



Features:

- 225W High Power Density 101.6 x 50.8 x 25.4mm
- Wide AC & DC Input 85V to 264VAC
- Active PFC
- Temperature Range -40°C to +70°C
- Protection: OVP, OCP and Output Short Circuit
- Output Range: 12V - 54VDC
- Low Standby Power <0.5W
- Fully Isolated Pri - Sec >4000Vrms
- Insulation: Class II
- Materials: UL94-V0
- IEC/EN/UL62368, EN61558, EN60335, EN60601
- 3 Year Warranty



Description

VTX-210-225-0## is a compact Open style AC-DC power converter with PFC. It features universal AC input and at the same time accepts DC input voltage, low power consumption, high efficiency, high reliability, reinforced isolation. It offers good EMC performance compliant to IEC/EN61000-4 and CISPR32/EN55032 and meets UL/EN/IEC62368, EN60335 and EN60601 standards. The converters are widely used in medical, industrial, office and civil applications. Please contact our Technical team for further support.

Selection Guide

Part Number	Cooling Method	Power Rating Watts	Output Voltage (VDC)	Output Current (A)	Output Voltage Adj. Range	Input Range
VTX-210-225-012	Air Cooling	140	12	11.67	11.8~12.6	85 - 264VAC (120 - 370VDC)
	13CFM	225	12	18.75		
VTX-210-225-015	Air Cooling	140	15	9.33	14.7~15.8	
	13CFM	225	15	15		
VTX-210-225-024	Air Cooling	140	24	5.83	23.5~25.2	
	13CFM	225	24	9.4		
VTX-210-225-027	Air Cooling	140	27	4.81	26.5~28.4	
	13CFM	225	27	8.35		
VTX-210-225-036	Air Cooling	140	36	3.88	35.3~37.8	
	13CFM	225	36	6.25		
VTX-210-225-048	Air Cooling	140	48	2.91	47.1~50.4	
	13CFM	225	48	4.7		
VTX-210-225-054	Air Cooling	140	54	2.59	52.3~55.5	
	13CFM	225	54	4.17		

Note: Other output voltages are available upon request.

Please contact Vigortronix for any enquiries. Products can be altered to suit custom requirements.
The information contained in this document is subject to change without notice.

Input Specification					
Item	Conditions	Min	Typical	Max	Unit
Input Voltage	AC Input	85	-	264	VAC
	DC Input	120	-	370	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	3	A
	230VAC	-	-	2	
Inrush Current	115VAC	-	40	-	
	230VAC	-	75	-	
Power Factor	230VAC Full Load	0.95	-	-	-
Leakage Current	240VAC / 50Hz	<0.1mA RMS Max			

Output Specification						
Item	Conditions	Min	Typical	Max	Unit	
Output Voltage	Output	-	+/-1	-	%	
Line Regulation	Full Load	-	+/-0.5	-		
Load Regulation	0% - 100% Load	-	+/-0.5	-		
Ripple / Noise	20MHz Bandwidth (P-P Value)	12V	-	-	60	mV
		15V to 48V	-	-	100	
		54V	-	-	200	
Stand by Power	230VAC	-	0.5	-	W	
Temp. Coefficient		-	+/-0.03	-	%/°C	
Short Circuit Protection		Hiccup, Continuous, Self-recovery				
Over Current Protection		>110% Load, Self-recovery				
Over Voltage Protection		Hiccup, Continuous, Self-recovery				
Over Temperature Protection		Recovery after Supply Power Reset and load removed				
Minimum Load		0	-	-	%	
Hold-up Time	230VAC Input	-	16	-	mS	

Please contact Vigortronix for any enquiries. Products can be altered to suit custom requirements.
The information contained in this document is subject to change without notice.

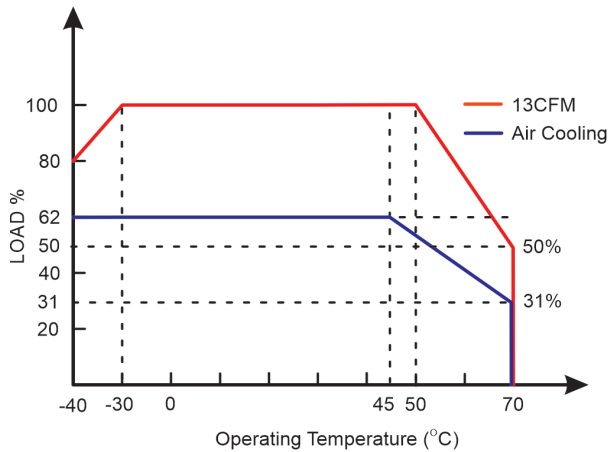
General Specification					
Item	Conditions	Min	Typical	Max	Unit
Dielectric Strength	Input to Output (1Min, <10mA)	4000	-	-	VAC
	Input to Earth(1Min, <10mA)	1500	-	-	
Insulation Resistance	Input to Output (500VDC)	50	-	-	M.Ohm
Operating Temperature		-40	-	+70	°C
Storage Temperature		-40	-	+85	
Operating Humidity		20	-	90	%RH
Storage Humidity		-	-	95	
Switching Frequency		-	65	-	KHz
Altitude		-	-	5000	m
Safety Class		CLASS I (With PE) CLASS II (Without PE)			
MTBF		>300KHrs @ 25°C (MIL-HDBK-217F)			
Safety Approvals		IEC/EN/UL62368, IEC/EN61558, IEC/EN60335, EN60601-1			
Dimensions		101.6 x 50.8 x 25.4mm (4 x 2 Inch)			
Cooling Method		Free air convection / 13CFM			
Weight		175g			

EMC Specification		
Emissions	CE /RE	CISPR32 / EN55032 CLASS B EN55014-1
Immunity	ESD	IEC/EN 61000-4-2 CONTACT +/-8KV EN55014-2
	RS	IEC/EN 61000-4-3 10V/m EN55014-2
	EFT	IEC/EN 61000-4-4 +/-4KV
	SURGE	IEC/EN 61000-4-5, EN55014-2
	CS	IEC/EN 61000-4-6 10V/r.m.s. EN55014-2
	Voltage Variation	IEC/EN 61000-4-11, EN55014-2

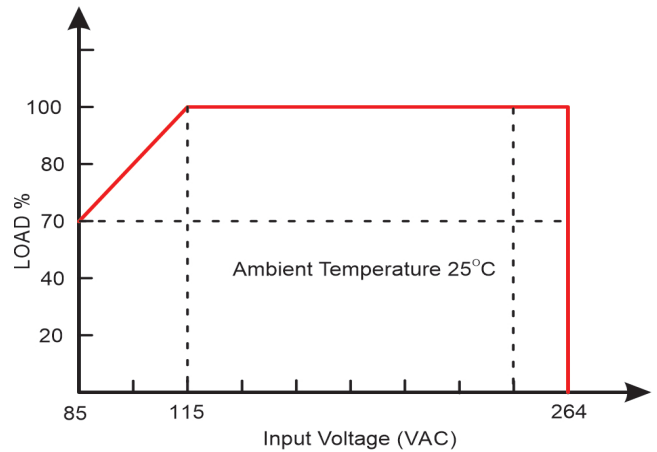
Please contact Vigortronix for any enquiries. Products can be altered to suit custom requirements.
The information contained in this document is subject to change without notice.

Derating Graphs

Temperature Derating Graph



Input Voltage Derating Graph

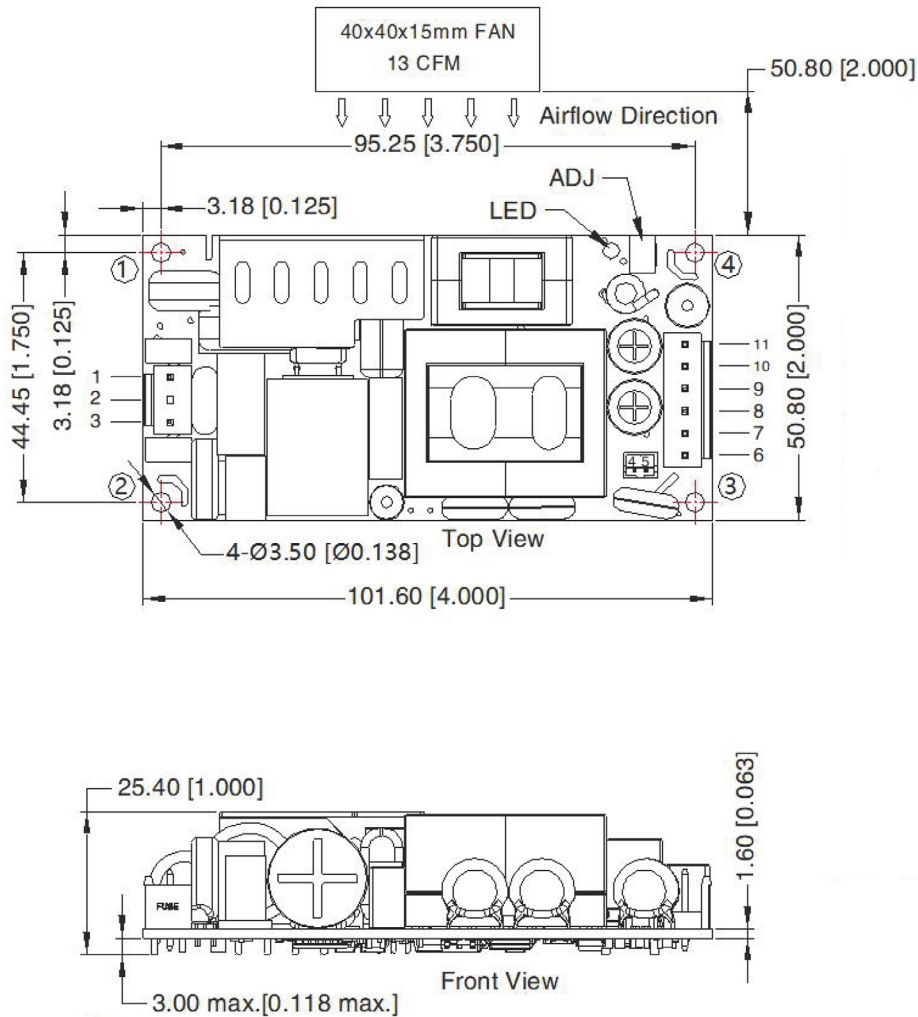


Efficiency Guide			
Part Number	Output Voltage (VDC)	Efficiency Typical (%)	Capacitance Load Max
VTX-210-225-012	12	93	6000 uF
VTX-210-225-015	15	93	5000 uF
VTX-210-225-024	24	94	3200 uF
VTX-210-225-027	27	94	2400 uF
VTX-210-225-036	36	94	2000 uF
VTX-210-225-048	48	94	1600 uF
VTX-210-225-054	54	94	1000 uF

Note: Other output voltages are available upon request.

Please contact Vigortronix for any enquiries. Products can be altered to suit custom requirements. The information contained in this document is subject to change without notice.

Dimensions



PIN Number	Function	Connector	Housing	Terminal
1	AC(N)/DC-	JST B3P-VH or Equivalent	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent
2	No Pin			
3	AC(L)/DC+			
4	Fan -	JST B2B-PH-K-S or Equivalent	JST PHR-2 or Equivalent	JST SPH-002T-P0.5S or Equivalent
5	Fan +			
6, 7, 8	-Vo	JST B6P-VH or Equivalent	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent
9, 10, 11	+Vo			

Please contact Vigortronix for any enquiries. Products can be altered to suit custom requirements.
The information contained in this document is subject to change without notice.