120W AC-DC High Reliability Industrial Adaptor GST120A series

Energy Verified
Rendement
Énergétique Vérifié

Features

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function
- No load power consumption<0.15W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE,NRCan, AU/NZ MEPS,EU ErP and CoC Version 5
- Class I power (with earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Fanless design with -30~+70℃ working temperature
- LED indicator for power on
- 3 years warranty

Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

Description

GST120A is a highly reliable, 120W desktop style single-output green adaptor series. This product is a class I power unit (with FG), equipped with a standard IEC320-C14 AC inlet and adopting the input range from 85VAC to 264VAC. The entire series supplies different models with output voltages ranging between 12VDC and 48VDC that can satisfy the demands for various types of consumer electronic devices.

With the efficiency up to 91% and the extremely low no-load power consumption below 0.15W,GST120A is compliant with USA EISA 2007/DoE, Canada NRCan, Australia and New Zealand MEPS, EU ErP,and Code of Conduct (CoC) Version 5. The supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case.GST120A is certified for the international safety regulations.

Model Encoding

GST 120A 12 -R7B

- R7B: DC plug type — R7B: Plug for 12~48V,Power DIN 4Pin with lock type(standard); P1M: Plug for 20~48V only,2.5φ x5.5φ x11mm,c+,tuning fork type(standard); Optional plug type available by customer requested
- 12: Output voltage
- A: IEC320-C14 AC inlet
- 120: Output wattage
- GST: Series name

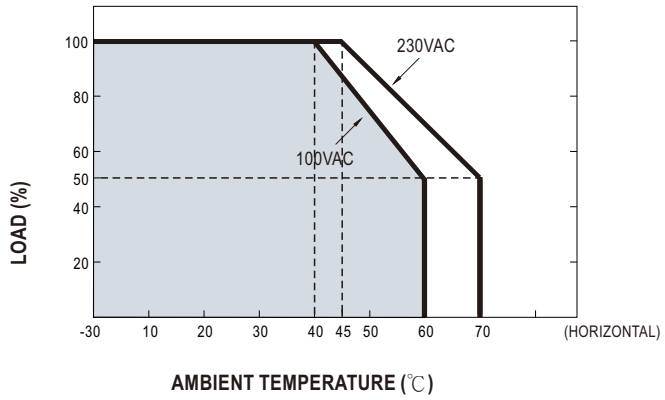
SPECIFICATION

ORDER NO.			GST120A12-R7B	GST120A15-R7B	GST120A20-□ □=R7B,P1M	GST120A24-□ □=R7B,P1M	GST120A48-□ □=R7B,P1M
OUTPUT	SAFETY MODEL NO.		GST120A12	GST120A15	GST120A20	GST120A24	GST120A48
	DC VOLTAGE		12V	15V	20V	24V	48V
	RATED CURRENT		8.5A	7A	6A	5A	2.5A
	CURRENT RANGE		0 ~ 8.5A	0 ~ 7A	0 ~ 6A	0 ~ 5A	0 ~ 2.5A
	RATED POWER (max.)		102W	105W	120W	120W	120W
	RIPPLE & NOISE (max.) Note.2		120mVp-p	150mVp-p	180mVp-p	200mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.3		±5.0%	±5.0%	±5.0%	±3.0%	±2.5%
	LINE REGULATION Note.4		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION		±5.0%	±5.0%	±4.0%	±3.0%	±2.5%
	SETUP, RISE TIME Note.5		2000ms, 30ms / 230VAC 2500ms, 30ms / 115VAC at full load				
	HOLD UP TIME (Typ.)		20ms / 230VAC 20ms / 115VAC at full load				
INPUT	VOLTAGE RANGE Note.6		85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE		47 ~ 63Hz				
	POWER FACTOR (Typ.)		PF>0.93 / 230VAC PF>0.97 / 115VAC at full load				
	EFFICIENCY (Typ.)	R7B	88.5%	89%	90%	90.5%	91%
		P1M	-----	-----	89%	89.5%	90.5%
	AC CURRENT		1.4A / 115VAC 0.7A / 230VAC				
	INRUSH CURRENT (max.)		70A / 230VAC				
	LEAKAGE CURRENT(max.)		0.75mA / 240VAC				
PROTECTION	OVERLOAD		105 ~ 160% rated output power				
			Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE		105 ~ 135% rated output voltage				
			Protection type : Shut down o/p voltage, re-power on to recover				
	OVER TEMPERATURE		Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.		-30 ~ +70℃ (Refer to "Derating Curve")				
	WORKING HUMIDITY		20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY		-40 ~ +85℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT		±0.03% / ℃ (0~45℃)				
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note. 7)	SAFETY STANDARDS		UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336, CCC GB4943, PSE J60950-1, AS/NZS 60950.1 approved				
	WITHSTAND VOLTAGE		I/P-O/P: 3KVAC				
	ISOLATION RESISTANCE		I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH				
	EMC EMISSION		Compliance to EN55022 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CAN ICES-3(B)/NMB-3(B),CNS13438 class B, GB9254, GB17625.1				
	EMC IMMUNITY		Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A				
OTHERS	MTBF		368.75K hrs min. MIL-HDBK-217F(25℃)				
	DIMENSION		167*67*35mm (L*W*H)				
	PACKING		0.62Kg; 20pcs/13.4Kg/0.9CUFT				
CONNECTOR	PLUG		See page 3 ; Other type available by customer requested				
	CABLE		See page 3 ; Other type available by customer requested				

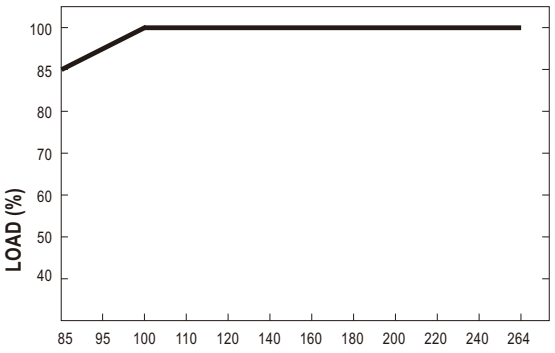
NOTE

1. All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.
2. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
3. Tolerance: includes set up tolerance, line regulation, load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. Derating may be needed under low input voltage. Please check the derating curve for more details.
7. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)

■ Derating Curve

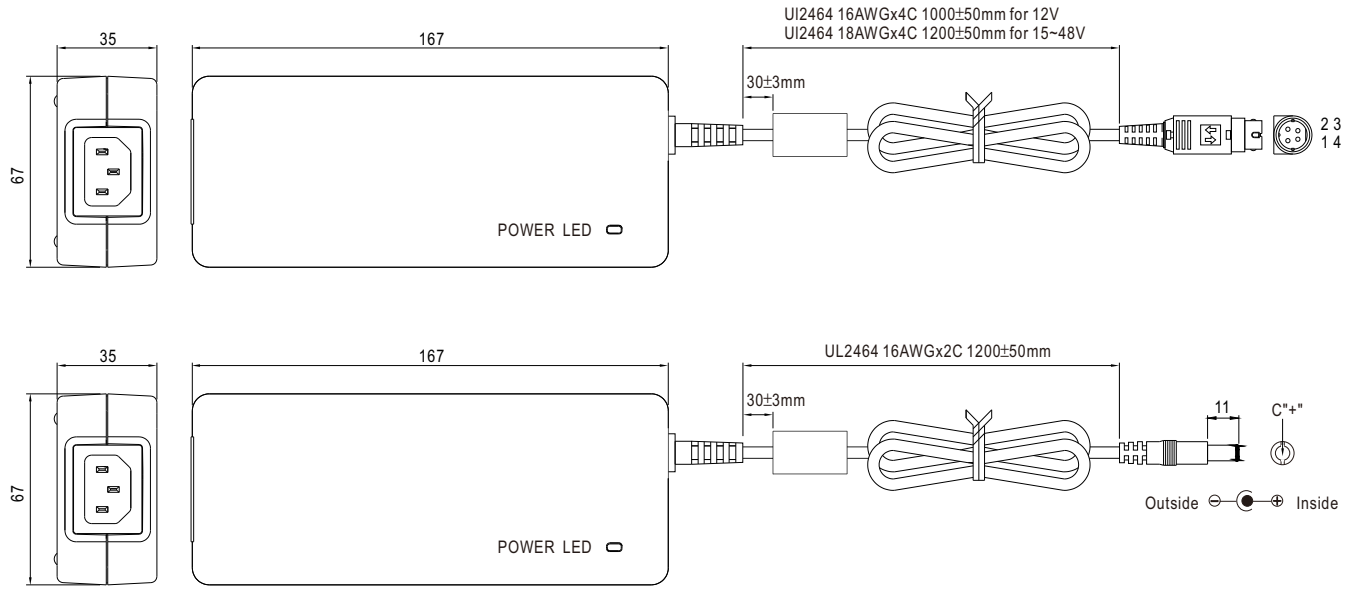


■ Static Characteristics



■ Mechanical Specification

Case No. GS120A Unit:mm



■ Plug Assignment

Standard plug (all models) :

Output plug (Power DIN 4 pin with lock type) : KYCON KPPX-4P equivalent

Mating plug (customer side , not provide with power supply) : KYCON KPJX-CM-4S equivalent

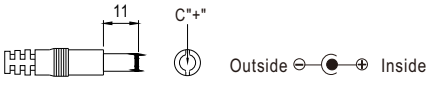
R7B		
	PIN NO.	OUTPUT
2 1 3 4	1,4	+V
	2,3	-V

AC FG

-V connected to AC FG

Standard plug(For 20V,24V,48V only)

P1M	
P/N	OUTPUT
CENTER	+



ID 2.5 x OD 5.5

-V connected to AC FG

■ Installation Manual

Please refer to : http://www.meanwell.com/webnet/search/InstallationSearch.html