



Features:

- 200W Compact Size 179.0 x 99.0 x 30.0mm
- Wide AC & DC Input 90V to 264VAC
- Temperature Range -30°C to +70°C
- LED Power Indicator
- Output Range: 5V - 48VDC
- Low Standby Power <0.75W
- Fully Isolated Pri - Sec: 4000Vrms
- Insulation: Class II
- Materials: UL94-V0
- UL/EN62368-1, EN61558, EN60335
- 3 Year Warranty



Description

VTX-212-200-0## AC-DC enclosed caged SMPS. It features a wide AC input 90V to 264VAC and a DC input voltage 120 to 370VDC. The converters have been designed with low power consumption, high efficiency, high reliability, reinforced isolation. It offers good EMC performance compliant to IEC/EN61000-4 and CISPR32/EN55032 and meets IEC/EN/UL62368/EN60335/EN61558 standards. The converters are widely used in industrial, power, home appliances, instrumentation, communication, LED lighting and civil applications. For extremely harsh EMC environment, we recommend using the application circuit show in this Datasheet or 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-212-200-005	200	12	4.5~5.5	30000	45°C (70°C @ 50%)	>88%	85 - 264VAC (120 - 370VDC)
VTX-212-200-012	200	12	11.4~13.8	16700			
VTX-212-200-015	200	15	13.5~18.0	13400			
VTX-212-200-024	200	24	21.6~28.8	8800			
VTX-212-200-036	200	36	32.4~39.6	5600			
VTX-212-200-048	200	48	43.2~52.8	4200			

Note: Other output voltages are available upon request.

Please contact Vigortronix for any enquiries. Products can be altered to suit custom requirements.
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Input Specification					
Item	Conditions	Min	Typical	Max	Unit
Input Voltage	AC Input	90	-	264	VAC
	DC Input	120	-	370	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	3	A
	230VAC	-	-	3	
Inrush Current	115VAC	-	60	-	
	230VAC	-	65	-	
Power factor	230VAC / 50Hz	-	0.95	-	-

Output Specification						
Item	Conditions	Min	Typical	Max	Unit	
Output Voltage	Full Load Range	-	+/-1	-	%	
Line Regulation	Rated Load	-	+/-0.5	-		
Load Regulation	0% - 100% Load	-	+/-0.5	-		
Ripple / Noise	20MHz Bandwidth	5V/12V/15V/24V	-	-	150	mV
		36V/48V	-	-	200	
Stand by Power	230VAC	-	0.75	1.0	W	
Temp. Coefficient		-	+/-0.03	-	%/°C	
Short Circuit Protection		Hiccup, Continuous, Self-recovery				
Over Current Protection		110%-200% Load, Self-recovery				
Over Voltage Protection		Hiccup, Continuous, Self-recovery				
Minimum Load		0	-	-	%	
Hold-up Time	115VAC Input	-	12	-	mS	
	230VAC Input	-	16	-		

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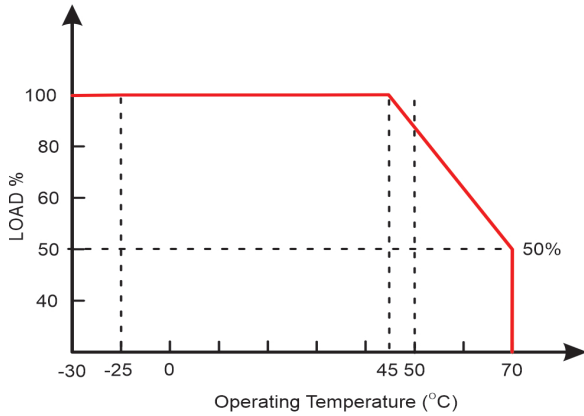
General Specification					
Item	Conditions	Min	Typical	Max	Unit
Dielectric Strength	Input to Output (1Min, 10mA)	4000	-	-	VAC
	Input to Earth (1Min, 10mA)	2000	-	-	
Insulation Resistance	Input to Output (500VDC)	50	-	-	M.Ohm
Operating Temperature		-30	-	+70	°C
Storage Temperature		-40	-	+85	
Operating Humidity		20	-	90	%RH
Storage Humidity		10	-	95	
Switching Frequency		-	65	-	KHz
Altitude		-	-	5000	m
Safety Class		CLASS I			
MTBF		>300KHrs @ 25°C (MIL-HDBK-217F)			
Safety Approvals		IEC/EN/UL62368, EN61558, EN60335			
Case Material		Metal (AL1100)			
Dimensions		179.00 x 99.00 x 30.00mm			
Cooling Method		Free air convection			
Weight		475g			

EMC Specification		
Emissions	CE /RE	CISPR32 / EN55032 CLASS A EN55014-1
Immunity	ESD	IEC/EN 61000-4-2 CONTACT +/-6KV 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

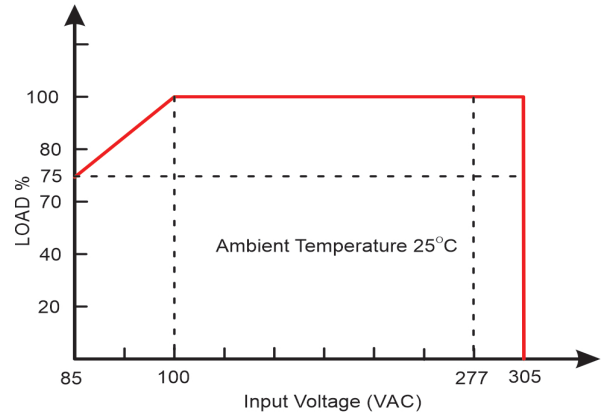
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Derating Graphs

Temperature Derating Graph



Input Voltage Derating Graph

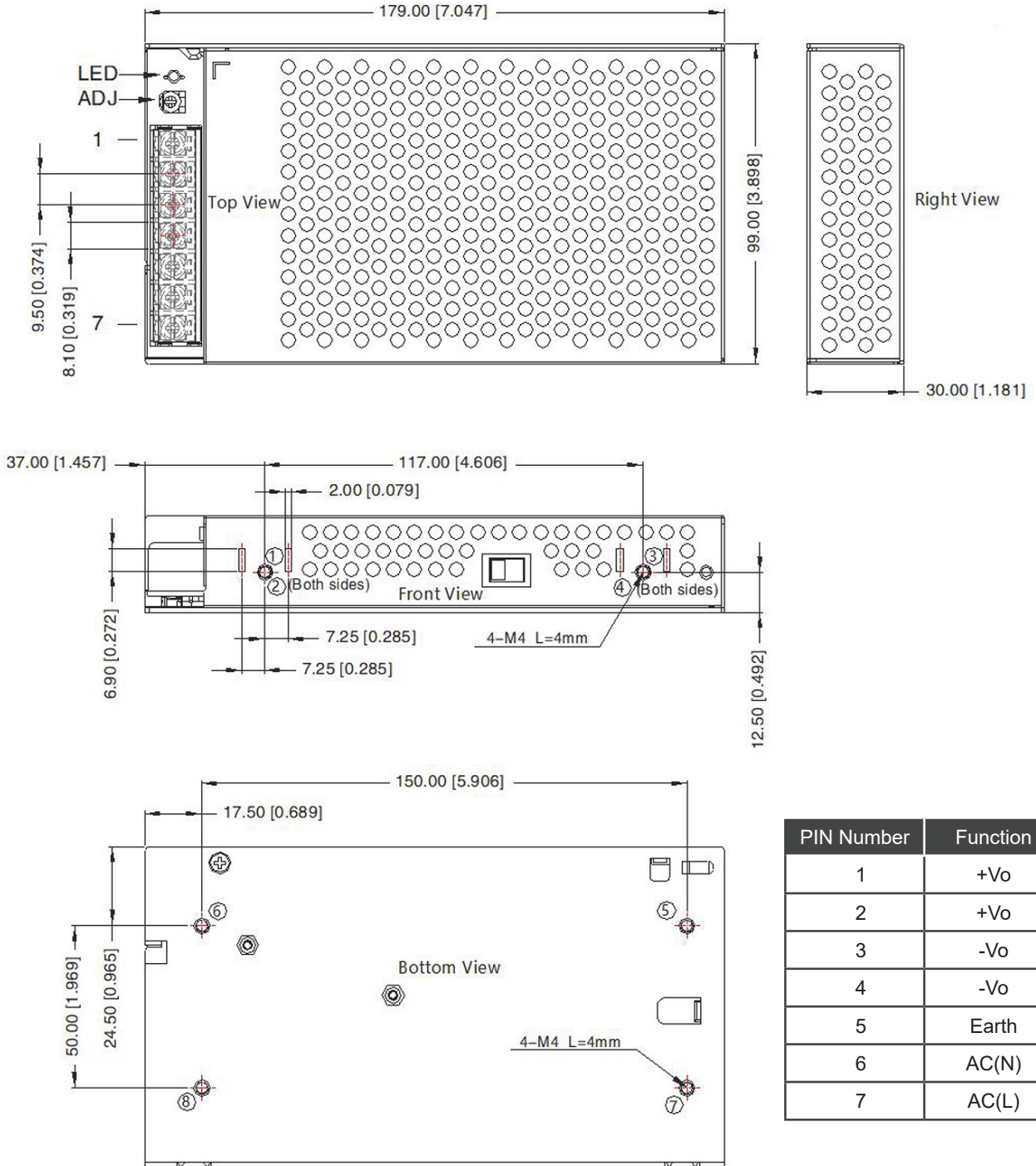


Efficiency Guide			
Part Number	Output Voltage (VDC)	Efficiency Typical (%)	Capacitance Load Max
VTX-212-200-005	5	88	10000 uF
VTX-212-200-012	12	88	4000 uF
VTX-212-200-015	15	88	3300 uF
VTX-212-200-024	24	90	1500 uF
VTX-212-200-036	36	89	1000 uF
VTX-212-200-048	48	89	470 uF

Note: Other output voltages are available upon request.

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Dimensions



PIN Number	Function
1	+Vo
2	+Vo
3	-Vo
4	-Vo
5	Earth
6	AC(N)
7	AC(L)

Position	Screw Size	Max Length	Max Torque
1 - 8	M4	4mm	0.9Nm

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