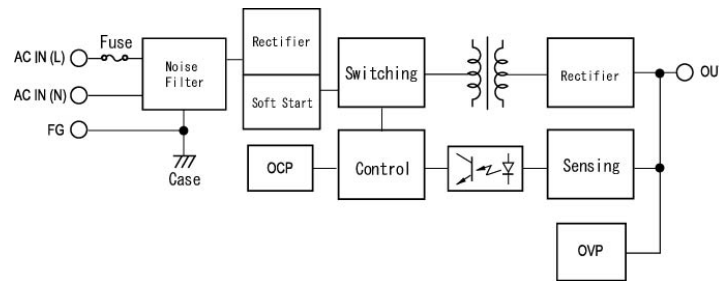


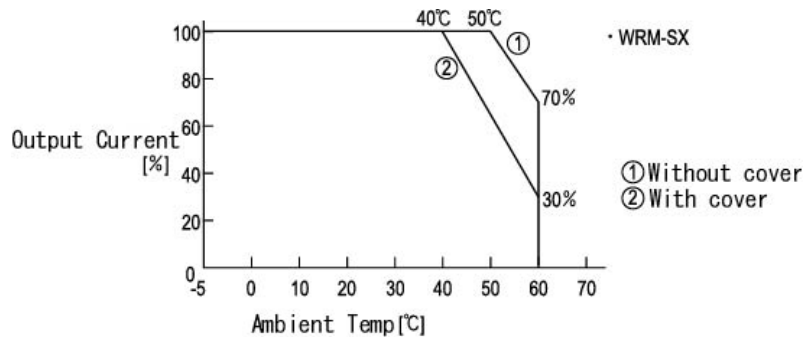
15 WATT AC-DC CONVERTER WRM-SX SERIES

Specifications WRM**SX-U 15WATTS/SINGLE	Model				
	WRM05SX-U	WRM12SX-U	WRM15SX-U	WRM24SX-U	WRM48SX-U
Input Characteristic					
Input Voltage	AC115-230V				
Input Current	0.42	0.41		0.40	
Input Range	AC85-264V(DC110-350V)				
Input Frequency	50/60Hz				
Input Frequency Range	47-440Hz				
Phase	Single				
Inrush Current *1	30A(maximum)at AC115V/60A(maximum) at AC230V				
Efficiency [%] (typical) *2	75	79	79	79	82

BLOCK DIAGRAM



DERATING CURVE



※For safety specification, contact ETA Sales Representative

Output Characteristic	Model				
	WRM05SX-U	WRM12SX-U	WRM15SX-U	WRM24SX-U	WRM48SX-U
Output Voltage [V]	5	12	15	24	48
Output Current [A]	3.0	1.3	1.0	0.7	0.35
Voltage Adjust Range	+/- 5% of Rated Output Voltage(at no load within the input range)				
Ripple and Noise [mVp-p](maximum) *3	100	170	200	290	530
Regulation					
a.Statistic Line Regulation [mV](maximum)	25	60	75	120	240
b.Statistic Load Regulation [mV](maximum)	50	120	150	240	480
c.Temperature Coefficient *4	0.03%/°C				
d.Drift[mV](maximum) *5	40	75	90	135	255
e.Dynamic Load Regulation [mV](typical) *6	not specified				
f.Recovery Time *6	not specified				
Rise up time	200mS(maximum) at 25°C and rated input/output				
Hold up time	10mS(minimum) at 25°C and rated input/output				
Functions					
Overcurrent Protection	>110% of Rated Output Current[A]	Current Limiting with automatic recovery			
		3.3	1.43	1.1	0.77
Overvoltage Protection	>110% of Rated Output Voltage[V]	Zener diode clamping			
		5.75	13.8	17.3	27.6
Remote Sense	not available				
Remote On/Off	not available				
Power Fail Detection	not available				
Parallel/series Operation	not available				
Environmental					
Operating Temperature *8	-5 to +40°C/open frame type:-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	Convection				
Leakage Current	1mA(maximum) at 2 ⁵⁰ 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)	290g/open fram type:275g				
? MTBF [H]	650,000				
? Switching Frequency[kHz](typical)	30	30	25	25	25

Conditions:

*1 at cold start

*2 at DC130V input and rated output

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

*4 at -5 to +50°C/open frame type:-5 to +50°C

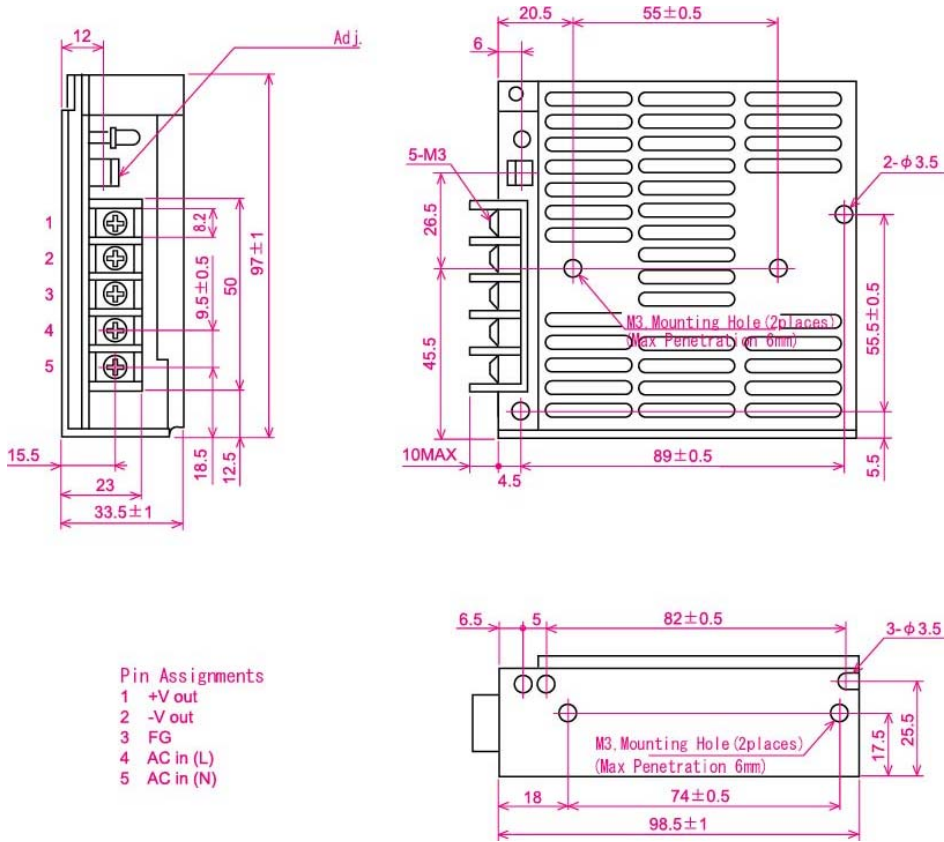
*5 for 7hours from 1hour after switch-on at 25°Cand rate input/output

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

*7 safety approved at 25°C

*8 variable on input voltage and load condition

DIMENSION DIAGRAM



EFFICIENCY CURVE

