RPS120 | INDUSTRIAL POWER SUPPLIES





Features:

- Supports 90 264 VAC / 127 370 VDC
- Efficiencies up to 89 %
 Protection against short circuit, overload, overvoltage & over temperature
 Cooling by free air convection
 UL 508 approved (E522848)

Model Number Legend:

RPS120 - □ □ - CU

1. Output Voltage: 12: 12 V 24: 24 V

48: 48 V

SPECIFICATIONS:

MODEL		RPS120-12-CU	RPS120-24-CU	RPS120-48-CU
	NOMINAL DC VOLTAGE	12 V	24 V	48 V
	RATED CURRENT	8 A	5 A	2.5 A
	CURRENT RANGE	0 - 8 A	0 - 5 A	0 - 2.5 A
	RATED POWER	96 W	120 W	120 W
	RIPPLE & NOISE (max)	< 1 % of Vout	< 1 % of Vout	< 1 % of Vout
OUTPUT	VOLTAGE ADJ. RANGE	12 to 14 V	24 to 28 V	48 to 56 V
OUIFUI	VOLTAGE TOLERANCE	±1%		
	LINE REGULATION	± 1 %		
	LOAD REGULATION	± 1 %		
	TURN ON TIME	< 1 sec @ 230 VAC & < 3 sec @ 115 VAC, Full load		
	HOLD UP TIME	≥ 60 ms at 230 VAC & ≥ 15 ms at 115 VAC, Full load		
	RISE TIME	< 100 ms		
	VOLTAGE RANGE *	90 - 264 VAC / 127 - 370 VDC		
	FREQUENCY RANGE	50 / 60 Hz		
INPUT	EFFICIENCY @ 230 V AC	Up to 89 %		
	AC CURRENT	2.2 A @ 115 VAC; 1.5 A @ 230 VAC		
	INRUSH CURRENT	< 48 Amps; Measured at 264 VAC, 25°C Ambient, Cold start		
	LEAKAGE CURRENT	< 1 mA; 264 VAC input		
	OVERLOAD	> 110 % of rated output current; Hiccup type; Autorecovery		
	OVERVOLTAGE	15.5 - 18.5 VDC	28.5 - 33.5 VDC	56.5 - 65.5 VDC
PROTECTION		Latched type; Input AC power to be recycled to recover the power supply		
	OUTPUT SHORT CIRCUIT	Hiccup mode when output is shorted; Autorecovery type.		
	OVER TEMPERATURE	Power supply shuts down when the temperature of PCB below main transformer reaches typically 120°C; Turns on only after the temperature falls below 90°C typically and AC power is recycled thereafter		
	OPERATING TEMP	 - 25°C to + 70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C, - 25°C to 0°C startup is guaranteed with spec deviation (Output ripple can be more than 10 % of the output voltage.) 		
	STORAGE TEMP	- 40°C to + 85°C		
ENVIRONMENT	COOLING	Natural convection cooled		
	HUMIDITY	5 to 95 % RH, Non condensing		
	ALTITUDE	2000 m		
	VIBRATION	Component : 10 ~ 500 Hz, 2 G 10 min. / 1 cycle, period for 60 min. each along X, Y, Z axes		
SAFETY & EMC	DIELECTRIC WITHSTAND	I/P to Earth: 2500 VAC I/P to O/P: 4000 VAC		
OAI LI I & LIVIC	VOLTAGE	0/P to Earth: 1500 VAC		
RELIABILITY	MTBF	> 220K hrs. as per MIL-HDBK-217F (25°C)		
	DIMENSION	43 x 109.8 x 102.7 mm (W x H x D)		
OTHERS	WEIGHT	350 gms		
	MOUNTING	35 mm DIN rail		

^{*} Although power supply will work for the specified DC input voltage range, UL approval is only for the specified AC input voltage range.

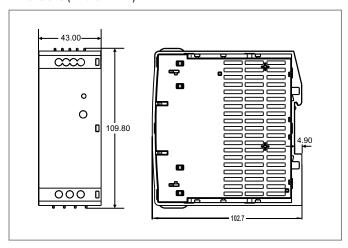
RPS120 | INDUSTRIAL POWER SUPPLIES ____ SELEC



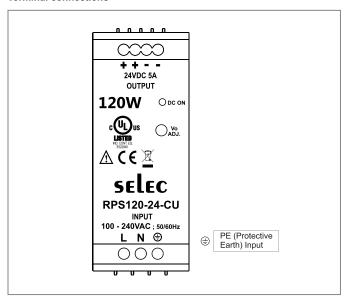
Connectors details

Description	Туре	Torque	
Input connector	GOOSVN : GS007S-7.5 OR Equivalent	. 0.5 Nm	
Output connector	GOOSVN : GS007S-5.08 OR Equivalent		

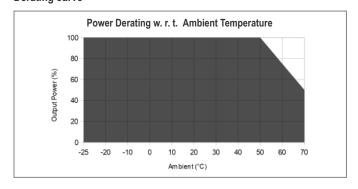
Dimensions (All are in mm)



Terminal connections



Derating curve



Compliance

Applicable EMI / EMC Standards					
Category	Reference Standards	Testing Level			
Conducted Emission	CISPR32	CLASS A			
Radiated Emission	CISPR32	CLASS A			
Electrostatic Discharge	IEC 61000-4-2	Level 4, Criteria A Level 3, Criteria A			
Radiated Susceptibility	IEC 61000-4-3	Level 3, Criteria B			
Electrical Fast Transient / Burst	IEC 61000-4-4	Level 3, Criteria A			
Surge	IEC 61000-4-5	Level 3, Criteria A			
Conducted Susceptibility	IEC 61000-4-6	Level 3, Criteria B			
Power Frequency Magnetic Field	IEC 61000-4-8	Level 4, Criteria A			
Voltage Dips & Interruption	IEC 61000-4-11	Criteria A & B			
Safety	UL 508 approved (E522848) Designed to meet IEC 62368-1				

Ordering information

Product Code Description		Certification
RPS120-12-CU	96 W, 12 V / 8 A Din rail mounted Power Supply in Plastic Housing	CE ROHS COMPRISED
RPS120-24-CU	120 W, 24 V / 5 A DIN rail mounted Power Supply in Plastic Housing	CE ROHS CONTRIBUTED
RPS120-48-CU	120 W, 48 V / 2.5 A DIN rail mounted Power Supply in Plastic Housing	CE ROHS COMPLIES

2