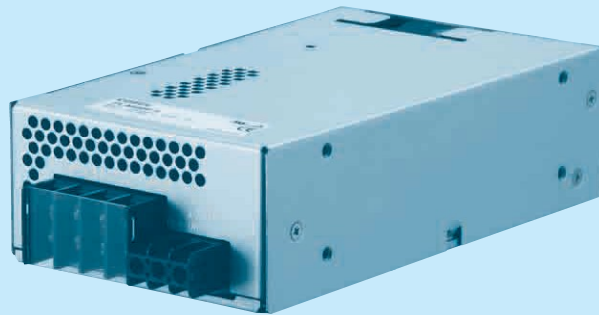
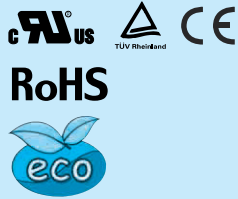


# PLA600F

1 **PL** 2 **A** 3 **600** 4 **F** 5 **-O** 6 **-O**



**Recommended EMI/EMC Filter**  
NAC-16-472



High voltage pulse noise type : NAP series  
Low leakage current type : NAM series  
\*The EMI/EMC Filter is recommended to connect with several devices.

- 1 Series name
  - 2 Single output
  - 3 Output wattage
  - 4 Universal input
  - 5 Output voltage
  - 6 Optional \* 7
- C : with Coating  
G : Low leakage current  
V : External potentiometer for output voltage adjustment  
U : Low input voltage stop (Complies with SEMI F-47)  
W: Parallel operation, LV alarm Remote sensing  
R : Remote on/off (Required external power source)  
F4: Low speed fan  
T2: Horizontal terminal block (non-screw-hold type)

See 5.1 in Instruction Manual.

## SPECIFICATIONS

	MODEL	PLA600F-5	PLA600F-12	PLA600F-15	PLA600F-24	PLA600F-36	PLA600F-48		
INPUT	VOLTAGE[V]	AC85 - 264 1φ (Output derating is required at AC85V - 115V. See 1.1 and 3.2 in Instruction Manual) * 4 (DC input and AC265 - 277V input * 4)							
	CURRENT[A]	ACIN 100V	6.2typ (Io=90%)	6.7typ (Io=90%)					
		ACIN 115V	6.0typ (Io=100%)	6.5typ (Io=100%)					
		ACIN 230V	3.0typ (Io=100%)	3.2typ (Io=100%)					
	FREQUENCY[Hz]	50 / 60 (47 - 63) (DC input and 440Hz * 4)							
	EFFICIENCY[%]	ACIN 100V	74typ (Io=90%)	81typ (Io=90%)	81typ (Io=90%)	84typ (Io=90%)	85typ (Io=90%)	85typ (Io=90%)	
		ACIN 115V	75typ (Io=100%)	81typ (Io=100%)	81typ (Io=100%)	84typ (Io=100%)	85typ (Io=100%)	85typ (Io=100%)	
		ACIN 230V	77typ (Io=100%)	84typ (Io=100%)	84typ (Io=100%)	88typ (Io=100%)	88typ (Io=100%)	88typ (Io=100%)	
	POWER FACTOR	ACIN 100V	0.98typ (Io=90%)						
		ACIN 115V	0.98typ (Io=100%)						
ACIN 230V		0.95typ (Io=100%)							
INRUSH CURRENT[A]	ACIN 100V	20/40typ (Io=90%) (Primary inrush current /Secondary inrush current) (More than 3sec to re-start)							
	ACIN 115V	20/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 3sec to re-start)							
	ACIN 230V	40/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 3sec to re-start)							
LEAKAGE CURRENT[mA]	1.5max (ACIN 115V / 240V, 60Hz, Io=100%, According to IEC60950-1 and DEN-AN)								
OUTPUT	VOLTAGE[V]	5	12	15	24	36	48		
	CURRENT[A]	ACIN 85-115V	Output derating is required at ACIN 115V or less (refer to instruction manual 3.2)						
		ACIN 115V-264V	100	50	40	25	16.7	12.5	
	WATTAGE[W]	ACIN 85-115V	Output derating is required at ACIN 115V or less (refer to instruction manual 3.2)						
		ACIN 115V-264V	500	600	600	600	601.2	600	
	LINE REGULATION[mV]	* 8	20max	48max	60max	96max	144max	192max	
	LOAD REGULATION[mV]	* 8	40max	100max	120max	150max	150max	300max	
	RIPPLE[mVp-p]	* 1	0 to +50C	80max	120max	120max	120max	150max	150max
		-20 to 0C	140max	160max	160max	160max	160max	400max	
	RIPPLE NOISE[mVp-p]	* 1	0 to +50C	120max	150max	150max	150max	200max	200max
		-20 to 0C	160max	180max	180max	180max	240max	500max	
	TEMPERATURE REGULATION[mV]	* 1	0 to +50C	50max	120max	150max	240max	360max	480max
		-20 to +50C	75max	180max	180max	290max	440max	600max	
	DRIFT[mV]	* 2	20max	48max	60max	96max	144max	192max	
	START-UP TIME[ms]		300typ (ACIN 115V, Io=100%)						
	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=100%)						
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		4.50 to 5.50	10.80 to 13.20	13.50 to 16.50	21.60 to 26.40	32.40 to 39.60	43.20 to 52.80	
OUTPUT VOLTAGE SETTING[V]		5.00 to 5.15	12.00 to 12.48	15.00 to 15.60	24.00 to 24.96	36.00 to 37.44	48.00 to 49.92		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically							
	OVERVOLTAGE PROTECTION[V]	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60	41.40 to 50.40	55.20 to 67.20		
	OPERATING INDICATION	LED (Green)							
	REMOTE SENSING	Optional (Option -W)							
REMOTE ON/OFF	Optional (Required external power source. Option -R)								
ISOLATION	INPUT-OUTPUT * RC	* 3	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MW min (At room temperature)						
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MW min (At room temperature)						
	OUTPUT * RC-FG	* 3	AC500V 1minute, Cutoff current = 100mA, DC500V 50MW min (At room temperature)						
	OUTPUT-RC	* 3	AC500V 1minute, Cutoff current = 100mA, DC500V 50MW min (At room temperature)						
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE * 5	-20 to +70C (Output derating is required), 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max							
	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +75C, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max							
	VIBRATION	10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axes							
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axes							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	HARMONIC ATTENUATOR * 10	Complies with IEC61000-3-2 class A							

## SPECIFICATIONS

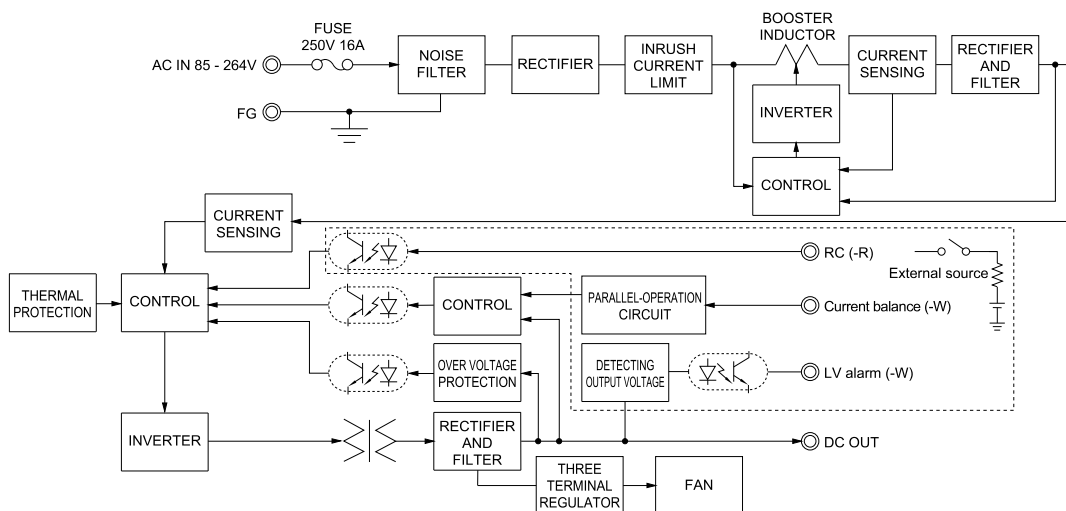
OTHERS	CASE SIZE/WEIGHT	120X 61X 215mm [4.72X 2.40X 8.46 inches] (Excluding terminal block and screw) (WX HX D) / 2.0kg max
	COOLING METHOD	* 9 Forced cooling (internal fan)
WARRANTY	WARRANTY	* 6 5 years (subject to the operating conditions)

- \* 1 This is the result of measurement of the testing board with capacitors of 22m F and 0.1m F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103. See 1.6 of Instruction Manual for more details.
- \* 2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25C.
- \* 3 The RC terminal is added to option –R models. The RC terminal is isolated from input, output, and FG.
- \* 4 Output power derating is required. Consult us if the power supply needs to be used for DC input, 440Hz input or AC265-277V input.
- \* 5 Output power derating is required. See 3.2 in Instruction Manual.
- \* 6 See 3.3 in Instruction Manual for more details.
- \* 7 Consult us about safety agency approvals for the models with optional functions.
- \* 8 Consult us about dynamic load and input response.
- \* 9 The fan speed slows down at no load.
- \* 10 Consult us about other classes. Do not use the power supply in overcurrent conditions or in unspecified input voltage ranges. Otherwise the internal components may be damaged. Parallel operation is allowed for PLA600F models with the –W option only. Sound noise may be heard from the power supply when used for pulse load.

## Features

- Cost-effective
- Longer life (see Instruction Manual)
- Low profile (meets 1U height = 41 mm or 1.61 inches)
- Wide operating temperature range (-20°C to +70°C see instruction manual)
- Screw hold type terminal block
- Slow fan speed at no load
- Many optional functions
- Complies with SEMI F-47 (-U option, see Instruction Manual for details)

## Block diagram



## External view

The external size of –V option, –W option, –R option, and –T2 option is different from the standard model. See “5. Options and Others” in Instruction Manual for more details.

