

48 V Industrial DIN Rail Power Supply 120W

ITT-120-48 48V, 120W DC Single Output Industrial DIN Rail Power Supply Unit

P/N: ITT-PS4196



The ITT series DIN Rail power supply units are stable power sources for industries that can experience varying temperatures and environments.

Compact Size with more Practicability and Convenience

ITT-120-48 is a power source for industrial Ethernet devices specially designed for the harsh working environment where it is hard to find suitable DC voltage power source.

The ITT-120-48 is part of an ITT Series that includes single DC output industrial DIN rail power supply units. These units accept universal 90-264 AC input voltage or DC input and provide 24V / 48V DC power output with various watt values. The ITT-120-48 is compact in size and can be installed on DIN rail TS-35 / 7.5 or 15. It is an ideal and convenient DC power feeding solution for industrial equipment under heavy industrial environments.

Stable Performance under Difficult Environments

The ITT Series power supply units provide various models with short circuit/overload/over voltage and over temperature protections for the stable operation of industrial Ethernet equipment. As they adopt the free air convection cooling system, they are able to operate under temperatures ranging from -20 to 70°C (maximum). Thus, the DC single output industrial DIN rail power supply units can be placed in almost any difficult environment.

Features:

- Power Input Voltage AC: 90~264VAC
- Input Voltage DC: 127-370VDC
- Power Output: 120 Watts, 48V DC, 2.5A
- Support production for short circuit/over current/over voltage
- Wide operation temperature range: -40°C~65
- 100% full load aging test
- High efficiency, long life time and high reliability
- Meet EMC Standard

SERVICES:
Guaranteed Warranty



Specifications:

| | |
|--------------------|--|
| OUTPUT | <ul style="list-style-type: none"> ➤ DC VOLTAGE: 48V ➤ RATED CURRENT: 2.5A ➤ CURRENT RANGE: 0 ~ 2.5A ➤ RATED POWER: 120W ➤ RIPPLE & NOISE (max.): 150mVp-p ➤ VOLTAGE ADJ. RANGE: 48 ~ 55V ➤ VOLTAGE TOLERANCE: ±1.0% ➤ LINE REGULATION: 0.5% ➤ LOAD REGULATION: ±1.0% ➤ SETUP, RISE TIME: <ul style="list-style-type: none"> 1200ms, 60ms/230VAC 2500ms, 60ms/115VAC at full load ➤ HOLD UP TIME (Typ.): <ul style="list-style-type: none"> 16ms/230VAC 10ms/115VAC at full load |
| INPUT | <ul style="list-style-type: none"> ➤ VOLTAGE RANGE: <ul style="list-style-type: none"> 90 ~ 264VAC 127 ~ 370VDC DC input operation possible by connecting AC/L (+), AC/N (-) ➤ FREQUENCY RANGE: 47 ~ 63Hz ➤ EFFICIENCY (Typ.): 89% ➤ AC CURRENT (Typ.): 2.25A/115VAC 1.3A/230VAC ➤ INRUSH CURRENT (Typ.): 20A/115VAC 35A/230VAC ➤ LEAKAGE CURRENT: <1mA / 240VAC |
| PROTECTION | <ul style="list-style-type: none"> ➤ OVERLOAD: 105 ~ 130% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed. ➤ OVER VOLTAGE: 56 ~ 65V Protection type: Shut down o/p voltage, re-power on to recover ➤ OVER TEMPERATURE: Shut down o/p voltage, re-power on to recover |
| ENVIRONMENT | <ul style="list-style-type: none"> ➤ WORKING TEMP.: -20 ~ +70°C (Refer to "Derating Curve") ➤ WORKING HUMIDITY: 20 ~ 95% RH non-condensing ➤ STORAGE TEMP., HUMIDITY: -40 ~ +85°C, 10 ~ 95% RH ➤ TEMP. COEFFICIENT: ±0.03%/°C (0 ~ 50°C) ➤ VIBRATION: Component: <ul style="list-style-type: none"> 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 |

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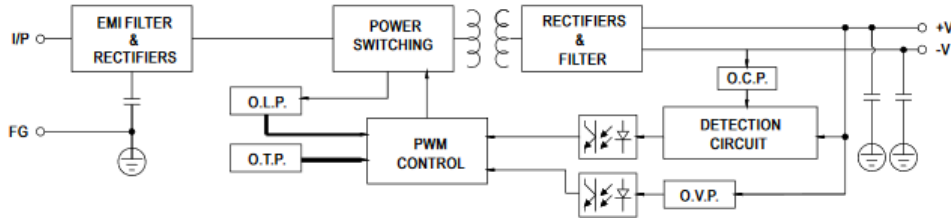
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|-------------------------|--|
| SAFETY & EMC | <ul style="list-style-type: none"> ➤ SAFETY STANDARDS: UI508, TUV EN60950-1 approved;(meet EN60204-1) ➤ WITHSTAND VOLTAGE: I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC ➤ ISOLATION RESISTANCE: I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25 °C/ 70% RH ➤ EMC EMISSION: Compliance to EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2,-3 ➤ EMC IMMUNITY: Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A |
| OTHERS | <ul style="list-style-type: none"> ➤ MTBF: 456.3K hrs min. MIL-HDBK-217F (25°C) ➤ DIMENSION: 40*125.2*113.5mm (W*H*D) ➤ PACKING: 0.6Kg; 20pcs/13Kg/1.16CUFT |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor 3. Tolerance: includes set up tolerance, line regulation and load regulation. 4. The power 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. 5. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the a*cent device is a heat source, 15mm clearance is recommended. 6. Derating may be needed under low input voltage. Please check the derating curve for more details. |

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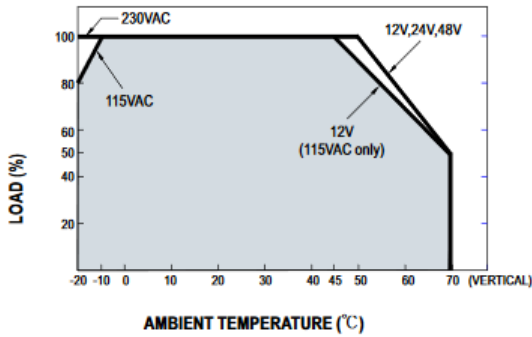


Block Diagram

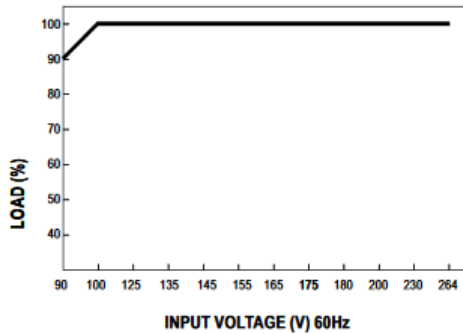
fosc : 70KHz



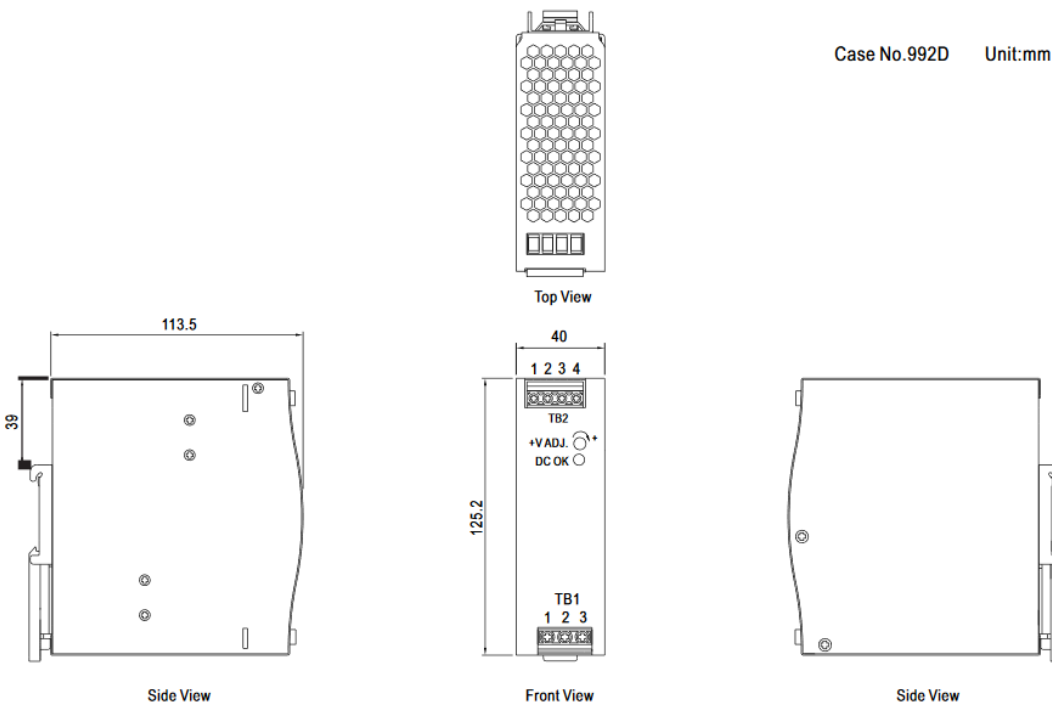
Derating Curve



Static Characteristics

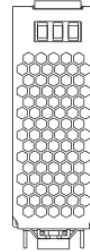


Case No.992D Unit:mm



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Bottom View

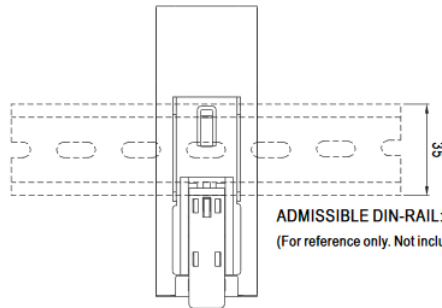
Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---------|--------------|
| 1 | FG ⊕ |
| 2 | AC/N or DC - |
| 3 | AC/L or DC + |

Terminal Pin No. Assignment (TB2)

| Pin No. | Assignment |
|---------|--------------|
| 1,2 | DC OUTPUT -V |
| 3,4 | DC OUTPUT +V |

■ Installation Instruction



Back View

ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15
(For reference only. Not included with unit.)

This series fits DIN-RAIL TS35/7.5 or TS35/15.

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