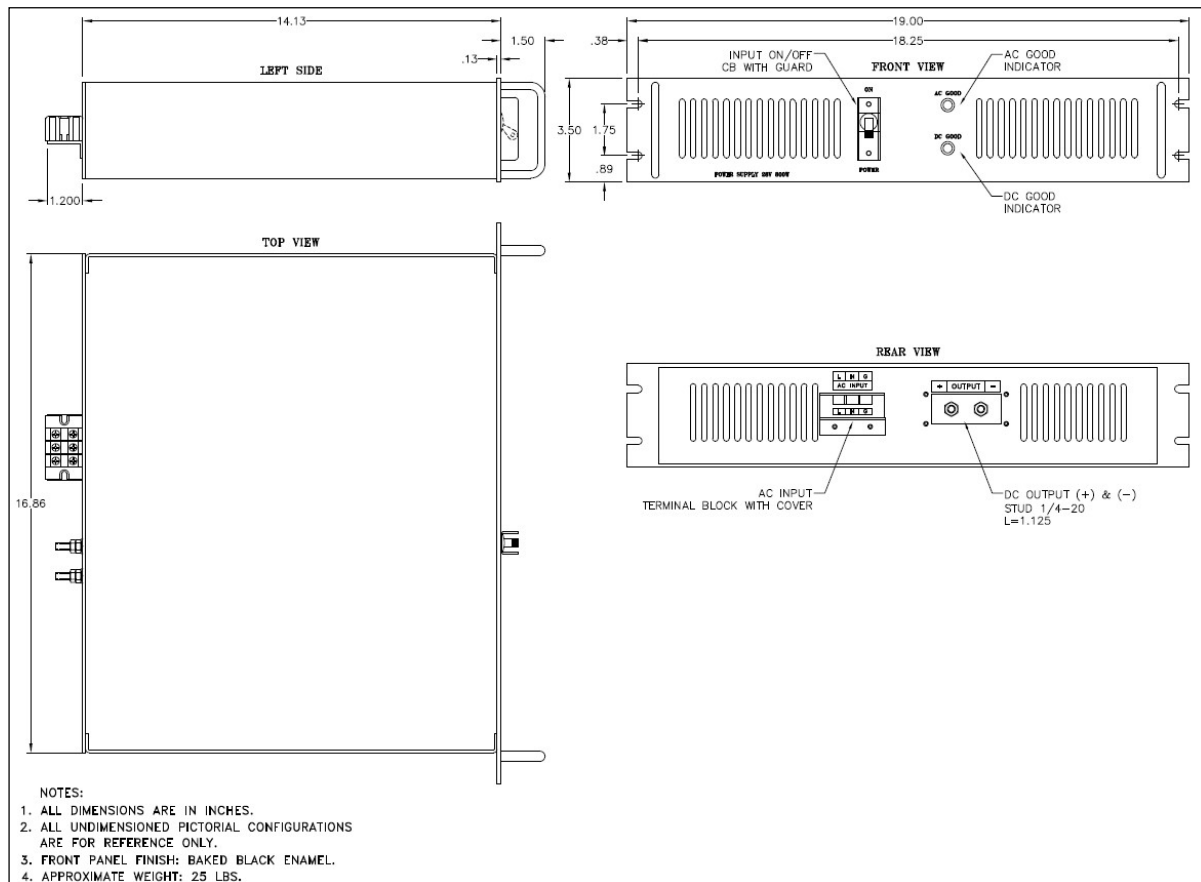
MODEL SELECTION FOR 1000W OUTPUT			MODEL SELECTION FOR 2000W OUTPUT		
MODEL NUMBER	VOLTAGE	CURRENT	MODEL NUMBER	VOLTAGE	CURRENT
TCP-RK-1000-12	12V	60A	-	-	-
TCP-RK-1000-15	15V	50A	-	-	-
TCP-RK-1000-24	24V	40A	TCP-RK-2000-24	24V	80A
TCP-RK-1000-28	28V	37A	TCP-RK-2000-28	28V	74A
TCP-RK-1000-48	48V	21A	TCP-RK-2000-48	48V	42A
NOTE: OTHER VOLTAGES & CURRENTS AVAILABLE. CONSULT THE FACTORY. INPUT VOLTAGE RANGE DETERMINE OUTPUT POWER					

OPTION DESIGNATIONS

-ORD	Redundant Operation
-PAR	Parallel Operation
-CC	Conformal Coating
-MIL	Ruggedized / Militarized
-4HZ	400 Hz Operation

Example: TCP-RK-XXXX-XX-ORD

MECHANICAL OUTLINE



Technology Dynamics Inc. is not responsible for any errors in this data sheet nor any damages or injuries resulting from the use of this product.