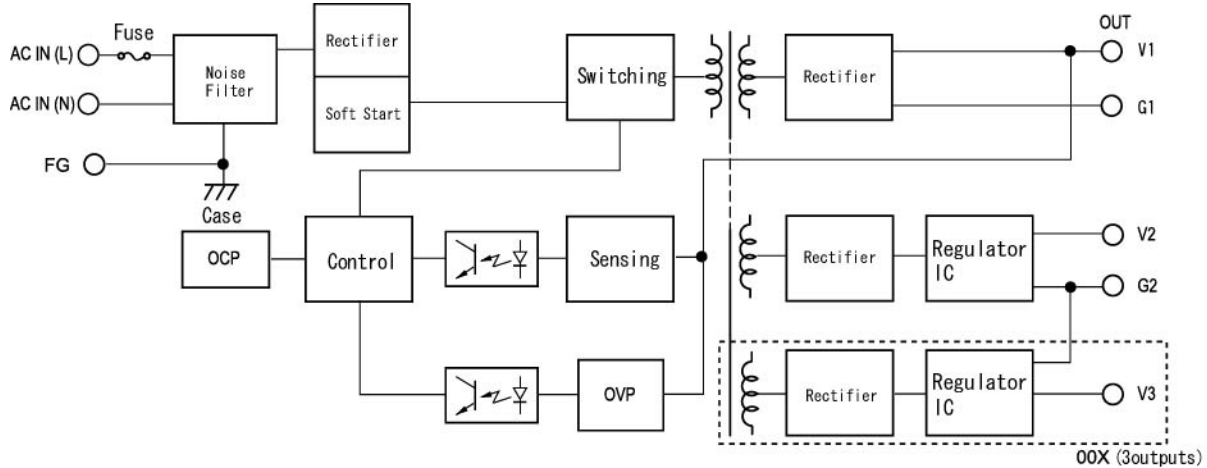


# 50 WATT AC-DC CONVERTER

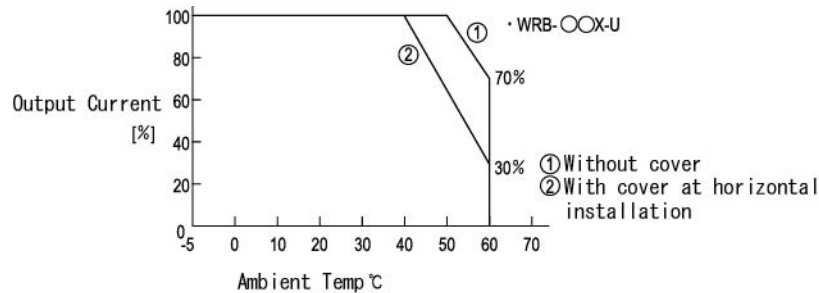
## WRB-00X Series 3 CHANNEL

Specifications<AC/DC>	Model		
<b>WRB**X-U</b> <b>50WATTS/3 OUTPUTS</b>	WRB01X-U	WRB03X-U	WRB04X-U
<b>Input Characteristic</b>			
Input Voltage	AC115-230V		
Input Current	1.2A		
Input Range	AC85-264V(DC110-350V)		
Input Frequency	50/60Hz		
Input Frequency Range	47-440Hz		
Phase	Single		
Inrush Current *1	35A(maximum) at AC115/70A(maximum) at AC230V		
Efficiency [%] (typical) *2	72	70	70

### BLOCK DIAGRAM



### DERATING CURVE



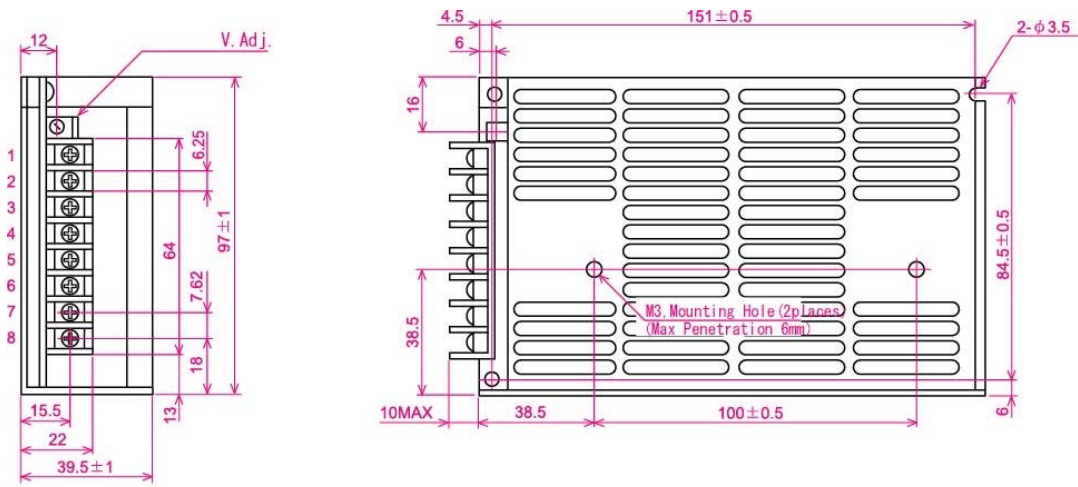
\*For safety specification, contact ETA Sales Representative

Specifications<AC/DC>	Model										
	WRB**X-U 50WATTS/3 OUTPUTS			WRB01X-U			WRB03X-U			WRB04X-U	
<b>Output Characteristic</b>											
Output Voltage [V]	5	+12	-12	5	+12	-5	5	+15	-15		
Output Current [A]	0.5-5.0	1.5	0.5	0.5-5.0	1.5	0.5	0.5-5.0	1.2	0.5		
Voltage Adjust Range	V1:+3%/-0% of Rated Output Voltage(at no load within the input range) V2,V3:fixed (at no load within the input range)										
Ripple and Noise [mVp-p](maximum) *3	100	170	170	100	170	100	100	200	200		
<b>Regulation</b>											
a.Statistic Line Regulation [mV](maximum)	25	60	60	25	60	25	25	75	75		
b.Statistic Load Regulation [mV](maximum)	50	120	120	50	120	50	50	150	150		
c.Temperature Coefficient *4	0.03%/										
d.Drift[mV](maximum) *5	40	75	75	40	75	40	40	90	90		
e.Dynamic Load Regulation [mV](typical) *6	not specified										
f.Recovery Time *6	not specified										
Rise up time	20ms (rated input) at 25t										
Hold up time	0.1ms (rated input) at 25t										
<b>Functions</b>											
Overcurrent Protection ≥ 10% of Rated Output Current[A]	V1:Current Limiting with automatic recovery V2,V3:by the regulator I.C's characteristics										
	5.5	-	-	5.5	-	-	5.5	-	-		
Overvoltage Protection ≥ 15% of Rated Output Voltage[V]	V1:Output shutdown(to reset,leave 1 minute after shut-off) V2,V3:not available										
	5.75	-	-	5.75	-	-	5.75	-	-		
Remote Sense	not available										
Remote On/Off	not available										
Power Fail Detection	not available										
Parallel/series Operation	not available										
<b>Environmental</b>											
Operating Temperature *7	5 to 40 frame type:-5 to +50										
Operating Humidity	30 to 85%RH(non-condensing)										
Storage Temperature	-20 to +85										
Storage Humidity	10 to 85%RH(non-condensing)										
Withstanding Voltage	Primary-Secondary AC3,000V for 1minute Primary-Frame Ground AC2,500V for 1minute Secondary-Frame Ground AC500V for 1minute										
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester										
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s <sup>2</sup> , 20minutes' period for 60minutes each along X,Y,Z axes(non-operating)										
Shock	294m/s <sup>2</sup>										
Cooling	Convection										
Leakage Current	0.5mA(maximum) at 25t and rated input frequency										
Line Conducted Noise	Built to meet VDE0871 Class B Built to meet FCC Part15-B Class B										
Safety	UL: UL1950 / C-UL:CSA C22.2 No234 (Level3) VDE:EN60950,IEC950,VDE0805										
? Weight (typical)	480g/open frame type:460g										
? MTBF [H]	420,000										

Conditions:

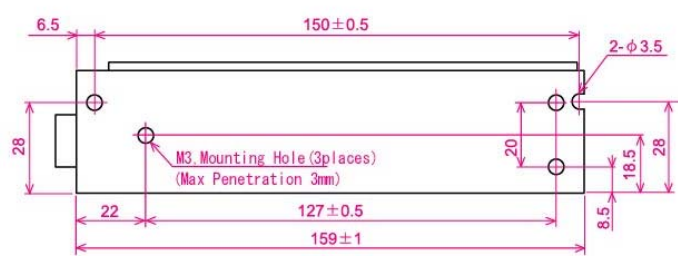
- \*1 at cold start
- \*2 at DC130V input and rated output
- \*3 measured by a bayonet probe at output connector at a 0 to 100MHz bandwidth
- \*4 at -5 to +40°C/open frame type:-5 to +50°C
- \*5 for the period of 7hours after operation of 1hour at 25°C and rated input/output
- \*6 when output current changed from 25% to 75% of rated output current rapidly at AC115/230V input
- \*7 safety approved at 25°C
- \*8 variable on input voltage and load condition

**DIMENSION DIAGRAM**



Pin Assignments

	2 out	3 out
	-FWX-U	-OOX-U
1	V1	V1
2	G1	G1
3	V2	V2
4	G2	G2
5	N.C.	V3
6	FG	FG
7	AC in (L)	AC in (L)
8	AC in (N)	AC in (N)



**OCP CURVE**

