



# MEAN WELL

## SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

# PT-45

## SERIES

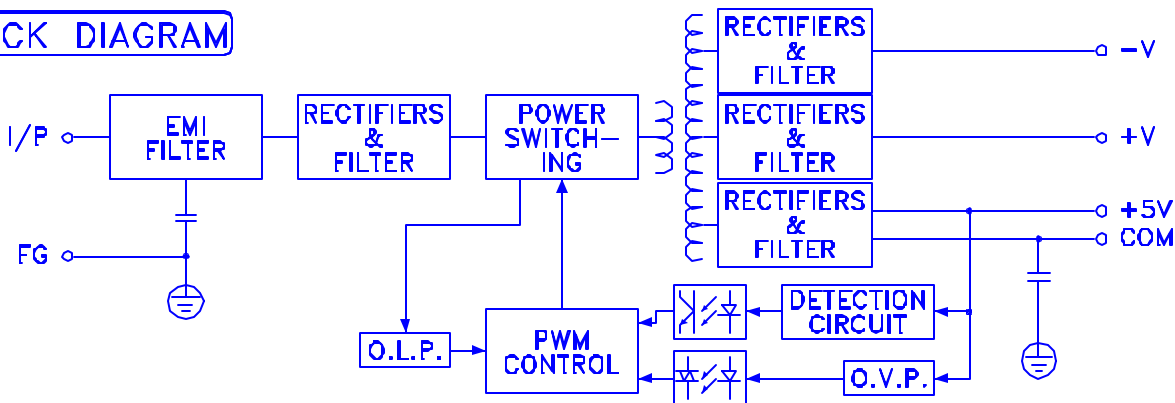
- .LOW COST, HIGH RELIABILITY
- .105° C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE



MODEL	PT-45A			PT-45B			PT-45C		
	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
DC OUTPUT VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V
OUTPUT V. TOLERANCE	±4%	±7%	±5%	±4%	±7%	±5%	±4%	±7%	±5%
OUTPUT RATED CURRENT	3A	2A	0.3A	3A	2A	0.3A	3A	1.6A	0.3A
OUTPUT MIN. RANGE	0.4A	0.2A	0A	0.4A	0.2A	0A	0.4A	0.2A	0A
OUTPUT MAX. RANGE	5A	2.5A	0.5A	5A	2.5A	0.5A	5A	2.3A	0.5A
RIPPLE & NOISE	50mV	120mV	50mV	50mV	120mV	100mV	50mV	120mV	100mV
LINE REGULATION	±1%	±2%	±1%	±1%	±2%	±1%	±1%	±2%	±1%
LOAD REGULATION	±3%	±4%	±1%	±3%	±4%	±1%	±3%	±4%	±1%
RATED OUTPUT POWER	40.5W			42.6W			43.5W		
MAXIMUM OUTPUT POWER	RATED OUTPUT POWER FOR CONVECTION : 52W WITH 18 CFM MIN. FORCED AIR								
EFFICIENCY	75%			75%			75%		
DC VOLTAGE ADJ.	CH1:+10,-5%			CH1:+10,-5%			CH1:+10,-5%		
INPUT VOLTAGE RANGE	90~264VAC 47~440Hz ; 120~370VDC								
AC CURRENT	1A/115V 0.7A/230V								
INRUSH CURRENT	COLD START 20A/115V 40A/230V								
LEAKAGE CURRENT	<0.5mA								
OVERLOAD PROTECTION	53~75W OUTPUT POWER TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY								
OVER VOLTAGE PROTECTION	5.75~6.75VDC ON CH1								
TEMP. COEFFICIENT	±0.04% / ° C (0~50° C) ON +5V OUTPUT								
SETUP,RISE,HOLD UP TIME	800ms, 20ms, 20ms								
VIBRATION	10~500Hz, 2G 3AXES 10min. / 1cycle ( 1 HOUR / EACH AXES )								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC 1min.								
ISOLATION RESISTANCE	I/P-O/P,I/P-FG,O/P-FG:500VDC / 100M Ohms								
WORKING TEMP., HUMIDITY	-10° C~+60° C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH								
STORAGE TEMP., HUMIDITY	-20° C~+85° C, 10%~95% RH								
DIMENSION	127*76.2*30mm (L*W*H) PCB ONLY								
WEIGHT	0.23Kgs								
SAFETY STANDARDS	UL1950,TUV EN60950 APPROVED								
EMC STANDARDS	CISPR22(EN55022),IEC1000-4-2,3,4,5 IEC1000-3-2,3 VERIFICATION								

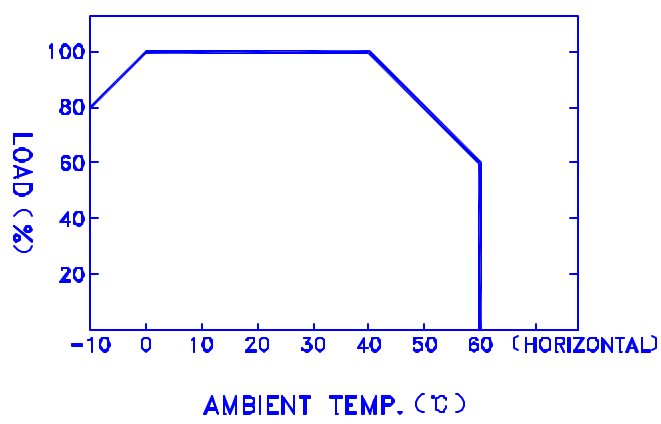
- NOTE :
- 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25° C 70% RH. AMBIENT.
  - 2.TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
  - 3.RIPPLE & NOISE ARE MEASURED AT 20MHZ BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
  - 4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
  - 5.OUTPUT PROVIDE UP TO MAXIMUM CURRENT, BUT RELATED TO MAXIMUM OUTPUT POWER.
  - 6.MOUNTING HOLES M1 AND M2 SHOULD BE GROUNDED FOR EMI PURPOSES.

## BLOCK DIAGRAM

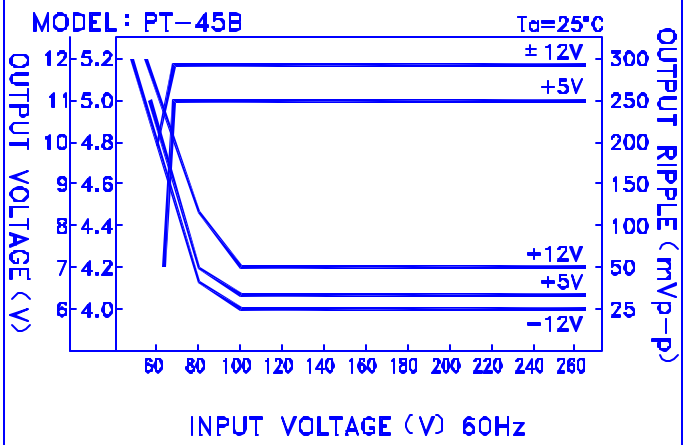


fosc : 65KHz

## OUTPUT DERATING



## STATIC CHARACTERISTICS



## DIMENSION (mm)

- ☒ **TERMINAL PIN NO. ASSIGNMENT**
  - ☒ CN1 : MOLEX 5277-02  
PIN 1,2 : AC INPUT
  - ☒ CN2 : MOLEX 5273-06
    - ☒ PIN 1 : DC OUTPUT +V
    - ☒ PIN 2,3 : DC OUTPUT +5V
    - ☒ PIN 4,5 : DC OUTPUT COM
    - ☒ PIN 6 : DC OUTPUT -V
- ☒ **MATING CONNECTORS**
  - ☒ CN1,2 MATING CONNECTOR TYPE MOLEX 5195 AND 5239 SERIES OR EQUIVALENT WITH MOLEX 5194 AND 5225 OR EQUIVALENT CRIMP TERMINALS.

