



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-P120-48V is a reliable and cost-effective 120W DIN rail power supply, designed for seamless installation on TS-35/7.5 or TS-35/15 mounting rails. Its slim 32mm 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-P120-48V 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.



Datasheet | IES7211-P120-48V 120W Single Output Industrial DIN RAIL

OUTPUT:	IES7211-P120-48V
DC Voltage	48V
Rated Current	2.5A
Current Range	0 ~ 2.5A
Rated Power	120W
Ripple & Noise (max.) Note.2	150mVp-p
Voltage adj. Range	48 ~ 55V
Voltage Tolerance Note.3	\pm 1.0%
Line Regulation	$\pm 0.5\%$
Load Regulation	\pm 1.0%
Setup, Rise Time	1200ms, 60ms/230VAC; 2000ms, 60ms/115VAC at full load
Hold Uptime (Typ.)	60ms/230VAC; 12ms/115VAC at full load
INPUT	
Voltage Range Note.6	90 $^{\sim}$ 264VAC; 127 $^{\sim}$ 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	
Overload	105 $^{\sim}$ 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	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)	Compliance to Lecococ 2 o
Safety standards	UL508,TUV BS EN/EN62368-1, EAC TP TC 004 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 Class 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



OTHERS	IFS7211-P120-48V

MTBF

2637.2K hrs min. Telcordia SR-332 (Bellcore) ; 452.3K hrs min. MIL-HDBK-217F (25 °C)

Dimension 40*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.

The power supply is considered a component which wll be installed into a final equipment. The final equipment must be re-conirmed that it stll meets EMC directives.

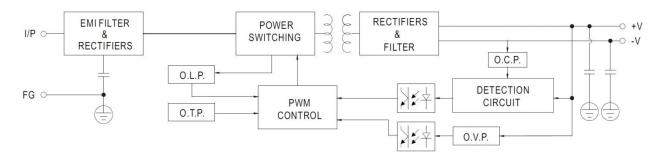
Installation clearances: 40mm on top, 20mm on the botom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.

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

The ambient temperature derating of 3.5° C/1000m with fanless models and of 5° C/1000m with fan models for operating altitude higher than 2000m(6500ft).

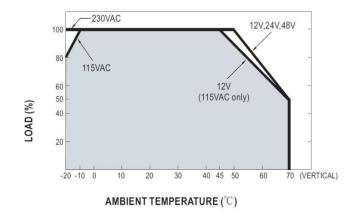
Block Diagram

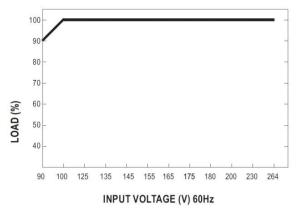
fosc: 70KHz



Derating Curve

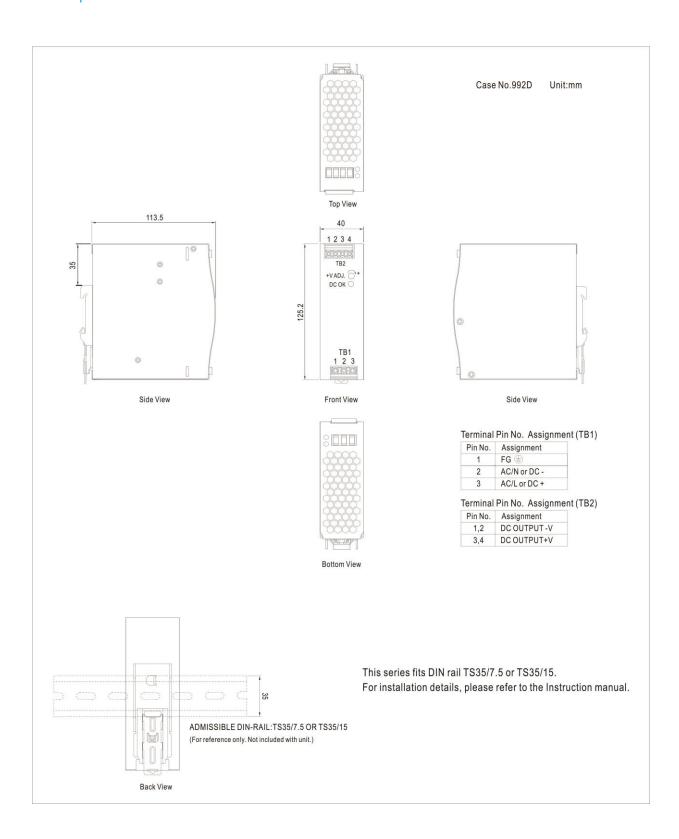
Static Characteristics







Mechanical Specification



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IES7211-P120-48V

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