



# ETA-USA

THE POWER PROFESSIONALS

## WRT\*\*FWX-O

## 30 Watt AC/DC Dual Output



Universal Input  
 Compact design with Inrush current protection  
 Dual Output  
 -WRT20FWX-O: 5V, 5V - WRT23FWX-O: 15V, 15V  
 -WRT21FWX-O: 5V, 24V - WRT24FWX-O: 5V, 12V  
 -WRT22FWX-O: 12V, 12V



		UNIT	
<b>INPUT</b>	<b>Voltage/Freq</b>	V	AC100V - 240V (AC85V ~ 264V or DC125V~ 370V), 50 / 60Hz (47 ~ 440Hz) Universal Input voltage
	<b>Current Typ.</b>	A	0.65 at 110V; .035 at 220V (I <sub>o</sub> =100%)
	<b>Power Factor</b>	-	--
	<b>Inrush Current</b>	A	20A typ (AC IN 110V, I <sub>o</sub> =100%), 40A typ (AC IN 220V, I <sub>o</sub> =100%) at cold start
	<b>Leakage</b>	mA	0.75

		UNIT	WRT24FWX-O		WRT21FWX-O		WRT20FWX-O		WRT22FWX-O		WRT23FWX-O		
<b>OUTPUT</b>	<b>Nominal Voltage</b>	VDC	+5	+12	+5	+24	+5	-5	+12	-12	+15	-15	
	<b>Efficiency typ</b>	%	71		74		74		77		78		
	<b>Current</b>	A	0.3~3	1.3	0.3~3	0.6	2	2	1.3	1.3	1	1	
	<b>Line Regulation</b>	mV (max)	25	120	25	240	25	25	60	60	75	75	
	<b>Load Regulation</b>	mV(max)	50	120	50	240	50	50	120	120	150	150	
	<b>Ripple</b>	mVp-p	80	120	80	120	80	80	120	120	120	120	
	<b>Ripple Noise maximum</b>	mVp-p	120	150	120	150	120	120	150	150	150	150	
	<b>Temperature Drift [0~+50C]</b>	mV	75	180	75	360	75	75	180	180	225	225	
	<b>Rise Time</b>	mS	800 max [AC IN 110V/220V I <sub>o</sub> =100%]										
	<b>Hold up Time</b>	mS	16 typ [AC IN 110V/220V, I <sub>o</sub> =100%]										
<b>Grounding</b>		Individual Ground						Common Ground					

<b>Protection</b>	<b>Over Voltage</b>	Works at 115~140% of rating	
	<b>Over Current</b>	Works at 105% over rated current and recovers automatically	
<b>Isolation</b>	<b>Input-Output</b>	AC 3,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)	
	<b>Input-F.G</b>	AC 2,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)	
	<b>Output-F.G</b>	AC 500V 1 minute current 100mA, DC 500V 100MΩ (At room temperature & Humidity)	
<b>Environment</b>	<b>Operating temp/hum</b>	-10 ~ +70°C, 20 ~ 90% RH(Non condensing)	
	<b>Storage temp/hum</b>	-20 ~ +75°C, 20 ~ 90% RH(Non condensing)	
	<b>Vibration</b>	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis	
	<b>Impact</b>	10G for 20ms once on each X, Y and Z axis	
<b>Safety</b>	<b>CE/ CB</b>	IEC 60950-1	
	<b>Line Con RF Voltage</b>	EN55022-A	
<b>Size</b>	<b>MM/G</b>	82 x 120 x 31.5	290 grams



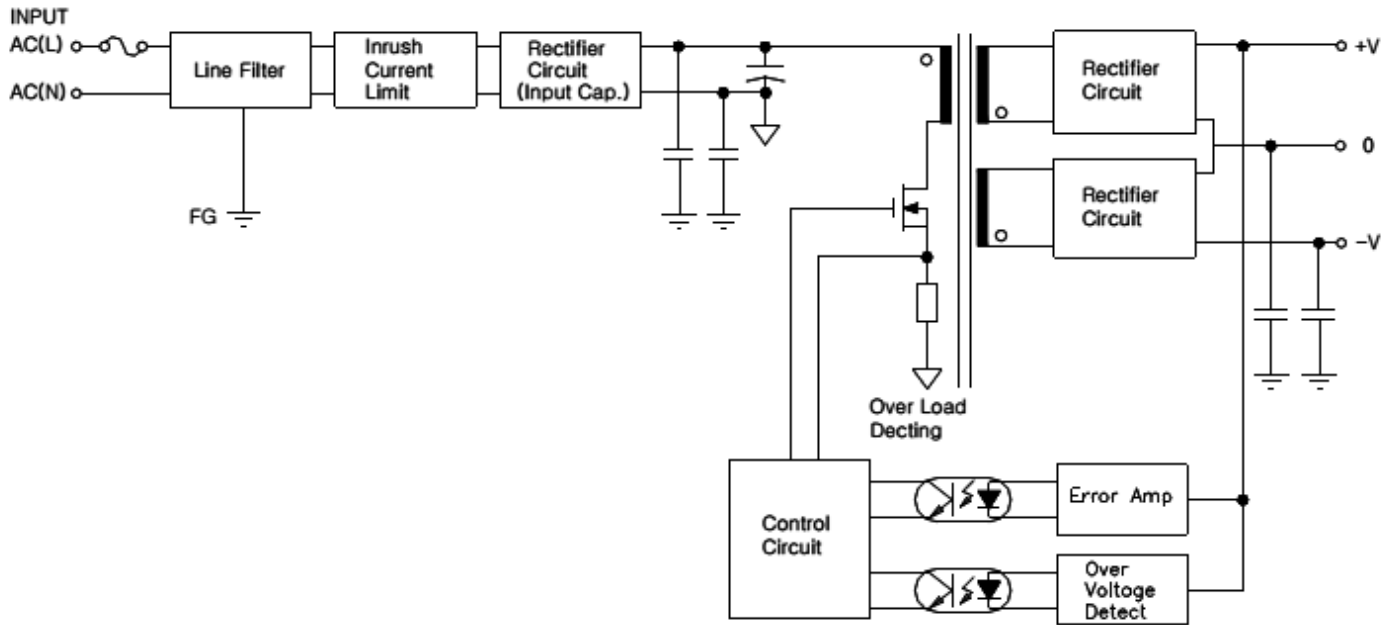
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16170 Vineyard Blvd, Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>  
 Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753

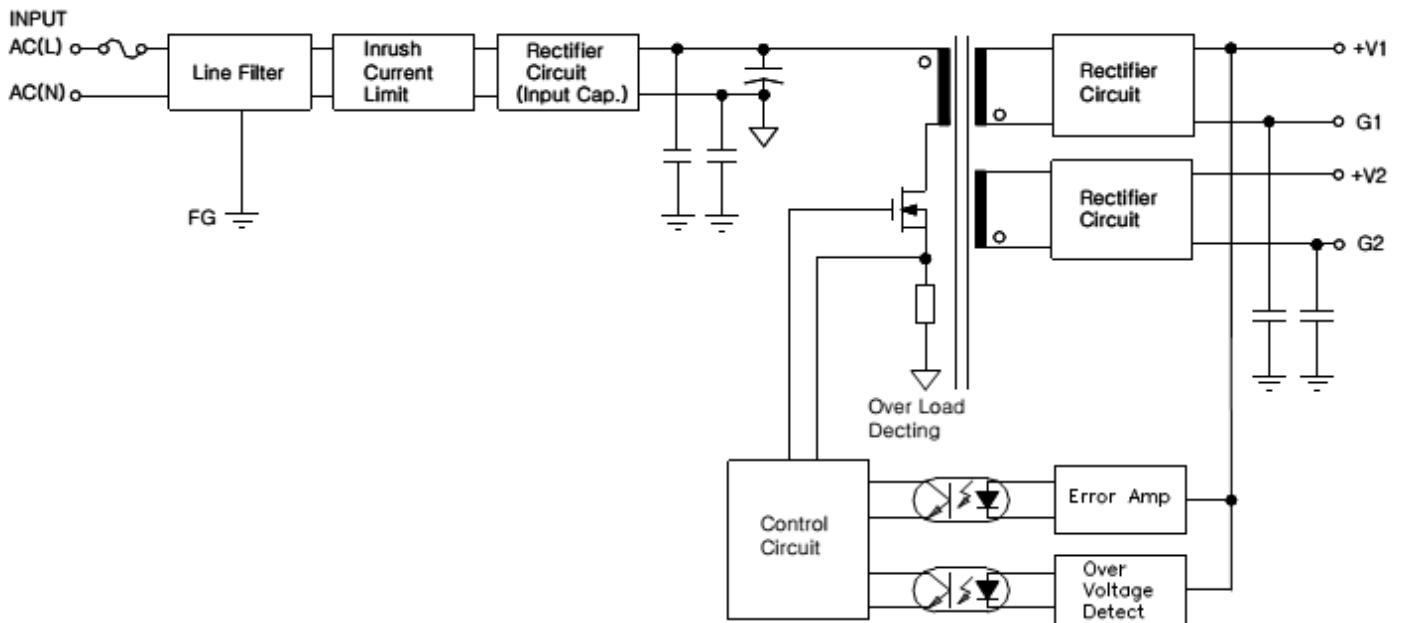


## BLOCK DIAGRAM

WRT24FWX-O WRT22FWX-O WRT23FWX-O (common ground)



WRT20FWX-O WRT21FWX-O



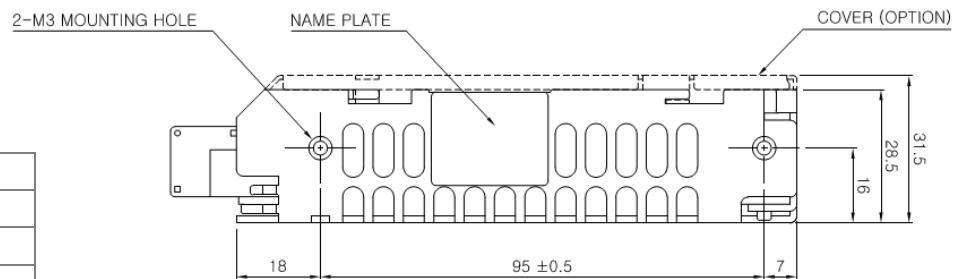
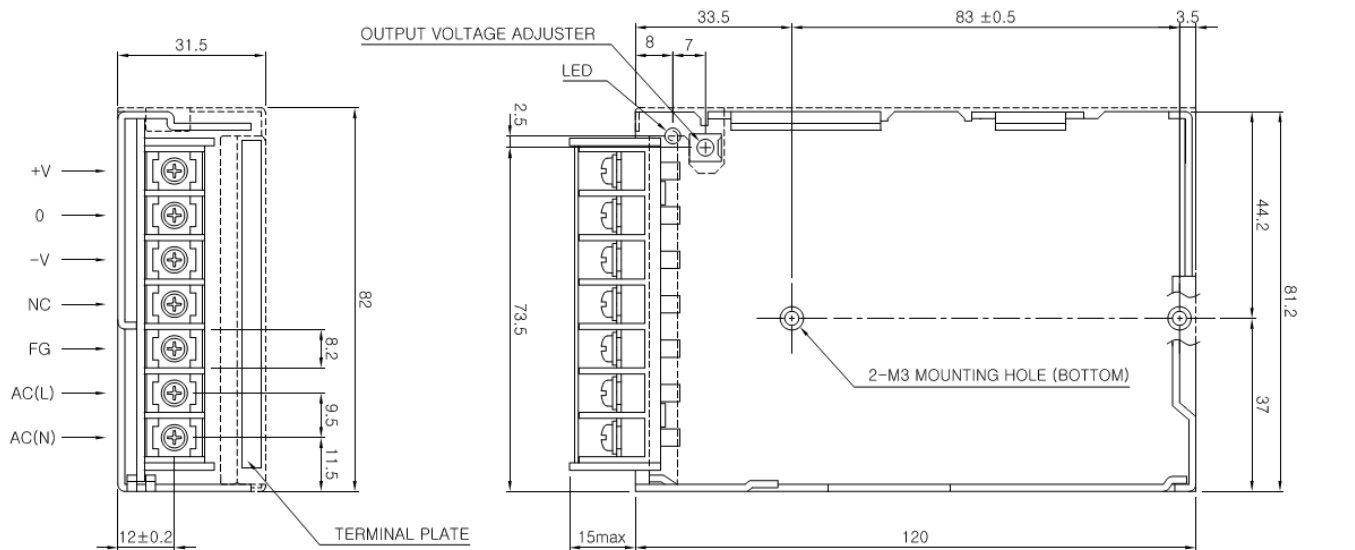


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## DIMENSIONAL DRAWING (mm)

WRT24FWX-O WRT22FWX-O WRT23FWX-O



Mark	Pin Connection
L	AC Line
N	AC Neutral
FG	Field Ground
+V	DC output
O	DC Ground
-V	DC Output



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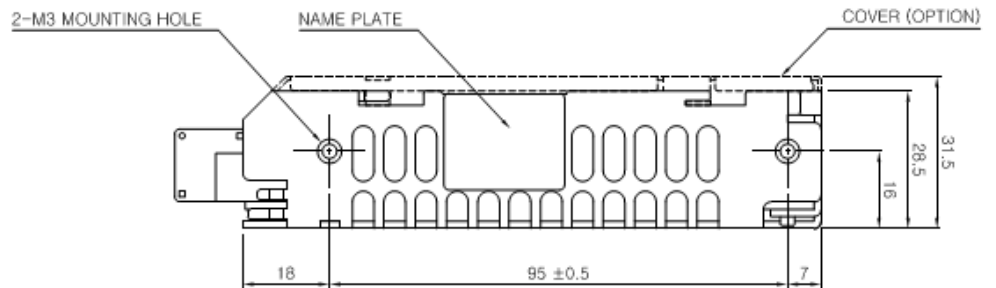
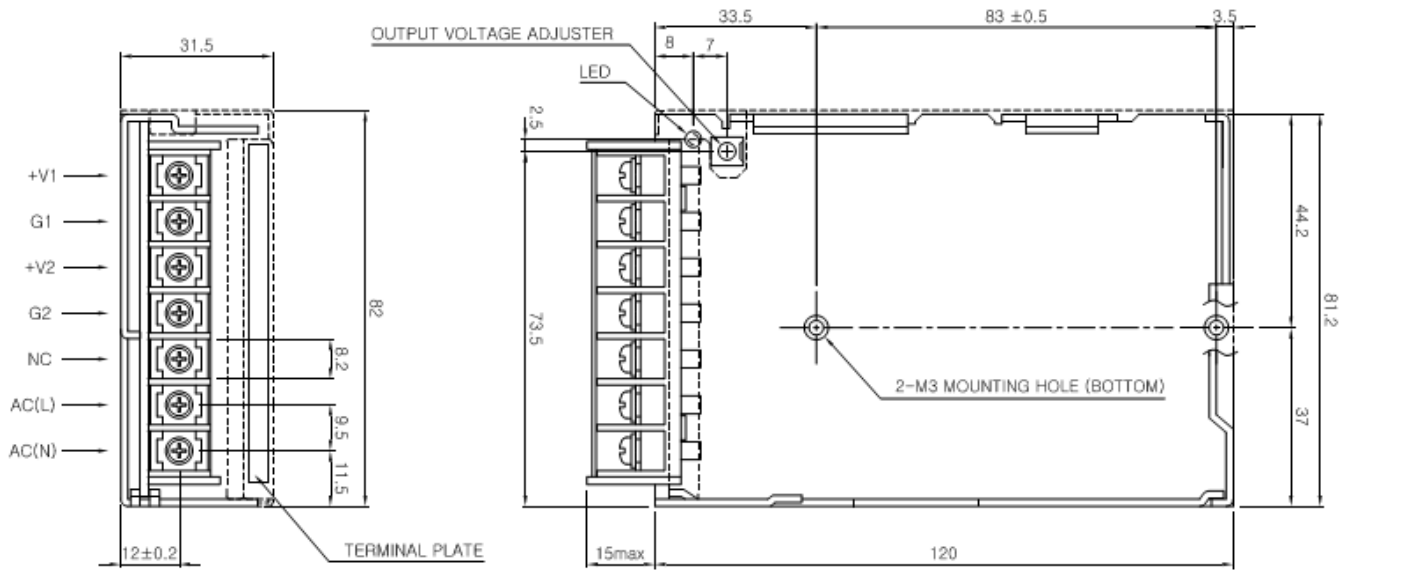
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## WRT20FWX-O WRT21FWX-O



Mark	Pin Connection
L	AC input line
N	AC input neutral
NC	AC Chassis Ground
+V1	DC V1 Output
G1	DC V1 Ground
+V2	DC V2 Output
G2	DC V2 Ground



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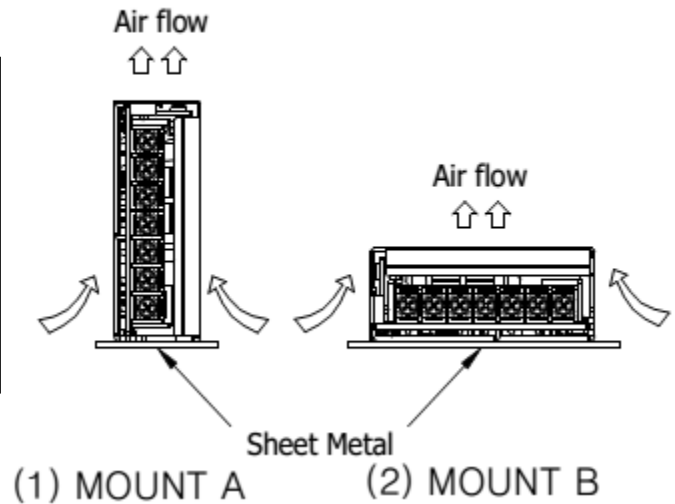
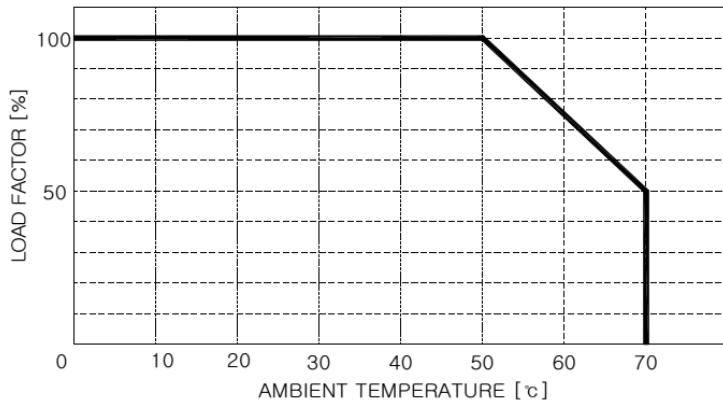
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## DERATING CURVE AND RECCOMENDED MOUNTING DIAGRAM



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