



### Features:

- 150W Compact Size 159.0 x 97.0 x 30.0mm
- Wide AC & DC Input 85V to 305VAC
- Temperature Range -30°C to +70°C
- Over-voltage Category OVC III
- Output Range: 12V - 55VDC
- Low Standby Power <0.5W
- Fully Isolated Pri - Sec: 4000Vrms
- Insulation: Class II
- Materials: UL94-V0
- UL/EN62368-1, EN61558, EN60335
- 3 Year Warranty



### Description

VTX-212-150-0### AC-DC enclosed caged PSU. It features a wide AC input 85V to 305VAC and a DC input voltage 100 to 430VDC. 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-212-150-012	150	12	10.2~13.8	12500	50°C (70°C @ 50%)	>86%	85 - 305VAC (120 - 430VDC)
VTX-212-150-015	150	15	13.5~18	10000			
VTX-212-150-024	150	24	21.6~28.8	6500			
VTX-212-150-036	150	36	32.4~39.6	4300			
VTX-212-150-048	150	48	43.2~52.8	3300			
VTX-212-150-055	150	55	49.5~60.5	2730			

**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	85	-	305	VAC
	DC Input	120	-	430	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	4	A
	230VAC	-	-	2	
Inrush Current	115VAC	-	30	-	
	230VAC	-	60	-	
Leakage Current	277VAC / 50Hz	0.75mA RMS Max			

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	12V/15V	-	-	150	mV
		24V/36V/48V/55V	-	-	200	
Stand by Power	230VAC	-	0.2	0.5	W	
Temp. Coefficient		-	+/-0.03	-	%/°C	
Short Circuit Protection		Hiccup, Continuous, Self-recovery				
Over Current Protection		110%-150% Load, Self-recovery				
Over Voltage Protection		Hiccup, Continuous, Self-recovery				
Minimum Load		0	-	-	%	
Hold-up Time	115VAC Input	-	8	-	mS	
	230VAC Input	-	40	-		

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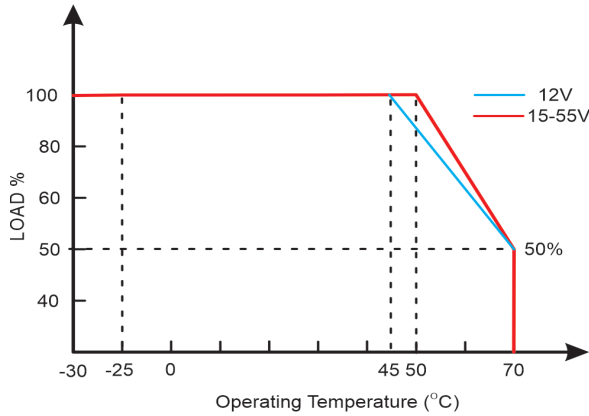
General Specification					
Item	Conditions	Min	Typical	Max	Unit
<b>Dielectric Strength</b>	Input to Output (1Min, 10mA)	4000	-	-	VAC
	Input to Earth (1Min, 10mA)	2000	-	-	
<b>Insulation Resistance</b>	Input to Output (500VDC)	50			M.Ohm
<b>Operating Temperature</b>		-30	-	+70	°C
<b>Storage Temperature</b>		-40	-	+85	
<b>Operating Humidity</b>		20	-	90	%RH
<b>Storage Humidity</b>		10	-	95	
<b>Switching Frequency</b>		-	65	-	KHz
<b>Altitude</b>		-	-	5000	m
<b>Safety Class</b>		CLASS I			
<b>MTBF</b>		>300KHrs @ 25°C (MIL-HDBK-217F)			
<b>Safety Approvals</b>		IEC/EN/UL62368, EN61558, EN60335			
<b>Case Material</b>		Metal (AL5052)			
<b>Dimensions</b>		159.00 x 97.00 x 30.00mm			
<b>Cooling Method</b>		Free air convection			
<b>Weight</b>		430g			

EMC Specification		
<b>Emissions</b>	CE /RE	CISPR32 / EN55032 CLASS B EN55014-1
<b>Immunity</b>	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

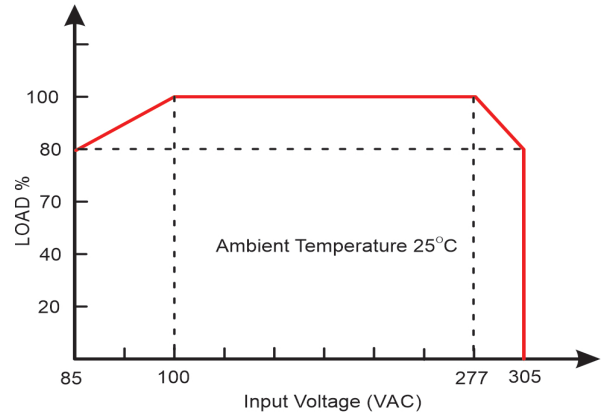
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## Derating Graphs

Temperature Derating Graph



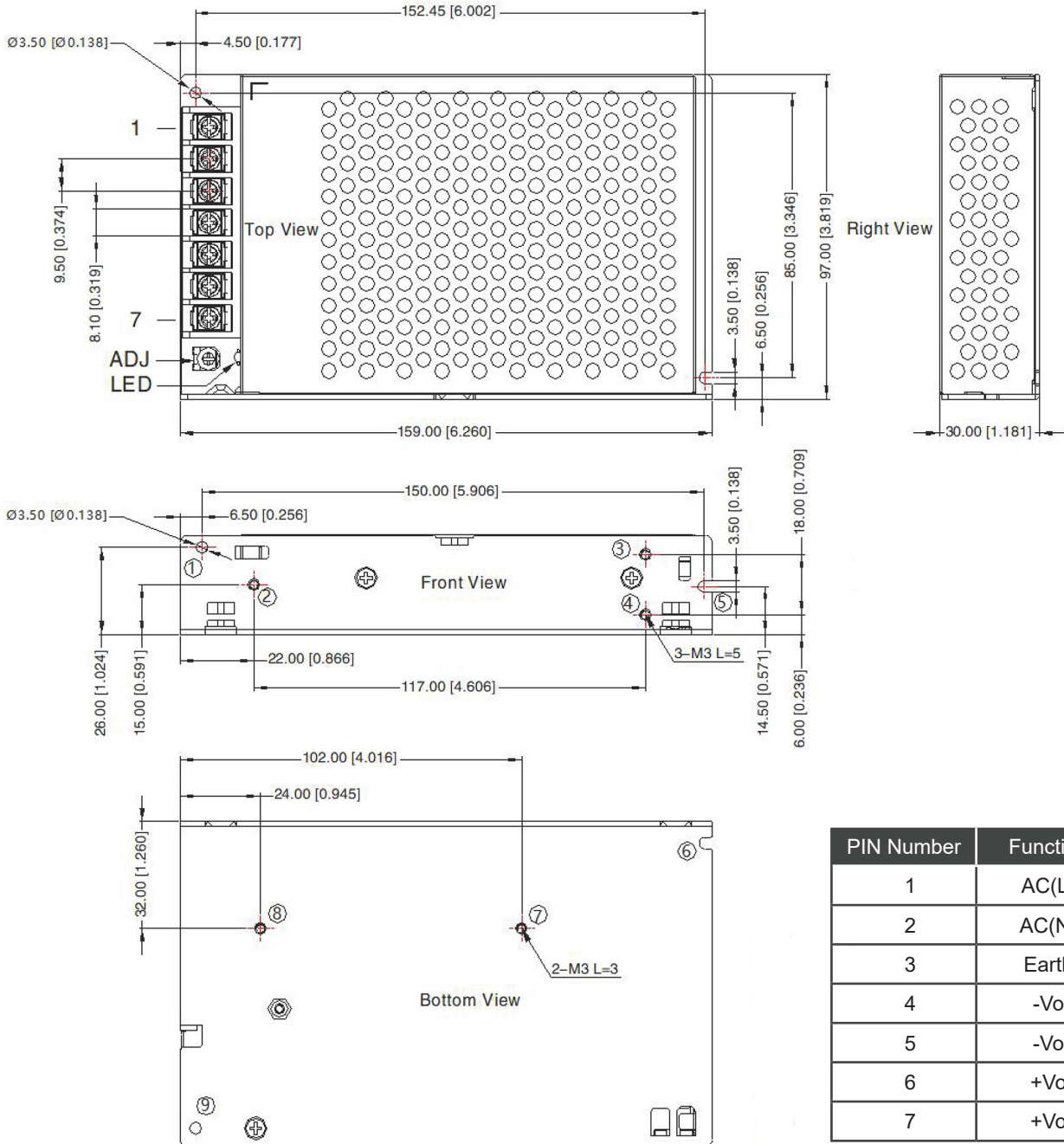
Input Voltage Derating Graph



Efficiency Guide			
Part Number	Output Voltage (VDC)	Efficiency Typical (%)	Capacitance Load Max
<b>VTX-212-150-012</b>	12	86	10000 uF
<b>VTX-212-150-015</b>	15	87	6000 uF
<b>VTX-212-150-024</b>	24	88	2400 uF
<b>VTX-212-150-036</b>	36	88	1200 uF
<b>VTX-212-150-048</b>	48	89	600 uF
<b>VTX-212-150-055</b>	55	90	600 uF
<b>Note: Other output voltages are available upon request.</b>			

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## Dimensions



Position	Screw Size	Max Length	Max Torque
2 - 4	M3	5mm	0.4Nm
7 - 8	M3	3mm	0.4Nm

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