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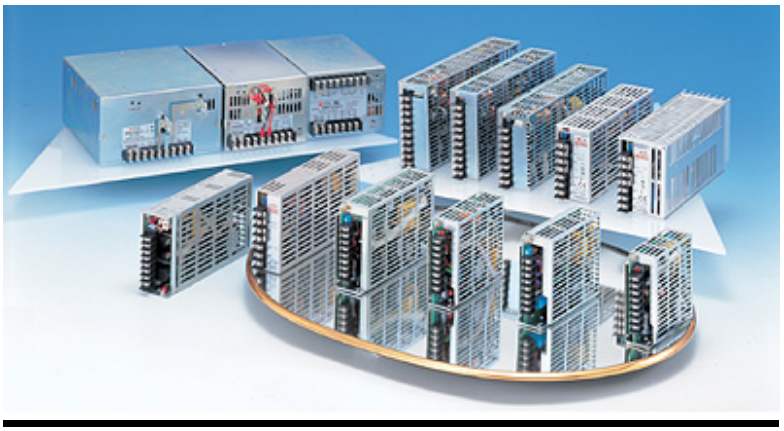
Your power supply experts

300 WATT AC-DC CONVERTER
WRF-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: 33.5Wx98.5Lx97H (400g)



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

Specifications<AC/DC> WRF**SX-U 300WATTS/SINGLE	Model							
	WRF05SX-U	WRF06SX-U	WRF12SX-U	WRF15SX-U	WRF24SX-U	WRF30SX-U	WRF36SX-U	WRF48SX-U
Input Characteristic								
Input Voltage	AC115/230V							
Input Current	7.5A							
Input Range	AC85-132V/170-264V(DC220-360V)							
Input Frequency	50/60Hz							
Input Frequency Range	47-440Hz							
Phase	Single							
Inrush Current *1	12A(maximum) at AC115/24A(maximum) at AC230V							
Efficiency [%] (typical) *2	79	79	82	83	84	84	84	84

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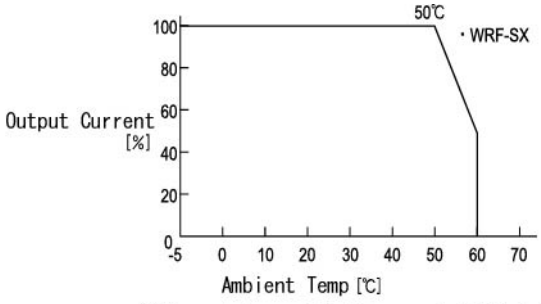
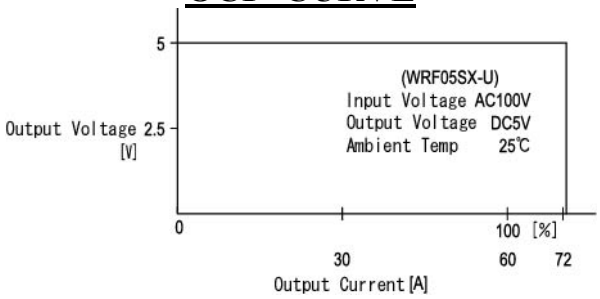
DERATING CURVE



※ For safety specification, contact ETA Sales Representative

OCP CURVE



Output	Model							
WRFSX-U(300WATTS/SINGLE)**	**WRF05SX-U**	**WRF06SX-U**	**WRF12SX-U**	**WRF15SX-U**	**WRF24SX-U**	**WRF30SX-U**	**WRF36SX-U**	**WRF48SX-U**
Output Voltage [V]	5	6	12	15	24	30	36	48
Output Current [A]	60.0	50.0	27.0	22.0	14.0	11.0	9.0	7.0
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)							
Ripple and Noise [mVp-p](maximum) *3	120	120	150	150	200	250	300	300
Regulation								
a.Statistic Line Regulation [mV](maximum)	25	30	60	75	120	150	180	240
b.Statistic Load Regulation [mV](maximum)	50	60	120	150	240	300	360	480
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	300mS(maximum) at 25°C and rated input/output							
Hold up time	10mS(minimum) at 25°C and rated input/output							
Functions								
Overcurrent Protection ≥105%	Current Limiting with automatic recovery							

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of Rated Output Current[A]	63.0	52.5	28.4	23.1	14.7	11.6	9.45	7.35
Overvoltage Protection ≥110%	Output shutdown(to reset,leave 1minute after shut-off)							
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	available							
Power Fail Detection	available							
Parallel/series Operation	available							
Environmental								
Operating Temperature *7	-5 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^2,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)							
Shock	294m/s^2							
Cooling	Forced Air(fan installed)							
Leakage Current	1mA(maximum) at 25°C,rated input/output and rated input frequency							
Line Conducted Noise	Built to meet FCC Part15-B Class A							
Safety	UL: UL1950							
	C-UL: CSA C22.2 No.234 (Level 5)							
□ Weight (typical)	1800g							
□ MTBF [H]	155,000							
□ Switching Frequency[kHz](typical)	140							

Condition:

*1 at cold start

*2 at DC260V input and rated output

*3 measured by a bayonet probe at output connector at 0 t 100MHz bandwidth

*4 at 0 -5 to +50℃

*5 for 7hour period after 1hour warm-up at 25℃ and rated input/output

*6 when output current changed from 25% and 75% of rated output current rapidly at AC115/230V input

*7 safety approved at 25℃

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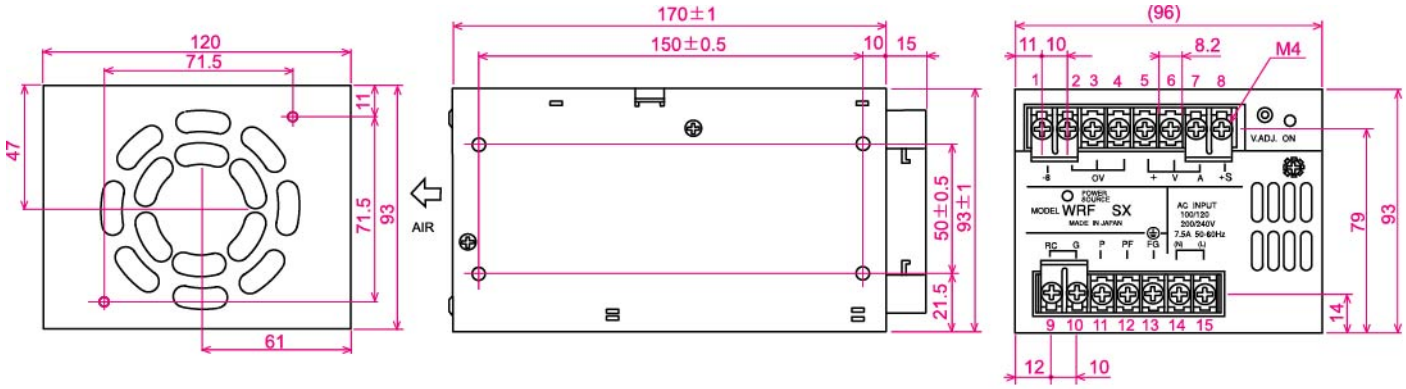
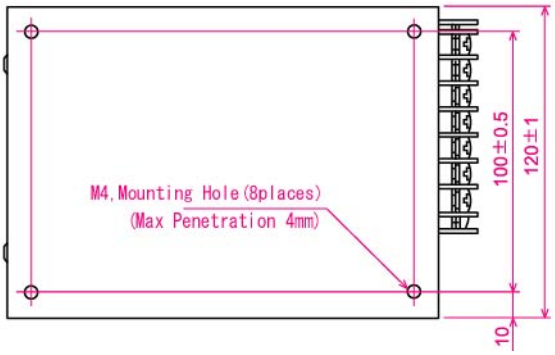
DIMENSION DIAGRAM





Pin Assignments

1	-S	9	R.C
2	G	10	R.C G
3	G	11	P
4	G	12	P.F.
5	+V	13	FG
6	+V	14	AC in (N)
7	+V	15	AC in (L)
8	+S		

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