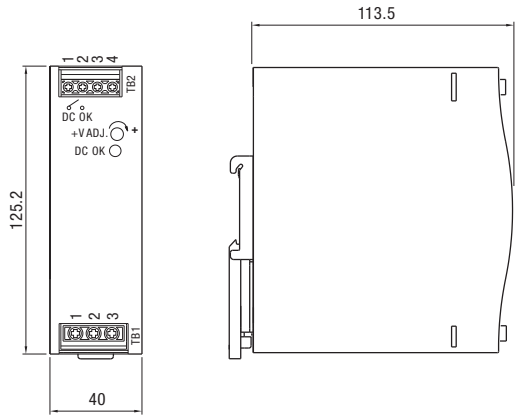
PSW-120 Series
Specifications

Features:
- Single and two phase wide input range 180 ~ 550VAC
- Protections: Short Circuit / Overload / Over Voltage / Overtemperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- DIN rail mountable
- UL508 (industrial control equipment) approved
- EN61000-6-2 (EN50082-2) industrial immunity level
- 100% full load burn-in test
- Built-in DC OK relay contact
- 3 year warranty

	Cat. No.	PSW-12012	PSW-12024	PSW-12048
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	10A	5A	2.5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 2.5A
	RATED POWER	120W	120W	120W
	RIPPLE & NOISE (max)	120mVp-p	120mVp-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	12 ~ 15V	24 ~ 29V	48 ~ 58V
	VOLTAGE TOLERANCE	±1.5%	±1.0%	±1.0%
		Tolerance: includes set up tolerance, line regulation and load regulation.		
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%
	SETUP, RISE HOLD UP TIME	2000ms, 70ms, 50ms / 400VAC	2000ms, 70ms, 10ms / 230VAC at full load	
		Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quick may lead to increase of the set up time.		
INPUT	VOLTAGE RANGE	180 ~ 550VAC	254 ~ 780VDC	
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	89.5% / 400V	91% / 400V	92% / 400V
	AC CURRENT	0.55A / 400VAC	1.2A / 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, recovers automatically after fault condition is removed		
	OVERVOLTAGE	16 ~ 18V	31 ~ 37V	60 ~ 67V
		Protection type: Shut down overvoltage, re-power on to recover		
	OVERTEMPERATURE	105˚C ± 5˚C (12V), 110˚C ± 5˚C (24V) (TSW1) detect on heat sink of power switch transistor; 100˚C ± 5˚C (48V) (TSW1) detect on heat sink of power diode		
		Protection type: Shut down overvoltage, re-power automatically after temperature goes down		
	DC OK SIGNAL	Relay contact rating (max.): 30V / 1A resistive		
ENVIRONMENT	WORKING TEMP.	-25 ~ +70˚C (Refer to output load derating curve)		
	WORKING HUMIDITY	20 ~ 90% 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 clip: Compliance to IEC60068-2-6		
SAFETY & EMC	SAFETY STANDARDS	UL508 approved IEC60950-1 compliant		
	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	Compliance to EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B		
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN61204-3; EN61000-6-2; (EN50082-2), heavy industry level; criteria A,		
		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	268K hrs min. MIL-HDBK-217K (25˚C)		
	DIMENSION	40x125.2x113.5mm (WxHxD)		
	PACKING	0.65Kg; 20pcs / 14Kg / 1.16CUFT		
		All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25˚C of ambient temperature.		

Mechanical Specification



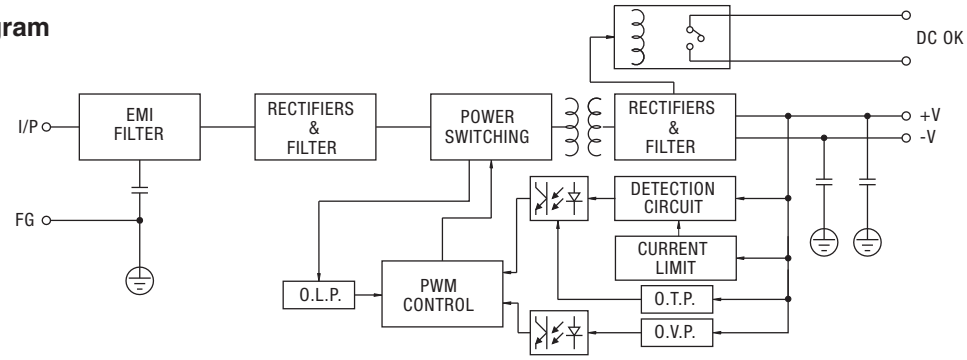
Terminal Pin No. Assignment (TB1)

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

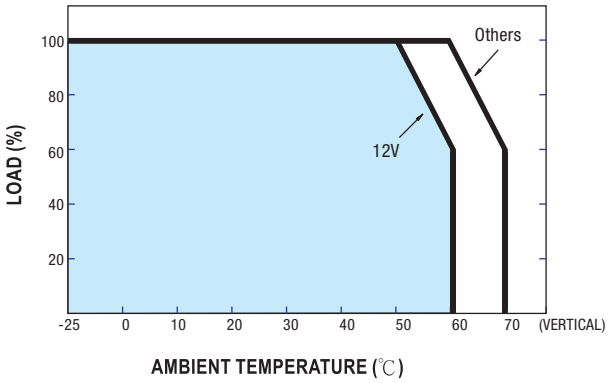
Terminal Pin No. Assignment (TB2)

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

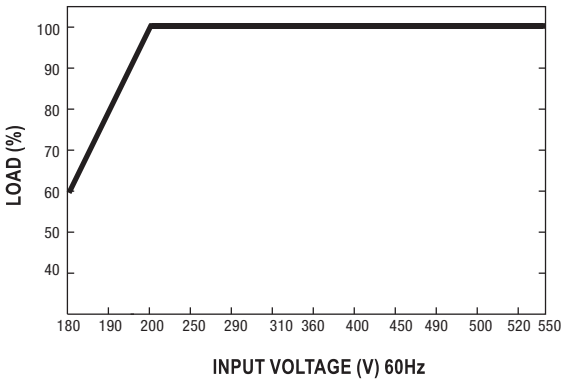
Block Diagram



Derating Curve



Static Characteristics



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