# RPS240 | INDUSTRIAL POWER SUPPLIES |





#### Features:

- Supports 90 264 VAC / 127 370 VDC
- Power factor > 0.95 @ full load over entire input range

48: 48 V

- Efficiencies up to 93 %
- Protection against short circuit, overload, overvoltage & over temperature
- Cooling by free air convection
- UL 508 approved (E522848)

### **Model Number Legend:**

RPS240 - \_\_\_\_ - CU

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

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#### SPECIFICATIONS:

MODEL		RPS240-12-CU	RPS240-24-CU	RPS240-48-CU	
	NOMINAL DC VOLTAGE	12 V	24 V	48 V	
	RATED CURRENT	18 A	10 A	5 A	
	CURRENT RANGE	0 - 18 A	0 - 10 A	0 - 5 A	
	RATED POWER	216 W	240 W	240 W	
	RIPPLE & NOISE (max)	< 1 % of Vout	< 1 % of Vout	< 1 % of Vout	
	VOLTAGE ADJ. RANGE	12 to 14 V	24 to 28 V	48 to 56 V	
OUTPUT	VOLTAGE TOLERANCE	± 1 %			
	LINE REGULATION	±1%			
	LOAD REGULATION	±1%			
	TURN ON TIME	< 2 sec; at full load			
	HOLD UP TIME	> 25 mS at 12 V & >16 mS at 14 V @ 115 / 230 VAC, Full Load	> 25 mS at 24 V & > 16 mS at 28 V @ 115 / 230 VAC, Full Load	> 25 mS at 48 V & > 16 mS at 56 V @ 115 / 230 VAC, Full Load	
	RISE TIME	< 100 ms			
	VOLTAGE RANGE *	90 - 264 VAC / 127 - 370V DC De-rate output power linearly below 100 VAC from 100 % at 100 VAC to 90 % at 90 VAC			
	FREQUENCY RANGE	50 / 60 Hz			
	POWER FACTOR	> 0.95 @ Full load over entire input range			
INPUT	EFFICIENCY @ 230V AC	Up to 92 %	Up to 93 %	Up to 93 %	
	AC CURRENT	2.4 A @ 115 VAC; 1.2 A @ 230 VAC			
	INRUSH CURRENT	< 60 Amps; Measured at 264 VAC, 25°C Ambient, Cold start			
	LEAKAGE CURRENT	< 1 mA; 264 VAC input			
	OVERLOAD	110 % to 140 % of rated output current; Hiccup type; Autorecovery			
		16 VDC ± 0.5 VDC	31 VDC ± 0.5 VDC	60 VDC ± 1 VDC	
PROTECTION	OVERVOLTAGE	Latched type; Input AC power to be recycled to recover the power supply			
TROTEORION	OUTPUT SHORT CIRCUIT	Hiccup mode when output is shorted; Autorecovery type.			
	OVER TEMPERATURE	The power supply shuts down when the temperature of PCB below PFC choke reaches typically 120°C.  It recovers automatically when temperature falls to typically 90°C			
FUNCTION	DC OK SIGNAL	Contact closes @ 11.5 V (typ.) Contact opens @ 11.0 V (typ.)	Contact closes @ 23.0 V (typ.) Contact opens @ 22.5 V (typ.)	Contact closes @ 46.0 V (typ.) Contact opens @ 45.0 V (typ.)	
		Contact Rating: 30 VDC 1 A; 60 VDC 0.5 A; 125 VAC 0.5 A; resistive load, min. current 1 mA			
	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 specification deviation (Output ripple can be more than 10 % of the output voltage.			
	STORAGE TEMP	- 40°C to + 85°C			
	COOLING	Natural convection cooled			
ENVIRONMENT	HUMIDITY	5 to 95 % RH, Non condensing			
	ALTITUDE	2000m			
	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 VOLTAGE	I/P to Earth: 2500 VAC			
RELIABILITY	MTBF	> 185K hrs. as per MIL-HDBK-217F (25°C)			
	DIMENSION	50 x 136 x 135 mm (W x H x D)			
OTHERS	WEIGHT	645 gms			
OTTILINO			35 mm DIN rail		

<sup>\*</sup> Although power supply will work for the specified DC input voltage range, UL approval is only for the specified AC input voltage range.

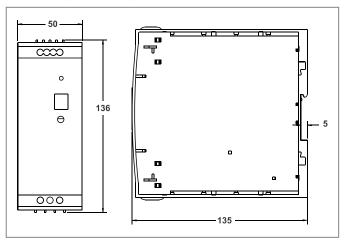
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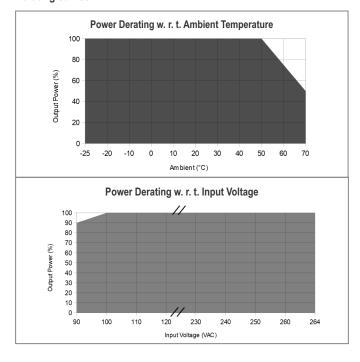
#### **Connectors details**

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

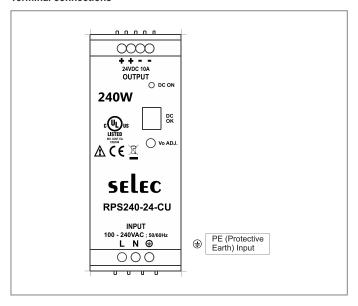
#### Dimensions (All are in mm)



#### **Derating curves**



#### **Terminal connections**



#### Compliance

Applicable EMI / EMC Standards					
Category	Reference Standards	Testing Level			
Conducted Emission	CISPR32	CLASS B			
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 (E Designed to meet IE				

## **Ordering information**

Product Code	Description	Certification
RPS240-12-CU	216 W, 12 V / 18 A Din rail mounted Power Supply in Plastic Housing	CE ROHS CONTRIBUTED
RPS240-24-CU	240 W, 24 V / 10 A DIN rail mounted Power Supply in Plastic Housing	CE ROHS CONTRIBUTED
RPS240-48-CU	240 W, 48 V / 5 A DIN rail mounted Power Supply in Plastic Housing	CE ROHS CONTRIBUTED

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