



Features :

- 480W rated power
- Active PFC
- Protection : Overload, Over Voltage, Output Short Circuit, Over Temperature
- Din rail mount
- Power OK indication
- DC-OK relay contact
- Cooling by free air convection

Certification : **CE**

Display specifications

Indication	LED for DC ON
------------	---------------

Input specifications

Voltage range	100 - 240V AC $\pm 10\%$, 127 - 370V DC
Frequency range	50 / 60Hz
AC current (Typ.)	4.8A @ 115V AC 2.4A @ 230V AC
Efficiency (Typ.)	93.5% @ 230V AC
Inrush current (Typ.)	<60Amps; Measured at 264VAC, 25°C Ambient, Cold start
Power factor	>0.95 @ Full load over entire input range
Start up time	<2sec @ Full load over entire input range

Output specifications

Output voltage	24 - 28V DC
Output current	20A at 24V; 17.14A at 28V
Ripple and Noise*	<1% of Vout
Line and load regulation	$\pm 1\%$
Hold up time	≥ 25 ms at 24V & ≥ 16 ms at 28V @ 115/230VAC, Full load
DC OK contact	Vout >23.0V = 1 Vout <22.5V = 0 Contact rating : 30V DC 1A; 60V DC 0.5A; 125V AC 0.5A; Resistive load, min current 1mA
Series operation	Possible for up to two power supplies (with external diode)

* Measured at 20MHz of bandwidth by using 0.1uF & 10uF parallel capacitor.

Protections

Input fused	8A - 250VAC Internal
Output over load	110% to 140% of rated output current protection type : Hiccup mode; recovers automatically after fault condition is removed.
Output short circuit	Hiccup mode when output is shorted; Recovers automatically after fault condition is removed.
Output over voltage	31VDC ± 0.5 VDC Protection type : Latched; Input AC power has to be recycled to recover the power supply.
Over temperature	Power supply shuts down when the temperature of PCB below PFC choke reaches typically 120°C; Turns ON only after the temperature falls to below 90°C typically and AC power is recycled thereafter.

Environment specifications

Operating temperature*	-25°C to +70°C
Storage temperature	-40°C to +85°C
Humidity	5 to 95% RH, Non condensing
Altitude	2000m

* De-rate output power at 12W/°C above +50°C Ambient.

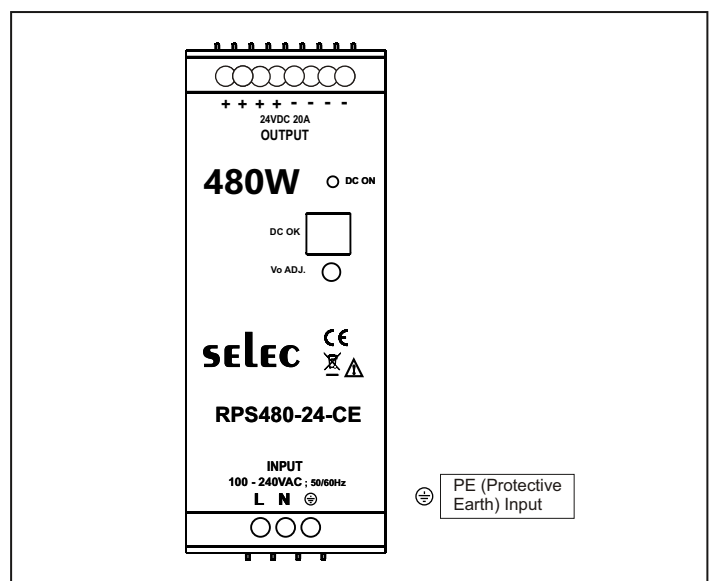
Mechanical specifications

Mounting	Din rail
Dimension	60*154*158.55mm (W*H*D)
Weight	1050 gms

Safety & EMC

Dielectric withstand voltage	I/P to Earth	: 2500V AC
	I/P to O/P	: 4000V AC
	O/P to Earth	: 1500V AC
	O/P to DC-OK	: 500V AC
Current Harmonics	Class D	

Terminal connections



Compliance

Applicable EMI / EMC Standards		
Product Standard		
Category	Reference Standards	Testing Level
Conducted Emission	CISPR22	CLASS B
Radiated Emission	CISPR22	CLASS A
Electrostatic Discharge	IEC61000-4-2	Level 4, Criteria A Level 3, Criteria A
Radiated Susceptibility	IEC61000-4-3	Level 3, Criteria B
Electrical Fast Transient / Burst	IEC61000-4-4	Level 3, Criteria A
Surge	IEC61000-4-5	Level 3, Criteria A
Conducted Susceptibility	IEC61000-4-6	Level 3, Criteria B
Power Frequency Magnetic Field	IEC61000-4-8	Level 4, Criteria A
Voltage Dips & Interruption	IEC61000-4-11	CLASS 3, Criteria A & B
TUV	Designed to meet IEC62368-1	
Safety	IEC62368-1	PASS

Ordering information

Product code	Description	Certification
RPS480-24-CE	SMPS - 24V DC, 20A	CE