### RPS480 | INDUSTRIAL POWER SUPPLIES |





#### Features:

- Supports 90 264 VAC / 127 370 VDC
- Power factor > 0.95 @ full load over entire input range
- Efficiencies up to 93 %
- Protection against short circuit, overload, overvoltage & over temperature
- Cooling by free air convection
- UL 508 approved (E522848)

# Model Number Legend: RPS480 - □ □ - CU 1. Output Voltage: 24: 24 V 48: 48 V

#### **SPECIFICATIONS:**

MODEL		RPS480-24-CU	RPS480-48-CU	
OUTPUT	NOMINAL DC VOLTAGE	24 V	48 V	
	RATED CURRENT	20 A	10 A	
	CURRENT RANGE	0 - 20 A	0 - 10 A	
	RATED POWER	480 W	480 W	
	RIPPLE & NOISE (max)	< 1 % of Vout	< 1 % of Vout	
	VOLTAGE ADJ. RANGE	24 to 28 V	48 to 56 V	
	VOLTAGE TOLERANCE	± 1 %		
	LINE REGULATION	±1%		
	LOAD REGULATION	±1%		
	TURN ON TIME	< 2 sec; at full load		
	HOLD UP TIME	> 20 mS at 24 V & > 12 mS at 28 V @ 115 / 230 VAC, Full Load	> 20 mS at 48 V $\&$ > 12 mS at 56 V @ 115 / 230 VAC, Full Load	
	RISE TIME	< 100 ms		
	VOLTAGE RANGE *	90 - 264 VAC / 127 - 370 VDC 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	> 93.5 %	> 94%	
	AC CURRENT	4.8 A @ 115 VAC;	4.8 A @ 115 VAC; 2.4 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		
PROTECTION	OVERVOLTACE	31 VDC ± 0.5 VDC	60 VDC ± 1 VDC	
	OVERVOLTAGE	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.		
FUNCTION		Contact closes @ 23.0V (typ.)	Contact closes @ 46.0V (typ.)	
	DC OK SIGNAL	Contact opens @ 22.5V (typ.)	Contact opens @ 45.0V (typ.)	
		Contact Rating: 30 VDC 1 A; 60 VDC 0.5 A; 125 VAC 0.5 A; resistive load, min. current 1mA		
ENVIRONMENT	OPERATING TEMP	<ul> <li>- 25°C to + 70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C,</li> <li>- 25°C to 0°C startup is guaranteed with spec deviation (Output ripple can be more than 10 % of the output voltage.)</li> </ul>		
	STORAGE TEMP	-40°C to +85°C		
	COOLING	Natural convection cooled		
	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 I/P to O/P: 4000 VAC	O/P to Earth: 1500 VAC O/P to DC-OK: 500 VAC	
	DIMENSION	60 x 154 x 158.55 mm (W x H x D)		
OTHERS	WEIGHT	1050 gms		
	MOUNTING	35 mm DIN rail		

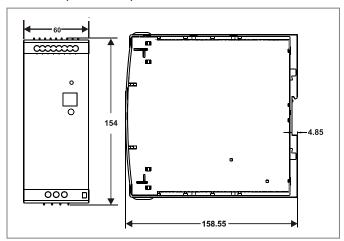
<sup>\*</sup> Although power supply will work for the specified DC input voltage range, UL approval is only for the specified AC input voltage range.

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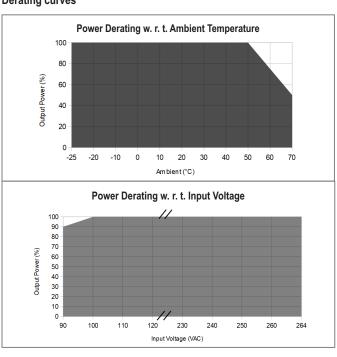
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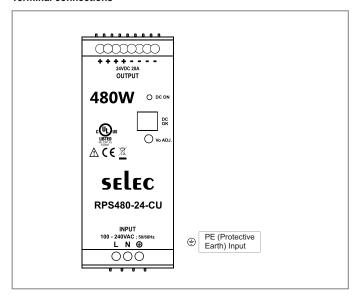
#### Dimensions (All are in mm)



#### **Derating curves**



#### **Terminal connections**



#### Compliance

Applicable EMI / EMC Standards					
Category	Reference Standards	Testing Level			
Conducted Emission	CISPR11	CLASS B			
Radiated Emission	CISPR22	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
RPS480-24-CU	480 W, 24 V / 20 A DIN rail mounted Power Supply in Plastic Housing	CE ROHS CONTRIBUTED
RPS480-48-CU	480 W, 48 V / 10 A DIN rail mounted Power Supply in Plastic Housing	CE ROHS COrplism

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