



Features:

- 120W High Power Density 76.2 x 50.8 x 31.0mm
- Wide AC & DC Input 85V to 264VAC
- Active PFC
- Temperature Range -40°C to +85°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-210-120-0## 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 industrial, office and civil applications. Please contact our Technical team for further support.

Selection Guide

Part Number	Power Rating Watts	Output Voltage (VDC)	Output Voltage Adj. Range	Output Current (mA)	Ambient Temp. (°C)	Efficiency Typical	Input Range
VTX-210-120-012	114	12	11.4~12.6	8000	50°C (85°C @ 40%)	>94%	85 - 264VAC (100 - 370VDC)
VTX-210-120-015	114	15	14.3~15.8	8000			
VTX-210-120-024	120	24	22.8~25.2	5000			
VTX-210-120-027	120	27	25.6~28.4	4440			
VTX-210-120-036	120	36	35.3~37.8	3330			
VTX-210-120-048	120	48	45.6~50.4	2500			
VTX-210-120-054	120	54	51.3~55.5	2220			

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.

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Vigortronix is a trading name of Vigortronix Limited

Vigortronix.com

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	-	-	2	A
	230VAC	-	-	1	
Inrush Current	115VAC	-	40	-	
	230VAC	-	75	-	
Power Factor	230VAC Full Load	0.94	-	-	-
Leakage Current	240VAC / 50Hz	<0.1mA RMS Max			

Output Specification					
Item	Conditions	Min	Typical	Max	Unit
Output Voltage	Output 12V/15V	-	+/-2	-	%
	24V/27V/36V/48V/54V	-	+/-1	-	
Line Regulation	Full Load	-	+/-0.5	-	
Load Regulation	0% - 100% Load	-	+/-1	-	
Ripple / Noise	12V to 27V 20MHz Bandwidth (P-P Value)	-	-	150	mV
	36V/48V/54V	-	-	200	
Stand by Power	230VAC	-	0.5	-	W
Temp. Coefficient		-	+/-0.02	-	%/°C
Short Circuit Protection		Hiccup, Continuous, Self-recovery			
Over Current Protection		>130% 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	-	15	-	mS

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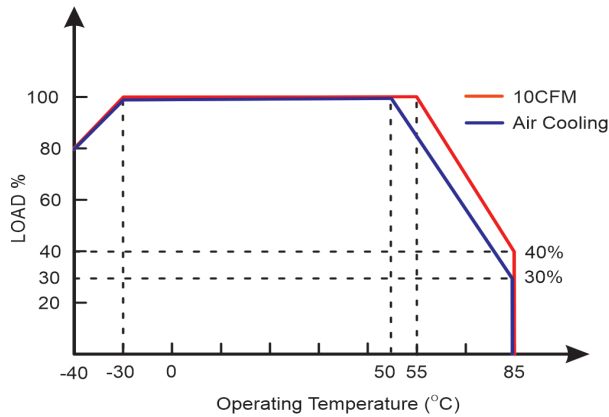
General Specification					
Item	Conditions	Min	Typical	Max	Unit
Dielectric Strength	Input to Output (1Min, <10mA)	4000	-	-	VAC
	Input to Earth(1Min, <10mA)	1500	-	-	
Insulation Resistance	Input to Output (500VDC)	100	-	-	M.Ohm
Operating Temperature		-40	-	+85	°C
Storage Temperature		-40	-	+85	
Operating 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, EN60335, EN60601-1			
Dimensions		76.2 x 50.8 x 31.0mm (3 x 2 Inch)			
Cooling Method		Free air convection / 10CFM			
Weight		125g			

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 +/-2KV
	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

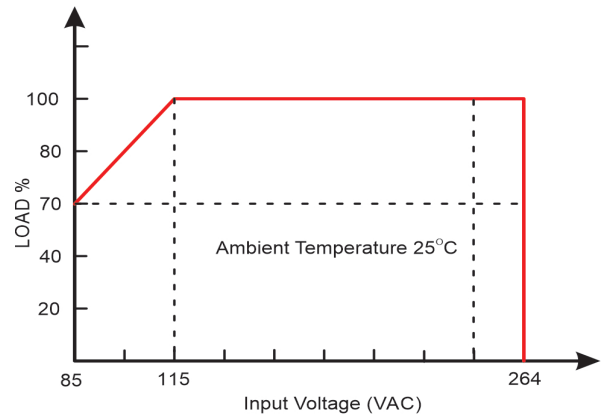
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Derating Graphs

Temperature Derating Graph



Input Voltage Derating Graph



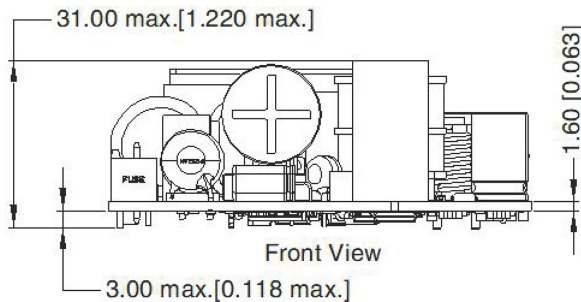
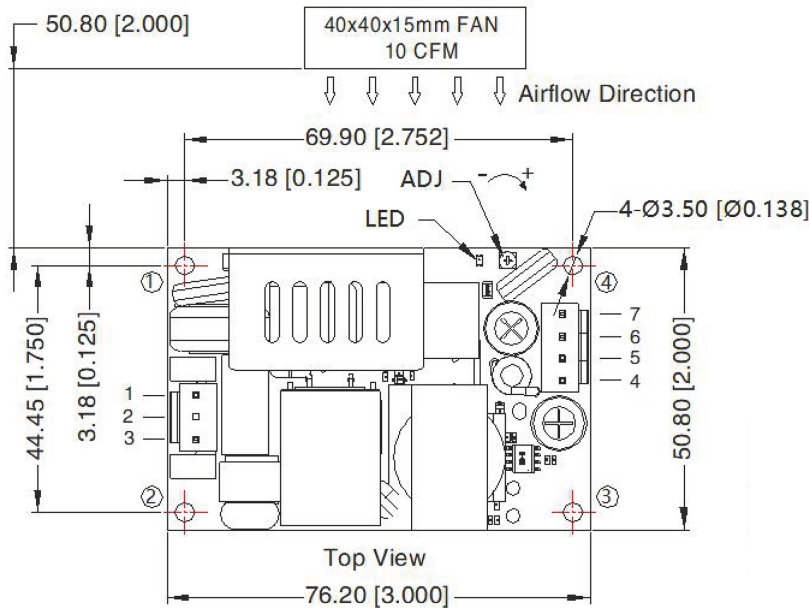
Efficiency Guide

Part Number	Output Voltage (VDC)	Efficiency Typical (%)	Capacitance Load Max
VTX-210-120-012	12	94	6000 uF
VTX-210-120-015	15	94	5000 uF
VTX-210-120-024	24	95	3200 uF
VTX-210-120-027	27	95	2400 uF
VTX-210-120-036	36	94	2000 uF
VTX-210-120-048	48	94	1600 uF
VTX-210-120-054	54	94	1300 uF

Note: Other output voltages are available upon request.

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Dimensions



PIN Number	Function	Connector	Housing	Terminal
1	AC(N)	JST B3P-VH or Equivalent	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent
2	No Pin			
3	AC(L)			
4	-Vo	JST B4P-VH or Equivalent	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent
5	-Vo			
6	+Vo			
7	+Vo			

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