

High Power Supplies 900 Watt AC/DC Universal Input Power Supply

SUMMARY

- **90 -264 Vac nominal input range**
- **Overvoltage, over temp. and short circuit protection**
- **Approved to UL, CSA and EN Standards**
- **Power Good LED**
- **Low Leakage**
- **12 V Auxiliary output**
- **Medical and commercial approvals**

The VTC Series are universal input AC/DC power supplies with power factor correction (PFC) with up to 900 Watts output power. The VTC product incorporates true inhibit, power fail alarm, power good signal and fan control. The series is approved to EN60601-1 and EN60950-1 to reduce design-in time and end system compliance costs



All specifications are typical at nominal input, full load at 25 °C unless otherwise stated

SPECIFICATIONS

OUTPUT SPECIFICATIONS		
Output Power	Integral forced air	900 Watts max.
Total Regulation		See table
Rise time	At turn-on	3.0 s max.
Transient response	Main output 25% 0.2 A/ μ s	3.5% max. dev. 350 μ s recovery to 1%
Temperature Coefficient		+/-0.03%/oC
Overvoltage protection		125% +/-10%
Short Circuit protection	block wall	Yes

INPUT SPECIFICATIONS		
Input Voltage range	Universal input	100-240 nom (90 - 264 max) Vac
Input frequency		47 Hz to 63 Hz
Input surge current		40 A max.
Ground Leakage current	264 Vac 60 Hz	160 μ A
Input current	115 Vac	12.0 A max
Input current	230 Vac	6.0 A max
Input fuse	F1	15.0 A

EMC INFORMATION		
Conducted emissions	EN55011	Level B
Radiated emissions	EN55011	Level A
Line freq. harmonics	EN61000-3-2	Class A
Voltage fluctuations	EN61000-3-3	Complies (clause 5b)
ESD Air	EN61000-4-2	8 kV contact
ESD Contact	EN61000-4-2	6 kV air
Radiated immunity	EN61000-4-3	3 V/m
Fast Transients (EFT)	EN61000-4-4	2 kV 5 kHz
Line surge immunity	EN61000-4-5	1 kV diff /2 kV cm
Conducted immunity	EN61000-4-6	3 Vrms
Power freq. mag. field	EN61000-4-8	3 A/m
Voltage dip immunity	EN61000-4-11	Unit will ride through without loss of output at 75% of rated load with AC power fail warning.

ENVIRONMENTAL SPECIFICATIONS		
Thermal Performance	operating ambient (see ratings chart)	-20 °C to +70 °C
	non-operating	-40 to +85 °C
	0 - 50 °C Fan cooled	900 Watts
Maximum Altitude	operating / non-operating	10,000 ft. / 40,000 ft. max.
Relative Humidity	non-condensing	5% - 90% RH
Vibration (operating)	0.003 g ² /Hz	1.5 g _{rms} 3 axes 10 min/axis
Vibration (non-operating)	0.026 g ² /Hz	5.0 g _{rms} 3 axes, 1 hr/axis
Shock	half-sine 20 g _{pk}	10 ms, 3 axes, 6 shocks total
	half-sine 40 g _{pk}	10 ms, 3 axes, 6 shocks total

GENERAL SPECIFICATIONS		
Hold-up time	120 Vac, 60 Hz	>35 ms at 900 Watts output
Efficiency	120 Vac 900 W output	>84 %
isolation voltage	input to ouput	4000 Vac
	input to ground	1800 Vac
Switching frequency	fixed	70 KHz, +/- 10 KHz
Safety Approvals	UL/EN/IEC 60601-1 CSA22.2 No.60601-1	
Maximum weight	2 kg (4.4 lbs)	

MODEL NUMBER	Output	Peak Output	Features	Ripple (3)	Regulation
VTC565221	24 V 37.5 A	24 V 39.5 A	+/-5% adjust	<240 mV	+/- 0.5%
VTC565222	28 V 32.1 A	28 V 34.1 A	+/-5% adjust	<240 mV	+/- 0.5%
VTC565223	36 V 25.0 A	36 V 27.0 A	+/-5% adjust	<240 mV	+/- 0.5%
VTC565224	48 V 18.8 A	48 V 20.8 A	+/-5% adjust	<240 mV	+/- 0.5%
All Models Aux. output	12.25 V 0.25 A	N/A	N/A	<120 mV	11.9 - 12.7 V

NOTES
1. Integral forced air cooling
2. Peak rating is for 1 minute maximum 10% duty cycle
3. Noise measurent 20 MHz Bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply.
4. 12 V Auxiliary output does not shutdown with inhibit

MECHANICAL NOTES
The VTC series is factory configured with standard connectors. Options B and T are available, Please contact factory for other connector arrangements

STANDARD OPTION

J1: PHOENIX PIN 1732034

- 1 AC INPUT LINE
- 2 AC INPUT NEUTRAL
- 3 AC INPUT SFTY GND

J7: PHOENIX PIN 1706785

(2 REQUIRED)

- 4 OUTPUT #1
- 3 OUTPUT #1
- 2 RETURN
- 1 RETURN

J6: PHOENIX PIN 1726066

- 1 FAN ON/OFF
- 2 +12V AUX
- 3 COMMON
- 4 INHIBIT
- 5 AC POWER FAIL
- 6 DC POWER GDX

"B" OPTION

J1: PHOENIX PIN 1732034

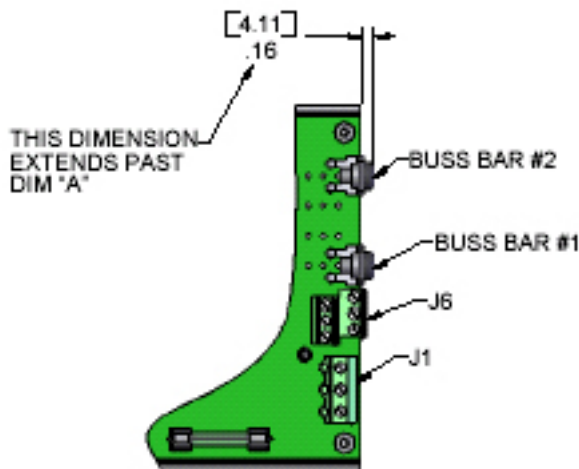
- 1 AC INPUT LINE
- 2 AC INPUT NEUTRAL
- 3 AC INPUT SFTY GND

BUSS BAR #1

BUSS BAR #2

J6: PHOENIX PIN 1726066

- 1 FAN ON/OFF
- 2 +12V AUX
- 3 COMMON
- 4 INHIBIT
- 5 AC POWER FAIL
- 6 DC POWER GOOD



"B" OPTION

"T" OPTION

J1: PHOENIX PIN 1804807

MATING CONNECTOR PHOENIX 1804917

- 1 AC INPUT LINE
- 2 AC INPUT NEUTRAL
- 3 AC INPUT SFTY GND

J6: PHOENIX PIN 1802414

MATING CONNECTOR PHOENIX 1754465

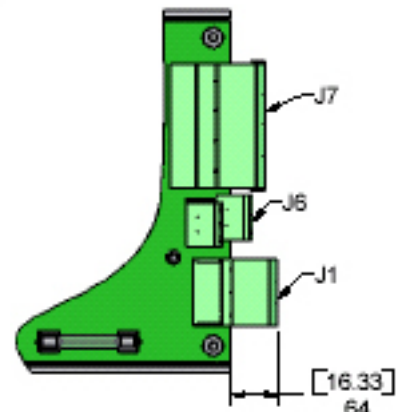
(2 REQUIRED)

- 1 FAN ON/OFF
- 2 +12V AUX
- 3 COMMON
- 4 INHIBIT
- 5 AC POWER FAIL
- 6 DC POWER GOOD

J7: PHOENIX PIN 1998959

MATING CONNECTOR PHOENIX 1913523

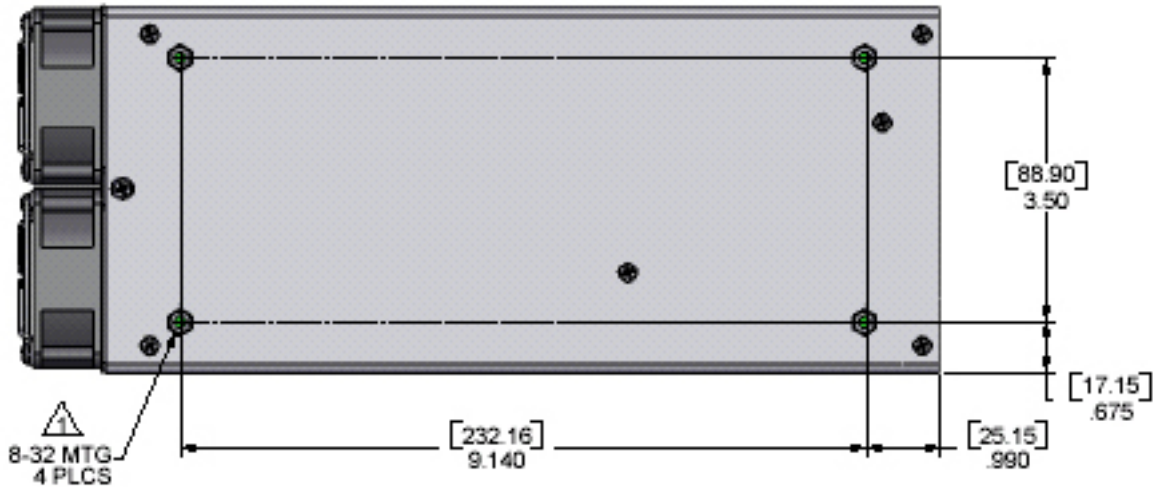
- 4 OUTPUT #1
- 3 OUTPUT #1
- 2 RETURN
- 1 RETURN



"T" OPTION

OUTLINE AND MOUNTING DRAWING

Other drawings and SolidWorks™ 3D Models are available on request.



MOUNTING SCREW MAX DEPTH .200 FROM OUTSIDE OF CHASSIS

