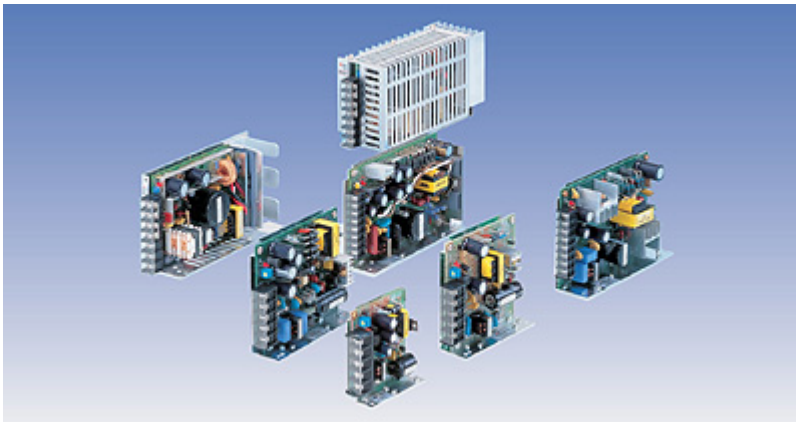


30 WATT AC-DC CONVERTER

ERT-FWB SERIES



Features

1. Open Frame
2. Cost Effective
3. High Efficiency
4. No derating without cover and horizontal mounting
5. Input 170-264Vac
6. EMI : complies with FCC/A, FCC/B for ERD & ERE
7. Over voltage protection

Cover(add suffix "-P")

***-P" model dimension is same as "without cover" model

General Description

"ER"-Series AC/DC Switching power supplies are open frame, low cost with high efficiency. 65 different models are available from low to medium power. A low power modules use a simple RCC circuit while high power supplies employ a forward converter.



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

ETA-USA Tel: 408-778-2793 Fax: 408-779-2753 e-mail: sales@eta-usa.com

Specifications<AC/DC>		Model							
ERT**FWB 30WATTS/2OUTPUTS		ERT21FW B-B		ERT22FW B-B		ERT23FW B		ERT24FW B-B	
Input Characteristic									
Input Voltage		AC 200V(DC260V)							
Input Range		AC170-264V(DC220-350V)							
Input Frequency		50/60Hz							
Input Frequency Range		47-440Hz							
Phase		Single							
Inrush Current *1		30A(maximum)at AC 200V							
Efficiency [%] (typical) *2		76		73		76		69	
Output Characteristic									
Output Voltage [V]		24	5	12	12	15	15	12	5
Output Current [A]		0.2-1.0(Peak1.5)	1.5	0.4-2.0(Peak2.7)	0.8	0.2-1.0(Peak1.5)	1.0	0.2-2.0(Peak2.7)	1.5
Voltage Adjust Range		V1: +3% /-0% of Rated Output Voltage(at no load within the input range) V2: fixed with tolerance of +/-3.5% (at no load within the input range)							
Ripple and Noise [mVp-p](maximum) *3		290	100	170	170	200	200	170	100
Regulation									
a.Statistic Line Regulation [mV](maximum)		120	25	60	60	75	75	60	25
b.Statistic Load Regulation [mV](maximum)		240	50	120	120	150	150	120	50
c.Temperature Coefficient *4		0.03%/°C							
d.Drift[mV](maximum) *5		135	40	75	75	90	90	75	40
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		20mS(minimum) at 25°C and rated input/output							
Functions									
Overcurrent Protection ≥ 105% of Rated		V1:Current Limiting with automatic recovery V2:by the regulator I.C's characteristics							
Output Current[A]		≥ Peak	-			≥ Peak	-	≥ Peak	-
Overvoltage Protection ≥ 115% of Rated		V1:Zener diode clamping V2: not available							
Output Voltage[V]		27.6	-			13.8	-	17.25	-
Remote Sense		not available							
Remote On/Off		not available							
Environmental									
Operating Temperature		-5 to +50°C [enclosed type:-5 to 50°C at vertical mount/-5 to 40°C at horizontal mount]							
Operating Humidity		85% RH(non-condensing)							
Storage Temperature		-20 to +85°C							
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 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 25°C ,rated input/output and rated input frequency							
? EMI(Electromagnetic Interference)		Built to meet FCC Part15-B Class B							
? Safety									
? Weight (typical)		400g/enclosed type:490g							
? MTBF [H]		670,000							
? Switching Frequency[kHz](typical) *7		35							

Conditions:

*1 at cold start

*2 at DC 260V input and rated output

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

*4 at -5 to +50°C /enclosed type: at -5 to +40°C

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

*6 when output current changed from 25% to 75% of rated output current rapidly at AC 200V input

*7 variable on input voltage and load conditions

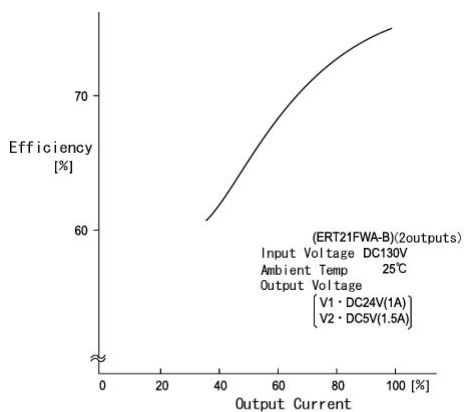


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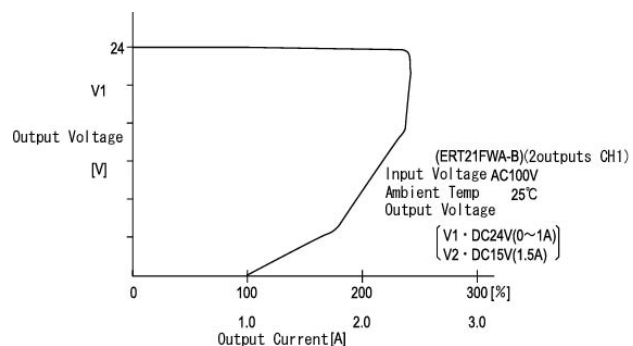
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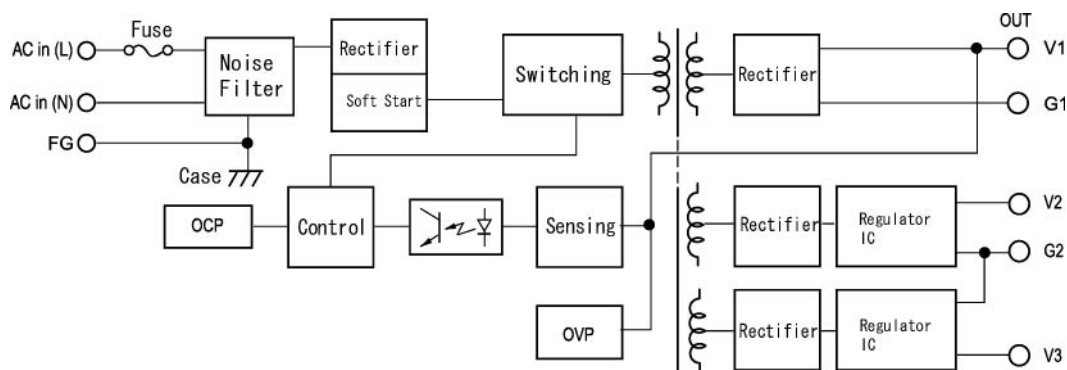
Efficiency Curve



OCP Curve



Block Diagram



Dimension Diagram

