



**Features**

- -25~+70℃ working temperature (refer to derating curve)
- Protections: short circuit /overload/ over voltage
- 100% pass aging test
- High efficiency, high reliability
- 2 years warranty

● **Application:**

Industrial control system, machinery and electrical equipment, electronic instruments, industrial automation, household appliances, etc.

● **Product certification:**



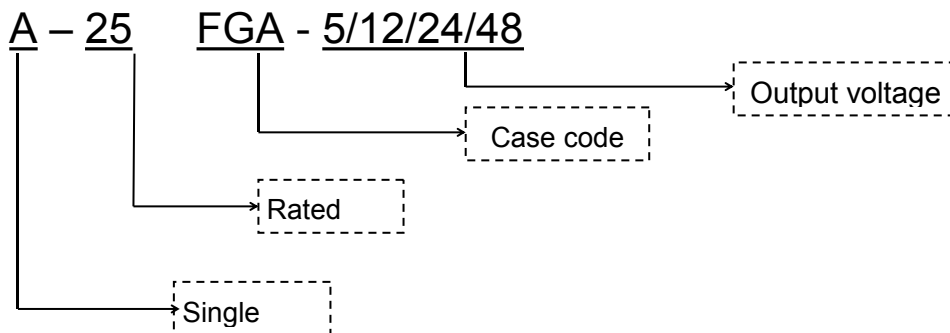
● **Standards:**

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

● **Product description:**

A-25FGA series is a 25W single circuit constant voltage output industrial control power supply, which has passed 3C high altitude certification. The voltage input range is 176 ~ 264Vac, and the output voltage is 5V, 12V, 24V, 48V, etc. it is suitable for industrial control system, mechanical and electrical equipment, electronic instruments, industrial automation, household appliances and other industrial fields. Super high efficiency, compact shell design and good heat dissipation ensure the long-term stable work of this series of products.

● **Named:**

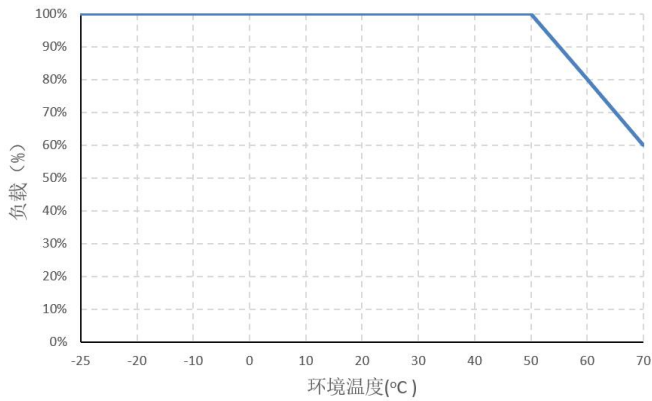


**● Specification**

| Model            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A-25FGA-5                                                                                                                                                                            | A-25FGA-12                        | A-25FGA-24 | A-25FGA-48 |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|------------|
| Input            | Voltage range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 176~264VAC                                                                                                                                                                           |                                   |            |            |
|                  | Input current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 230VAC/0.33A                                                                                                                                                                         |                                   |            |            |
|                  | Efficiency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≥80%                                                                                                                                                                                 | ≥81%                              | ≥82%       | ≥82%       |
|                  | Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 47~63HZ                                                                                                                                                                              |                                   |            |            |
|                  | Leakage current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <0.75mA/240VAC                                                                                                                                                                       |                                   |            |            |
|                  | Inrush current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50A/230VAC cold start                                                                                                                                                                |                                   |            |            |
| Output           | DC voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5V                                                                                                                                                                                   | 12V                               | 24V        | 48V        |
|                  | Rated current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5A                                                                                                                                                                                   | 2.1A                              | 1.1A       | 0.55A      |
|                  | Power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 25W                                                                                                                                                                                  | 25.2W                             | 26.4W      | 26.4W      |
|                  | Voltage adj.range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4.5~5.5V                                                                                                                                                                             | 10.8~13.2V                        | 21.6~26.4V | 44~52V     |
|                  | Ripple and noise                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 100mVp-p                                                                                                                                                                             | 120mVp-p                          | 150mVp-p   | 200mVp-p   |
|                  | Set up,rise time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2500ms, 50ms/230VAC full load                                                                                                                                                        |                                   |            |            |
|                  | Hold up time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 20ms/230VAC full load                                                                                                                                                                |                                   |            |            |
|                  | Line regulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ±0.5%                                                                                                                                                                                | ±0.5%                             | ±0.5%      | ±0.5%      |
|                  | Load regulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ±2.0%                                                                                                                                                                                | ±1.0%                             | ±1.0%      | ±1.0%      |
|                  | Output Voltage Accuracy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ±2.0%                                                                                                                                                                                | ±2.0%                             | ±1.0%      | ±1.0%      |
|                  | EMC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | EMS                                                                                                                                                                                  | EN55035 ;EN61000-4-2,3,4,5,6,8,11 |            |            |
| Harmonic current |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | GB17625.1;EN61000-3-2,-3 limited                                                                                                                                                     |                                   |            |            |
| EMC              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN55032, Class B                                                                                                                                                                     |                                   |            |            |
| Safety           | Safety standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Design refer :GB4943/UL1012                                                                                                                                                          |                                   |            |            |
|                  | Withstand voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | I/P-O/P:I/P-O/P:3KVac/5mA; I/P-CASE:I/P-CASE:I/P-CASE:1.5KVac/5mA;<br>O/P-CASE:O/P-CASE:0.5KVDC/5mA 1min for each test                                                               |                                   |            |            |
|                  | Isolation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | I/P-O/P: 100M ohms; I/P-Case:100M ohms; O/P-Case:50M ohms                                                                                                                            |                                   |            |            |
|                  | Leak current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | I/P-FG≤0.75mA; (Input:240Vac, frequency:50Hz)                                                                                                                                        |                                   |            |            |
| Protection       | Over voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5.8~8V                                                                                                                                                                               | 13.5~17V                          | 27~33V     | 54~64V     |
|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Hiccup mode                                                                                                                                                                          |                                   |            |            |
|                  | Over load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 110~160% rated Hiccup mode,auto-recovery                                                                                                                                             |                                   |            |            |
|                  | Over temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | /                                                                                                                                                                                    |                                   |            |            |
|                  | Short circuit Hiccup mode,auto-recovery after remove fault condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                      |                                   |            |            |
| Environment      | Working Temp&humidity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -25~70℃ 20%~95%RH no condensing (refer to derating curve)                                                                                                                            |                                   |            |            |
|                  | Storage Temp&humidity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -30℃~80℃; 10%~95%RH no condensing                                                                                                                                                    |                                   |            |            |
|                  | Vibration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10~500Hz,2G, 10min/1 cycle,60min.each along X,Y, Z axes six sweep cycles                                                                                                             |                                   |            |            |
|                  | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Under 25℃:500000Hrs, MIL-217 Method                                                                                                                                                  |                                   |            |            |
| Others           | SIZE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 91.5*51*28 mm (L*W*H)                                                                                                                                                                |                                   |            |            |
|                  | Packing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.23Kg/pc,96pcs/ctn, 17.5KG/ctn                                                                                                                                                      |                                   |            |            |
|                  | Cooling mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input checked="" type="checkbox"/> free air <input type="checkbox"/> with fan                                                                                                       |                                   |            |            |
|                  | Extension mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> PCB double side conformal coating <input type="checkbox"/> block with cover <input type="checkbox"/> ow temp start (-40℃)<br><input type="checkbox"/> Other |                                   |            |            |
| Note             | <p>*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.</p> <p>*Ripple&amp;noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>*All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25℃ of ambient temperature.</p> <p>*the auxiliary heat dissipation of aluminum plate with an area of 400 * 400 * 3mm must be used when full load working.</p> <p>*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.</p> |                                                                                                                                                                                      |                                   |            |            |

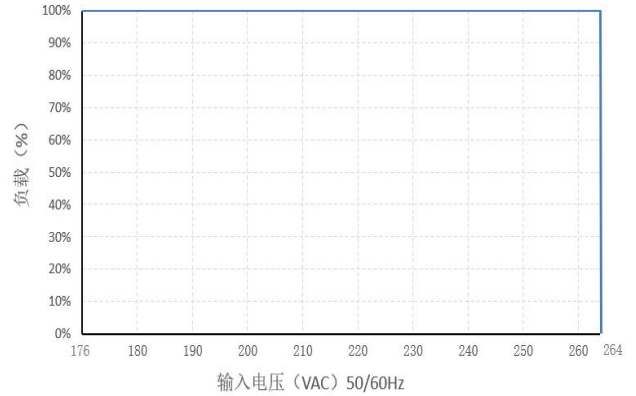
● Load and temperature curve

负载vs环境温度

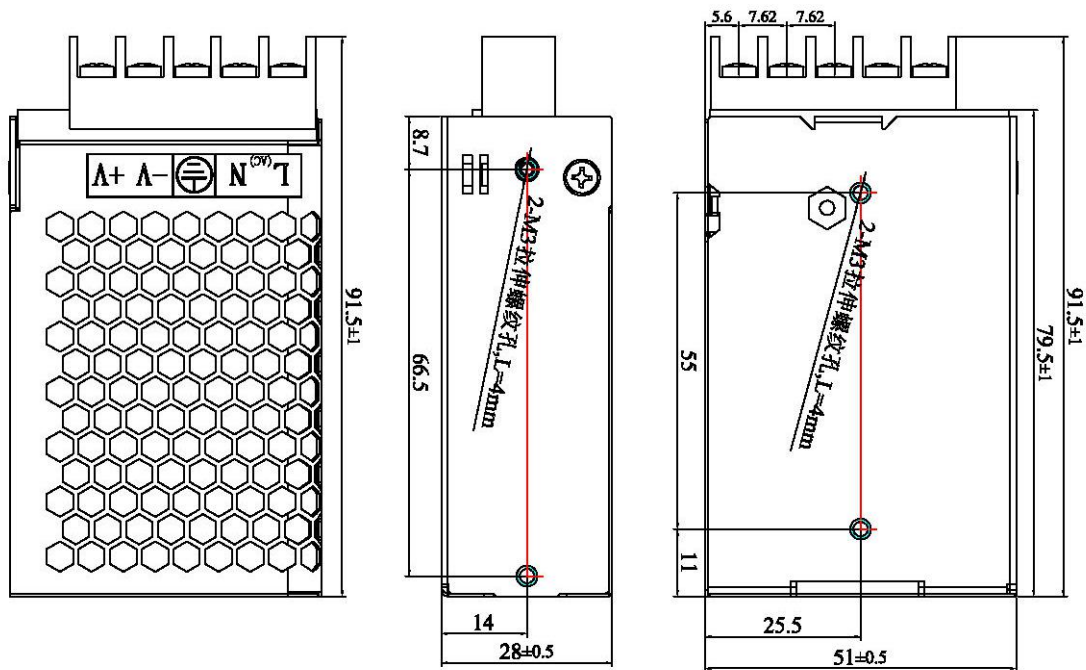


Static characteristic curve

负载vs输入电压



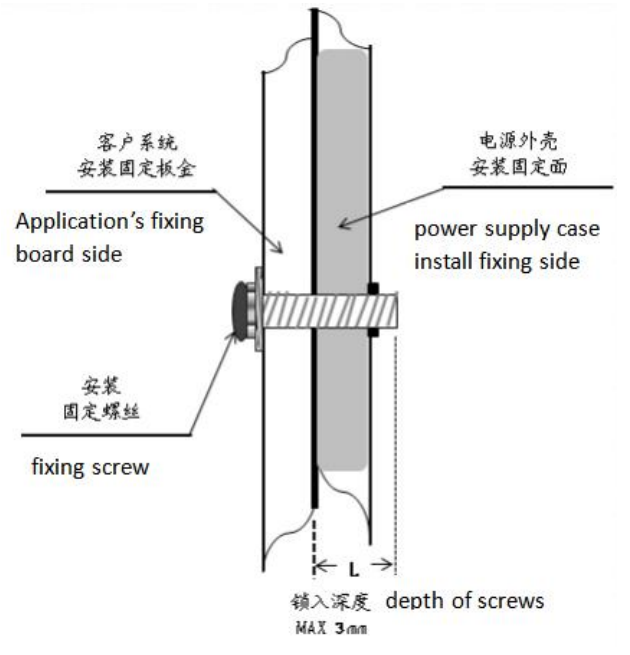
● Install drawing



● **Install Installation**

**Warning**

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



● **Use 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.