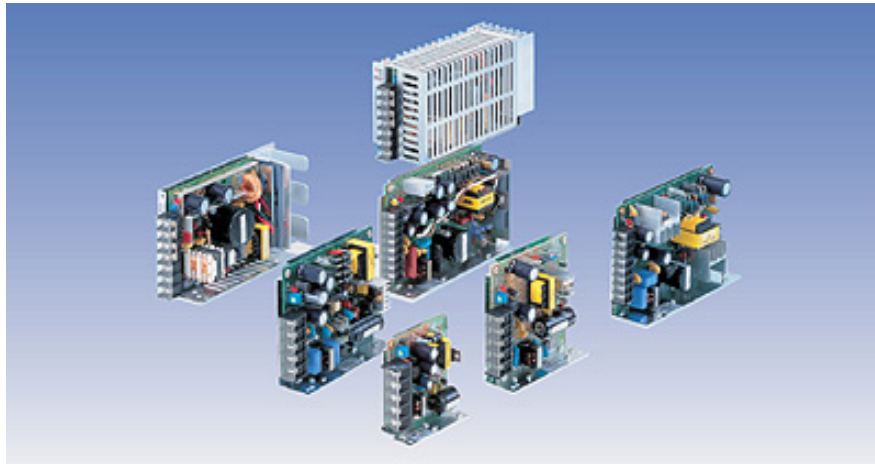


**ERM-00A Series
3 Channel Output**



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")

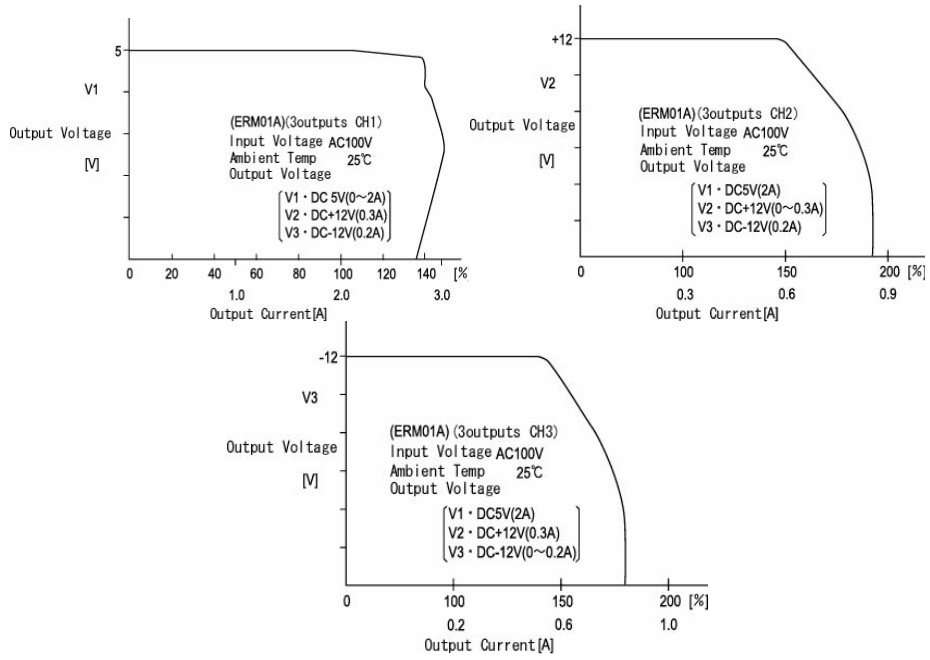
**"-P" model dimension is same as "without cover" model

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.

Specifications<AC/DC>	Model		
	ERM01A	ERM03A	ERM04A
ERM**A 15WATTS/3OUTPUTS			
Input Voltage	AC100V(DC130V)		
Input Range	AC85-132V(DC110-175V)		
Input Frequency	50/60Hz		
Input Frequency Range	47-440Hz		
Phase	Single		
Inrush Current *1	25A(maximum)at AC100V		
Efficiency [%] (typical) *2	69	66	70

OCP Curves



ERM**A Specification

Specifications<AC/DC>	Model								
ERM**A 15WATTS/3OUTPUTS	ERM01A			ERM03A			ERM04A		
Output Characteristic									
Output Voltage [V]	5	+12	-12	5	+12	-5	5	+15	-15
Output Current [A]	0.2-2	0.3	0.2	0.2-2	0.3	0.2	0.2-2	0.2	0.2
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	100	170	170	100	170	100	100	200	200
Regulation									
Statistic Line Regulation [mV](maximum)	25	60	60	25	60	25	25	75	75
Statistic Load Regulation [mV](maximum)	50	120	120	50	120	50	50	150	150
Temperature Coefficient *4	0.03%/°C								
Drift[mV](maximum) *5	40	75	75	40	75	40	40	90	90
Dynamic Load Regulation [mV](typical) *6	not specified								
Recovery Time *6	not specified								
Rise up time	200mS(maximum) at 25°Cand rated input/output								
Hold up time	20mS(minimum) at 25°Cand rated input/output								
Functions									
Overcurrent Protection $\geq 20\%$ of Rated Output Current[A]	V1:Current Limiting with automatic recovery V2,V3:by the regulator I.C's characteristics								
	2.4	-	-	2.4	-	-	2.4	-	-
Overvoltage Protection $\geq 15\%$ of Rated Output Voltage[V]	clamping V2,V3:not available								
	5.75	-	-	5.75	-	-	5.75	-	-
Remote Sense	not available								
Remote On/Off	not available								
Environmental									
Operating Temperature	-5 to +50°C								
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	98m/s ²								
Cooling	Convection								
? Leakage Current	-----								
? Line conducted noise	t FCC Part15-B Class B								
? Safety	-----								
Weight (typical)	enclosed type:280g								
? MTBF [H]	820,000								
? Switching Frequency[kHz](typical) *7	25			30					

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°C

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

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

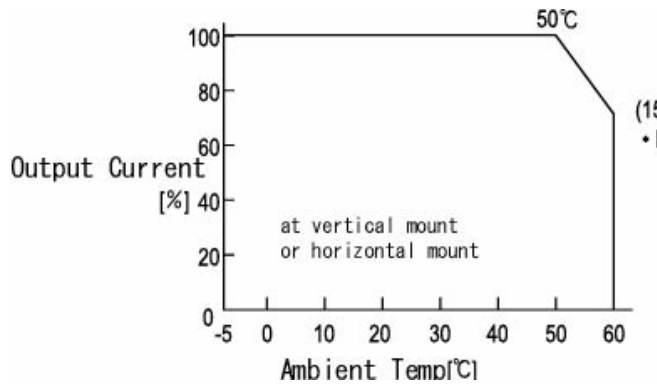
*7 variable on input voltage and load conditions



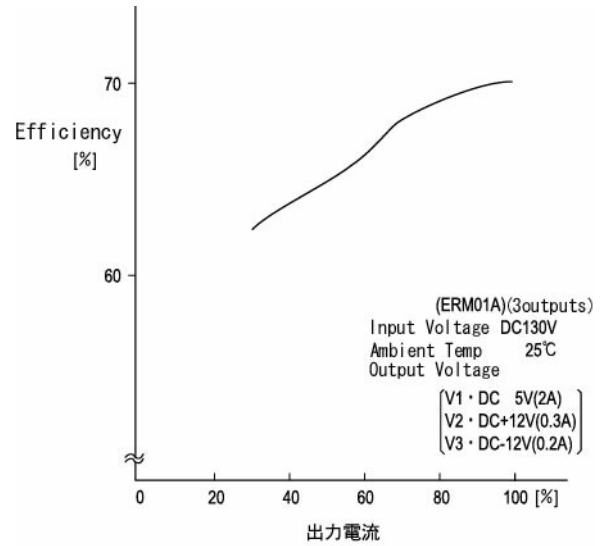
ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

Derating Curve



Efficiency Curve



Dimension (mm)

