

60 WATT AC-DC CONVERTER ERB-HWA SERIES

Specifications<AC/DC>	Model									
ERB**HWA 60WATTS/2OUTPUTS	ERB21HWA	ERB22HWA	ERB23HWA	ERB24HWA	ERB25HWA	ERB26HWA	ERB27HWA	ERB28HWA	ERB29HWA	ERB30HWA
Input Voltage	AC100V(DC130V)									
Input Range	AC85-132V(DC110-175V)									
Input Frequency	50/60Hz									
Input Frequency Range	47-440Hz									
Phase	Single									
Inrush Current *1	30A(maximum) at AC100V									
Efficiency [%] (typical) *2	81	81	83	79	83					
Output Characteristic										
Output Voltage [V]	5	24	12	12	15	15	5	12	12	24
Output Current [A]	5.0(P2)	1.5(P4)	2.0(P4)	3.0(P2)	1.8	2.4	5.0	3.0	2.0	1.5
Voltage Adjust Range	+/-10% of Rated Output Voltage(at no load within the input range)									
Ripple and Noise [mVp-p](maximum) *3	100	290	170	170	200	200	100	170	170	290
Regulation										
a.Statistic Line Regulation [mV](maximum)	25	120	60	60	75	75	25	60	60	120
b.Statistic Load Regulation [mV](maximum)	50	240	120	120	150	150	50	120	120	240
c.Temperature Coefficient *4	0.03%/									
d.Drift[mV](maximum) *5	40	135	75	75	90	90	40	75	75	135
e.Dynamic Load Regulation [mV](typical) *6	not specified									
f.Recovery Time *6	not specified									
Rise up time	200mS(maximum) at 25									
Hold up time	20mS(minimum) at 25									
Functions										
Overcurrent Protection	Current Limiting with automatic recovery									
Output Current[A]	5.75	2.3	2.07	2.52	5.75	2.3				
Overvoltage Protection	Zener diode clamping									
Output Voltage[V]	5.75	27.6	13.8	13.8	17.3	17.3	5.75	13.8	13.8	27.6
Remote Sense	not available									
Remote On/Off	not available									
Environmental										
Operating Temperature	-5 to +50									
Operating Humidity	85%RH(non-condensing)									
Storage Temperature	-20 to +85									
Storage Humidity	85%RH(non-condensing)									
Withstanding Voltage	Primary-Secondary AC1,500V for 1minute Primary-Frame Ground AC1,500V for 1minute Secondary-Frame Ground AC500V for 1minute									
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation test er									
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									
	1mA(maximum) at 25									
	Built to meet FCC Part15-B Class B									
	370g/enclosed type:410g									
	400,000									
	35	50	35	50	35	50	35	50	35	50

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

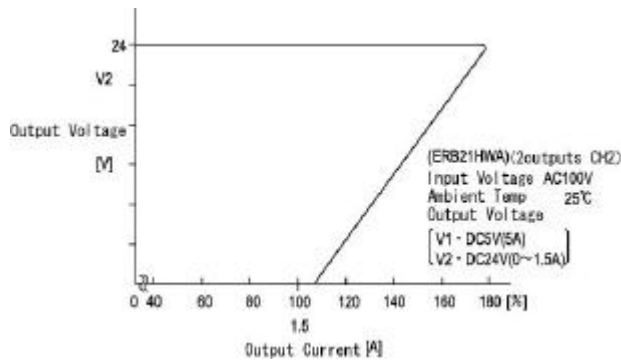
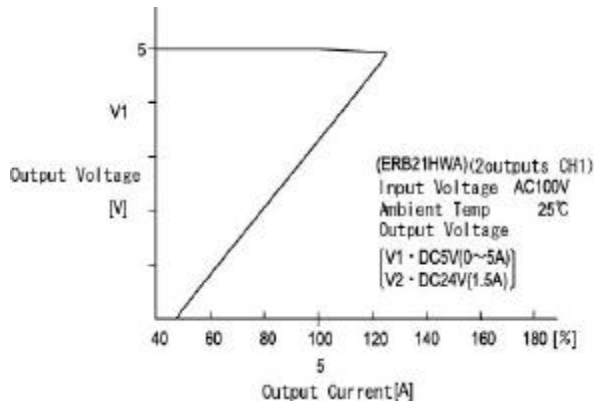
*4 at -5 to +50

*5 for 7hour period after 1hour warm-up at 25

*6 when output current changed from 25% to 75% of rated output current rapidly at AC100V input

*7 variable on input voltage and load conditions

OCP Curve



Efficiency Curve

