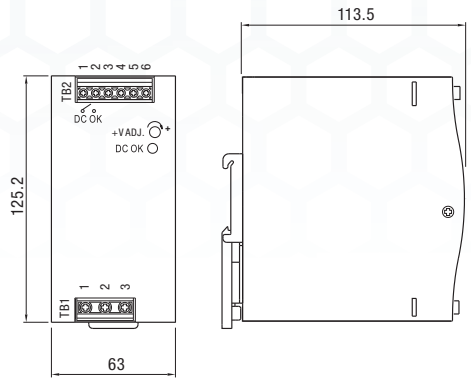
PSW-240 Series
Specifications

Features:
- Single and two phase wide input range 180~550VAC
- High efficiency 91% and low power dissipation
- Protections: Short Circuit / Overload / Over Voltage / Overtemperature
- Cooling by free air convection
- DIN rail mountable
- 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
- 3 year warranty

	Cat. No.	PSW-24024	PSW-24048
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	10A	5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A
	RATED POWER	240W	240W
	RIPPLE & NOISE (max)	150mVp-p	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.	
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE	±1.0%	±1.0%
		Tolerance: includes set up tolerance, line regulation and load regulation.	
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%
INPUT	SETUP, RISE, HOLD UP TIME	800ms, 150ms, 18ms / 400VAC	1500ms, 150ms, 18ms / 230VAC at full load
	VOLTAGE RANGE	180 ~ 550VAC 254 ~ 780VDC	
		Derating may be needed under low input voltage. Please check the derating curve for more details	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	91%	
	AC CURRENT	1A / 400VAC 2A / 230VAC	
	INRUSH CURRENT (Typ.)	COLD START 50A	
	LEAKAGE CURRENT	≤ 3.5 mA / 530VAC	
PROTECTION	OVERLOAD	105 ~ 130% rated output power	
		Protection type: Constant current limiting, unit will shut down after 3 sec.; auto recovery after 1 minute if the fault condition is removed	
	OVERVOLTAGE	29 ~ 33V	56 ~ 65V
		Protection type: Shut down overvoltage, re-power on to recovery Under over-voltage condition, If input voltage ≤ 200VAC, the power supply will shut down and then may have auto-recovery after several seconds	
	OVERTEMPERATURE	90˚C ± 5˚C (TSW) detect on heat sink of power switch Protection type: Shut down overvoltage, recovers automatically after temperature goes down	
	DC OK RELAY CONTACT RATINGS (max.)	60VDC / 0.3A; 30VDC / 1A; 30VAC / 0.5A resistive load	
ENVIRONMENT	WORKING TEMP.	-30 ~ +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	20 ~ 95% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85˚C; 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03% / ˚C (0 ~ 50˚C)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60 min. each long X,Y, Z axes	
	MOUNTING	Compliance to IEC60068-2-6	
SAFETY & EMC	SAFETY STANDARDS	UL508 approved IEC 60950-1 compliant Design refer to GL	
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 1.5KVAC O/P-FG :0.5KVAC O/P-DC OK: 0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: ≥ 100M Ohms / 500VDC (25˚C; 70% RH)	
	EMI CONDUCTION & RADIATION	EN55022 (CISPR22), Class B	
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3	
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN 55024; EN61000-6-2; (EN50082-2); EN61204-3; heavy industry level; criteria A approved; The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.	
OTHERS	MTBF	141.1K hrs min. MIL-HDBK-217K (25˚C)	
	DIMENSION	63x125.2x113.5mm (WxHxD)	
	PACKING	1.06Kg; 12pcs / 13.7Kg / 1.06CUFT	
		All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25˚C of ambient temperature.	

Mechanical Specification



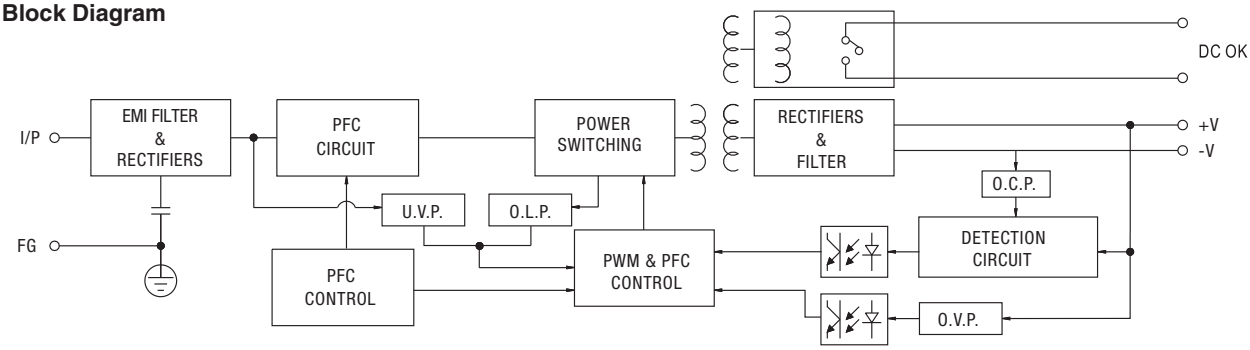
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/L2
3	AC/L1

Terminal Pin No. Assignment (TB2)

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

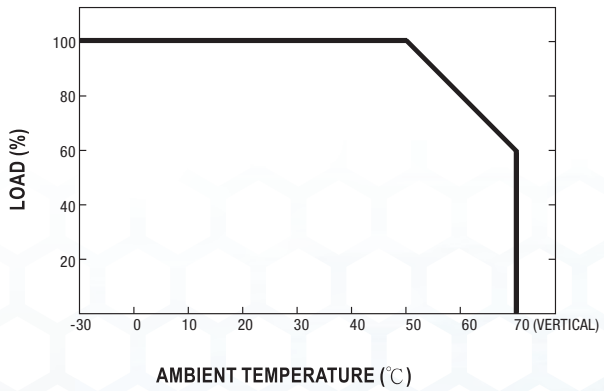
Block Diagram



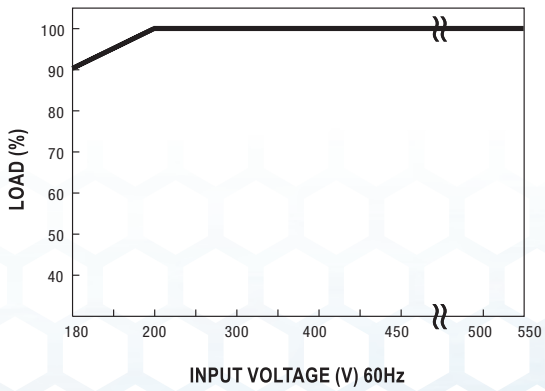
DC OK Relay Contact

Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

Derating Curve



Output Derating VS Input Voltage



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