ETA-USA
The Power Professionals

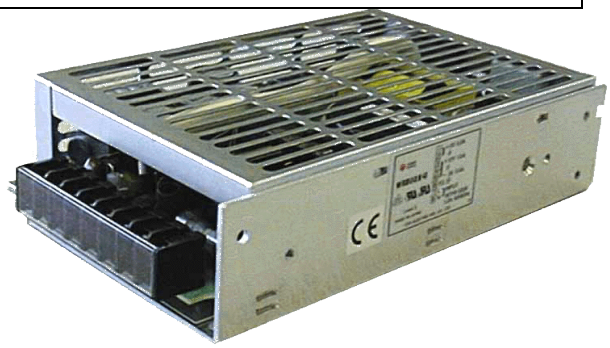
50 WATT
AC-DC CONVERTER
WRB-00X Series
3 CHANNEL

Features

1. Universal input 85-264VAC
2. EMI: meets EN 55022/B, FCC/B
3. Compact size
4. High efficiency and reliability
5. Output voltage adjustable
6. Over voltage protection

Options

N/A



General Description

Universal or auto-ranging inputs for world wide use. Output power from 15 to 600 watts. Up to 4 outputs available. Approved to international safety standards.

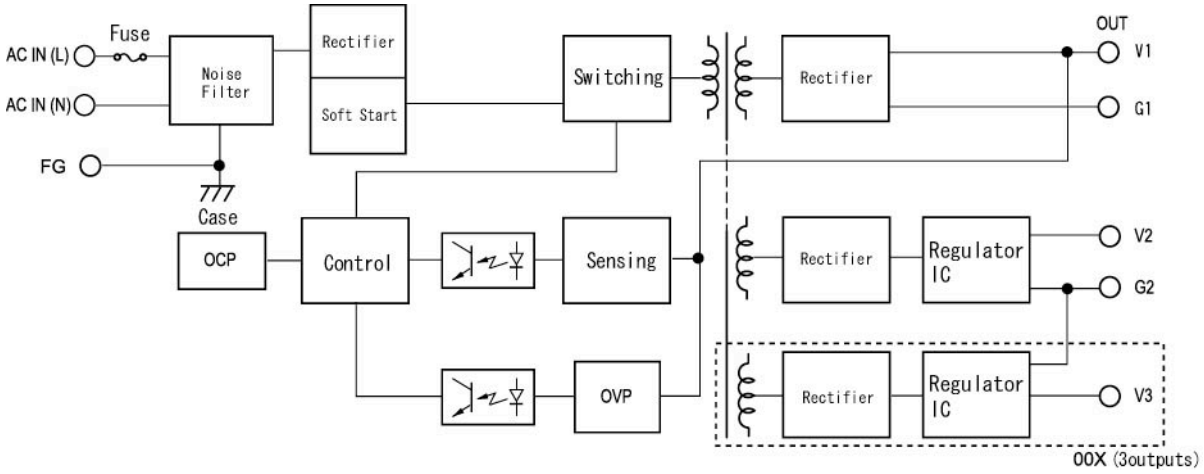
Dimensions: 39.5Wx159Lx97H(mm) (480g)

RoHS CE

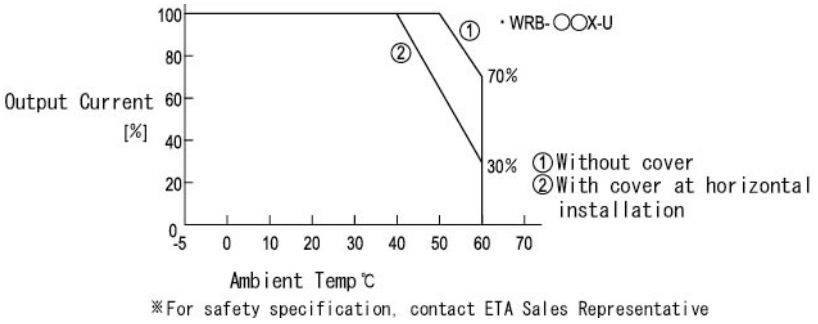
ETA-USA 16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 http://www.eta-usa.com
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753

Specifications<AC/DC>	Model		
WRB**X-U 50WATTS/3 OUTPUTS	WRB01X	WRB03X	WRB04X
Input Characteristic			
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

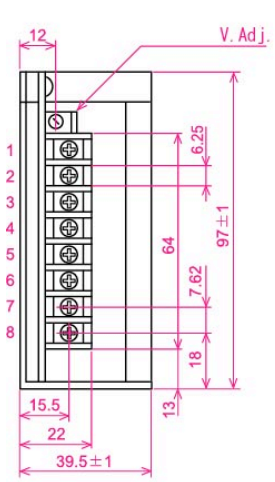
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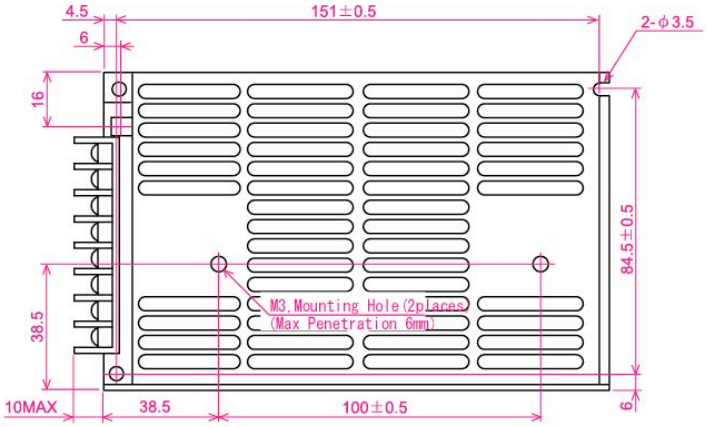
Specifications<AC/DC>	Model								
WRB**X-U 50WATTS/3 OUTPUTS	WRB01X			WRB03X			WRB04X		
Output Characteristic									
Output Voltage [V]	5	+12	-12	5	+12	-5	5	+15	-15
Output Current [A]	0.5-5.0	1.5	0.5	0.5-5.0	1.5	0.5	0.5-5.0	1.2	0.5
Voltage Adjust Range	V1:+3%/-0% of Rated Output Voltage(at no load 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
Regulation									
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	200mS(maximum) at 25? and rated input/output								
Hold up time	10mS(minimum) at 25? and rated input/output								
Functions									
Overcurrent Protection ?110% 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 ?115% 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								
Environmental									
Operating Temperature *7	-5 to +40?/open 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^2, 20minutes' period for 60minutes each along X,Y,Z axes(non-operating)								
Shock	294m/s^2								
Cooling	Convection								
Leakage Current	1mA(maximum) at 25?,rated input/output and rated input frequency								
Line Conducted Noise									
Safety	N/A								
? Weight (typical)	480g/open frame type:460g								
? MTBF [H]	420,000								

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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

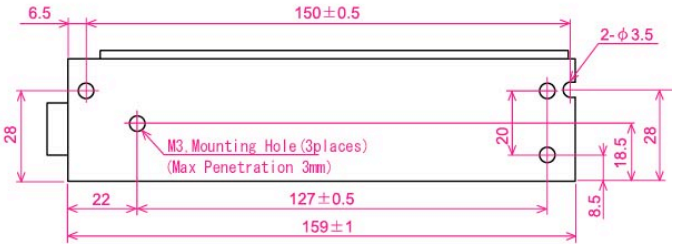
DIMENSION DIAGRAM



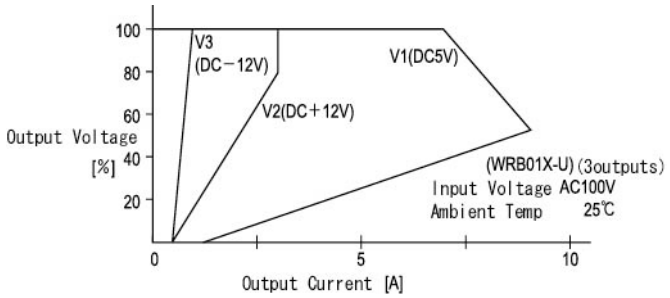


Pin Assignments

	2 out -FWX-U	3 out -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


100
80
60
40
20
Output Voltage
[%]
V3
(DC−12V)
V1(DC5V)
V2(DC+12V)
(WRB01X-U) (3outputs)
Input Voltage AC100V
Ambient Temp 25℃
0
5
10
Output Current [A]