Datasheet | **IES7211-P240-48V**
240W Single Output Industrial DIN RAIL



Reliable, High-Efficiency Power Solution
Tailored for Industrial PoE Ethernet System

### Features

- Universal AC input/ Full range
- Protections: Short circuit/Overload /Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- BS EN/EN61000-6-2(BS EN/EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

### Applications

- Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

## Description

The IES7211-P240-48V is a reliable and cost-effective 240W DIN rail power supply, designed for seamless installation on TS-35/7.5 or TS-35/15 mounting rails. Its slim 63mm width is optimized for space-saving installations within control cabinets, making it an excellent choice for environments with limited space. This power supply supports a wide AC input range from 90VAC to 264VAC and fully complies with BS EN/EN61000-3-2, the European Union's standard for harmonic current, ensuring compliance with international regulations.

Built with a durable metal housing, the IES7211-P240-48V offers enhanced heat dissipation, delivering consistent performance even in demanding conditions. With an impressive efficiency of up to 89%, it operates reliably in ambient temperatures from -20°C to 70°C, relying solely on natural air convection. Equipped with a constant current mode for overload protection, it is highly versatile, accommodating various inductive and capacitive applications, making it a dependable solution for industrial power systems.

| **OUTPUT :** | **IES7211-P240-48V** |
|---|---|
| DC Voltage | 48V |
| Rated Current | 5A |
| Current Range | 0 ~ 5A |
| Rated Power | 240W |
| Ripple & Noise (max.) Note.2 | 150mVp-p |
| Voltage adj. Range | 48 ~ 55V |
| Voltage Tolerance Note.3 | ±1.0% |
| Line Regulation | ±0.5% |
| Load Regulation | ±1.0% |
| Setup, Rise Time | 1500ms, 100ms/230VAC 3000ms, 100ms/115VAC at full load |
| Hold Uptime (Typ.) | 28ms/230VAC 22ms/115VAC at full load |
| **INPUT** | |
| Voltage Range Note.4 | 90 ~ 264VAC; 127 ~ 370VDC |
| Frequency range | 47 ~ 63Hz |
| Efficiency (Typ.) | 90% |
| AC Current (Typ.) | 2.5A/115VAC; 1.3A/230VAC |
| Inrush Current (Typ.) | 20A/115VAC; 35A/230VAC |
| Leakage Current | <1mA/ 240VAC |
| **PROTECTION** | |
| Overload | 105 ~ 130% rated output power |
| Over Voltage | 56 ~ 65V [Protection type : Shut down o/p voltage, re-power on to recover] |
| Over Temperature | Protection type : Shut down o/p voltage, re-power on to recover |
| **ENVIRONMENT** | |
| Working Temp. | -20 ~ +70℃ (Refer to "Derating Curve") |
| Working Humidity | 20 ~ 95% RH non-condensing |
| Storage Temp., Humidity | -40 ~ +85℃ , 10 ~ 95% RH |
| Temp. Coefficient | ± 0.03%/℃(0-50℃) |
| Vibration | Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6 |
| **SAFETY& EMC (Note 4)** | |
| Safety standards | UL508, TUV BS EN/EN62368-1, EAC TP TC 004, BSMI CNS14336-1, BIS IS13252(Part1): 2010/EC 60950-1:2005(NOTE 8), KC K60950-1(for 48V only) approved: (meet BS EN/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℃/ 70% RH |
| EMC Emission | Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Cass B, BS EN/EN61000-3-2,-3 |
| EMC Immunity | Compliance to BS EN/EN61000-4-2.3,4,5.6,8,11,BS EN/EN55035,BS EN/EN61000-6-2(BS EN/EN50082-2).BS EN/EN61204-3, heavy industry level, EAC TP TC 020,KSC 9832(for 48V only) |

| **OTHERS** | **IES7211-P240-48V** |
|---|---|
| MTBF | 1645.2K hrs min. Telcordia SR-332 (Bellcore) ; 230.2K hrs min. MIL-HDBK-217F (25℃) |
| Dimension | 63*125.2*113.5mm (W*H*D) |

**NOTE**

All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.

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.

Tolerance : includes set up tolerance, line regulation and load regulation.

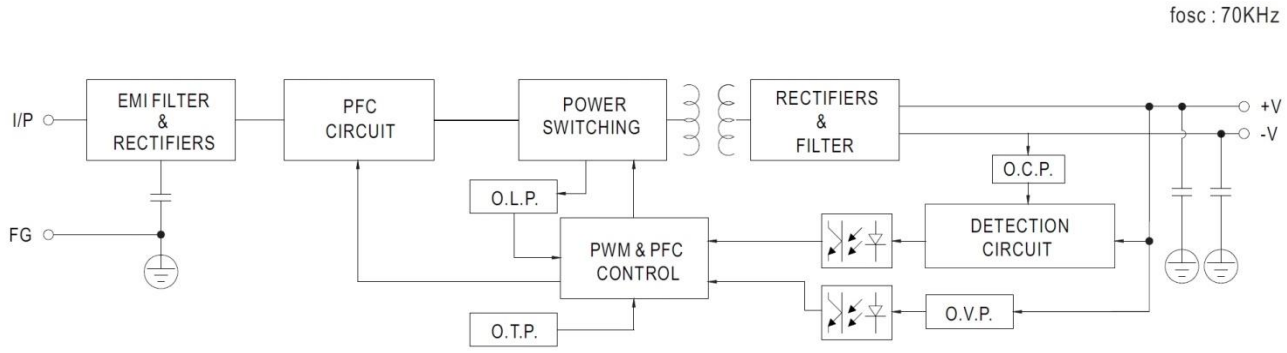
Derating may be needed under low input voltage .Please check the derating curve for more details.

Installation clearances : 40mm on top, 20mm on the botom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.

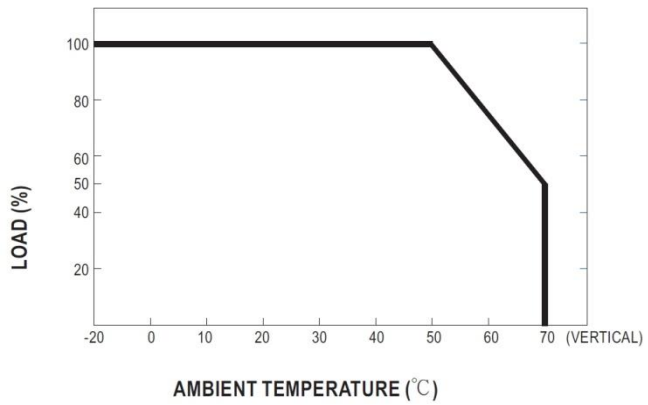
The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives, For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies.

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).

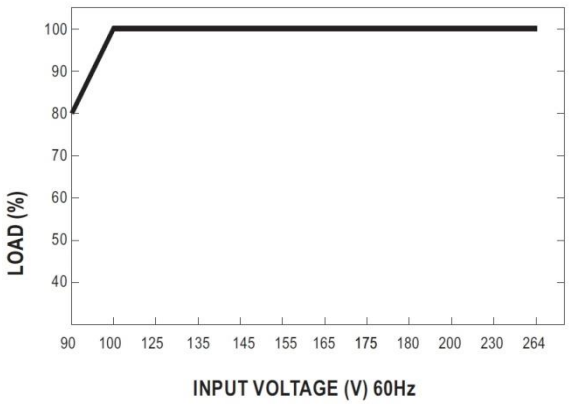
## Block Diagram



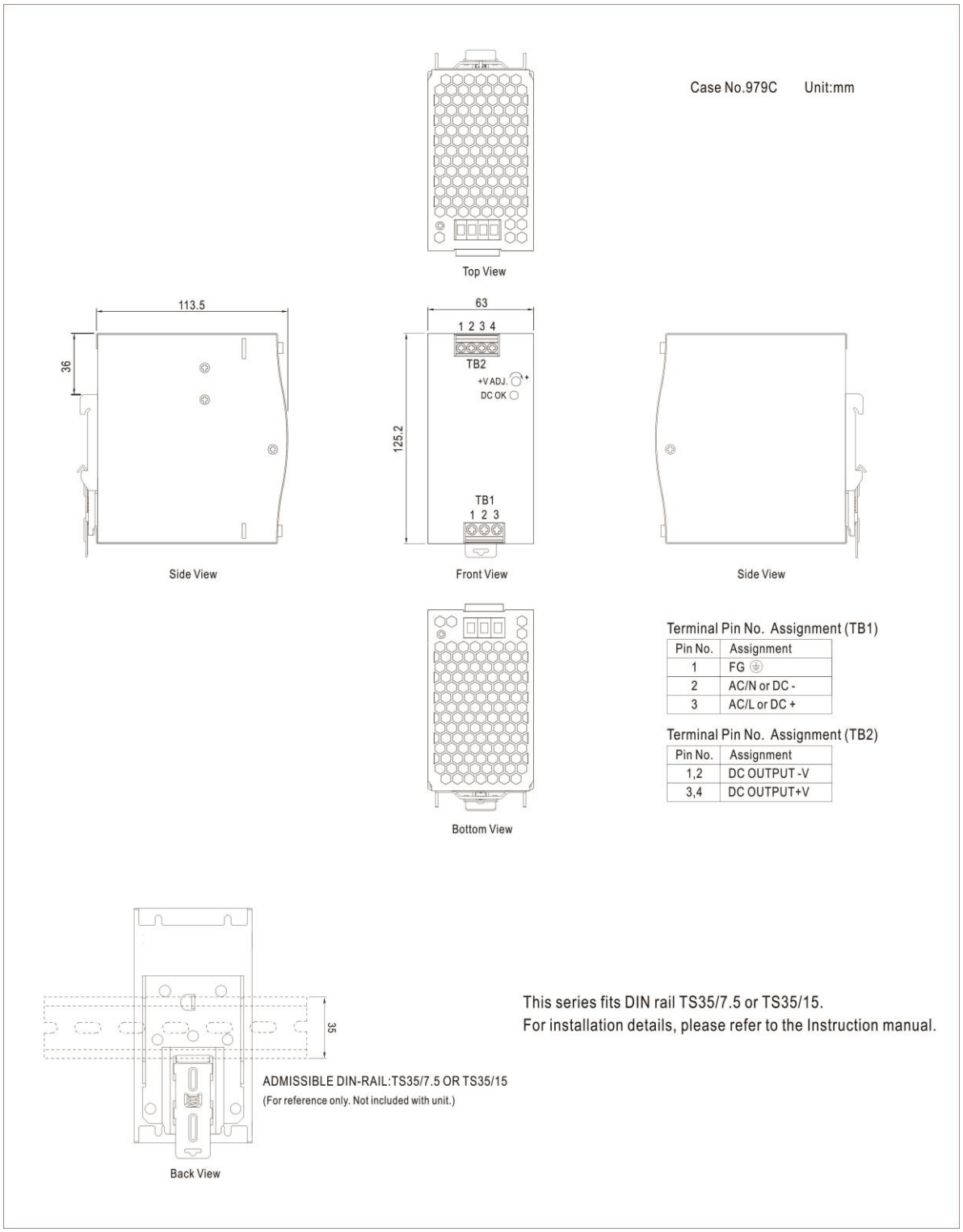

## Derating Curve




## Static Characteristics



## Mechanical Specification

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