



PSC-241 Series



Features:

- Universal AC input (88-264V AC)
- High efficiency 92% and low power dissipation
- Installed on DIN rail TS-35 / 7.5 or 15
- Built-in active PFC function, PF > 0.95
- 150% peak load capability
- 100% full load burn-in test
- Protection: SCP, OLP, OVP, OTP
- Two selectable peak load modes
- Built-in DC OK Relay contact
- Built-in Remote ON / OFF function
- 3 years warranty
- UL 508

OUTPUT

Cat. No.

PSC-24124

PSC-24148

DC VOLTAGE
RATED CURRENT
CURRENT RANGE
RATED POWER
PEAK CURRENT
PEAK POWER

24V
10A
0~10A
240W
15A
360W (3sec.) Two selectable peak load modes
3 seconds or 20% duty cycle Max. The average output power should not exceed the rate power.

48V
5A
0~5A
240W
7.5A

RIPPLE & NOISE (max)

150mVp-p
Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.

300mVp-p

VOLTAGE ADJ. RANGE
VOLTAGE TOLERANCE

-2% ~ +8%
±1.0%
Tolerance: includes set up tolerance, line regulation and load regulation.

-2% ~ +8%
±1.0%

LINE REGULATION
LOAD REGULATION
SETUP, RISE TIME
HOLD UP TIME (Typ.)

±0.5%
±1.0%
700ms, 30ms / 230VAC / 115VAC at full load
20ms / 230VAC; 20ms / 115VAC at full load

±0.5%
±1.0%

INPUT

VOLTAGE RANGE

88 ~ 264VAC; 124 ~ 373VDC
Derating may apply in low input voltage. Please check the derating curve for more details.

FREQUENCY RANGE
POWER FACTOR (Typ.)
EFFICIENCY (Typ.)
AC CURRENT (Typ.)
INRUSH CURRENT (Typ.)
LEAKAGE CURRENT

47 ~ 63Hz
0.96 / 230VAC; 0.96 / 115VAC at full load
91%
2.6A / 115VAC; 1.3A / 230VAC
33A / 115VAC; 65A / 230VAC
<1mA/ 240VAC

92%

PROTECTION

OVERLOAD

105% ~ 150% rated output power for 3 sec and then shutdown in O/P with auto-recovery.
150% or greater rated power or short circuit is constant current limiting.
If O/P drops to 40% output then it auto-recover 5 times; if fault condition is not removed during auto recovery, the system will shut down and needs to be restarted to recover.

OVER VOLTAGE

28 ~ 33V
56 ~ 65V
Protection type: Shut down O/P voltage with auto-recovery

OVER TEMPERATURE

95 ±5°C (TSW: detect on heatsink of power diode)
Protection type: Shut down o/p voltage, recovers automatically after temperature goes down

ENVIRONMENT

WORKING TEMP.

-25 ~ +70°C (Refer to output load derating curve)
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.

WORKING HUMIDITY
STORAGE TEMP. / HUMIDITY
TEMP. COEFFICIENT
VIBRATION

20 ~ 95% RH non-condensing
-40 ~ +85°C; 10 ~ 95% RH
±0.03% / °C (0 ~ 50°C)
10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes

SAFETY & EMC

SAFETY STANDARDS
WITHSTAND VOLTAGE
ISOLATION RESISTANCE
EMI CONDUCTION & RADIATION
HARMONIC CURRENT
EMS IMMUNITY

UL508, TUV EN60950-1
I/P-O/P: 4242VDC I/P-FG2121VDC O/P-F/G: 707VDC O/P-DC OK: 707VDC
I/P-O/P, I/P-FG, O/P-FG: > 100M Ohms / 500VDC / 25°C / 70% RH
EN55022:2006 Class B
EN61000-3-2: 2006 Class A, ENG1000-3-3: 1995+A1: 2001+A2: 2005
EN61204-3: 2000, EN55024: 1998+A1: 2001+A2: 2003 light industry level, criteria A
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.

OUTPUT

DC OK RELAY CONTACT RATINGS (max)
MTBF
DIMENSION
PACKING
COOLING

60VDC / 0.3A, 30VDC / 1A, 30VAC / 0.5A resistive load
57K HRS (MIL-HDBK-217F)
65.8x125.2x117.7 mm (WxHxD)
0.9kg; 12pcs / 12.8kg
Free air convection
All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

Mechanical Specification

Unit : mm / inch

Terminal Pin No. Assignment (TB1)

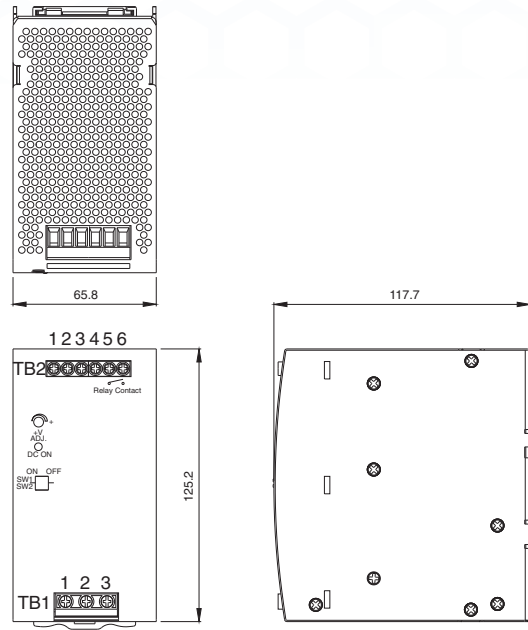
Pin NO.	Assignment
1	FG ⊕
2	AC/L
3	AC/N

Terminal Pin No. Assignment (TB2)

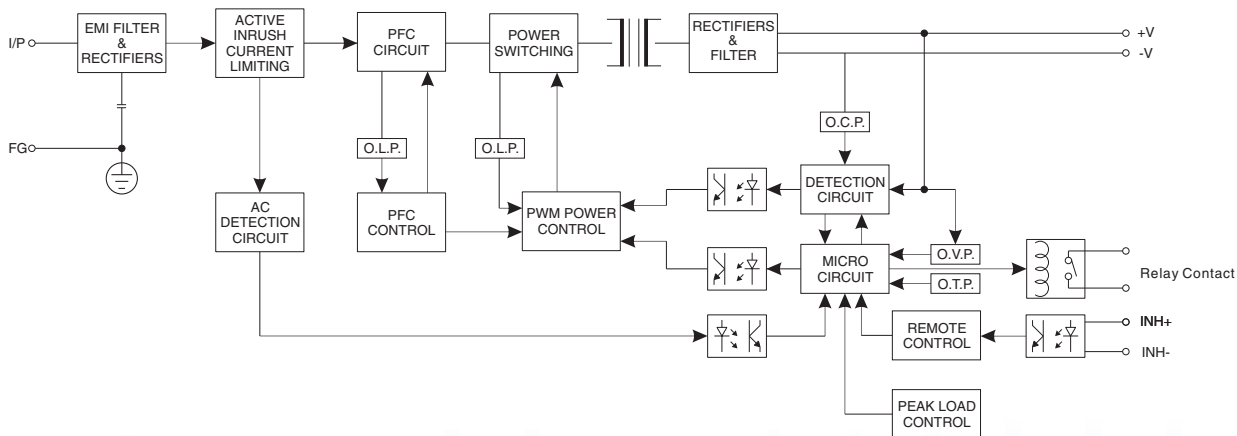
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

Switch No. Assignment

SW NO.	Assignment
SW1	PEAK LOAD SETTING
SW2	REMOTE ON/OFF SETTING



Block Diagram



DC OK Relay Contact

Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drop below 45% rated output voltage.
Contact Ratings(max.)	30V/1A resistive load

Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.