



EFY370SX-U1

777W Front end



FEATURES

- Series
- 700W Class
- Rated Output Voltage
- Single Output
- AC100-200 Class Input
- Safety Standards Approved 60950-1 (UL, C-UL, EN)
- PFC Unit for ET-series
- Power Factor 0.99 at output 400W
- **High Efficiency 97% in AC240V Input by Convection Cooling**



MODEL/CHANNEL		Unit	EFY370SX-U1
OUTPUT	Output Voltage	Vdc	370
	Output Current	A	2.1
	Line Regulation max.	mV	2
	Load Regulation max.	mV	2
	Temperature Effect	mV	2
	Output Voltage Accuracy	V	DC 364~376
	Maximum Output Power	W	777
	Ripple and Noise(max.)	mVp	10 to 40

MODEL/CHANNEL		Unit	EFY370SX-U1
INPUT	Input Voltage	Vac	AC85-264
	Input Current	mA	10-5
	Inrush Current	mA	100A at cold start 30; 240A at cold start 60
	Power Factor	V	100V At 0.95A output 0.99; 100V At 2.1A output 0.99; 240V At 2.1A output 0.96
	Efficiency (typical)	%	100V At 0.95A output 95; 100V At 2.1A output 93; 200V At 2.1A output 97
	Input Voltage Range	Vdc	AC85~264
	Phase	-	1
	Leakage Current	mA	1
	Rated Input Frequency	Hz	50/60 (45~65)
	Operation Range	V	AC85~255
	PFC Operation Range	V	AC85~255

- Limited by Thermistor, may not be able to work properly when turning ON just immediate after operation
- Within the rated frequency range
- Refer to the subject "Derating Condition" for detail
- Measured by a Bayonet type probe Bandwidth DC-20[MHz]
- At Power Factor Correction operating range, output voltage will be Bridge Rectified voltage when AC 255 to 264V input
- Avoid the overload or output short
- Turns H to L to RET terminal after starts up.
- This signal gives timing of Start-up for DC-DC converter connected to the output side. ENA terminal: connected to collector terminal of Opto isolator (PH1) RET: terminal: Connected to Emitter terminal of Opto isolator (PH1)
These terminals are electrically isolated from the other terminals but not to be as the secondary circuit.

- Max Voltage to apply: 15V Max Sink Current: 1mA
- The Value marked in "()" is by forced air cooling
- Derating by input current will be applied. Please refer to the chart below.
- FG terminal on this product is not evaluated as Protective Earth Conduction
Please connect this terminal to grounded body conductor of the product by the Protective Earth Terminal of the final product not directly connect to the Protective Earth Terminal of the final product.
- Standard for recommended reliability estimation of components count method JEITA's switching opower supply according to JEITA RCR-9102



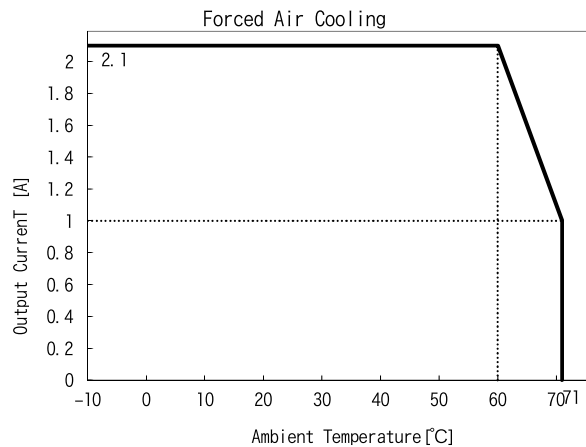


	MODEL/CHANNEL	Unit	
Environment	Operating Temperature	°C	Refer to the derating condition -10~+71°C Non Isolated
	Operating Humidity	%	20~90°C With Condensation
	Storage Temperature	°C	-20~+85°C Except Thermal Shock
	Storage Humidity	%	20~90°C With Condensation
	Primary Frame Ground	-	AC2500V Cutoff Current 20mA 1 min. (Normal temperature & humidity)
	Secondary Frame Ground	-	Non Isolated
	Vibration	-	5~10Hz; 10mm, 10~55Hz 19.6 m/s ² X, Y, Z; 10mm, 10~55Hz 19.6 m/s ² X, Y, Z (non operating)
Safety	Safety Standards	-	TUV: EN60601-1 CB: IEC60601-1 UL60950-1 IEC61000-3-2
	Conducted Emissions	-	EN55032 Class A; EN55032 Class B
	Shock	-	AC85~264
	Cooling	-	Convection Cooling or Forced Air Cooling
	Insulation Resistance	-	100mΩ min. z aa500VDC
Function	Overvoltage Protection	-	At DC400V min., to stop the PFC Operation At DC260V max., operation stop and then outputs H in ENA terminal
	Enable Signal Output	-	Open Collector Output
	MTBF	H	277,315.59
Dimension	Size(WxHxD) / Weight	mm/g	96Wx170Lx38H/850

Forced Air Cooling

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Forced Air Cooling : Wind speed 8 [m/s]
Operation in wind direction which blows to the product.



Line	Comment
—	0.1 [A/°C] of load derating is required from 61 [°C] to 71 [°C].



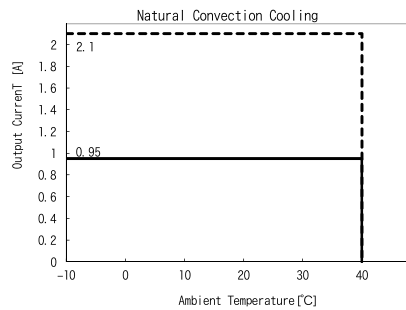


Derating Condition

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Please refer to the Derating Condition.
Temperature rise may vary up to mounting condition. Please check that under actual operating condition.

1. Safety Standards Certified

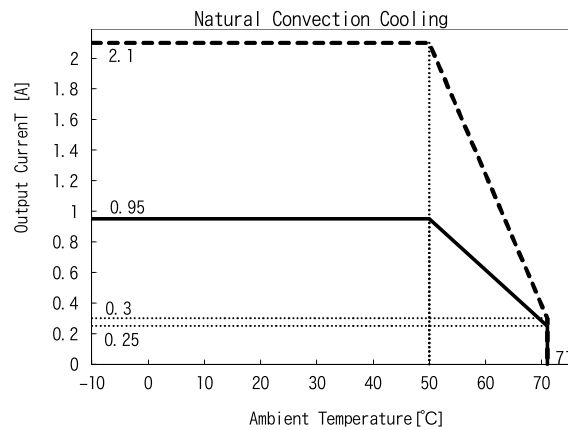


Line	V in	Comment
—	AC100 [V] in	Limited in 40 [°C].
- -	AC200 [V] in	Limited in 40 [°C].

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2. 1. AC100 [V] , AC200 [V] / AC100 [V] , AC200 [V] in



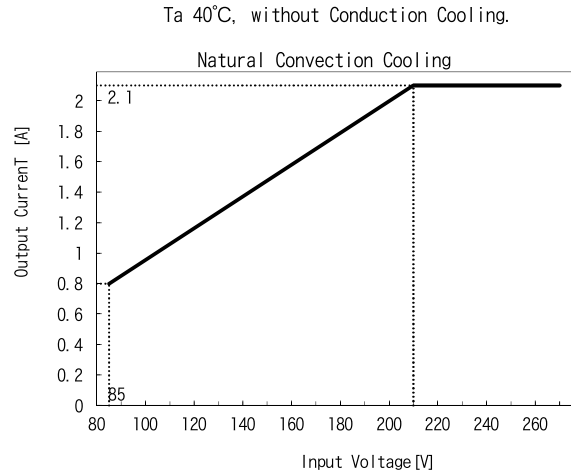
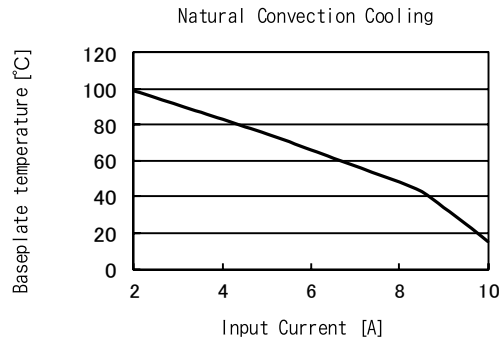
Line	V in	Comment
—	AC100 [V] in	0.033 [A/°C] of load derating is required from 50 [°C] to 71 [°C].
- -	AC200 [V] in	0.085 [A/°C] of load derating is required from 55 [°C] to 71 [°C].





Natural Convection Cooling

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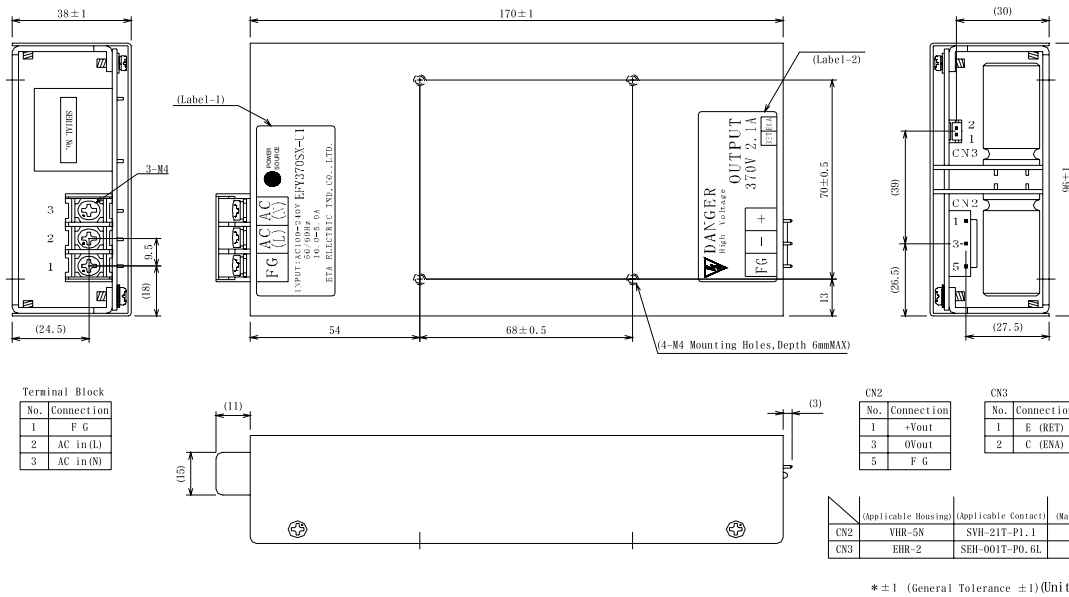
線 Line	Comment
—	-0.0104[A/V] of load derating is required from 85[V] to 210[V]. AC210~270[V] input, 2.1[A] output.





Outline Drawing

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Block Diagram (mm)

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Block Diagram

