

# 75 WATT AC/DC CONVERTER WRC- SX SERIES

## 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: 38Wx177.5Lx97H (520g)**



## Features

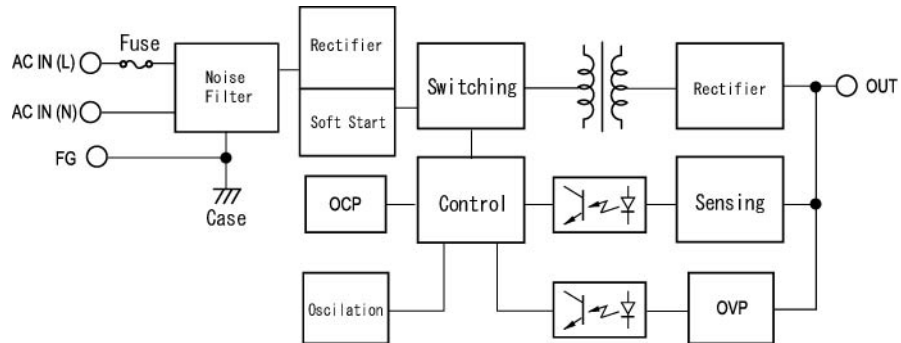
1. Universal input 85-264VAC
2. EMI: meets EN 55022/B, FCC/B
3. Compact size
4. High efficiency and reliability
5. Output voltage adjustable
6. Over voltage protection

## Options

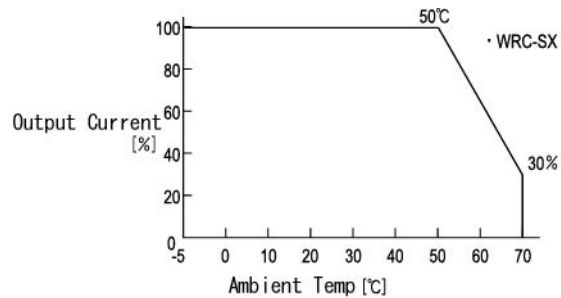
N/A

Specifications WRC**SX-U 75WATTS/SINGLE	Model							
	WRC05SX-U	WRC06SX-U	WRC12SX-U	WRC15SX-U	WRC24SX-U	WRC30SX-U	WRC36SX-U	WRC48SX-U
<b>Input Characteristic</b>								
Input Voltage	AC115/230V							
Input Current	1.6-0.9A							
Input Range	AC85-264V(DC110-350V)							
Input Frequency	50/60Hz							
Input Frequency Range	47-440Hz							
Phase	Single							
Inrush Current *1	23A(maximum) at AC115/46A(maximum) at AC230V							
Efficiency [%] (typical) *2	80	80	82	83	85	84	85	85

## BLOCK DIAGRAM



## DERATING CURVE



\* For safety specification, contact ETA Sales Representative

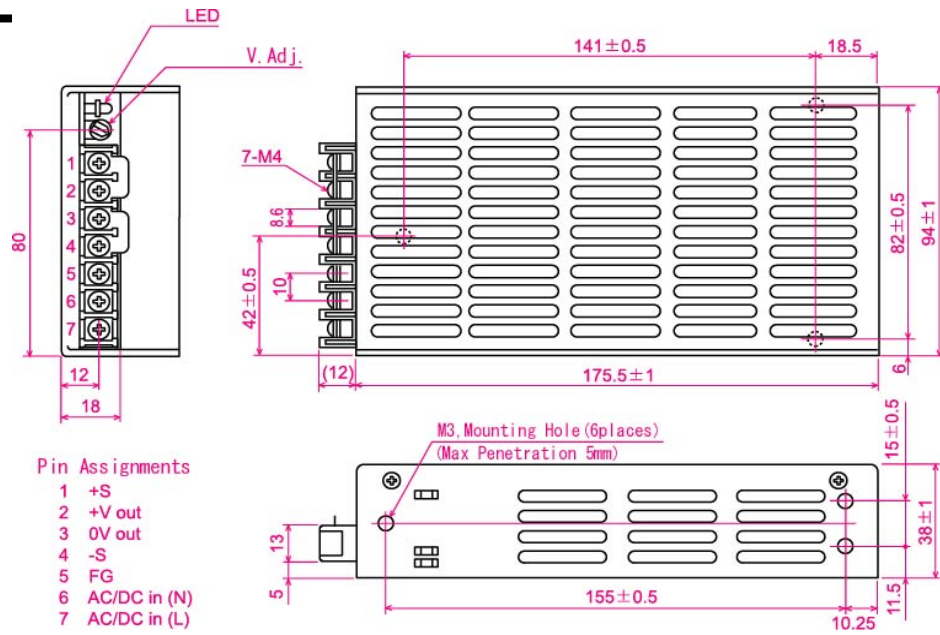
Output	Model							
	WRC05SX-U	WRC06SX-U	WRC12SX-U	WRC15SX-U	WRC24SX-U	WRC30SX-U	WRC36SX-U	WRC48SX-U
<b>WRC**SX-U(75WATTS/SINGLE)</b>								
Output Voltage [V]	5	6	12	15	24	30	36	48
Output Current [A]	15.0	12.5	6.3	5.0	3.2	2.5	2.1	1.6
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)							
Ripple and Noise[mVp-p](maximum) *3	150	160	220	250	340	400	460	580
Regulation								
a.Statistic Line Regulation [mV](maximum)	40	48	96	120	192	240	288	384
b.Statistic Load Regulation [mV](maximum)	45	54	108	135	216	270	324	432
c.Temperature Coefficient *4	0.03%/°C							
d.Drift[mV](maximum) *5	40	45	75	90	135	165	195	255
e.Dynamic Load Regulation [mV](typical) *6	not specified							
f.Recovery Time *6	not specified							
Rise up time	800mS(maximum)AC115V/400mS(maximum)AC230V at 25°C and rated input/output							
Hold up time	15mS(minimum) at 25°C and rated input/output							
<b>Functions</b>								
Over current Protection *7 ]	Current Limiting with automatic recovery							
≥110% of Rated Output Current[A]	16.5	13.8	6.93	5.5	3.52	2.75	2.31	1.76
Extension Capacitor [uF](maximum)	30,000	20,000	10,000	5,000	3,000	1,500	1,500	470

Over voltage Protection	Output shutdown(to reset, leave 1 minute after shut-off)							
≥110% of Rated Output Voltage[V]	5.5	6.6	13.2	16.5	26.4	33.0	39.6	52.8
Remote Sense	available							
Remote On/Off	not available							
Power Fail Detection	not available							
Parallel/series Operation	not available							
<b>Environmental</b>								
Operating Temperature *8	0 to +50°C							
Operating Humidity	30 to 85%RH(non-condensing)							
Storage Temperature	-20 to +85°C							
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	1mA(maximum) at 25°C, rated input/output 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 No.234 (Level 3)							
	VDE:EN60950,IEC950,VDE0805							
□ Weight (typical)	520g/open frame type:500g							
□ MTBF [H]	500,000							

Conditions:

- \*1 at cold start
- \*2 at DC130V input and rated output
- \*3 measured by a bayonet probe at output connector at 0 to 100MHz bandwidth
- \*4 at 0 to +50°C
- \*5 for 7hour period after 1hour warm-up at 25°C and rated input/output
- \*6 when output current changed from 25% and 75% of rated output current rapidly at 115/230V input
- \*7 output voltage becomes hiccup-mode when it goes below half of rated output voltage at over load conditions
- \*8 safety approved at 25°C

**DIMENSION DIAGRAM**



### EFFICIENCY CURVE

