

# **Specification**

| Project NO. | PYW000257-18033 | Model. | AFCU-60D    |  |  |
|-------------|-----------------|--------|-------------|--|--|
| Rev.        | Rev. S01        |        | Huang Tujun |  |  |

| Prepared | Date |  |
|----------|------|--|
| Checked  | Date |  |
| Approved | Date |  |

| Change Reason and content: |       |
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## DONGGUAN PYW ELECTRONICS TECH. CO.,LTD.

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#### **■Feature:**

- Global voltage input: 90 ~ 264Vac, 100 ~ 370Vdc
- Meet the safety design requirements
- Compact structure, easy installation, output terminal with protective cover
- Ultra-wide operating temperature range (-25°C  $\sim$  70°C)
- Comprehensive protection: overload/short circuit/overvoltage
- Luxury electrolytic capacitor, high reliability, long life
- 2 years warranty



#### Picture for reference

|   | ecifications                       | AEGU   | 07 5 1 1 5 D                      |                    |                      |                | J             |                | 1 101010 | for refere | 1100 |
|---|------------------------------------|--|-----------------------------------|--------------------|----------------------|----------------|---------------|----------------|----------|------------|------|
| Product n   | name Note 1                        |  | 07.5+15R                          |                    |                      |                |               |                |          |            |      |
|   | Rated output                       | 7.5V   | 15V                               |                    | ,                    |                | ,             |                | 1        |            | ,    |
|   | Settingrange(10%l                  | 5~5.05V  | 0.1.5.4                           |                    | /                    |                | /             |                | /        |            | 1    |
|   | Output current                     | 0.2A-5.0   0-1.5A  |                                   |                    |                      |                |               |                |          |            |      |
|   | Rated output                       | 60W  |                                   |                    |                      |                |               |                |          |            |      |
| exportat  | Ripple noise note 2                | <50 mV   | <50 mV                            |                    |                      |                |               |                |          |            | 1    |
| ion   | Output control                     | -5%~+5   | ±5.0%                             |                    |                      |                |               |                | /        |            | 1    |
|   | Pressure Output start time         | ±2.0%  |                                   | <br> 1.1aad\       |                      |                |               |                |          |            |      |
|   | Output start time Output hold time | ≤1S (230Vac input, Full load)  |                                   |                    |                      |                |               |                |          |            |      |
|   | Voltage overshoot                  | ≥20mS(230Vac input, Full load) <5.0%   |                                   |                    |                      |                |               |                |          |            |      |
|   | Dynamic Dynamic                    |  | T and 100/X                       | 7mm 1              | 00/ <b>5</b> 00/I as | d. 50/Vm m     | 500/ 1000/T   | and, 50/Vm .   | _        |            |      |
|   | Input voltage range                |  | 6 <u>Load:10%V</u><br>c/ 47~63Hz, |                    |                      | id: 5%Vp-p     | 50%-100%L     | 340: 370 v p-p | p        |            |      |
|   | Rated input                        |  | ac / $47 \sim 63112$ ,            |                    |                      |                |               |                |          |            |      |
|   | Starting voltage                   | 90Vac  | ac / 4 /~0311.                    | <u>z, 100 - 37</u> | ovac                 |                |               |                |          |            |      |
| input   | Efficiency (typical                | 81%  |                                   |                    |                      |                |               |                |          |            |      |
|   | Input current                      | <1.2A  |                                   |                    |                      |                |               |                |          |            |      |
|   | Starting impulse                   |  | 4Vac Cold st                      | art                |                      |                |               |                |          |            |      |
| Protecti  | Output overpower                   | 105%~150   |                                   | ar t               |                      |                |               |                |          |            |      |
|   | Output overvoltage                 |  |                                   | -recovery          |                      |                |               |                |          |            |      |
| on  | Output overcurrent                 | Constant pressure, self-recovery 105%~150%   |                                   |                    |                      |                |               |                |          |            |      |
| functio   | Output                             |  | chine, long-to                    | erm self-rec       | overv                |                |               |                |          |            |      |
| n   | Overtemperature                    | /  | , <u></u>                         |                    |                      |                |               |                |          |            |      |
| Workin  | Operating                          | -25°C~70°  | C; 20%~9                          | 0%RH No            | condensing           | <u> </u>       |               |                |          |            |      |
| G.  | Store temperature                  | -30°C~85°  | C; 10%~9:                         | 5%RH No            | condensing           | Ţ              |               |                |          |            |      |
| g   | Vibration                          | 10 ~ 500H  | z, 2G 10min                       | ./1cycle, pe       | riod for60m          | in. each along | g X,Y, Z axes |                |          |            |      |
| environ   | strike                             | 10 ~ 500Hz, 2G 10min./1cycle, period for60min. each along X,Y, Z axes 20G/11mS pulse ,3 times at each X,Y,Z axes |                                   |                    |                      |                |               |                |          |            |      |
| ment  | altitude                           | 5000m  |                                   |                    |                      |                |               |                |          |            |      |
| Safety  | Safety standard                    | GB4943/EN60950/EN62368   |                                   |                    |                      |                |               |                |          |            |      |
| and   | Leakage current                    | Primary side - secondary side ≤0.25mA Primary side - Earth ≤3.5mA  |                                   |                    |                      |                |               |                |          |            |      |
| electro   | Insulation strength                | Input - Output :3KVac/10mA Input - Ground :1.5KVac/10mA Output - Ground :500Vdc/10mA Test time 1min              |                                   |                    |                      |                |               |                |          |            |      |
| magneti   | Insulation                         | Input - Output: 100M ohms Input - Earth: 100M ohms Output - Earth: 100M ohms                                     |                                   |                    |                      |                |               |                |          |            |      |
|   | Harmonic wave                      | EN61000-3-2,-3   |                                   |                    |                      |                |               |                |          |            |      |
| c   | Electromagnetic                    | EN55022/EN55032/EN55024 Class A;   |                                   |                    |                      |                |               |                |          |            |      |
| compati   | Electromagnetic                    | EN61000-4-2,3,4,5,6,8,11 A 类设备   |                                   |                    |                      |                |               |                |          |            |      |
|   | Size (L * W * H)                   | 145mm×78mm×38mm  |                                   |                    |                      |                |               |                |          |            |      |
| other   | Connecting                         | 95-5PFence type with protective cover terminal block   |                                   |                    |                      |                |               |                |          |            |      |
|   | Cooling mode                       | Natural air cooling  |                                   |                    |                      |                |               |                |          |            |      |
| reliabili Design MTBF 200,000Hrs AT 25°C, MIL-217 Method 2 Components Stress Method |                                    |  |                                   |                    |                      |                |               |                |          |            |      |
| reliabili   | Design MTBF                        | 200,000111   | 5 A1 25 C, 1                      | VIIL-21/ IVI       | ziilou z Con         | iponents suc   | SS MEMOU      |                |          |            |      |

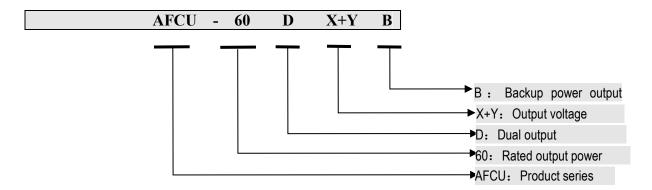
Note 2: Ripple noise is connected using 12# twisted pair, and at 20MHz bandwidth, 0.1uF and 10uF capacitors in parallel.

Note 3: -5V output load: When the ratio of 5V output load is in the ratio range of 2:1 ~ 1:6, the voltage regulator accuracy of -5V is  $\pm 5.0\%$ ; If remark other limit load ratio ranges exist, confirm the impact of the -5V output range on system reliability. If the -5V is in the air, the -5V output does not affect the system and the reliability of the power module. 4:. For details, see the derating curve, positioning diagram, and installation mode description.

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## DONGGUAN PYW ELECTRONICS TECH. CO.,LTD. Model: AFCU-60DB Series

## **Model Code Description:**

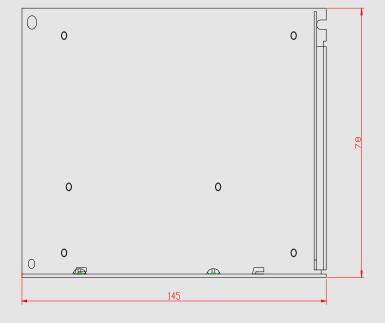


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## Mechanical: Unit: mm





#### Input terminal definition:

| Pin N | Pin No. Assignment |            | Terminal                  |
|-------|--------------------|------------|---------------------------|
|       | 1                  | Null line  |                           |
|       | 2                  | Live line  | 85-7 Fence terminal block |
|       | 3                  | Earth wire |                           |

#### Dc output terminal definition:

| Pin N | 0. | Assignment                     | Terminal                  |
|-------|----|--------------------------------|---------------------------|
|       | 7  | V1 The main output is positive |                           |
|       | 6  | V1 The main output is negative | 85-7 Fence terminal block |
|       | 5  | V2 The main output is negative |                           |
|       | 4  | V2 The main output is positive |                           |

## Installation mode description:

Install two M3 flat washer screws at positions A-B in the positioning diagram. The length of the screws inserted into the housing should not exceed 3mm.

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#### **Product installation and instruction:**

- Refer to the mechanical to select the appropriate installation. If necessary, the diameter of the kelly wire is no less than AWG #1.
- 2. Make the electrical connection is correct, to avoid damage to the SPS or equipment: Input & Output, Ac & DC, Positive & negative, Input Voltage Range.
- Do not touch circuit board to avoid electric shock when SPS is working. Do not touch to avoid heat in three minutes after working. Do not touch the soldering side.
- Let it work at ventilated conditions to improve reliability. Do not make it ON/OFF too quickly. Any condition is out of the rated range, please contact FAE for suggestion.
- 5. If the SPS works abnormally, do not open to repair except professional, contact FAE for support.

#### Packaging, transportation, storage:

- Package: Unless customer's special demand, Product name, model, manufacturer logo in the box; Date of production can be traced back.
- 2. Transport: Product packaging is suitable for road, railway, air shipping and sea shipping, etc. Be to civilized handling, waterproof, anti-fall, and to avoid severe impact.
- Storage: Do not disassemble or take off the packing box when the product is not in use. Keep 20cm away from ground, and 50cm away from Wall, heat source and air inlet. The storage temperature and relative humidity shall be in accordance with the specifications, and Avoid strong mechanical vibration, shock and strong magnetic field. If the storage period is more than two years, it should be tested again before use.

#### Reference standard:

- GB4943/EN60950/ EN62368: Safety of Information Technology Equipment.
- **GB2324:** Basic environmental testing procedures for electric and electronic products. 2.
- 3. EN55022/EN55032/EN55024: Information technology equipment – Radio disturbance characteristics - Limits and methods of measurement
- IEC61000-4: Electromagnetic compatibility (EMC) test and measurement techniques.
- IEC 61000-6-1: Standard and measurement of electromagnetic immunity for residential, commercial and light industrial 5. environments.
- 6. IEC 61000-6-2: Standard and measurement of electromagnetic immunity for products used in industrial environment.
- 7. GB17625.1-2022: The limits for the harmonic current from low-voltage electrical and electronic equipment (equipment input current≤16A per phase ).
- 8. **GB/T 17626:** Electromagnetic compatibility testing and measurement techniques.
- GB/T14714: General specification for switching power supply of micro computer system equipment.
- GB/T9254.1-2021: Radio disturbance limits and methods of measurement for information technology equipment.
- 11. DONGGUAN PYW ELECTRONICS TECH. CO.,LTD. Enterprise standard.

#### Statement

## Class A statement

## Warning

In a residential environment, running this device may cause radio

interference.

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