





#### **Features:**

- 30W Single Output Regulated
- Output Range: 5V 24VDC
- Input: 90 264VAC , 47 63Hz
- Low Standby Powe
- Fully Isolated Pri Sec 3000Vrms
- 100% Full Burn-in Test
- · LED Indicator DC On, DC Low

Part Number	Power Rating Watts	Output Voltage (Vdc)	Output Current (mA)	Ambient Temp. (°C)	Efficiency Typical	Input Range	
VTX-211-030-105	25	5	5000		>80%	90 - 264VAC	
VTX-211-030-112	30	12	2500	70			
VTX-211-030-115	30	15	2000	70 70070		00 2047710	
VTX-211-030-124	30	24	1300				
Note: Other output voltages are available upon request.							

### **Application:**

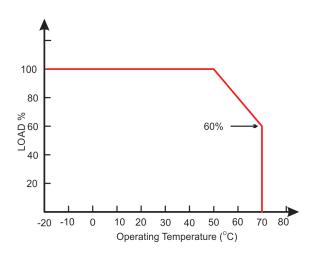
- Process Control
- Factory Automation
- Traffic & Transportation System
- Indusctrial Applications

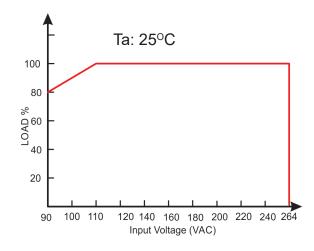


Model: 30Watt		Specification					
Model		VTX-211-030-105	VTX-211-030-112	VTX-211-030-115	VTX-211-030-124		
	Voltage DC	5V	12V	15V	24V		
	Rated Power	25W	30W	30W	30W		
	Rated Current	5A	2.5A	2.0A	1.30A		
	Current Range	0 - 5.0A	0 - 2.5A	0 - 2.5A	0 - 1.30A		
	Voltage Tolerance	1%	1%		1%		
	Voltage Adj. Range	4.5V - 5.3V	11.6V - 12.3V	14.6V - 15.3V	23.5V - 24.5V		
OUTPUT	Minimum Load	0	0	0	0		
	Ripple / Noise Typical	32mV	42mV		46mV		
	Line Regulation	1%	1%	1%	1%		
	Load Regulation	1%	1%	1%	1%		
	Rise Time (115VAC)	100mS	100mS	100mS	100mS		
	Hold Up Time (115VAC)	20mS	20mS	20mS	20mS		
	Note:	The ripple values are measured at 20MHz of bandwidth by using a 12" twisted pairwire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load					
	Voltage Range	90 - 264VAC /	90 - 264VAC	90 - 264VAC	90 - 264VAC		
	Input Frequency	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz		
INDUT	Efficiency	>78%	>83%	>85%	>87%		
INPUT -	Current	0.65A (115VAC) / 0.35A (230VAC)					
	Inrush Current 30A (115VAC) / 60A (230VAC)						
	Leakage Current <0.25mA						
	No Load Power	1.0W					
	Over Current	6A	4A	3A	2.2A		
	Over Voltage	6.5V	16V	19V	30V		
Protection	Short Circuit Protection	Hiccup mode, it will recover automatically after fault condition is removed					
	Over Temperature	Over temperature protection value: 100±10°C					
	Surge Voltage (L - N) 2KV						
Dielectric Isolation	Isolation Voltage	I/P-O/P: 3KVac, I/P-FG: 1.5KVac, O/P-FG: 1.5KVac		Vac			
	Operating Temperature -25°C - +70°C (With Derating)						
Enviroment	Operating Relative Humidity	Non Condensing 20 - 95%					
	Storage Temperature	-40°C - +85°C (Humidity 5 ~ 95% RH)					
	MTBF	>200,000Hrs @ 25°C (MIL-HDBK-217F)					
	Weight	250g					
	Cooling Method	Free Air Convection					
	Mounting	Vertical					
Safety	Compliant Standards			N60950-1			
ЕМС	EMI / EMS		EN 61000-3-3:2013 (	(CISPR 22:2008) ClassE IEC 61000-3-2:2014) IEC 61000-3-3:2013) (CISPR 24:2010)	3		

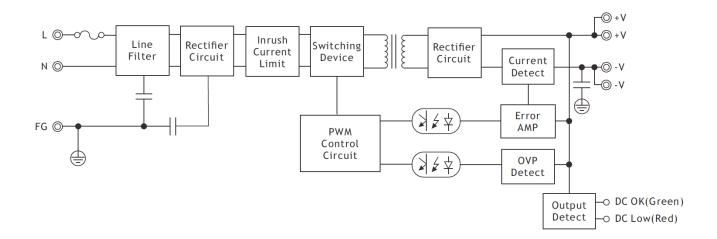


## **Electrical Derating Graphs**





#### **Block Diagram**



#### LED(Green)

DC OK LED light will be ON when the power supply is properly operated

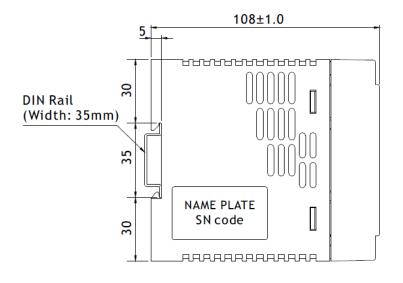
#### LED(Red)

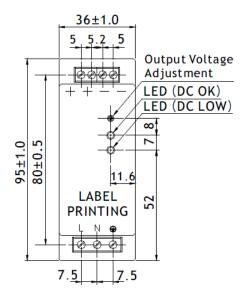
DC Low LED light will be ON:

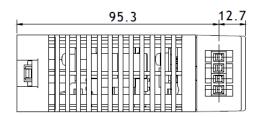
- (1) when output voltage is below 85%(±2.5%) from the rated output voltage;
- (2) when get over voltage, over current, over temperature and short circuit fault



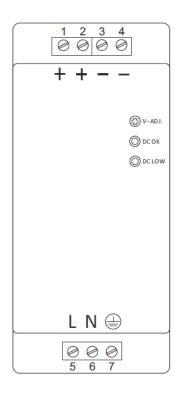
### **Mechanical Layout**







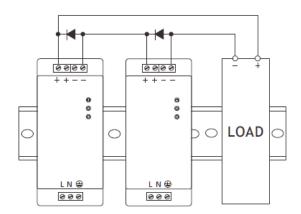
Unit: mm
Tolerance: ±1.0

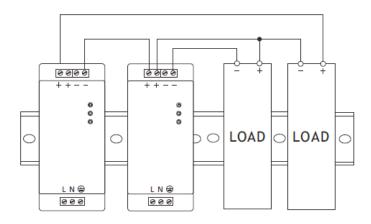


Marking	No.	Assignment	
+	1	DC(+) Output Terminal	
+	2		
_	3	DC(-) Output Terminal	
_	4		
L	5	AC(L) Input Terminal	
N	6	AC(N) Input Terminal	
	7	AC Grounding Terminal	
V-ADJ.	/	DC Output voltage adjustment trimmer	
DC OK	/	DC Output OK indication LED(Green)	
DC LOW	/	DC Output Low indication LED(Red)	



### **Application Note: Series Connection**





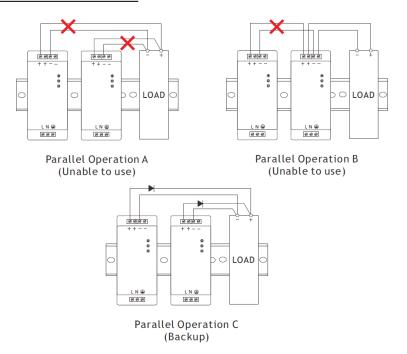
Series Operation A

Series Operation B

#### Note:

- 1. Series operation can be connected as shown in above;
- 2. Load current should be less than the current value of the product with the lowest output current specified at the product specification with the power supply at series connection.

#### **Application Note: Parallel Connection**

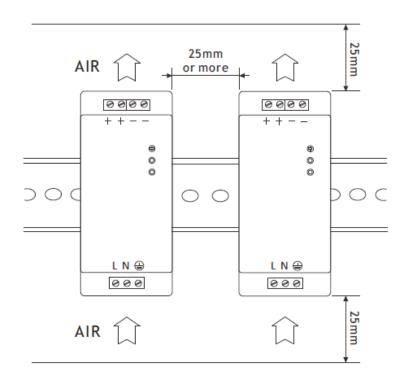


#### Note:

- 1. Parallel operation should be composed with the same products, while the connection should be as shown as "Parallel operation C";
- 2. In parallel operation C, current capacity cannot be increased, while it should be used for backup only. Moreover, diode that is to be added during parallel operation should be selected after considering it's voltage drop, output voltage and current capacity.



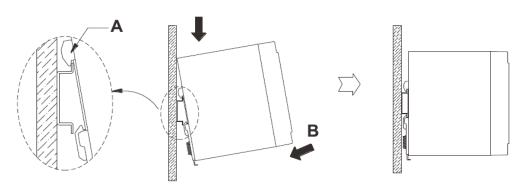
### **Application Note: Mounting**



Mounting method should be considered with airflow. Leave enough space between the units

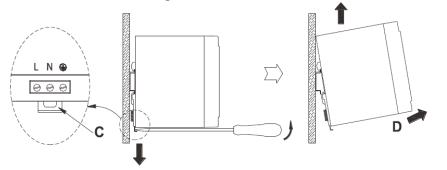
when several units are mounted together. Forced air cooling makes protection against heat better.

### **Application Note: Fitting**



Firstly hang A part on the top of Rail as shown in below, then push the power supply into B direction to fix it.

### Application Note: Removing



Remove the power supply to D direction, pulling C part by using tools, such as a screwdriver, to downward direction.