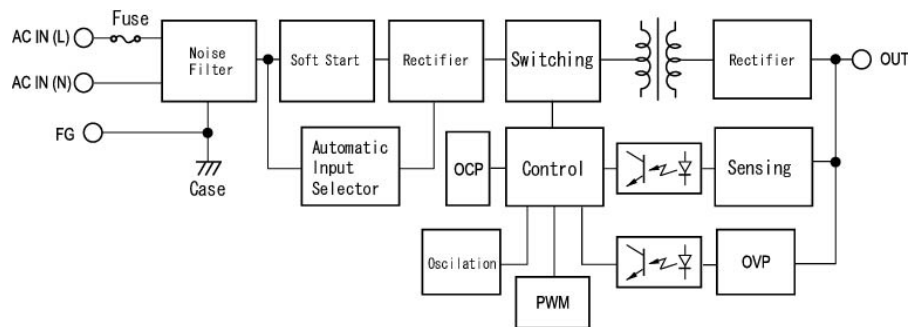


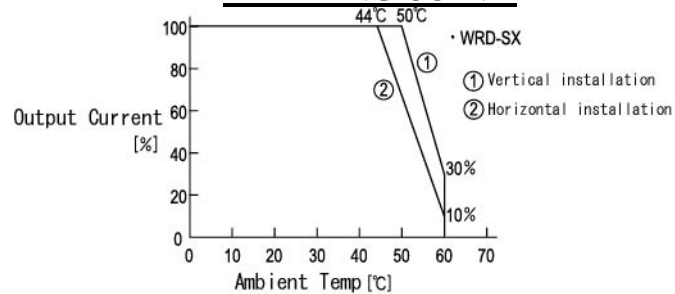
# 100 WATT AC-DC CONVERTER WRD-SX SERIES

Specifications <b>WRD**SX-U</b> 100WATTS/SINGLE	Model				
	WRD05SX-U	WRD12SX-U	WRD15SX-U	WRD24SX-U	WRD48SX-U
<b>Input Characteristic</b>					
Input Voltage	AC115/230V				
Input Current	2.1A at AC115V/1.2A at AC230V				
Input Range *1	AC85-132V/AC170-264V(DC220-350V)				
Input Frequency	50/60Hz				
Input Frequency Range	47-440Hz				
Phase	Single				
Inrush Current *2	12A(maximum)at AC115V/24A(maximum) at AC230V				
Efficiency [%] (typical) *3	81	83	84	87	87

## BLOCK DIAGRAM



## DERATING CURVE



\*For safety specification, contact ETA Sales Representative

Output Characteristic	Model				
	WRD**SX-U(100WATTS/SINGLE)	WRD05SX-U	WRD12SX-U	WRD15SX-U	WRD24SX-U
Output Voltage [V]	5	12	15	24	48
Output Current [A]	20.0	9.0	7.0	4.5	2.2
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)				
Ripple and Noise [mVp-p](maximum) *4	100	170	200	290	530
<b>Regulation</b>					
a.Statistic Line Regulation [mV](maximum)	15	36	45	72	144
b.Statistic Load Regulation [mV](maximum)	15	36	45	72	144
c.Temperature Coefficient *5	0.01%/°C				
d.Drift[mV](maximum) *6	40	75	90	135	255
e.Dynamic Load Regulation [mV](typical) *7	not specified				
f.Recovery Time *7	not specified				
Rise up time	500mS(maximum)AC115V/200mS(maximum)AC230V at 25°C and rated input/output				
Hold up time	20mS(minimum) at 25°C and rated input/output				
<b>Functions</b>					
Overcurrent Protection $\geq 110\%$ of Rated Output Current[A]	Current Limiting with automatic recovery				
	22.0	9.9	7.7	4.95	2.42
Over voltage Protection $\geq 110\%$ of Rated Output Voltage[V]	Output shutdown(to reset, leave 1minute after shut-off)				
	5.5	13.2	16.5	26.4	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	vertical mount:0 to +50°C /horizontal mount: 0 to +40°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				
	CUL: CSA C22.2 No234(Level 3)				
	VDE: EN60950,IEC950,VDE0805				
□ Weight (typical)	690g				
□ MTBF [H]	450,000				
□ Switching Frequency[kHz](typical)	140				

**Condition:**

- \*1 Auto-changeable between 100V input and 200V input at AC140V +/-2V
- \*2 at cold start
- \*3 at DC260V input and rated output
- \*4 measured by a bayonet probe at output connector at a 0 to 100MHz bandwidth
- \*5 at 0 to +50°C
- \*6 for 7hour period after 1hour warm-up at 25°C and rated input/output
- \*7 when output current changed from 25% and 75% of rated output current rapidly at AC115/230V input
- \*8 safety approved at 25°C

**DIMENSION DIAGRAM**

**EFFICIENCY CURVE**

