

### 240W Single Output Industrial DIN Rail Power Supply with PFC Function

## PS-C240 Series



#### Features:

- · Built-in active PFC function, PF>0.93
- · High efficiency 93% and low power dissipation
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · Cooling by free air convection
- · Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- · Built-in DC OK Relay contact
- 100% full load burn-in test
- 150% peak load capability
- · 3 years warranty







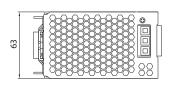
#### **SPECIFICATION** MODEL PS-C240-24 PS-C240-48 DC VOLTAGE 24V 48V RATED CURRENT 10A 5A **CURRENT RANGE** 0 ~ 10A 0 ~ 5A 240W RATED POWER 240W PEAK CURRENT 15A 7.5A PEAK POWER Note.6 360W (3sec.) OUTPUT RIPPLE & NOISE (max.) Note.2 100mVp-p 120mVp-p VOLTAGE ADJ. RANGE 24 ~ 28V 48 ~ 55V **VOLTAGE TOLERANCE** Note.3 ±1.0% ±1.0% LINE REGULATION ±0.5% ±0.5% LOAD REGULATION ±1.0% ±1.0% SETUP, RISE TIME 1500ms, 60ms/230VAC 3000ms, 60ms/115VAC at full load HOLD UP TIME (Typ.) 20ms/230VAC at full load VOLTAGE RANGE 124 ~ 370VDC 88 ~ 264VAC FREQUENCY RANGE 47 ~ 63Hz 0.99/115VAC at full load POWER FACTOR (Typ.) 0.92/230VAC INPUT EFFICIENCY (Typ.) 93% 2.6A/115VAC 1.3A/230VAC AC CURRENT (Typ.) 31A/115VAC 62A/230VAC INRUSH CURRENT (Typ.) LEAKAGE CURRENT <1mA / 240VAC Normally works within 110 ~ 150% rated output power for 3 sec and then shut down o/p voltage with auto-recovery 150 ~ 170% rated power or short circuit, constant current limiting within 3 sec and then 88 ~ 132VAC : Shut down o/p voltage **OVERLOAD** with auto-recovery, 180 ~ 264VAC : Shut down o/p voltage, re-power on to recover 29 ~ 33V 56 ~ 60V PROTECTION OVER VOLTAGE Protection type: Shut down o/p voltage with auto-recovery 95°C ±5°C (TSW: detect on heatsink of power switch) **OVER TEMPERATURE** Protection type: Shut down o/p voltage, recovers automatically after temperature goes down FUNCTION DC OK REALY CONTACT RATINGS (max.) 60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load WORKING TEMP. Note.5 -25 ~ +70° (Refer to output load derating curve) **WORKING HUMIDITY** 20 ~ 95% RH non-condensing ENVIRONMENT STORAGE TEMP., HUMIDITY -20 ~ +85°C, 10 ~ 95% RH TEMP. COEFFICIENT ±0.03%/°C (0 ~ 50°C) **VIBRATION** Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 SAFETY STANDARDS UL508, TUV EN60950-1 approved I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC WITHSTAND VOLTAGE ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH SAFETY & **EMI CONDUCTION & RADIATION** Compliance to EN55022 (CISPR22) Class B EMC (Note 4) HARMONIC CURRENT Compliance to EN61000-3-2,-3 Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, **EMS IMMUNITY** criteria A, SEMI F47 criteria A, GL approved MTBF 169.3Khrs min. MIL-HDBK-217F (25°C) OTHERS DIMENSION 63\*125.2\*113.5mm (W\*H\*D) 1.03Kg; 12pcs/13.4Kg/1.06CUFT 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. NOTE 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation and load regulation. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets **EMC** directives 5. Installation clearances: 40mm on top, 20mm on the bottom, 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. 6. 3 seconds or 20% duty cycle max. and the average output power should not exceed the rate power. 7. Derating may be needed under low input voltage. Please check the derating curve for more details

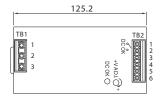


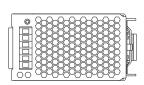


# Altech Corp.®

#### **Mechanical Specification**

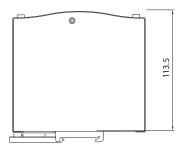






Terminal Pin No. Assignment (TB1)

Pin No.	Assignment	
1	FG 🖶	
2	AC/N	
3	AC/L	

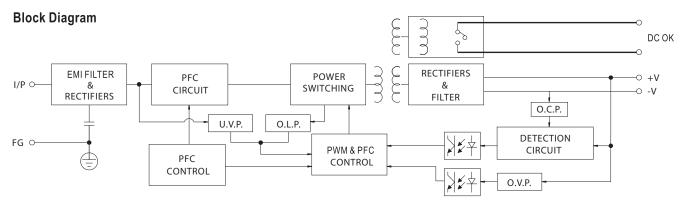


Terminal Pin No. Assignment (TB2)

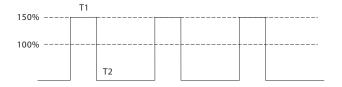
Pin No.	Assignment	
1,2	Relay Contact	
3,4 DC OUTPUT +V		
5,6	DC OUTPUT -V	

#### **DC OK Relay Contact**

Contact Close	When the output voltage reaches the adjusted output voltage.	
Contact Open	When the output voltage drop below 90% output voltage.	
Contact Ratings (max.)	30V/1A resistive load	

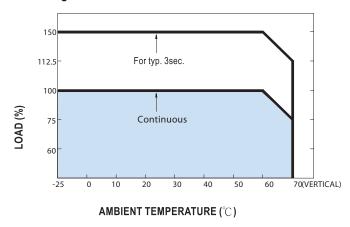


#### **Peak Loading**



Peak lo	oad (T1)	Full load or 50% load(T2)
360W	/ 3 sec.	240W / 100 sec.
360W	/ 3 sec.	120W / 10 sec.

#### **Derating Curve**



#### Output derating VS input voltage

