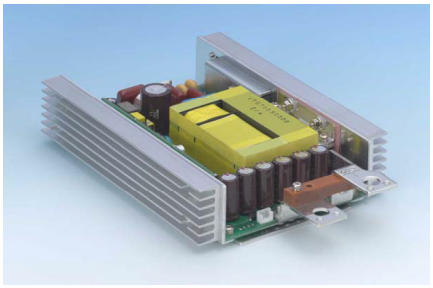
ETG-SC 600W



FEATURES

- Light weight, compact size
- High efficiency, high reliability
- Over voltage and over current protection
- **Isolated Power Supply**

RoHS

	MODEL/CHANNEL	Unit	ETG3.3-SC300	ETG05-SC300-U1	ETG12-SC300	ETG24-SC300
OUTPUT (Single)	Output Voltage	Vdc	3.3	5	12	24
	Output Current	A	120	120	50	25
	Line Regulation	mV	20	40	48	120
	Load Regulation	mVp	40	45	48	135
	Ripple and Noise	mVp	150		220	340
	Voltage Adjustment Range	-	±10% of rated output voltage			
	Rise Time	-	500 mS (maximum)			
	Temp. Coefficient	mV	0.9	1.5	3.6	7.5
	Drift	mV	20	40	48	135
	Dynamic Load Regulation	mV	250	250	600	1200
	Efficiency	%	94	95	95	95
	Rated Output Power	W	396	600		
INPUT	Input Voltage	V	DC300			
	Input Voltage Range	-	DC200 to 400			
Protection	Over Current Protection	A	Constant current drop, automatic recovery after removing the overload. No guarantee provided for continuous overcurrent or short-circuit status for 1 minute or longer.		Constant current drop, automatic recovery after removing the overload. Output shuts down when output voltage drops to around 5V. Turn on at least 1 minute after the input voltage shutdown to restart.	
	Over Voltage Protection	-	Turn on at least 1 minute after the input voltage shutdown to restart			
	Remote Sense	-	Available (with load line form output terminal, connect + and - sensing terminals to + and - terminals of load line, respectively)			
	Remote Control	-	Available			
	Safety	-	UL60950-1, CSA60950-1, EN60950-1 certified (5V) CE (LV directive) compliant			
	Ref. MTBF	H	185,910	184,195	172,243	172,243

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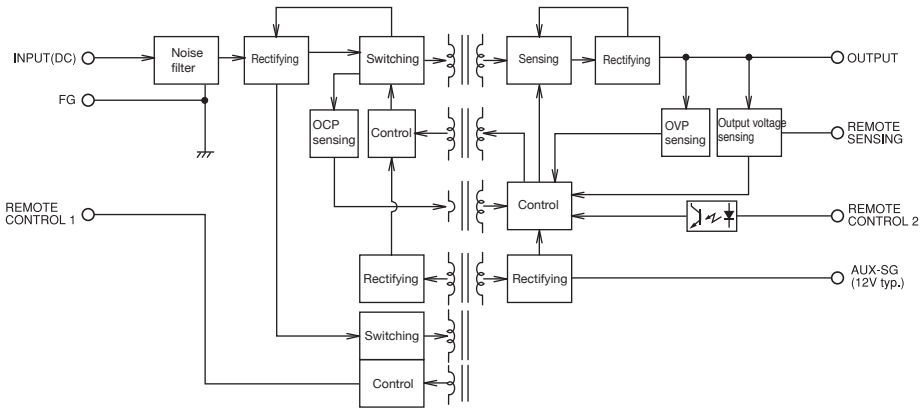
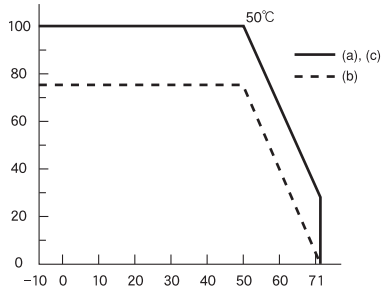
	MODEL/CHANNEL	Unit	
Environment	Operating Temperature	°C	-10 to +71°C without thermal shock
	Operating Humidity	%	20 to 90% RH (non-condensing)
	Storage Temperature	°C	-20 to +85°C without thermal shock
	Withstand Voltage Primary-Secondary	%	AC3000V for 1 minute without defect, faradic current=10mA
	Primary-Frame Ground	%	AC2000V for 1 minute without defect, faradic current=10mA
	Secondary-Frame Ground	-	AC1000V for 1 minute without defect, faradic current=100mA
	Isolation Resistance Primary - Secondary - Case	-	100 MΩ (minimum)
	Shock	-	Impact force: 196 m/s^2
	Cooling	-	Convection cooling
	Vibration	-	5 to 10Hz: 10mm double amplitude, 10 to 55Hz: acceleration 19.6m/s^2 20 minute cycle for 60 minutes each along X, Y, Z axes (non-operating)
	Storage Humidity	-	20 to 90% RH (non-condensing)
Dimension	Size(WxHxD) / Weight	mm/g	Open-frame type / approx. 715 g

Block Diagram 600W

(600W), Single output



Temperature Derating Curve 600W



(a) When ambient temperature goes above 50 [˚C], an output should be lowered to the degree that the derating curb shown in the left figure is satisfied (by 3.5% per degree °C when the ambient temperature is between 50 and 71 [˚C])

(b) When the ambient temperature is 50 [˚C] or below, the unit should be used under a load condition of up to 75%. When ambient temperature goes above 50 [˚C], an output should be lowered to the degree that the derating curb shown in the left figure is satisfied (by 3.5% per degree C when the ambient temperature is between 50 and 71 [˚C])

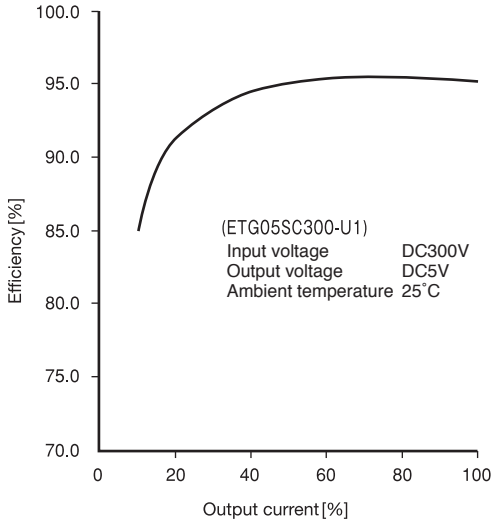
(c) If measured temperature rise of T1 copper plate, T1 input choke coil, and heatsink is up to the maximum rise specified below, the power supply unit can be operated under a load condition of 100% or below until the ambient temperature reaches to 50 [˚C]. (A measure, such as placing the unit on a surface with high heat release and using cooling fan, should be taken so that the unit is operated at or below the maximum temperature rise.) If the measured temperatures are above the maximum rise, the unit should be operated with the same derating as (b)

Maximum temperature rise: T1 copper plate: temperature rise (t) 60 [˚C]
T1 coil: temperature rise (t) 60[˚C]
Heatsink; temperature rise (t) 40 [˚C]

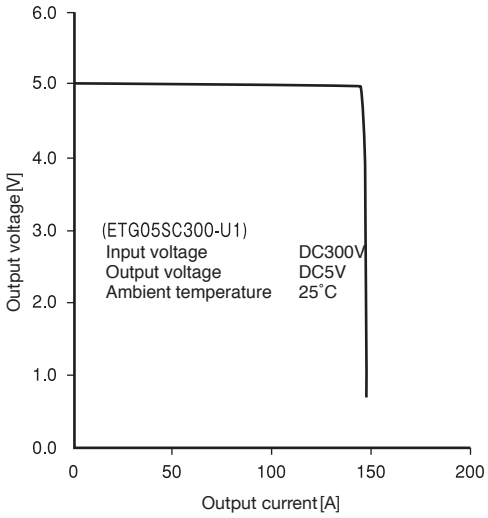
Output Current/Overcurrent 600W

(300W), Single output

Output current and efficiency curve

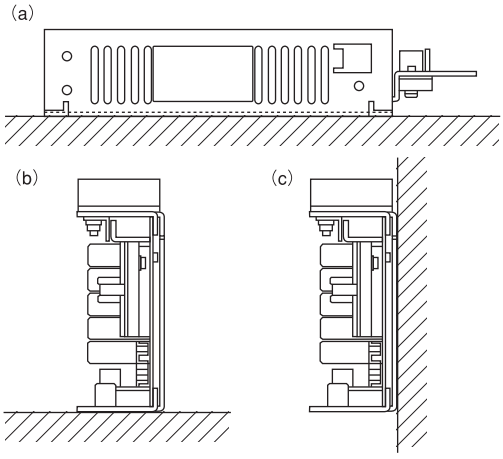


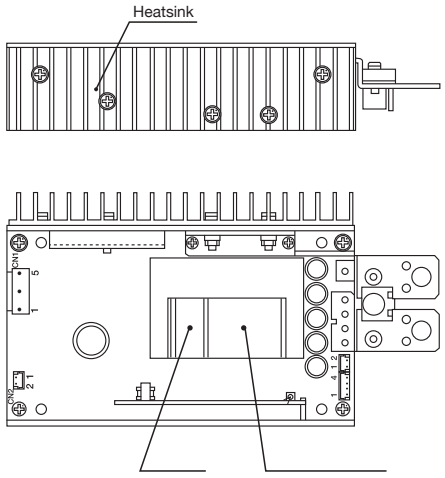
Overcurrent protection (OCP) curve



Placing/Mounting Direction 600W

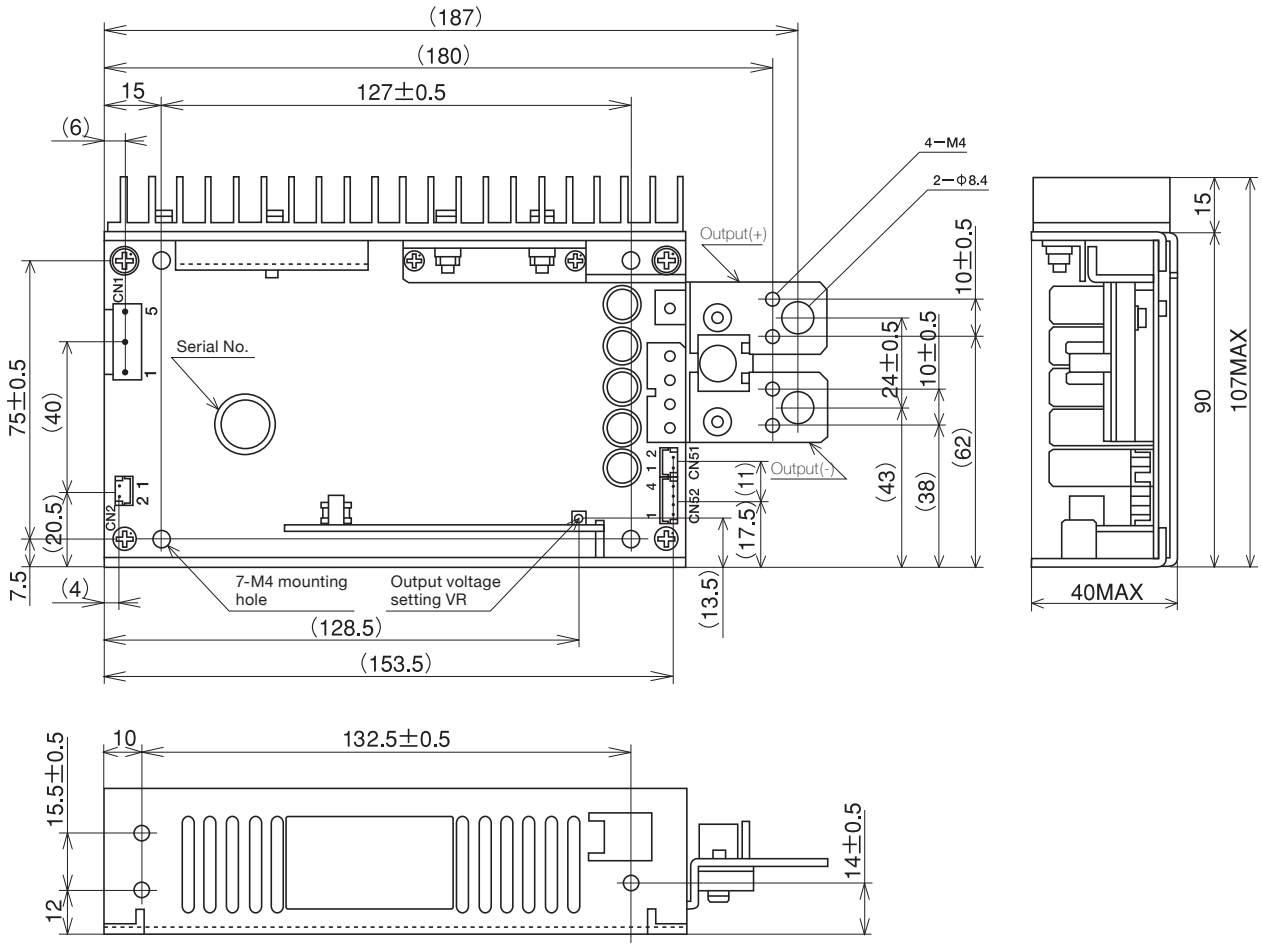
Placing/mounting direction





Dimension Diagram (mm) 600W

(600W), Single output



Connector joint

Pin No.	CN1	Pin No.	CN2	Pin No.	CN51	Pin No.	CN52
1	+Vin	1	−RC1	1	−RC1	1	AUX
2	−Vin	2	+RC1	2	+RC1	2	+RC2
3	FG					3	−RC2
						4	SG