



Power Factor  
Corrected  
Power Supply

300 – 400 Watts

TEK300 - 400 Series

300 - 400 Watts Single Output

**SMX POWER**

3005 Avenida Simi, Simi Valley, CA 93063

TEL: (805) 582-2804 FAX: (805) 582-2308

[www.smxpower.com](http://www.smxpower.com)

#### Features

- Universal AC input
- 100% Burn-in, hi pot tested
- Wide selection of single outputs
- World –wide agency approval
- High quality
- Superior performance
- Price competitive
- Enclosed and U-channel versions
- Power factor correction to EN61000-3-2 Class D

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## DESCRIPTION

The **TEK Series**, Power Factor Corrected Switch Mode Power Supplies are available in over 24 single output models and provide output power from 300 to 400 watts. These high performance switchers are low profile and available in an open-frame or fully enclosed configuration. The **TEK Series** is an ideal choice and a powerful solution for any application where up to 400 watts may be required. They are intended for installation as a component in OEM systems

## SPECIFICATION

### AC Input Specification

Input Voltage:	90-264 VAC .99 Active PFC
Input Frequency:	47~63Hz
Inrush Current:	35A peak maximum (Cold Start, full load, 230VAC)
Efficiency:	75% minimum @ 230VAC, full load

### DC Output Specifications

Output Voltage:	See Model Chart
Voltage Adjust:	+/-5% of rated output.
Output Current:	See Model Chart
Line/Load Regulation Max.:	+/-1%
Ripple and Noise:	+/-1%
Turn-On Delay:	1 sec max. at 120VAC
Hold-up Time:	20ms at 120VAC and 80% of rated load.
Overshoot:	Not to exceed 5% over nominal voltage.

### Environmental Specification

Operating Temperature:	0 to 50°C ambient, derate 2.5% per degree C from 50°C to 70°C.
Storage Temperature:	-20 to 85°C
Operating Humidity:	5% to 90% RH, non-condensing
Storage Humidity:	5% to 95% RH, non-condensing
Vibration:	5 to 50HZ, X,Y,Z axis, acceleration, +/-7.35M/s <sup>2</sup>
Cooling:	22 CFM airflow required for full rated output.

### Safety Specifications

Safety:	UL60950, CSA C22.2 No. 60950-00, EN60950, CB
Emissions:	FCC Part 15 subject J, Class B, CISPR 22 Class B, CE marked.
Leakage Current:	The AC leakage current shall not exceed 3.5mA when the power supply is connected to a supply voltage equal to the upper limit of the rated voltage range.

### Additional Features

Power Supply on:	Green LED indicates when the power supply is on.
Power Good:	Designated as PG on the PCB. This is a power-on reset signal. Signal will go high when the output reaches the regulation limit. It will go low at least 1msec before loss of regulation.
Remote inhibit:	Require a TTL low signal to inhibit output.
Overcurrent Protection:	Power limits at 110-140% of rated output current recovers automatically.
Overvoltage Protection:	Output is protected against over-voltage. Unit latching will occur when the output exceeds 130%. Recycle AC to reset.
Over Temp. Protection:	When the ambient temp. exceeds 85°C the unit shuts down with automatic recovery
Short Circuit Protection:	Short circuit can be continuous without damage. Recovery is automatic.

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Model Number	Output Range	Preset Voltage	Output Current	
			Max.	Peak
TEK300PE-12	12 - 15V	12V	25A	46.66A
TEK300PE-18	16 - 21V	18V	18.75A	33.33A
TEK300PE-24	22 - 30V	24V	13.64A	23.33A
TEK300PE-36	31 - 41V	36V	9.68A	17.07A
TEK300PE-48	42 - 55V	48V	7.15A	12.72A
TEK300PU-12	12 - 15V	12V	25A	46.66A
TEK300PU-18	16 - 21V	18V	18.75A	33.33A
TEK300PU-24	22 - 30V	24V	13.64A	23.33A
TEK300PU-36	31 - 41V	36V	9.68A	17.07A
TEK300PU-48	42 - 55V	48V	7.15A	12.72A
TEK400PE-12	12 - 15V	12V	33.34A	46.66A
TEK400PE-18	16 - 21V	18V	25A	33.33A
TEK400PE-24	22 - 30V	24V	18.19A	23.33A
TEK400PE-36	31 - 41V	36V	12.9A	17.07A
TEK400PE-48	42 - 55V	48V	9.53A	12.72A
TEK400PU-12	12 - 15V	12V	33.34A	46.66A
TEK400PU-18	16 - 21V	18V	25A	33.33A
TEK400PU-24	22 - 30V	24V	18.19A	23.33A
TEK400PU-36	31 - 41V	36V	12.9A	17.07A
TEK400PU-48	42 - 55V	48V	9.53A	12.72A

\* 1% minimum load is required to maintain the ripple and regulation.

\* Output is fully isolated.

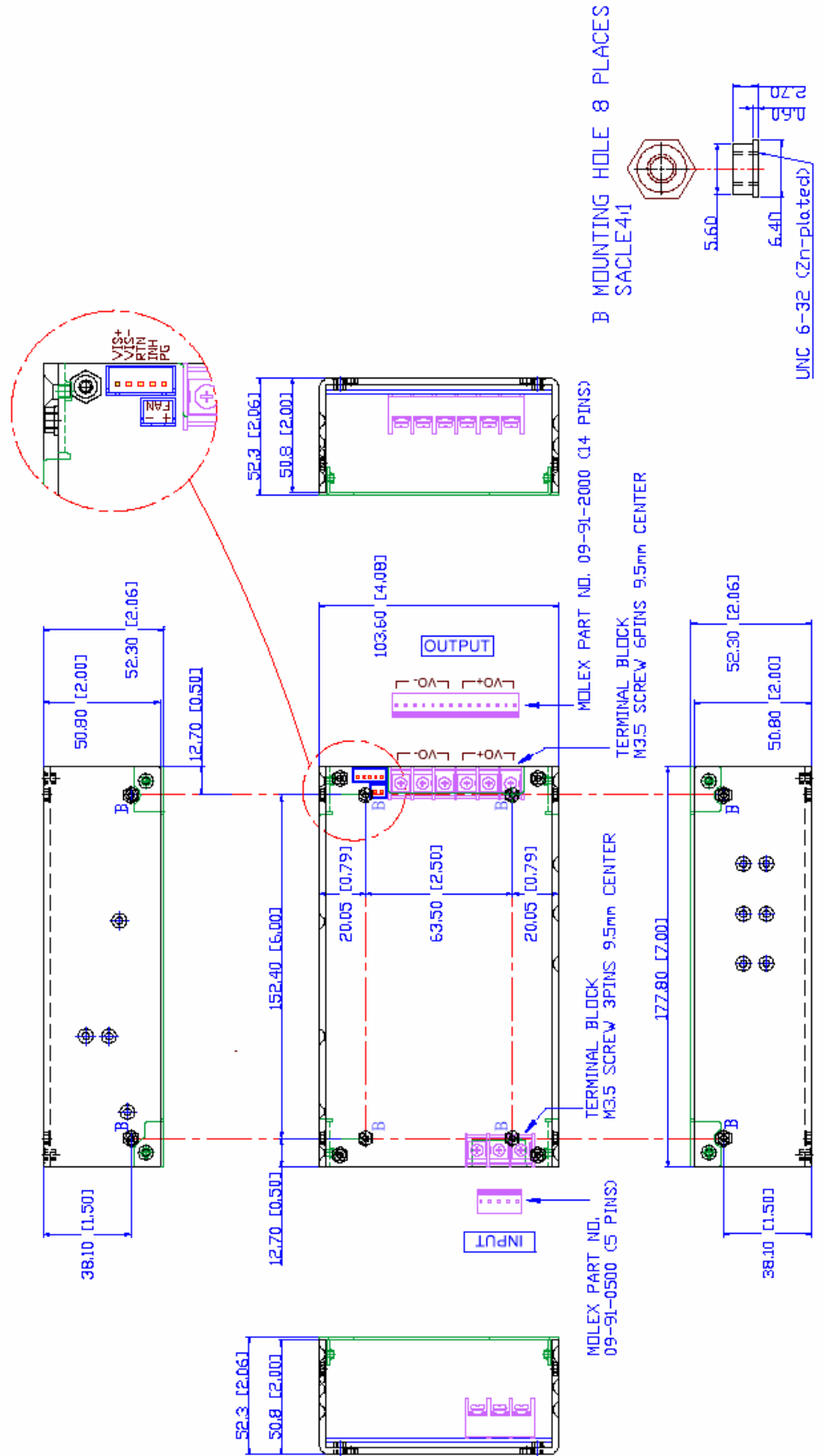
\* Ripple and noise is measured from 10KHZ to 20MHZ bandwidth at output terminals with parallel 0.1 $\mu$ F ceramic and 22 $\mu$ F electrolytic capacitors.

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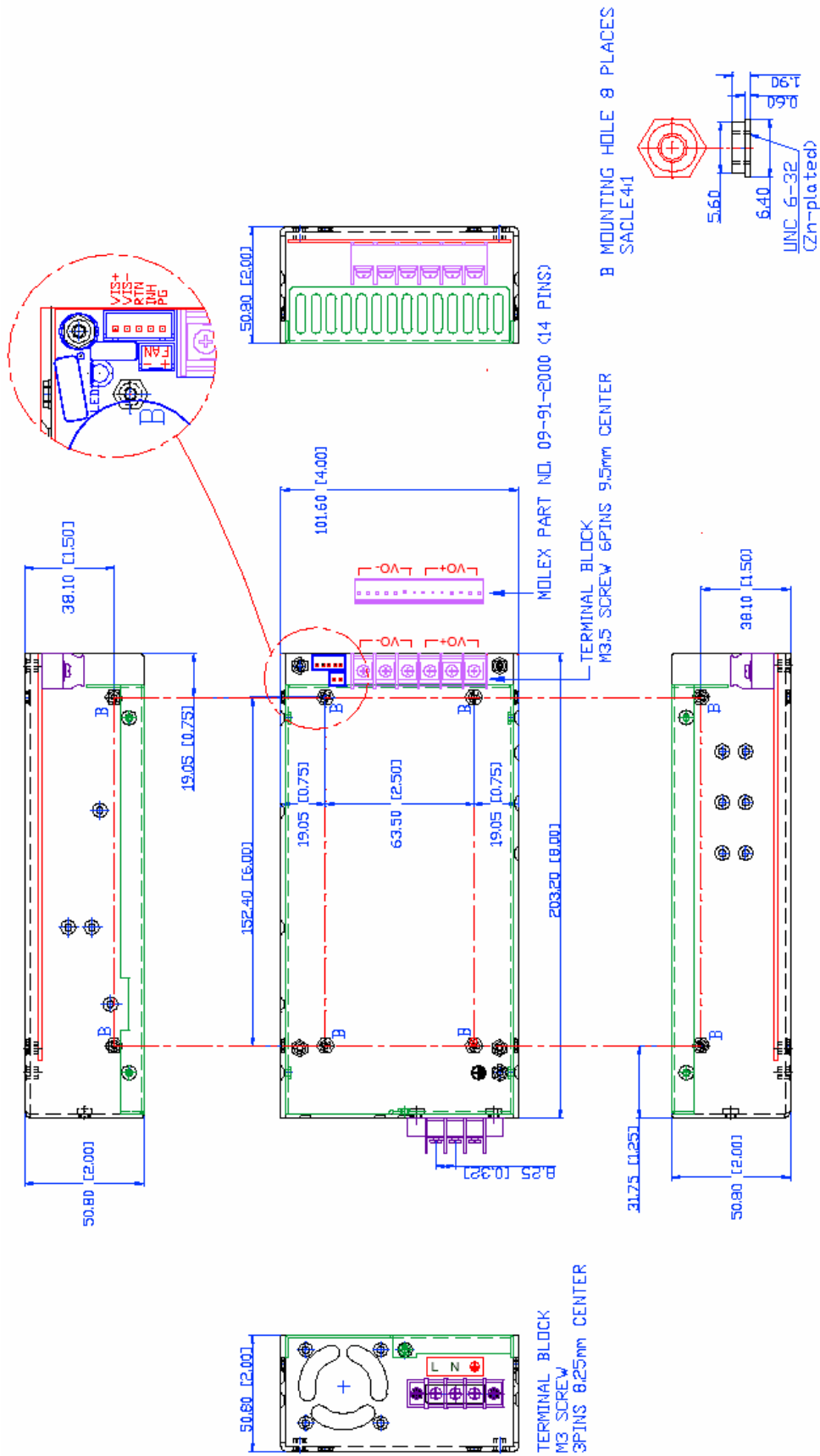
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MECHANICAL DRAWING



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