



Наличие и актуальные цены на

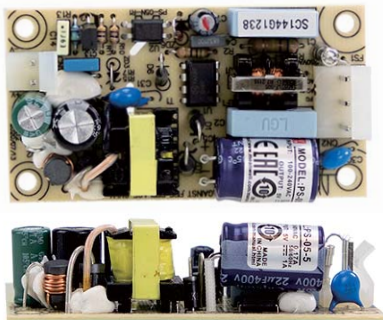
**PS-05-24**

<https://www.mean-well.ru/store/PS-05-24/>



## 5W Single Output Switching Power Supply

## PS-05 series



### GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

#### Features :

- Universal AC input / Full range
- Low leakage current <0.5mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Fix switching frequency at 67KHz
- Low cost
- High reliability
- 2 years warranty

User's Manual



BS EN/EN62368-1



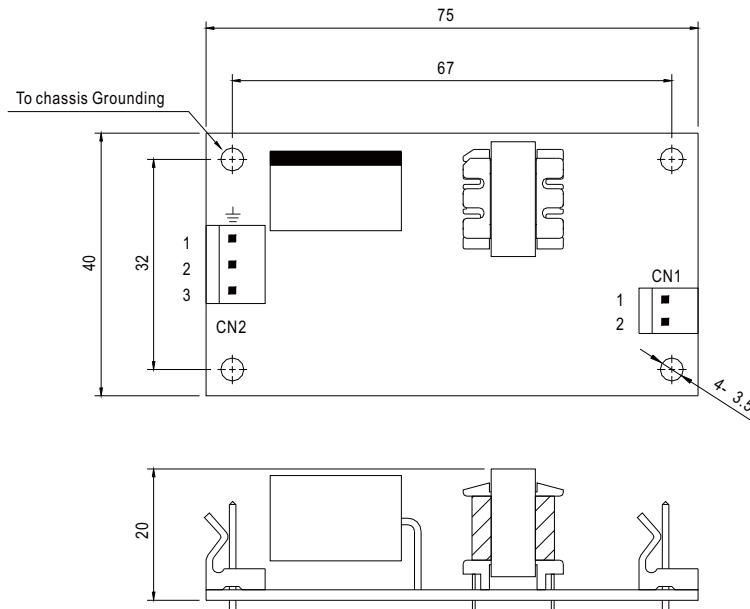
TPTC004 IEC62368-1

### SPECIFICATION

| MODEL                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PS-05-5                                                                                                                 | PS-05-12                                                                  | PS-05-15     | PS-05-24     | PS-05-48     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------|--------------|--------------|
| OUTPUT                     | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5V                                                                                                                      | 12V                                                                       | 15V          | 24V          | 48V          |
|                            | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1A                                                                                                                      | 0.45A                                                                     | 0.35A        | 0.22A        | 0.11A        |
|                            | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0 ~ 1.2A                                                                                                                | 0 ~ 0.5A                                                                  | 0 ~ 0.4A     | 0 ~ 0.25A    | 0 ~ 0.125A   |
|                            | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5W                                                                                                                      | 5.4W                                                                      | 5.25W        | 5.28W        | 5.28W        |
|                            | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 100mVp-p                                                                                                                | 120mVp-p                                                                  | 120mVp-p     | 200mVp-p     | 200mVp-p     |
|                            | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ± 2.0%                                                                                                                  | ± 2.0%                                                                    | ± 2.0%       | ± 2.0%       | ± 1.0%       |
|                            | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ± 1.0%                                                                                                                  | ± 1.0%                                                                    | ± 1.0%       | ± 0.5%       | ± 0.5%       |
|                            | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ± 1.0%                                                                                                                  | ± 1.0%                                                                    | ± 1.0%       | ± 0.5%       | ± 0.5%       |
|                            | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1000ms, 20ms                                                                                                            |                                                                           |              |              |              |
| HOLD UP TIME(Typ.)         | 100ms at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                         |                                                                           |              |              |              |
| INPUT                      | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 85 ~ 264VAC 120 ~ 370VDC                                                                                                |                                                                           |              |              |              |
|                            | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 47 ~ 63Hz                                                                                                               |                                                                           |              |              |              |
|                            | EFFICIENCY(Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 70%                                                                                                                     | 75%                                                                       | 75%          | 76%          | 76%          |
|                            | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.15A/115VAC 0.07A/230VAC                                                                                               |                                                                           |              |              |              |
|                            | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | COLD START 30A/230VAC                                                                                                   |                                                                           |              |              |              |
|                            | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <0.5mA / 240VAC                                                                                                         |                                                                           |              |              |              |
| PROTECTION                 | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Above 105% rated output power<br>Protection type : Hiccup mode, recovery automatically after fault condition is removed |                                                                           |              |              |              |
|                            | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5.75 ~ 6.75V                                                                                                            | 13.8 ~ 16.2V                                                              | 17.2 ~ 20.2V | 27.6 ~ 32.4V | 55.2 ~ 64.8V |
|                            | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Hiccup mode, recovery automatically after fault condition is removed                                                    |                                                                           |              |              |              |
|                            | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | -10 ~ +60℃ (Refer to "Derating Curve")                                                                                  |                                                                           |              |              |              |
| ENVIRONMENT                | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20 ~ 90% RH non-condensing                                                                                              |                                                                           |              |              |              |
|                            | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -20 ~ +85℃, 10 ~ 95% RH                                                                                                 |                                                                           |              |              |              |
|                            | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ±0.05%/℃ (0 ~ 50℃)                                                                                                      |                                                                           |              |              |              |
|                            | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                 |                                                                           |              |              |              |
|                            | SAFETY & EMC<br>(Note 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SAFETY STANDARDS                                                                                                        | TUV BS EN/EN62368-1,EAC TP TC 004 approved, IEC62368-1 CB approved by TUV |              |              |              |
| WITHSTAND VOLTAGE          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I/P-O/P:3KVAC                                                                                                           |                                                                           |              |              |              |
| ISOLATION RESISTANCE       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH                                                                               |                                                                           |              |              |              |
| EMI CONDUCTION & RADIATION |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020                                                            |                                                                           |              |              |              |
| HARMONIC CURRENT           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Compliance to BS EN/EN61000-3-2,-3                                                                                      |                                                                           |              |              |              |
| EMS IMMUNITY               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020                        |                                                                           |              |              |              |
| OTHERS                     | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6873.2K hrs min. Telcordia SR-332 (Bellcore) ; 1271.1K hrs min. MIL-HDBK-217F (25℃)                                     |                                                                           |              |              |              |
|                            | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 75*40*20mm (L*W*H)                                                                                                      |                                                                           |              |              |              |
|                            | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.05Kg; 120pcs/6.25Kg/0.56CUFT                                                                                          |                                                                           |              |              |              |
| NOTE                       | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>5. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |                                                                                                                         |                                                                           |              |              |              |

## Mechanical Specification

(Unit: mm , tolerance  $\pm 1$  mm)



AC Input Connector (CN2) : Molex 5285-03 or equivalent

| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | FG $\perp$ | Molex 5058 or equivalent | Molex 2478 or equivalent |
| 2       | AC/N       |                          |                          |
| 3       | AC/L       |                          |                          |

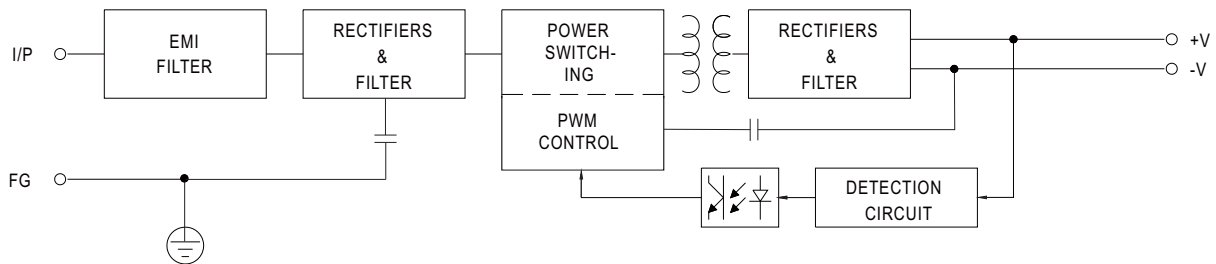
DC Output Connector (CN1) : Molex 5273-02 or equivalent

| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | +V         | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 2       | -V         |                          |                          |

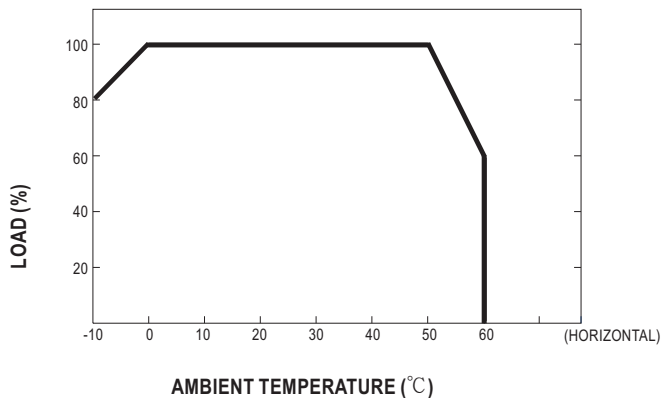
$\perp$  : Grounding Required  
CN2: Pin 1 is safety ground

## Block Diagram

fosc : 67KHz



## Derating Curve



## Static Characteristics

