



Features:

- 5W Compact Size 48.50 x 36.00 x 20.50mm
- Wide AC & DC Input 85V to 264VAC (100 to 370VDC)
- Temperature Range -30°C to +70°C
- Dual Output
- Output Short Circuit, Overcurrent, OVC Protection
- Fully Isolated Pri - Sec >4000Vrms
- Insulation: Class I
- Materials: UL94-V0
- EMC performance meets CISPR32 RoHS / EN55032 CLASS B
- 3 Year Warranty



Description

VTX-214-005-4#### is a compact size Dual Output AC-DC converter. It features a wide AC input 85V to 264Vac and a DC input voltage 100 to 370VDC. The converters have been designed with low power consumption, high efficiency, high reliability, reinforced isolation. It offers good EMC performance. The converters are widely used in industrial power, instrumentation, communication 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 1 Voltage Current	Output 2 Voltage Current	Output 1 Capacitive Load (uF)	Output2 Capacitive Load (uF)	Efficiency Typical
VTX-214-005-4505	5	5V/900mA	5V/100mA	3400	400	>70%
VTX-214-005-4512	5	5V/750mA	12V/100mA	2500	220	
VTX-214-005-4515	5	5V/700mA	15V/100mA	2200	2200	
VTX-214-005-4524	5.4	5V/600mA	24V/100mA	3100	100	

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	100	-	370	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	0.125	A
	230VAC	-	-	0.08	
Inrush Current	115VAC	-	10	-	
	230VAC	-	20	-	
External Input Fuse		1Amp Slow Blow Fuse			

Output Specification					
Item	Conditions	Min	Typical	Max	Unit
Output Voltage	Output V01	-	+/-2	-	%
	Output V02	-	+/-10	-	
Line Regulation	Full Load Output V01	-	+/-0.5	-	
	Full Load Output V02	-	+/-1.5	-	
Load Regulation	10% - 100% Load V01	-	+/-2	-	
	10% - 100% Load V02		+/-5		
Ripple / Noise	20MHz Bandwidth (Peak to Peak Value)	-	-	130	mV
Temp. Coefficient		-	+/-0.02	-	%/°C
Short Circuit Protection		Hiccup, Continuous, Self-recovery			
Over Current Protection		>150% Load Self-recovery			
Over Voltage Protection		Hiccup, Continuous, Self-recovery			
Minimum Load		10	-	-	%
Hold-up Time	115VAC Input	-	15	-	mS
	230VAC Input	-	80	-	

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.

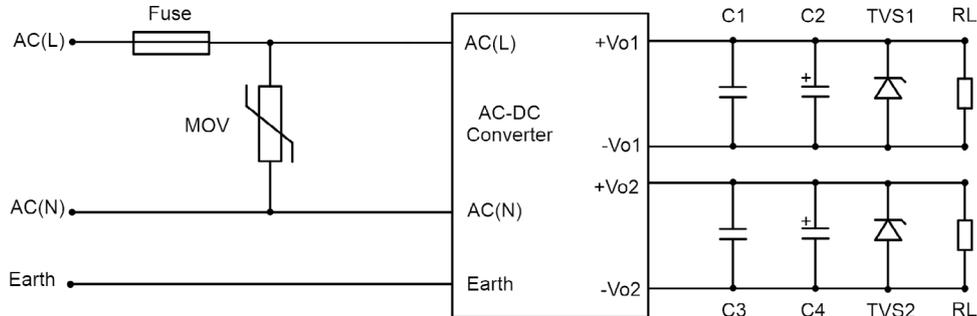
General Specification					
Item	Conditions	Min	Typical	Max	Unit
Dielectric Strength	Input to Output (1Min, 5mA)	4000	-	-	VAC
	Input to Earth (1Min, 5mA)	2500	-	-	
	Output 1 to Output 2 (Isolated Output)	500	-	-	VDC
Operating Temperature		-30	-	+70	°C
Storage Temperature		-40	-	+85	
Storage Humidity		-	-	+95	%RH
Soldering Temperature	Wave Soldering	260 +/-5°C			
	Manual Soldering	360 +/-5°C			
Switching Frequency		-	100	-	KHz
Safety Class		CLASS I			
MTBF		>300,000Hrs @ 25°C (MIL-HDBK-217F)			
Safety Approvals		Refer to IEC/UL/EN62368-1			
Materials - Case		UL94-V0			
Cooling Method		Free Air Convection			
Weight		55g			

EMC Specification		
Emissions	CE /RE	CISPR32 / EN55032 CLASS B 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
	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.

Application Schematic for EMC

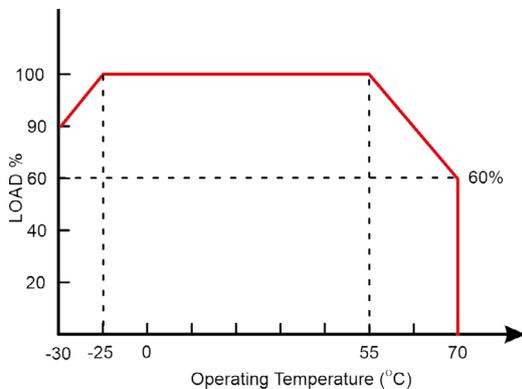
Typical Application EMC



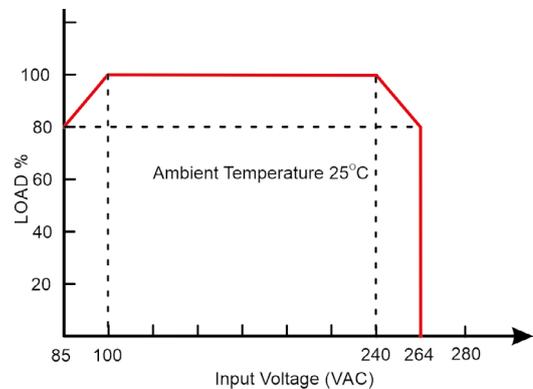
Part Number	C1/C3 (uF)	C2 (uF)	C4 (uF)	TVS1	TVS2	Fuse	MOV
VTX-214-005-4505	1.0	220	22	SMBJ7.0A	SMBJ7.0A	1Amp/250V Slow Blow	S14K300
VTX-214-005-4512		220	22	SMBJ7.0A	SMBJ20A		
VTX-214-005-4515		220	22	SMBJ7.0A	SMBJ20A		
VTX-214-005-4524		220	22	SMBJ7.0A	SMBJ30A		
Note: For additional filtering requirements, contact technical support							

Derating Graphs

Temperature Derating Graph

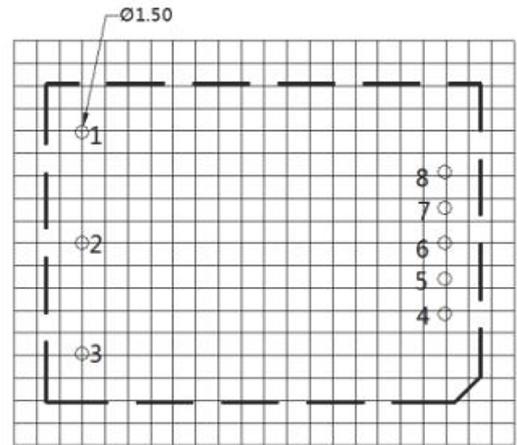
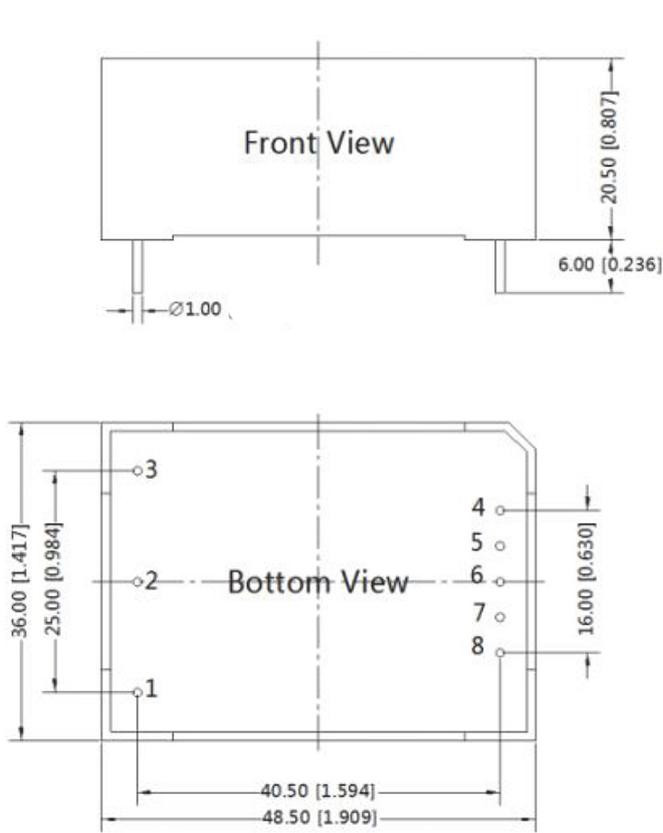


Input Voltage Derating Graph



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



Note: Grid 2.54*2.54mm

Note: Measurements are in millimeters

PIN Number	Function
1	Earth
2	AC(N)
3	AC(L)
4	+Vo2
5	-Vo2
6	No Pin
7	+Vo1
8	-Vo1

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.