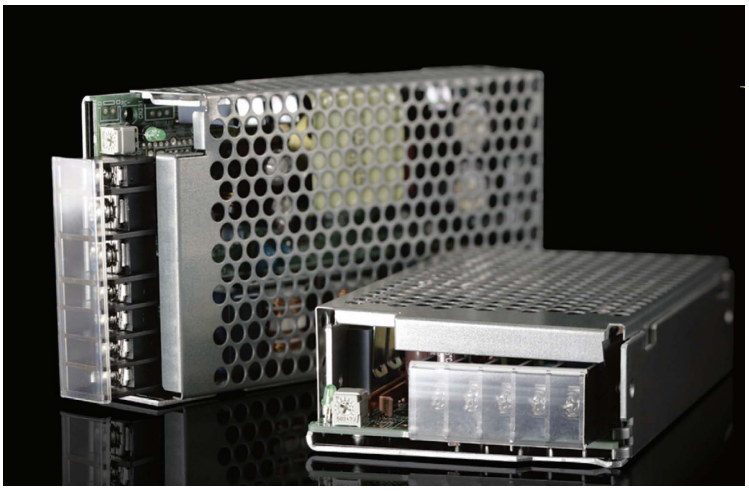
ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

AC/DC SWITCHING POWER SUPPLY
SINGLE CHANNEL OUTPUT
75 WATTS

ESS75 *SERIES*

General Description



Features

1. Smaller than competitors by 15-20%
2. Operating temp shows full load at 50° C (122° F), can operate at temperatures up to 71°C
3. Five-year guarantee
4. Over-current protection
5. Over-voltage protection
6. Remote Sensing (sense line) available
7. Can meet medical and appliance standards
8. Low leakage < 500µA

Application

Broad needs

Input

Input Voltage:		AC100~240V
Input Voltage Range:		AC85~264V (DC110~350V)
Frequency:		50/60Hz
Frequency Range:		47~440Hz
Phase:		Single
Inrush Current:	*1	14A at 100V; 28A at 200V

ETA USA
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email at: sales@eta-usa.com

Output Characteristic	Unit	Models						
		ESS75-3.3	ESS75-05	ESS75-12	ESS75-15	ESS75-24	ESS75-36	ESS75-48
Output Voltage	Vdc	3.3	5.0	12	15	24	36	48
Output Current	A	15	15	6.3	5	3.2	2.1	1.6
Ripple &Noise(max)	mVpp	120	120	150	150	150	250	250
Voltage Adjust Range	V	2.97~3.63	4.50~5.50	10.8~13.2	13.5~16.5	21.6~26.4	32.4~39.6	43.2~52.8
Rise time	mS	30 mS typ						
Hold up time	mS	30 mS max						
Regulation								
a. Line Regulation [max]	mV	20	20	48	60	96	144	192
b. Load Regulation	mV	40	40	100	120	150	240	240
c. Temperature Coefficient	0 to 50°C	50	50	120	150	240	360	480
	-10 to 0°C	60	60	150	180	290	450	600
d. Drift(maximum)	mV	20	20	48	60	96	144	192

Efficiency *1	%	At AC100V 78%-87.5% At AC 200V 80%-89.5%
Power Factor *1		0.89-0.99

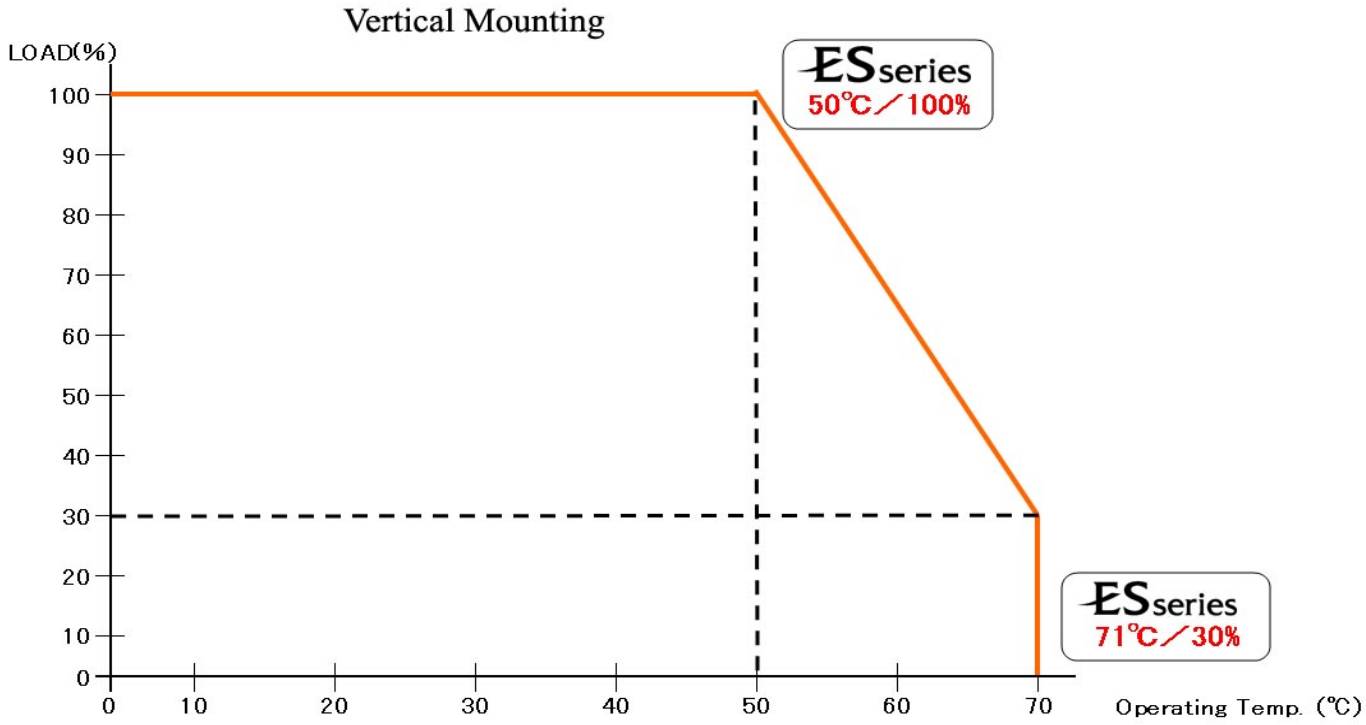
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Environmental Specification	
Operating Temperature*3	-10 to +71 °C
Operating Humidity	20~90% RH
Storage Temperature	-30 to +85 °C
Storage Humidity	10~95% RH [non-condensing]
Withstanding Voltage	Primary-Secondary AC3,000V for 1minute Primary-Frame Ground AC2,500V for 1minute Secondary-Frame Ground AC1,000V for 1minute *Sensory Current: Secondary Frame Ground (20[mA])/Others (10[mA])
Isolation Resistance	Primary-Secondary-Frame Ground 100MΩ(minimum) by DC500V insulation tester
Vibration	5~10Hz:10mm double amplitude,10-55Hz:19.6m/s^2,30 minute cycle each along X,Y,Z axes(non-operating)
Shock	196 m/s^2 on x,y,z axis
Cooling	Convection
Leakage current	500μA
MTBF	>210,000 hours
Environmental Agencies	
Line Conducted Noise [EMI]	Built to meet FCC-B, VCCI-B, CISPR22-B, EN55022-B
Line Harmonic Distortion/Current	IEC61000-3-2 Compliant
Safety	UL60950-1 1st ed., CAN/CSA C22.2 No.60950-1-03 Approved UL508 17th ed., CAN/CSA C22.2 No.107.1-01 Approved EN60950-1:2001+A11:2004 Approved CE Marking : EN60950-1:2001+A11:2004(LVD) Declared
Function/Protection	
Over current Protection	Operate at 105% min of rated current, automatic return
Over voltage Protection	Input reentry at shutdown
Remote Sense	Available
Remote Control	Available
Series Operation	Available
Parallel Operation	Not Available (N+1 Operation is Applicable by Diode-OR)
Driving Indicator	Power Source on LED indication; Green
Mechanical	
Dimension [mm]	33 W × 131 L × 79 H
Weight [g](typical)	350

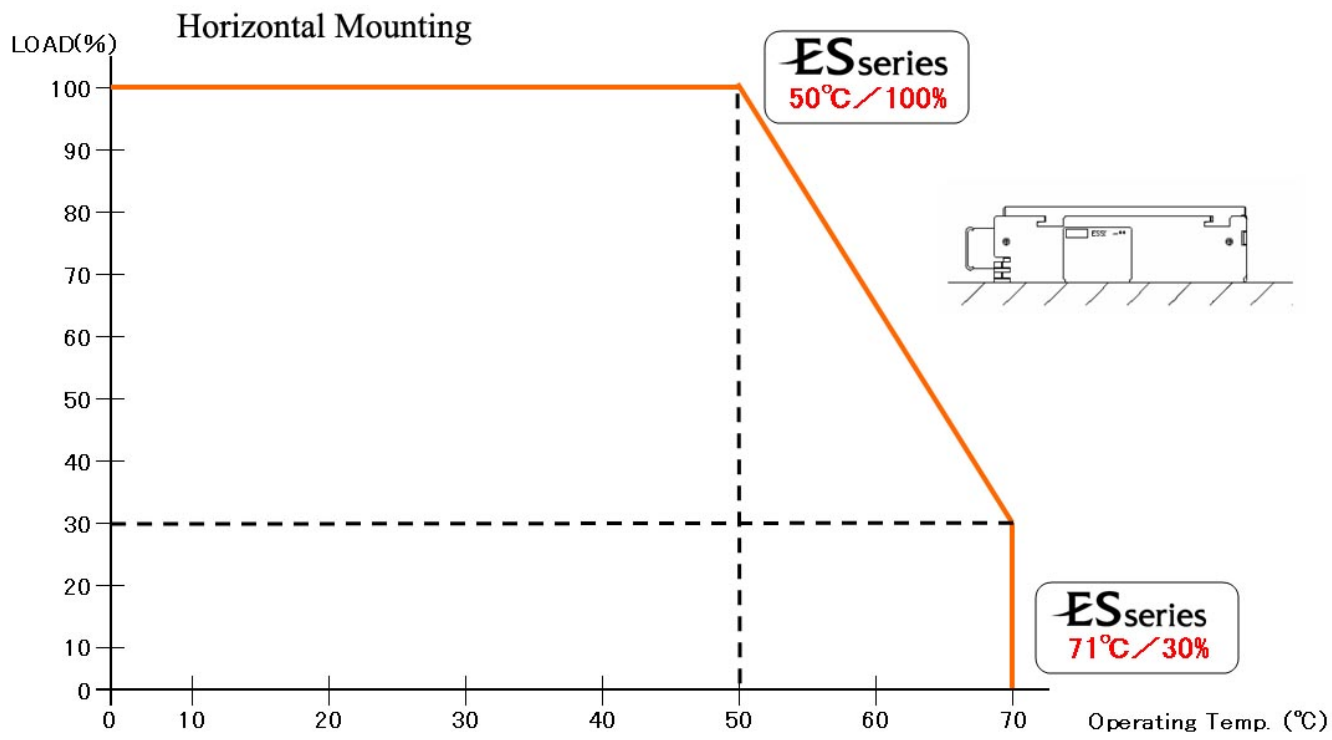
Conditions:
*1 Rated input and Rated output
*2 at Output current quick change 25% to 75%
*3 At 100% load (convection cooling)

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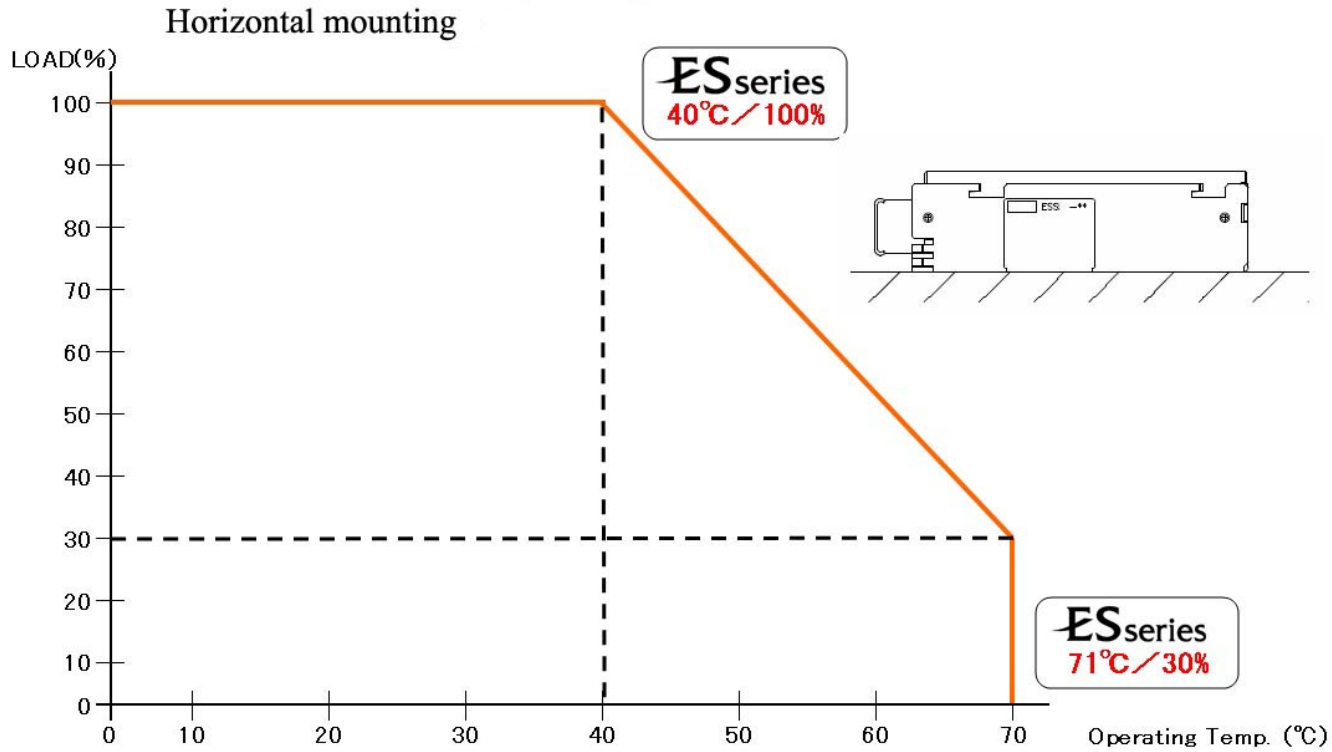
Derating Curves



3.3 and 5V Horizontal

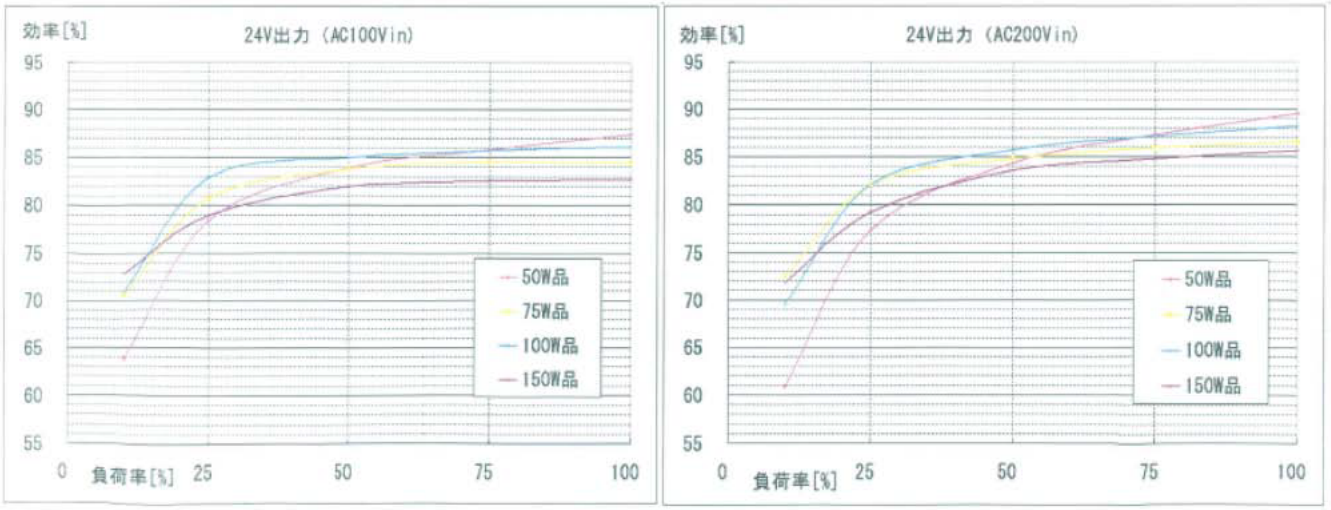


12V to 48V Horizontal



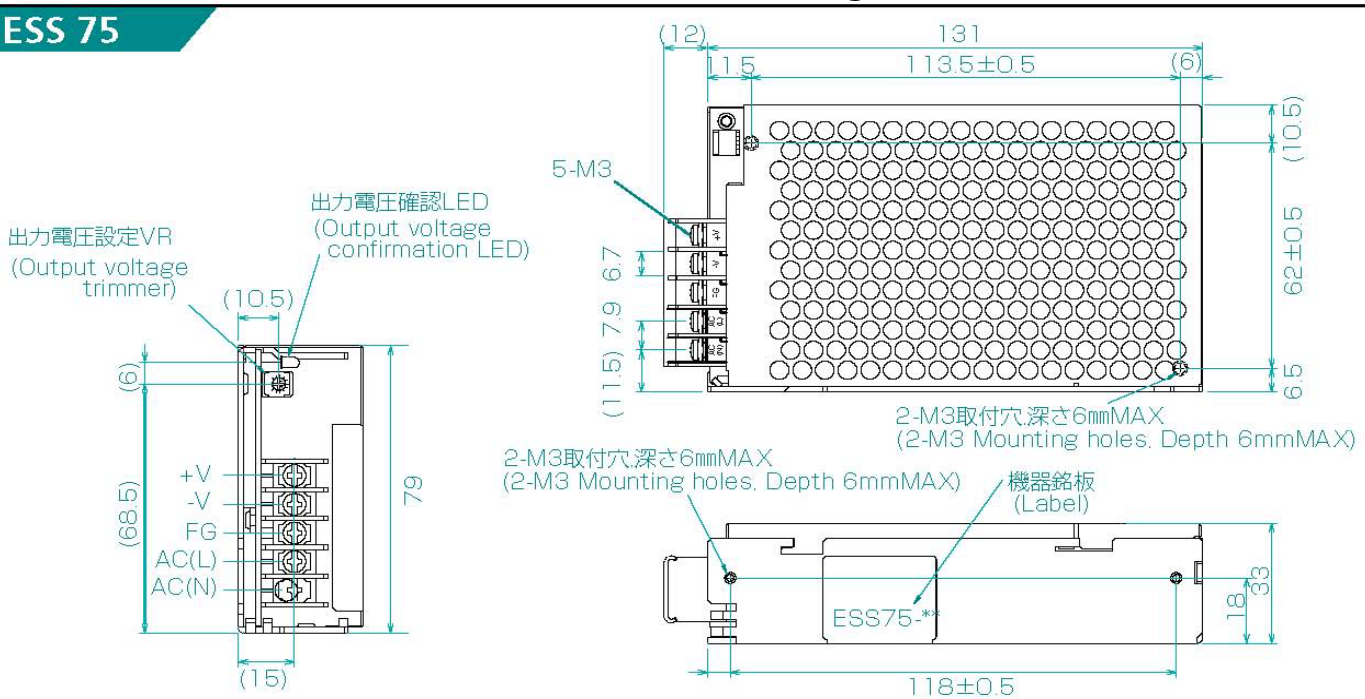
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Efficiency Curves



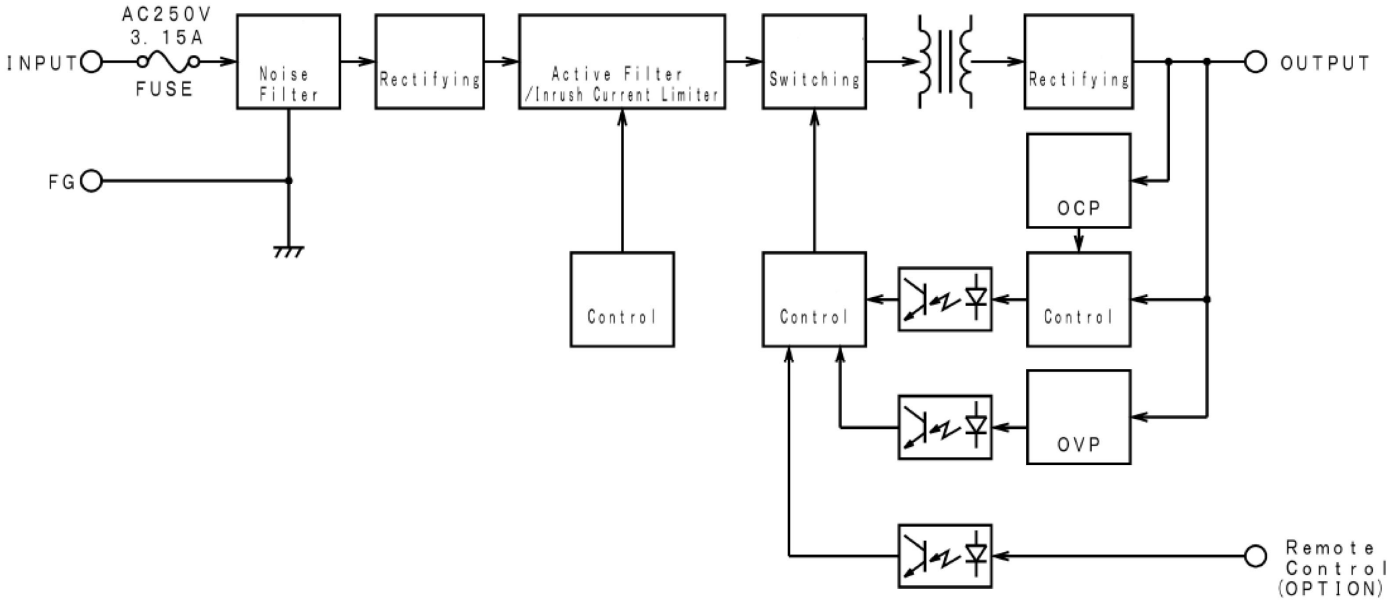
Mechanical Drawings

ESS 75



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Block Diagram



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