# OTL-26-E-W-120-48


DATASHEET

## Key Features

- OTL-26-E-W-120-48 is an economical 120W rail-mounted power supply compliant with German industrial standards. It is designed for installation on TS-35/7.5 or TS-35/15 rails, supporting full-range AC input from 90Vac to 264Vac. All specifications meet the EN61000-3-2 standard, which specifies harmonic current limits for EU applications.
- Designed with a metal casing for enhanced heat dissipation, this power supply achieves over 90% efficiency at 220V. Operating effectively in air-circulated environments with temperatures ranging from-40°C to 70°C, it features constant current mode overload protection. Ideal for inductive and capacitive loads, its comprehensive protection system and compliance with industrial control

▶ Product specification technical

| Product Model | OTL-26-E-W-60-48 | |
|---|---|---|
| output | Output groups | 1 |
| | rated output voltage | 48Vdc |
| | factory set output voltage | 48.00-48.2Vdc （Vin：220Vac / LOAD：0A） |
| | output rated current | 2.5A |
| | output current range | 0～2.5A |
| | output rating | 120W |
| | total peak output power | Total peak power: 160W (sustained for 10 seconds at 220Vac) |
| | peak anode current | 3.5A (Sustained for 10 seconds at 220Vac) |
| | ripple noise | Peak-to-peak voltage ≤100mV. (Measurement method: Connect a 0.1 μ F and 47 μ F capacitor in parallel with the terminal, and measure at 20MHz bandwidth) |
| | output voltage regulation range | 47～56Vdc |
| | regulation accuracy | ±3% (@ 90-264Vac input, 100% load) |
| | linear adjustment rate | ±0.5% (@ 90-264Vac input, 100% load) |
| | load regulation | ±1% (@ 90-264Vac input, 0-100% load) |
| | output startup time | < 2S @ nominal input (100% load ) |
| | output hold time | > 20ms @ 115Vac,<br>> 50 ms @ 230Vac (100% load ) |
| | voltage overshoot | ≤5% |
| Import | input voltage range | 90～264Vac |
| | rated input voltage range | 100～240Vac |
| | frequency range | 47Hz～63Hz |
| | rated frequency | 50Hz/60Hz |
| | starting voltage | 90Vac |
| | productiveness | > 85.0% @ 115Vac, > 90.0% @ 230Vac |
| | input currenton | < 2.40A @ 115Vac, < 1.20A @ 230Vac |
| | initiation current | < 35A @ 115Vac & 230Vac |
| | power factor | >0.6 |

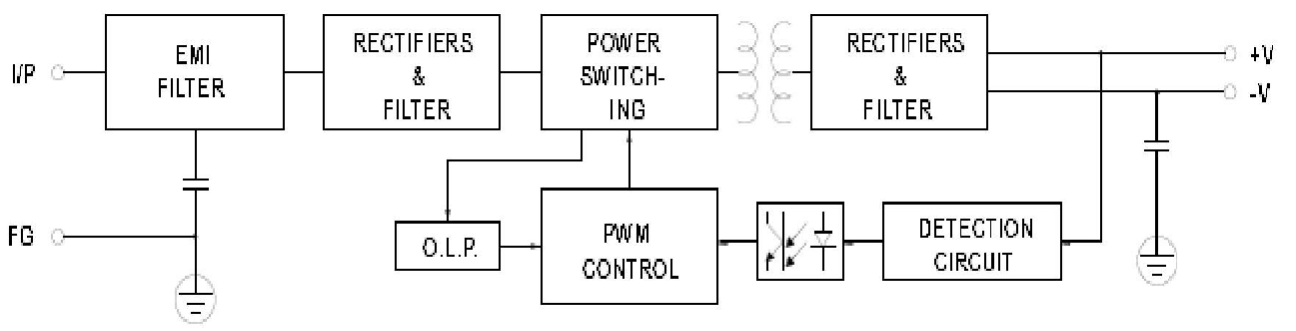
| | | | |
|---|---|---|---|
| defencive function | output | over power protection | 130～160W oscillating test (Test method: Output current increases continuously until protection activates. Protection mode: Oscillating test. System automatically resumes after overpower condition is eliminated) |
| | | overvoltage crowbar | 61-67V protection mode: Output self-locking protection is disabled. Power must be reapplied to restore operation. |
| | | overcurrent protection | 2.8～3.7A oscillating test (Test method: The output current increases continuously until protection is triggered; Protection mode: Oscillating, which automatically resumes normal operation after overcurrent is eliminated.) |
| | | short-circuit protection | A copper wire with sufficient cross-sectional area and a length of 15cm±5cm can be directly short-circuited at the power output port. It can sustain a long-term short circuit, and the system will automatically restore after the short circuit is eliminated. |
| work environment | Working temperature and humidity | -40～70℃; 20%～95%RH | |
| | Storage temperature and humidity | -40°C to 85°C; 10% to 95% relative humidity (RH), no condensation | |
| | temperature coefficient | ±0.03%/℃ (0～50℃) | |
| | vibrate | Frequency range: 10–500 Hz, acceleration: 2 G, each sweep cycle: 10 min, with 6 sweep cycles performed along the X, Y, and Z axes. | |
| | lash | Acceleration 20G, duration 11ms, with 3 impacts along the X, Y, and Z axes | |
| | above sea level | 2000m | |

| | | | |
|---|---|---|---|
| Safety and Electromagnetic Compatibility Standards | safety standards | EN IEC 62368-1 ■ Reference □ Certification | |
| | insulation strength | Input-Output: 3KVac/10mA; Input-House: 1.5KVac/10mA; Output-House: 0.5KVDC/10mA. Each test is conducted for 1 minute. | |
| | ground test<br>leakage current | Test conditions: 32A/2 minutes; Ground impedance: <0.1 ohms. | ground test |
| | | | leakage current |
| | insulation impedance | | |
| | electromagnetic interference<br>Harmonic current<br>electromagnetic anti-jamming capability | conducted interference | electromagnetic interference |
| | | radiatedradiated interference | |
| | | EN61000-3-2 CLASS D | Harmonic current |
| | | conduction disturbance | electromagnetic anti-jamming capability |
| | | radiation disturbance | |
| | | power frequency disturbance | |
| | | electrostatic disturbance | |
| other | | fast pulse train | |
| guarantee period | 5 years | | |

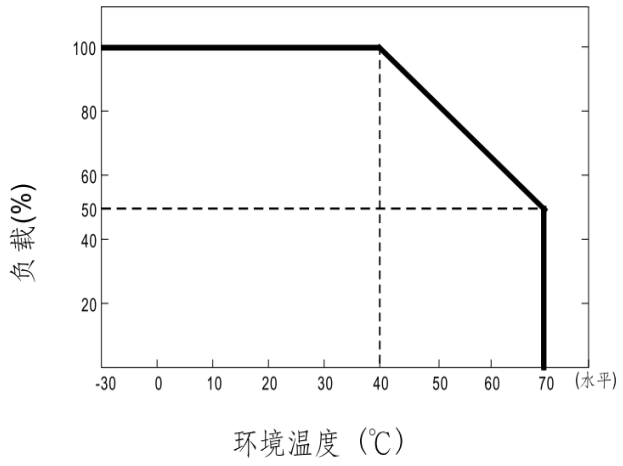
► **Remarks :**

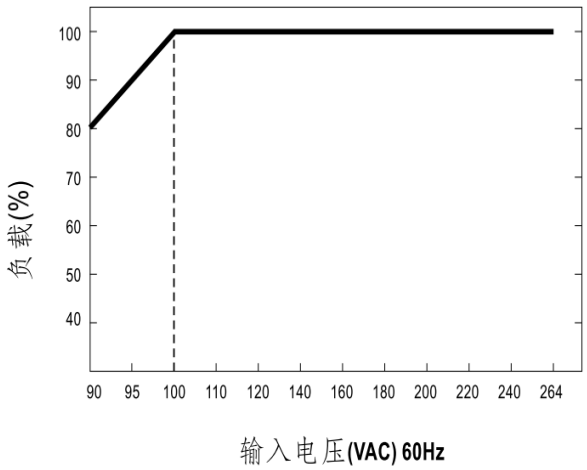
- Unless otherwise specified, all specifications are measured under the following conditions: 230VAC input, rated load, and ambient temperature of 25°C.
- Ripple and noise measurement method: Use a 12-inch twisted pair cable with 0.1μF and 47μF capacitors connected in parallel at the terminals, and perform measurements at a bandwidth of 20MHz.
- . Accuracy: includes set error, linear adjustment rate and load adjustment rate.
- The power supply should be considered as an integral component of the system. Electromagnetic compatibility (EMC) verification must be performed in conjunction with the final equipment.

► **Internal structure block diagram :**

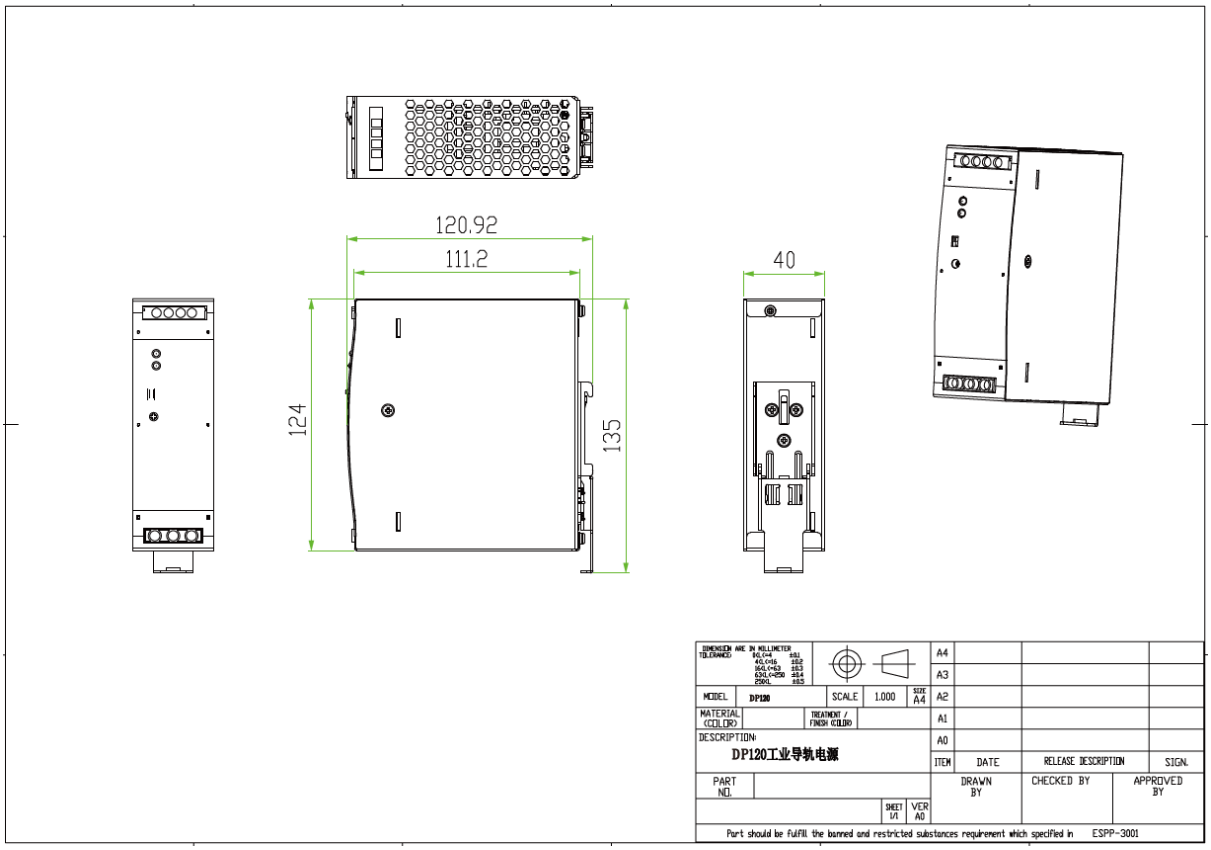


## Reduction curve, Static characteristic curve Reduction curve, Static characteristic curve,




## External dimensions



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