



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

AC/DC SWITCHING POWER SUPPLY
AC INPUT 170~264V
SINGLE CHANNEL OUTPUT
150 WATTS



ERE-SB-U SERIES

DIMENSION: 48Wx230Lx115H



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.

Application

Input

Input Voltage:	AC230
Input Voltage Range:	AC170~264V
Input Current:	1.7 A
Frequency:	50/60Hz
Input Frequency Range:	47-440Hz
Phase:	Single
Inrush Current: *1	20A(max.) at AC230V
Leakage Current:	1mA(maximum) at 25°C (rated input/output and rated input frequency)

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

Option

Cover(add suffix "-P")
***"-P" model dimension is same as "without cover" model

Output Characteristic	Unit	Models				
		ERE05SB	ERE12SB	ERE15SB	ERE24SB	ERE48SB
Output Voltage	Vdc	5	12	15	24	48
Output Current	A	30	14	11	7	3.5
Voltage Adjust Range	V	+/- 10% of Rated Output Voltage (at no load within the input range)				
Ripple Noise(max)*3	mVpp	150	220	250	340	580
Rise up time	mS	500mS(maximum) at 25°C and rated input/output				
Hold up time	mS	20mS(minimum) at 25°C and rated input/output				
Regulation						
a. Line Regulation	mV	40	96	120	192	384
b. Load Regulation	mV	45	108	135	216	432
c. Temperature Coefficient *4	°C	0.03%/°C				
d. Drift(maximum) *5	mV	40	75	90	135	255
e. Dynamic Load Regulation (typ.) *6	mV	150	360	450	720	1440
f. Recovery Time *6	mS	0.3mS(typical)				
Efficiency *2	%	82	84	85	88	89

Conditions:

- *1 at cold start
- *2 at DC260V input/rated output
- *3 measured by a bayonet probe at output connector at 0 to 100MHz bandwidth
- *4 at -10 to +50°C/enclosed type: at -10 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 AC200V input
- *7 variable on input voltage and load conditions



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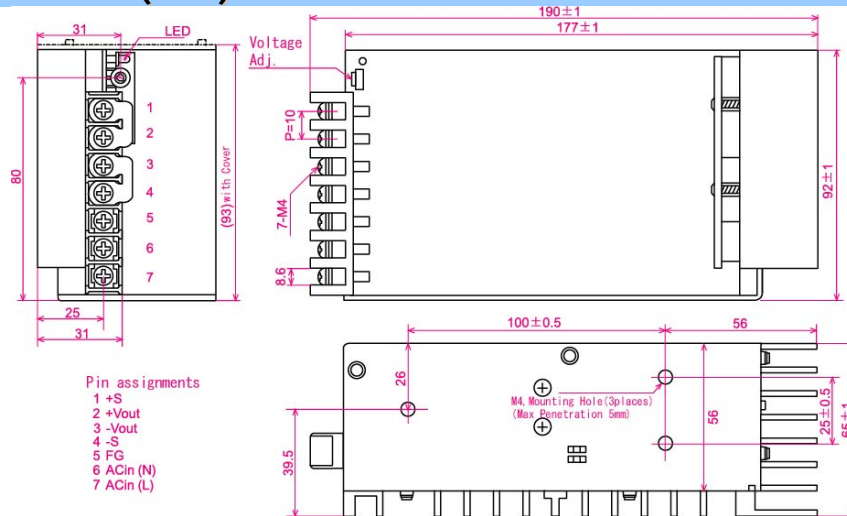
Environmental Specification					
Operating Temperature	0 to +50°C [enclosed type: 0 to 50°C at vertical mount / 0 to 40°C at horizontal mount]				
Operating Humidity	85%RH (non-condensing)				
Storage Temperature	-20 to +85°C				
Storage Humidity	85%RH (non-condensing)				
Withstanding Voltage	Primary-Secondary AC1500V for 1minute Primary-Frame Ground AC1500V 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				
Environmental Agencies					
Line Conducted Noise	not specified				
Safety					
MTBF [H]	670000				
Switching Frequency [kHz]	145				
Function/Protection					
Over current Protection (≥105% of Rated Output Current [A])	Current Limiting with automatic recovery				
	31.5	14.7	11.55	7.35	3.68
Over voltage Protection (≥115% of Rated Output Voltage [V])	output shutdown (to reset, leave 30seconds after shut-off)				
	5.75	13.8	17.25	27.6	55.2
Remote Sense	available				
Remote On/Off	not available				
Mechanical					
Dimension [mm]	65Wx177Lx92H				
Weight	890g/enclosed type: 930g				



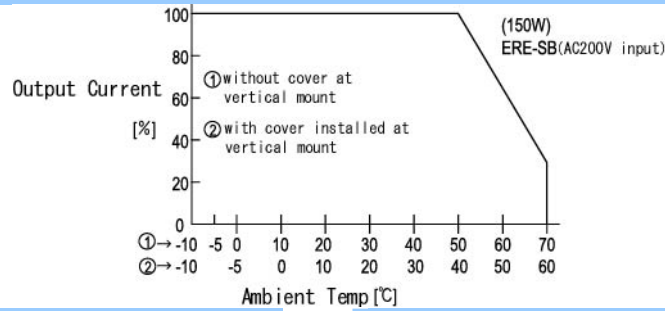
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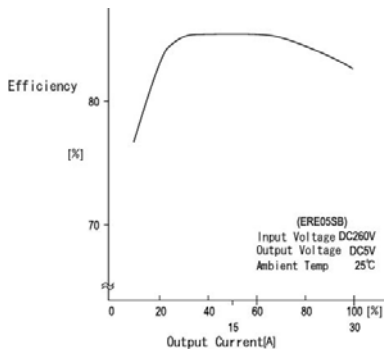
DIMENTION DIAGRAM (mm)



DERATING CURVE



EFFICIENCY CURVE



OCP CURVE

