



Features

- √ Slim model, Height 30mm
- √ Working temp: -30~+70℃ (refer to output derating curve)
- √ Protection: Short circuit / Over load/Over voltage
- √ 3 years warranty
- √ 100% pass high temperature aging test

Applications

Industrial control systems, machinery and electrical equipment, electronic instrumentation, industrial automation, household appliances, etc

Product certification



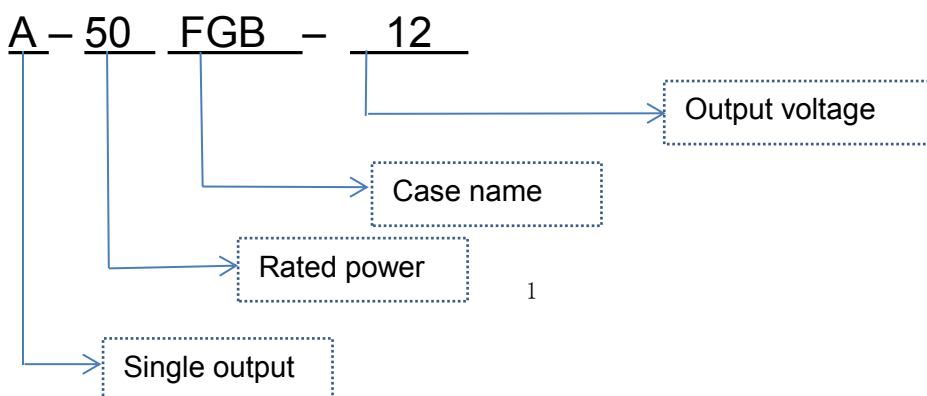
Standards

EN55035\EN61000-4-2,3,4,5,6,8,11\GB17625.1\EN61000-3-2,-3\EN55032\GB4943\UL1012

Product description

A-50GB series is an industrial control power supply with 50w single-channel constant-voltage output. The input voltage range is 90-264 VAC, and the output voltage is 5v. It can be applied to various industrial fields such as industrial control systems, machinery and electrical equipment, electronic instruments and meters, industrial automation, household appliances etc. The ultra-high efficiency, compact profile design, good heat dissipation, guarantee the long-term stable work of this series of products.

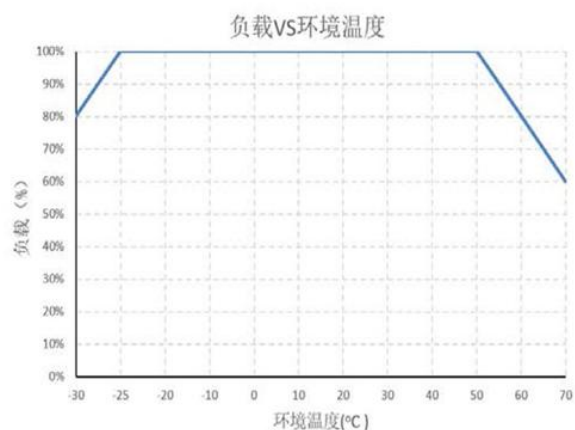
Product name



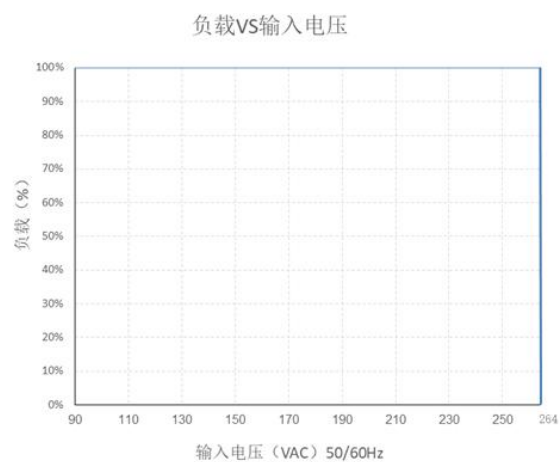
● General Specifications

	Model	A-50FGB-5	A-50FGB-12	A-50FGB-15	A-50FGB-24	A-50FGB-36	A-50FGB-48
Input	Input voltage	90~264VAC					
	Input current	230VAC/0.55A					
		115VAC/1.0A					
	Efficiency	≥83%	≥85%	≥85%	≥85%	≥86%	≥86%
	Frequency range	47~63HZ					
	Leakage current	<1mA/240VAC					
	Inrush current	Cold start 60A/230VAC					
Output	DC voltage	5V	12V	15V	24V	36V	48V
	Rated current	10A	4.2A	3.4A	2.1A	1.4A	1.1A
	Rated power	50W	50.4W	51W	50.4W	50.4W	52.8W
	Voltage ADJ.range	4.5~5.5V	10.8~13.2V	13.5~16.5V	21.6~26.4V	33~39V	44~52V
	Ripple & Noise	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Set up,rise	2500ms, 30ms/230VAC load 100%					
	Hold up time	20ms/230VAC load 100%					
	Line regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Voltage accuracy	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	EMI	EMS	Design refer to:EN55035 ;EN61000-4-2,3,4,5,6,8,11				
Harmonic current		Design refer to:GB17625.1;EN61000-3-2,-3 limited requirements					
EMC		Design refer to:EN55032, Class B					
Safety	Safety Standard	Design refer to:GB4943/UL1012					
	Withstand voltage	I/P-O/P:3KVac/7mA; I/P-CASE:1.5KVac/7mA; O/P-CASE:0.5KVAC/7mA Test time:1min					
	Isolation resistance	I/P-O/P: 100M ohms; I/P-Case:100M ohms; O/P-Case:50M ohms					
Protections	Over Voltage	5.75~6.5V	13.5~16V	16.8~19.5V	27~32V	40~48V	53~60V
		When the main voltage loop fault causes the output voltage to rise, the secondary voltage loop (over voltage protection loop) works in real time to limit the output voltage to a safe value					
	Over Load	110~160% rated ,Hiccup mode,auto-recovery after fault condition removed					
	Over Temp	/					
	Short Current	Auto-recovery after fault condition removed					
Environment	Working Temp&humidity	-30~70℃ 20%~95%RH non-condensing					
	Storage Temp&humidity	-30℃~80℃; 10%~95%RH non-condensing					
	Vibration	10~500Hz,2G,10min/1 cycle,60min.each along X,Y, Z axes					
	Impact	20G,last 11mS,3 impacts along X, Y and Z axes					
	Altitude	5000mtrs,the ambient temperature derating of 0.6 ℃/100m for operating altitude higher than 2000m					
Reliability	MTBF	25℃ :100000Hrs, MIL-217 Method					
Others	Size	99*82*30 (L*W*H)					
	Packing	0.2Kg/pcs,60 pcs/box, 14KG/box					
	Cold mode	☒ Free air cooling ☐ Fan					
	More options	☐ PCB double side coating ☐ Terminal with cover ☐ low temp start (-40℃) ☐ Other					
Note	*In order to extend the service life, it is recommended to leave 30% more allowance when loading. For example, if the equipment needs 100W power, please choose the power supply over 130W. *Ripple&noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. *All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25℃ of ambient temperature. *the auxiliary heat dissipation of aluminum plate with an area of 400 * 400 * 3mm must be used when full load working. *The power supply is considered a component which will be installed into a final equipment.The final equipment must be re-confirmed that it still meets EMC directives.All our EMC tests are carried out by mounting samples on metal plates.						

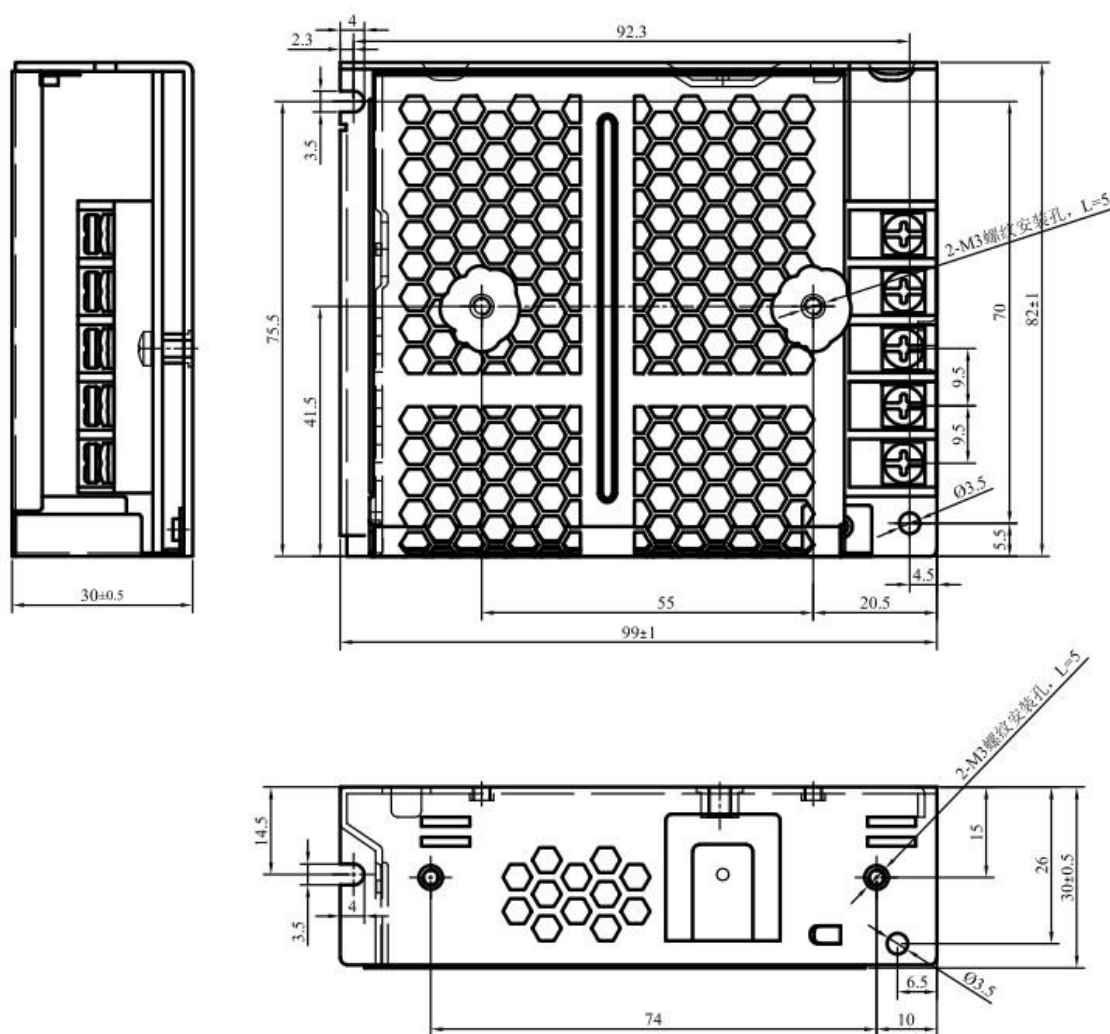
● Load and temperature curve



● Static characteristic curve



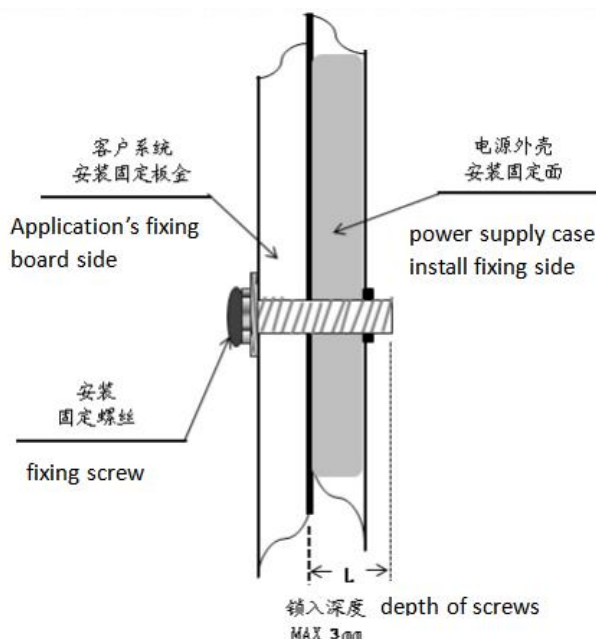
● Install drawing



● Installation

Warning

- Use mounting screws by M3*6mm,
- Max depth of screws into housing is 3mm,
- Right picture with more details.



● Instructions:

- 1、 please follow the installation instructions when use the power supply。
- 2、 Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment。
- 3、 Before power on, please use a multimeter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on。
- 4、 Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.
- 5、 In order to ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded (ground wire please thicker than AWG18#)。
- 6、 If the power supply fails, please do not repair it without permission. Please contact our customer service department as soon as possible, customer service line: 86-519-85215050。

● Transport、storage:

1、 Transport:

The package is suitable for shipping by automobiles, ships, airs, trains, etc. During transportation, it shall be rain proof,loaded and unloaded gently。

2、 Storage:

When the product is not in use, it shall be placed in the packing box. The storage environment temperature and relative humidity shall meet the requirements of the product. No corrosive gas or product in the warehouse, and no strong mechanical vibration, impact and strong magnetic field. The packing box shall be padded at least 20cm above the ground, and not be soaked. If the storage time is too long (more than 1 year), it shall be rechecked by professionals before use.