# PLA15F

PL A 15 F





Recommended EMI/EMC Filter NAC-04-472



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

 ®Optional \*7
 C: with Coating
 J: Connector interface T : Vertical terminal block

N1: with DIN rail

See 5.1 in Instruction Manual.

#### **SPECIFICATIONS**

Information the Home page is the latest.

	MODEL		PLA15F-5	PLA15F-12	PLA15F-15	PLA15F-24		
	VOLTAGE[V]		AC85 - 264 1 φ (Output der	ating is required at AC85V	- 115V. See 1.1 and 3.2 in Ins	truction Manual) *3		
		ACIN 100V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
	CURRENT[A]	ACIN 115V	0.4typ (lo=100%)					
		ACIN 230V	0.25typ (Io=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63)					
		ACIN 100V	72.5typ (Io=90%)	75.5typ (Io=90%)	77.0typ (Io=90%)	78.0typ (lo=90%)		
NPUT	EFFICIENCY[%]	ACIN 115V	73.5typ (lo=100%)	77.0typ (Io=100%)	78.5typ (lo=100%)	79.0typ (lo=100%)		
		ACIN 230V	75.5typ (Io=100%)	78.5typ (Io=100%)	79.5typ (Io=100%)	80.0typ (Io=100%)		
		ACIN 100V	16typ (Io=90%) Ta=25℃ at	, ,	1 3 3 7 ( 3 3 3 3 7 )	1		
	INRUSH CURRENT[A]	ACIN 115V	16typ (Io=100%) Ta=25°C a					
		ACIN 230V	32typ (Io=100%) Ta=25℃ a					
	LEAKAGE CURRENT		, , ,		g to IEC60950-1 and DEN-AN	d)		
	VOLTAGE[V]	[,1]	5	12	15	24		
	CURRENT[A]		3	1.3	1	0.7		
	OUNTER [A]	ACIN 85-115V	Output derating is required			0.7		
	WATTAGE[W]	ACIN 115V-264V	15.0	15.6	15.0	16.8		
	LINE DECLIL ATIONS		20max	48max				
	LINE REGULATION[n				60max	96max		
	LOAD REGULATION[		40max	100max	120max	150max		
		0 to +50℃	80max	120max	120max	120max		
	RIPPLE[mVp-p] *1	-10 to 0℃		160max	160max	160max		
		lo=0 to 35%		240max	240max	280max		
OUTPUT	RIPPLE NOISE[mVp-p] *1  TEMPERATURE REGULATION[mV]	0 to +50℃	120max	150max	150max	150max		
		-10 to 0°C	160max	180max	180max	180max		
		lo=0 to 35%		300max	300max	320max		
		0 to +50°C	50max	120max	150max	240max		
		-10 to +50°C	60max	150max	180max	290max		
	DRIFT[mV]	*2	20max	48max	60max	96max		
	START-UP TIME[ms]		200typ (ACIN 115V, Io=100%) *Start-up time is 700 ms typ for less than 1 minute of applying input again from turning off the input voltage					
	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=100%	b)				
	OUTPUT VOLTAGE ADJUSTMEN	IT RANGE[V]	4.50 to 5.50	10.80 to 13.20	13.50 to 16.50	21.60 to 26.40		
	OUTPUT VOLTAGE SETT	ING[V]	5.00 to 5.15	12.00 to 12.48	15.00 to 15.60	24.00 to 24.96		
	OVERCURRENT PROTE	CTION	Works over 105% of rating	and recovers automatically				
ROTECTION	OVERVOLTAGE PROTE	CTION[V]	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60		
IRCUIT AND	OPERATING INDICAT	ION	LED (Green)					
THERS	REMOTE SENSING		Not provided					
	REMOTE ON/OFF		Not provided					
	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)					
SOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)					
	OUTPUT-FG		AC500V 1minute, Cutoff current = 25mA, DC500V 50M $\Omega$ min (At room temperature)					
	OPERATING TEMPHUMID.AND	AI TITUDE *5						
	STORAGE TEMP., HUMID.AND		-20 to +75°C, 20 - 90%RH (	0,, ,				
NVIRONMENT	VIBRATION		10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3	• • • • • • • • • • • • • • • • • • • •	· '			
	IMPACT		196.1m/s² (20G), 11ms, one		odon diong A, 1 and 2 axes			
	AGENCY APPROVAL	<u> </u>	, ,,	· · · · · · · · · · · · · · · · · · ·	8, UL508 (Except option -J) C	Complies with DEN AN		
SAFETY AND NOISE	CONDUCTED NOISE	3				POLIDEIR-AIN		
REGULATIONS		TOD	Complies with FCC-B, VCC		D, ENUOUZZ-B			
LOOLATIONS	HARMONIC ATTENU	AIOK *8	Complies with IEC61000-3-	z ciass A				



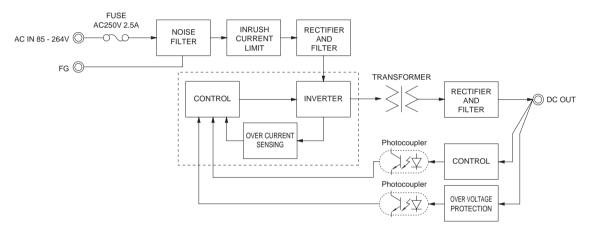
OTHERS	CASE SIZE/WEIGHT	38×80×73mm [1.50×3.15×2.87 inches] (Excluding terminal block and screw) (W×H×D) / 250g max
OTHERS	COOLING METHOD	Convection
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

- This is the result of measurement of the testing board with capacitors of 22  $\mu$  F and 0.1  $\mu$  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.
  - When the load factor is 0 35%, the switching power loss is reduced by burst operation, which will cause ripple and ripple noise to go beyond the specifications.
- Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
- Output power derating is required. As for DC input, consult us for advice.
- Consult us about dynamic load and input response. Measure the output voltage by using the average mode of the tester to deal with the burst operation at 35% load or less
- Output power derating is required. See 3.2 in Instruction Manual.
- See 3.3 in Instruction Manual for more detail
- Consult us about safety agency approvals for the models with optional functions
- 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 not possible with this mode.
- Sound noise may be heard from the power supply when used for pulse load.

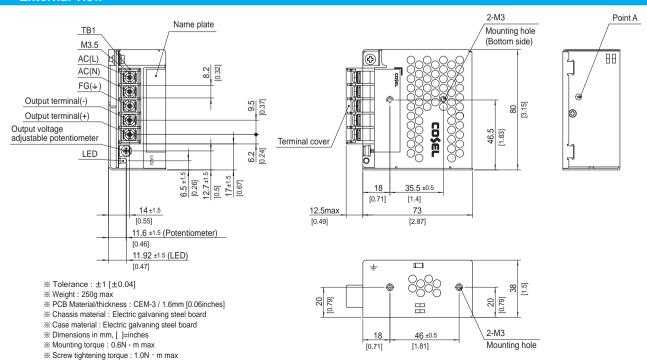
#### **Features**

- · Compact design (Depth: 73mm 2.87inches)
- · Low power consumption (1.0W typ AC240Vin, no load at standard model)
- · UL508 approved (Except option -J), and complies with SEMI F47
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

#### **Block diagram**



#### **External view**



# PLA30F

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Recommended EMI/EMC Filter NAC-04-472

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

- Optional \*7
   C: with Coating
   J: Connector interface
- T : Vertical terminal block N1: with DIN rail

See 5.1 in Instruction Manual.

## **SPECIFICATIONS**

Information the Home page is the latest.

	MODEL		PLA30F-5	PLA30F-12	PLA30F-15	PLA30F-24		
	VOLTAGE[V]		AC85 - 264 1 φ (Output dera	ating is required at AC85V - 1	115V. See 1.1 and 3.2 in Insti	ruction Manual) *3		
		ACIN 100V	0.7typ (lo=90%)					
	CURRENT[A]	ACIN 115V	0.7typ (lo=100%)					
		ACIN 230V	0.4typ (lo=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63)					
NDUT		ACIN 100V	73.0typ (Io=90%)	80.0typ (Io=90%)	81.0typ (lo=90%)	82.5typ (Io=90%)		
INPUT	EFFICIENCY[%]	ACIN 115V	74.0typ (Io=100%)	80.5typ (lo=100%)	81.5typ (lo=100%)	83.0typ (lo=100%)		
		ACIN 230V	77.0typ (lo=100%)	81.0typ (lo=100%)	82.0typ (lo=100%)	83.5typ (lo=100%)		
		ACIN 100V	16typ (lo=90%) Ta=25℃ at o	cold start				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=25℃ at	t cold start				
		ACIN 230V	32typ (lo=100%) Ta=25℃ at	t cold start				
	LEAKAGE CURRENT	[mA]	0.65max (ACIN 115V / 240V	/, 60Hz, Io=100%, According	to IEC60950-1 and DEN-AN	)		
	VOLTAGE[V]		5	12	15	24		
	CURRENT[A]		6	2.5	2	1.3		
	WATTACEDAD	ACIN 85-115V	Output derating is required a	at ACIN 115V or less (refer to	instruction manual 3.2)			
	WATTAGE[W]	ACIN 115V-264V	30.0	30.0	30.0	31.2		
	LINE REGULATION[m	1V] *4	20max	48max	60max	96max		
	LOAD REGULATION[	mV] *4	40max	100max	120max	150max		
	DIDDLET V. 1	0 to +50°C	80max	120max	120max	120max		
	RIPPLE[mVp-p] *1	-10 to 0°C	140max	160max	160max	160max		
DUTPUT	RIPPLE NOISE[mVp-p] *1	0 to +50°C	120max	150max	150max	150max		
		-10 to 0°C	160max	180max	180max	180max		
	TEMPERATURE REQUILATIONS	0 to +50°C	50max	120max	150max	240max		
	TEMPERATURE REGULATION[mV]	-10 to +50°C	60max	150max	180max	290max		
	DRIFT[mV] *2		20max	48max	60max	96max		
	START-UP TIME[ms]		150typ (ACIN 115V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMEN	IT RANGE[V]	4.50 to 5.50	10.80 to 13.20	13.50 to 16.50	21.60 to 26.40		
	OUTPUT VOLTAGE SETT	ING[V]	5.00 to 5.15	12.00 to 12.48	15.00 to 15.60	24.00 to 24.96		
	OVERCURRENT PROTE	CTION	Works over 105% of rating a	and recovers automatically				
PROTECTION	OVERVOLTAGE PROTE	CTION[V]	5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60		
CIRCUIT AND	OPERATING INDICAT	ION	LED (Green)					
OTHERS	REMOTE SENSING		Not provided					
	REMOTE ON/OFF		Not provided					
	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)					
SOLATION	INPUT-FG		AC2,000V 1minute, Cutoff c	urrent = 10mA, DC500V 50N	MΩ min (At room temperature	e)		
	OUTPUT-FG		AC500V 1minute, Cutoff cur	rent = 25mA, DC500V 50MS	2 min (At room temperature)			
	OPERATING TEMP., HUMID. AND	ALTITUDE *5	-20 to +70°C, 20 - 90%RH (I	Non condensing), 3,000m (10	0,000 feet) max			
NIVIDONIMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +75°C, 20 - 90%RH (I	Non condensing), 9,000m (30	0,000 feet) max			
NVIRONMENT	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3r	minutes period, 60minutes ea	ach along X, Y and Z axes			
	IMPACT		196.1m/s² (20G), 11ms, onc	e each X, Y and Z axes				
SAFETY AND	AGENCY APPROVAL	s	UL60950-1, C-UL (CSA609	50-1), EN60950-1, EN50178,	, UL508 (Except option -J) Co	omplies with DEN-AN		
NOISE	CONDUCTED NOISE			I-B, CISPR22-B, EN55011-B,				
REGULATIONS	HARMONIC ATTENUA	ATOR *8	Complies with IEC61000-3-2 class A					



OTHERS	CASE SIZE/WEIGHT	38×80×88mm [1.50×3.15×3.46 inches] (Excluding terminal block and screw) (W×H×D) / 330g max
OTHERS	COOLING METHOD	Convection
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

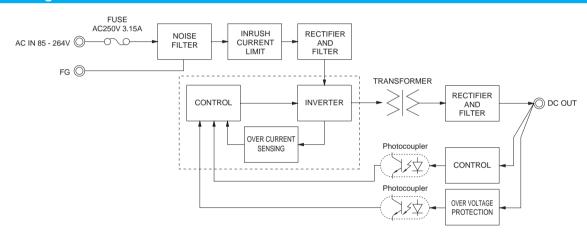
- This is the result of measurement of the testing board with capacitors of 22  $\mu$  F and 0.1  $\mu$  F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
  - See 1.6 of Instruction Manual for more details.
- \*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
   \*3 Output power derating is required. As for DC input, consult us for advice.
- Consult us about dynamic load and input response.
- 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. 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 not possible with this mode.
- Sound noise may be heard from the power supply when used for pulse load.

#### **Features**

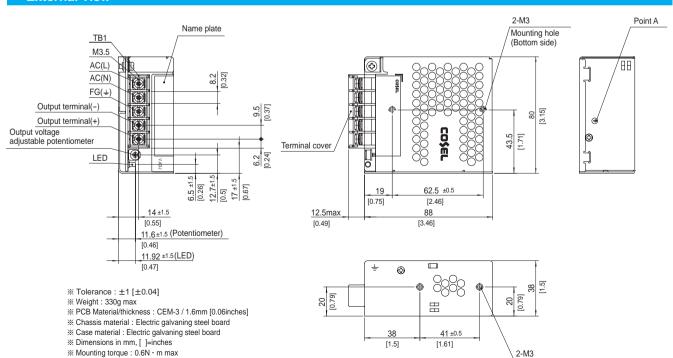
- · Compact design (Depth: 88mm 3.46inches)
- · UL508 approved (Except option -J), and complies with SEMI F47
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

#### **Block diagram**



#### **External view**

Screw tightening torque: 1.0N · m max



Mounting hole

# PLA50F

PL A 50 F - - -





Recommended EMI/EMC Filter NAC-04-472



High voltage pulse noise type : NAP series Low leakage current type : NAM series

\*The EMI/EMC Filter is recommended to connect with several devices.

® Optional \*7
 C : with Coating
 J : Connector interface

T : Vertical terminal block

N1: with DIN rail

1)Series name 2)Single output 3)Output wattage 4)Universal input 5)Output voltage

See 5.1 in Instruction Manual.

#### **SPECIFICATIONS**

Information the Home page is the latest.

	MODEL		PLA50F-5	PLA50F-12	PLA50F-15	PLA50F-24		
	VOLTAGE[V]			ting is required at AC85V - 11	5V. See 1.1 and 3.2 in Instructi	ion Manual) *3		
		ACIN 100V	0.6typ (lo=90%) 0.7typ (lo=90%)					
	CURRENT[A]	ACIN 115V	0.6typ (lo=100%)	0.7typ (lo=100%)				
		ACIN 230V	0.3typ (lo=100%)	0.4typ (lo=100%)				
	FREQUENCY[Hz]		50 / 60 (47 - 63)					
		ACIN 100V	74.5typ (lo=90%)	80.0typ (Io=90%)	80.0typ (Io=90%)	81.5typ (Io=90%)		
	EFFICIENCY[%]	ACIN 115V	75.0typ (Io=100%)	80.5typ (lo=100%)	80.5typ (lo=100%)	82.0typ (lo=100%)		
INPUT		ACIN 230V	76.5typ (Io=100%)	82.0typ (Io=100%)	82.0typ (lo=100%)	84.0typ (lo=100%)		
		ACIN 100V	0.97typ (Io=90%)	0.98typ (Io=90%)		, , , , ,		
	POWER FACTOR	ACIN 115V	0.97typ (Io=100%)	0.98typ (Io=100%)				
		ACIN 230V	0.85typ (Io=100%)	0.87typ (lo=100%)				
		ACIN 100V	16typ (Io=90%) Ta=25℃ at c	, ,				
	INRUSH CURRENT[A]	ACIN 115V	16typ (Io=100%) Ta=25℃ at					
		ACIN 230V	32typ (Io=100%) Ta=25℃ at					
	LEAKAGE CURRENT		7	60Hz, Io=100%, According to	IEC60950-1 and DEN-AN)			
	VOLTAGE[V]	• •	5	12	15	24		
	CURRENT[A]		8	4.3	3.5	2.2		
		ACIN 85-115V		t ACIN 115V or less (refer to in				
	WATTAGE[W]	ACIN 115V-264V	40.0	51.6	52.5	52.8		
	LINE REGULATION[mV] *4		20max	48max	60max	96max		
	LOAD REGULATION	mV1 *4	40max	100max	120max	150max		
	RIPPLE[mVp-p] *1	0 to +45℃	80max	120max	120max	120max		
		-10 to 0℃	140max	160max	160max	160max		
OUTPUT	RIPPLE NOISE[mVp-p] *1  TEMPERATURE REGULATION[mV]	0 to +45°C	120max	150max	150max	150max		
		-10 to 0℃	160max	180max	180max	180max		
		0 to +45℃	50max	120max	150max	240max		
		-10 to +45°C	60max	150max	180max	290max		
	DRIFT[mV]	*2	20max	48max	60max	96max		
	START-UP TIME[ms]		350typ (ACIN 115V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMEN	IT RANGE[V]	4.50 to 5.50	10.80 to 13.20	13.50 to 16.50	21.60 to 26.40		
	OUTPUT VOLTAGE SETT		5.00 to 5.15	12.00 to 12.48	15.00 to 15.60	24.00 to 24.96		
	OVERCURRENT PROTE		Works over 105% of rating a					
PROTECTION	OVERVOLTAGE PROTE		5.75 to 7.00	13.80 to 16.80	17.25 to 21.00	27.60 to 33.60		
CIRCUIT AND	OPERATING INDICAT		LED (Green)					
OTHERS	REMOTE SENSING		Not provided					
	REMOTE ON/OFF		Not provided					
	INPUT-OUTPUT		<u>'</u>	urrent = 10mA, DC500V 50MΩ	2 min (At room temperature)			
ISOLATION	INPUT-FG			rrent = 10mA, DC500V 50MΩ				
	OUTPUT-FG			ent = 25mA, DC500V 50M $\Omega$ i				
	OPERATING TEMP., HUMID. AND	ALTITUDE *5		Ion condensing), 3,000m (10,0				
	STORAGE TEMP., HUMID.AND		, , , , , , , , , , , , , , , , , , , ,	lon condensing), 9,000m (30,0				
ENVIRONMENT	VIBRATION			ninutes period, 60minutes each				
	IMPACT		196.1m/s² (20G), 11ms, once		<u> </u>			
SAFETY AND	AGENCY APPROVAL	S	X // //	·	JL508 (Except option -J) Comp	olies with DEN-AN		
NOISE	CONDUCTED NOISE			B, CISPR22-B, EN55011-B, E				
REGULATIONS	HARMONIC ATTENUA	ATOR *8	Complies with IEC61000-3-2	· · · · · · · · · · · · · · · · · · ·				
		511	- CO	0.000 / 1				



OTHERS	CASE SIZE/WEIGHT	38×80×99mm [1.50×3.15×3.90 inches] (Excluding terminal block and screw) (W×H×D) / 400g max
OTHERS	COOLING METHOD	Convection
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

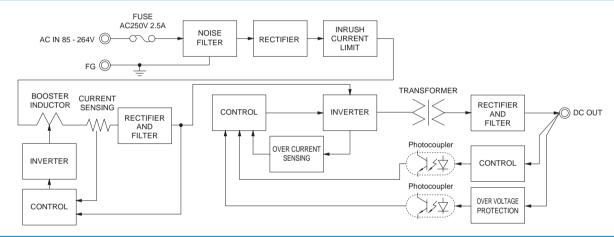
- This is the result of measurement of the testing board with capacitors of 22  $\mu$  F and 0.1  $\mu$  F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
  - See 1.6 of Instruction Manual for more details.
- \*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
- \*3 Output power derating is required. As for DC input, consult us for advice.
- Consult us about dynamic load and input response.
- 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. 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 not possible with this mode.
- Sound noise may be heard from the power supply when used for pulse load.

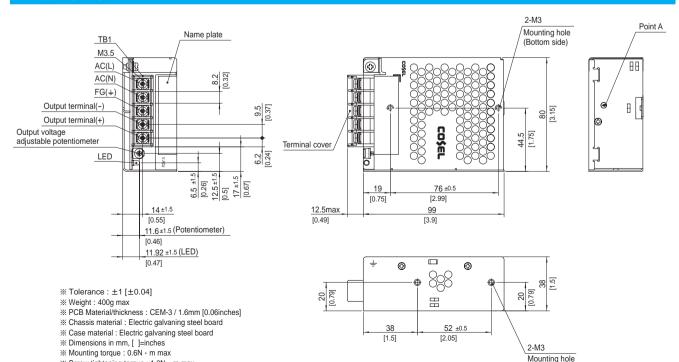
#### **Features**

- · Compact design (Depth: 99mm 3.90inches)
- · UL508 approved (Except option -J), and complies with SEMI F47
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

#### **Block diagram**



#### **External view**



eco

## PLA100F

A 100 F 5









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

- Optional \*7
   C: with Coating
   R: Remote on/off (Required external
- power source)
  J : Connector interface
- T : Vertical terminal block
  L : Lower power consumption
  (0.5W max at AC240Vin, no load, ErP-compliant)
- N1: with DIN rail

See 5.1 in Instruction Manual.

#### **SPECIFICATIONS**

\* Please consider "PBA100F-5-N" about 5V output with case cover

<u> </u>	CATIONS		* Please consider "PB/	100F-5-N" about 5V ou	tput with case cover.			
	MODEL		PLA100F-12	PLA100F-15	PLA100F-24	PLA100F-36	PLA100F-48	
	VOLTAGE[V]		AC85 - 264 1 φ (Outp (DC input *3)	ut derating is required	at AC85V - 115V. See 1.	1 and 3.2 in Instruction N	/lanual) *3	
	ACIN 100V		1.2typ (lo=90%)					
	CURRENT[A]	ACIN 115V	1.1typ (lo=100%)					
		ACIN 230V	0.6typ (lo=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63) (DC i	nput and 440Hz *3)				
		ACIN 100V	82typ (lo=90%)	83typ (Io=90%)	85typ (lo=90%)	86typ (lo=90%)	86typ (lo=90%)	
NPUT	EFFICIENCY[%]	ACIN 115V	82typ (Io=100%)	83typ (Io=100%)	85typ (lo=100%)	86typ (lo=100%)	86typ (lo=100%)	
NPUI		ACIN 230V	85typ (lo=100%)	86typ (lo=100%)	88typ (lo=100%)	89typ (lo=100%)	89typ (lo=100%)	
		ACIN 100V	0.98typ (lo=90%)					
	POWER FACTOR	ACIN 115V	0.98typ (lo=100%)					
		ACIN 230V	0.95typ (lo=100%) *	Power factor correction	n is stopped at AC250V of	or more.		
		ACIN 100V	16typ (Io=90%) Ta=25	°C at cold start				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=2	25°C at cold start				
		ACIN 230V	32typ (lo=100%) Ta=2	25°C at cold start				
	LEAKAGE CURRENT	[mA]	0.75max (ACIN 115V	/ 240V, 60Hz, lo=100%	, According to IEC60950	0-1 and DEN-AN)		
	VOLTAGE[V]		12	15	24	36	48	
ļ.	CUDDENTIAL	ACIN 85-115V	Output derating is req	uired at ACIN 115V or	less (refer to instruction	manual 3.2)		
	CURRENT[A]	ACIN 115V-264V		6.7	4.3	2.8	2.1	
		ACIN 85-115V	Output derating is reg	uired at ACIN 115V or	less (refer to instruction	manual 3.2)	'	
	WATTAGE[W]	ACIN 115V-264V	100.8	100.5	103.2	100.8	100.8	
ļ.	LINE REGULATION[m	1V1 *4	48max	60max	96max	144max	192max	
	LOAD REGULATION	lo=30 to 100%		120max	150max	150max	300max	
	[mV] *4	lo=0 to 30%		se contact us about det				
OUTPUT	RIPPLE[mVp-p]	0 to +40°C	120max	120max	120max	150max	150max	
	*1	-10 to 0°C	160max	160max	160max	200max	400max	
	lo: load factor	lo=0 to 30%	500max	500max	500max	500max	500max	
	RIPPLE NOISE[mVp-p]	0 to +40°C		150max	150max	200max	200max	
	*1	-10 to 0°C		180max	180max	240max	500max	
	lo: load factor			600max	600max	600max	600max	
		0 to +40℃	120max	150max	240max	360max	480max	
	TEMPERATURE REGULATION[mV]	-10 to +40°C	180max	180max	290max	440max	600max	
	DRIFT[mV]	*2	48max	60max	96max	144max	192max	
H	START-UP TIME[ms]		500typ (ACIN 115V, Io=100%) Ta=25°C					
H	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=100%) Ia=25 C					
	OUTPUT VOLTAGE ADJUSTMEN	IT RANGEIVI	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 SETT		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	
	OVERCURRENT PROTE			ating and recovers auto		30.00 to 37.44	140.00 10 40.02	
	OVERVOLTAGE PROTE		13.80 to 16.80	17.25 to 21.00	27.60 to 33.60	41.40 to 50.40	54.00 to 67.20	
H	OPERATING INDICAT							
. +	REMOTE SENSING	ION	LED (Green)					
	REMOTE ON/OFF		Not provided  Optional (Required external power source Option R)					
-		**	Optional (Required external power source. Option -R)					
H	INPUT-OUTPUT • RC	*9	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)  AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)					
SOLATION +	INPUT-FG	J-	, ,	,	,	. ,		
- F	OUTPUT RC-FG		$\Omega$ AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (At room temperature) $\Omega$ AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (At room temperature)					
	OUTPUT-RC	*9					at) man	
	OPERATING TEMP., HUMID. AND				· · · · · · · · · · · · · · · · · · ·	sing), 3,000m (10,000 fe	et) max	
NVIRONMENT -	STORAGE TEMP., HUMID. AND	ALIIIUDE			, 9,000m (30,000 feet) m			
L	VIBRATION				Ominutes each along X,	Y and ∠ axes		
	IMPACT			s, once each X, Y and				
	AGENCY APPROVAL	S	, ,		, , ,	cept option -J) Complies	with DEN-AN	
NOISE	CONDUCTED NOISE		•	, , , , , , , , , , , , , , , , , , ,	EN55011-B, EN55022-B	<b>1</b>		
REGULATIONS	HARMONIC ATTENUA	ATOR *8	Complies with IEC610	00-3-2 class A				



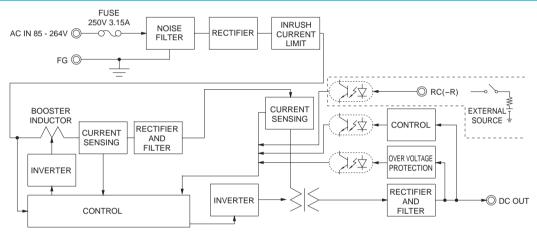
OTHERS	CASE SIZE/WEIGHT	×97×109mm [1.61×3.82×4.29 inches] (Excluding terminal block and screw) (W×H×D) / 500g max			
OTHERS	COOLING METHOD	Convection			
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)			

- \*1 This is the result of measurement of the testing board with canacitors of 22 U.F. and 0.1 U.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.
  - When the load factor is 0 30%, the switching power loss is reduced by burst operation, which will cause ripple and ripple noise to go beyond the specifications.
- Drift is the change in DC output for an eight hour period after a half-
- hour warm-up at 25℃.
- \*3 Output power denating is required. As for DC input, consult us for advice
- Consult us about dynamic load and input response. Measure the output voltage by using the average mode of the tester to deal with the burst operation at 30% load or less.
- Output power derating is required. See 3.2 in Instruction Manual.
- Consult us about safety agency approvals for the models with optional functions.
- \*8 Consult us about other classes.
- The RC terminal is added to ontion -R models. The RC terminal is isolated from input, output, and FG.
- 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 not possible with this mode
- Sound noise may be heard from the power supply when used for pulse load.

#### **Features**

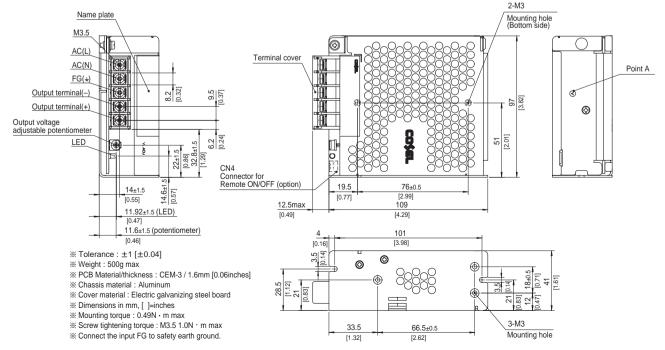
- · Compact design (Depth: 109mm 4.29inches)
- · High efficiency (88%typ PLA100F-24, AC230Vin, 100% load)
- · Low power consumption (1.5W typ AC240Vin, no load at standard model)
- · Lower power consumption (0.5Wmax AC240Vin, no load at option -L: see instruction manual)
- · UL508 approved (Except option -J), and complies with SEMI F47 (see instruction manual 1.1)
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

#### **Block diagram**



#### **External view**

The external size of -R option, -J option, -N1 option and -T option models is different from the standard model. See "5. Options and Others" in Instruction Manual for more details.



## PLA150F

A 150 F 5









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

- Optional \*7
   C: with Coating
   R: Remote on/off
  - (Required external power source)
    J : Connector interface
- T : Vertical terminal block
  L : Lower power consumption
  (0.5W max at AC240Vin, no load, ErP-compliant)
- N1: with DIN rail

See 5.1 in Instruction Manual.

#### **SPECIFICATIONS**

\* Please consider "PRA150F-5-N" about 5V output with case cover

	MODEL		PLA150F-12	PLA150F-15	PLA150F-24	PLA150F-36	PLA150F-48	
	VOLTAGE[V]		AC85 - 264 1 φ (Outp (DC input *3)	out derating is required a	at AC85V - 115V. See 1.	1 and 3.2 in Instruction M	fanual) *3	
	ACIN 100V		1.7typ (lo=90%)					
	CURRENT[A]	ACIN 115V	1.6typ (lo=100%)					
		ACIN 230V	0.8typ (lo=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63) (DC	input and 440Hz *3)				
		ACIN 100V	84typ (lo=90%)	84typ (Io=90%)	87typ (Io=90%)	87typ (Io=90%)	87typ (lo=90%)	
	EFFICIENCY[%]	ACIN 115V	84typ (lo=100%)	84typ (lo=100%)	87typ (Io=100%)	87typ (lo=100%)	87typ (lo=100%)	
NPUT		ACIN 230V	87typ (lo=100%)	87typ (Io=100%)	90typ (Io=100%)	90typ (Io=100%)	90typ (lo=100%)	
		ACIN 100V	0.98typ (Io=90%)	[ 0.13/p (10 10070)	CC-5/F (CC-10070)	TO 1)   (10 10070)	1119   (11 1117)	
	POWER FACTOR	ACIN 115V	0.98typ (Io=100%)					
		ACIN 230V	, ,	Power factor correction	is stopped at AC250V of	or more		
		ACIN 100V	16typ (Io=90%) Ta=25		10 010pp00 01710200 V C	7 111010.		
	INRUSH CURRENT[A]	ACIN 115V	16typ (Io=100%) Ta=2					
	INTOON CONNENTED	ACIN 230V	32typ (lo=100%) Ta=2					
	LEAKAGE CURRENT				, According to IEC60950	)-1 and DENLAN)		
	VOLTAGE[V]	[\\	12	15	24	36	48	
	TOLINGLIT	ACIN 85-115V			ess (refer to instruction i		70	
	CURRENT[A]	ACIN 05-115V ACIN 115V-264V		10	6.4	4.2	3.2	
		ACIN 1154-2044 ACIN 85-115V					3.2	
	WATTAGE[W]	ACIN 05-115V ACIN 115V-264V	150.0	150.0	ess (refer to instruction and 153.6	151.2	153.6	
	LINE DECLII ATIONS							
	LINE REGULATION[m	Io=30 to 100%	48max	60max 120max	96max	144max	192max	
	LOAD REGULATION		100max	se contact us about det	150max	150max	300max	
	[mV] *4		- '			450may	450	
ОИТРИТ	RIPPLE[mVp-p]		120max	120max	120max	150max	150max	
	lo: load factor	-10 to 0℃	160max	160max	160max	200max	400max	
		10-010-0070	500max	500max	500max	500max	500max	
	RIPPLE NOISE[mVp-p]	0 to +40°C		150max	150max	200max	200max	
	*1	-10 to 0℃	180max	180max	180max	240max	500max	
	lo: load factor	10-0 10 00 /0	600max	600max	600max	600max	600max	
	TEMPERATURE REGULATION[mV]	0 to +40℃	120max	150max	240max	360max	480max	
		-10 to +40°C	180max	180max	290max	440max	600max	
	DRIFT[mV]	*2	48max	60max	96max	144max	192max	
	START-UP TIME[ms]		500typ (ACIN 115V, Io=100%) Ta=25℃					
	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io:					
	OUTPUT VOLTAGE ADJUSTMEN			13.50 to 16.50	21.60 to 26.40	32.40 to 39.60	43.20 to 52.80	
	OUTPUT VOLTAGE SETT		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	
	OVERCURRENT PROTE			rating and recovers auto				
ROTECTION	OVERVOLTAGE PROTE		13.80 to 16.80	17.25 to 21.00	27.60 to 33.60	41.40 to 50.40	54.00 to 67.20	
IRCUIT AND	OPERATING INDICAT	ION	LED (Green)					
THERS	REMOTE SENSING		Not provided					
	REMOTE ON/OFF			kternal power source. O				
	INPUT-OUTPUT • C	*9	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)					
SOLATION	INPUT-FG				C500V 50M $\Omega$ min (At re	<u> </u>		
CLATION	OUTPUT • RC-FG	*9	AC500V 1minute, Cu	toff current = 100mA, D	C500V 50M $\Omega$ min (At ro	om temperature)		
	OUTPUT-RC	*9	AC500V 1minute, Cu	toff current = 100mA, D	C500V 50M $\Omega$ min (At ro	om temperature)		
	OPERATING TEMP., HUMID. AND A	ALTITUDE *5	-20 to +70°C (Output	derating is required), 20	- 90%RH (Non condens	sing), 3,000m (10,000 fee	et) max	
NIVIDONIMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +75°C, 20 - 90°	%RH (Non condensing)	9,000m (30,000 feet) m	nax		
NVIRONMENT	VIBRATION		10 - 55Hz, 19.6m/s <sup>2</sup> (	2G), 3minutes period, 6	Ominutes each along X,	Y and Z axes		
	IMPACT		196.1m/s² (20G), 11n	ns, once each X, Y and Z	Zaxes			
SAFETY AND	AGENCY APPROVAL	S	UL60950-1, C-UL (CS	SA60950-1), EN60950-1	, EN50178, UL508 (Exc	cept option -J) Complies	with DEN-AN	
	CONDUCTED NOISE					<del> </del>		
NOISE	COMPOCILD MOISE		Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B  Complies with IEC61000-3-2 class A					





OTHERS	CASE SIZE/WEIGHT	41×97×129mm [1.61×3.82×5.08 inches] (Excluding terminal block and screw) (WXHXD) / 600g max
OTHERS	COOLING METHOD	Convection
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

This is the result of measurement of the testing board with capacitors of 22 LIF and 0.1 LIF placed at 150 mm from the output terminals by a 20. MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken

See 1.6 of Instruction Manual for more details.

When the load factor is 0 - 30%, the switching power loss is reduced by burst operation, which will cause ripple and ripple noise to go beyond the specifications

Drift is the change in DC output for an eight hour period after a half-

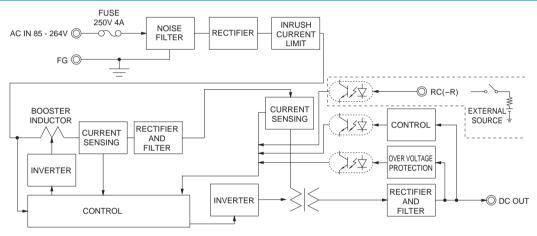
- hour warm-up at 25℃.
- Output power derating is required. As for DC input, consult us for advice Consult us about dynamic load and input response. Measure the output
- voltage by using the average mode of the tester to deal with the burst operation at 30% load or less.
- Output power derating is required. See 3.2 in Instruction Manual.
- See 3.3 in Instruction Manual for more details.
- Consult us about safety agency approvals for the models with optional functions.
- Consult us about other classes

- The RC terminal is added to option -R models. The RC terminal is isolated from input, output, and FG.
- 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 not possible with this mode
- pulse load.

#### **Features**

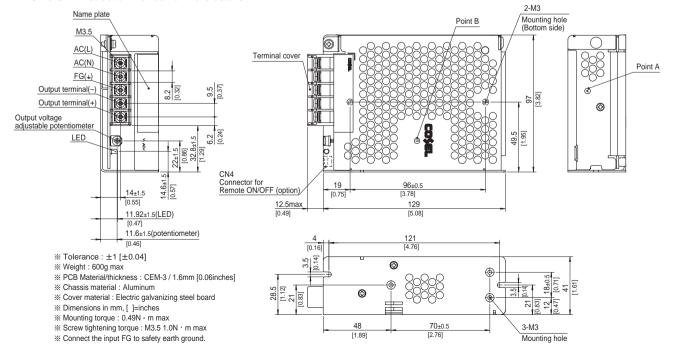
- · Compact design (Depth: 129mm 5.08inches)
- · High efficiency (90%typ PLA150F-24, AC230Vin, 100% load)
- · Low power consumption (1.5W typ AC240Vin, no load at standard model)
- · Lower power consumption (0.5Wmax AC240Vin, no load at option -L: see instruction manual)
- · UL508 approved (Except option -J), and complies with SEMI F47 (see instruction manual 1.1)
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

#### **Block diagram**



#### **External view**

The external size of -R option, -J option, -N1 option and -T option models is different from the standard model. See "5. Options and Others" in Instruction Manual for more details.



# PLA300F

300





- 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

- output voltage adjustment
  - U: Low input voltage stop (Complies with SEMI F-47) 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		PLA300F-5	PLA300F-12	PLA300F-15	PLA300F-24	PLA300F-36	PLA300F-48	
	VOLTAGE[V]				uired at AC85V - 115	V. See 1.1 and 3.2 i	n Instruction Manual	) *3	
			(DC input and AC265 - 277V input *3)						
	ACIN 100		3.1typ (lo=90%)	3.4typ (lo=90%)					
	CURRENT[A]	ACIN 115V	3.0typ (lo=100%)	3.3typ (lo=100%)					
		ACIN 230V	1.5typ (lo=100%)	1.7typ (lo=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63) (D	C input and 440Hz	*3)				
		ACIN 100V	73typ (lo=90%)	78typ (lo=90%)	80typ (lo=90%)	84typ (lo=90%)	84typ (Io=90%)	84typ (lo=90%)	
NPUT	EFFICIENCY[%]	ACIN 115V	74typ (lo=100%)	78typ (Io=100%)	80typ (lo=100%)	84typ (lo=100%)	84typ (lo=100%)	84typ (lo=100%	
NFUI		ACIN 230V	77typ (lo=100%)	81typ (lo=100%)	83typ (lo=100%)	87typ (lo=100%)	87typ (lo=100%)	87typ (lo=100%	
		ACIN 100V	0.98typ (lo=90%)						
	POWER FACTOR	ACIN 115V	0.98typ (lo=100%)						
		ACIN 230V	0.95typ (lo=100%)						
		ACIN 100V	20typ (lo=90%) Ta=	=25℃ at cold start					
	INRUSH CURRENT[A]	ACIN 115V	20typ (lo=100%) Ta	a=25°C at cold start					
		ACIN 230V	40typ (lo=100%) Ta	a=25°C at cold start					
	LEAKAGE CURRENT	[mA]	0.75max (ACIN 11	5V / 240V, 60Hz, lo=	=100%, According to	IEC60950-1 and DE	N-AN)		
	VOLTAGE[V]		5	12	15	24	36	48	
	CURRENT[A]	ACIN 85-115V	Output derating is a	required at ACIN 11	5V or less (refer to in	struction manual 3.2	2)		
	CORRENTIAL	ACIN 115V-264V	50	25	20	12.5	8.4	6.3	
	WATTAGE[W]	ACIN 85-115V	Output derating is a	required at ACIN 11	5V or less (refer to in	struction manual 3.2	2)		
	WATTAGE[W]	ACIN 115V-264V	250	300	300	300	302.4	302.4	
	LINE REGULATION[m	nV] *4	20max	48max	60max	96max	144max	192max	
	LOAD REGULATION[	mV] *4	40max	100max	120max	150max	150max	300max	
	RIPPLE[mVp-p]	0 to +50°C	80max	120max	120max	120max	150max	150max	
OUTPUT	*1	-10 to 0℃	140max	160max	160max	160max	160max	400max	
JUIPUI	RIPPLE NOISE[mVp-p]  *1  TEMPERATURE REGULATION[mV]	0 to +50°C	120max	150max	150max	150max	200max	200max	
		-10 to 0℃	160max	180max	180max	180max	240max	500max	
		0 to +50°C	50max	120max	150max	240max	360max	480max	
		-10 to +50°C	75max	180max	180max	290max	440max	600max	
	DRIFT[mV] *2		20max	48max	60max	96max	144max	192max	
	START-UP TIME[ms]		300typ (ACIN 115\)	/, Io=100%)		•		•	
	HOLD-UP TIME[ms]		20typ (ACIN 115V,	lo=100%)					
	OUTPUT VOLTAGE ADJUSTMEN	NT 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 SETT	ING[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	
	OVERCURRENT PROTE	CTION	Works over 105% of	of rating and recover	s automatically				
PROTECTION	OVERVOLTAGE PROTE	CTION[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	
CIRCUIT AND	OPERATING INDICAT	ION	LED (Green)			•	•	•	
OTHERS	REMOTE SENSING		Not provided						
	REMOTE ON/OFF		Optional (Required external power source. Option -R)						
	INPUT-OUTPUT • RC	*10	AC3,000V 1minute	, Cutoff current = 10	mA, DC500V 50MΩ	min (At room tempe	erature)		
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At room temperature)						
SOLATION	OUTPUT • RC-FG	*10							
	OUTPUT-RC	*10							
	OPERATING TEMP., HUMID. AND	ALTITUDE *5			ed), 20 - 90%RH (No			x	
	STORAGE TEMP., HUMID. AND				nsing), 9,000m (30,0	0,	, , ,		
NVIRONMENT	VIBRATION				riod, 60minutes each		es		
	IMPACT			1ms, once each X, Y		<u> </u>			
SAFETY AND	AGENCY APPROVAL	S	, ,,		0950-1, EN50178 Co	mplies with DEN-Al	N		
NOISE	CONDUCTED NOISE				· · · · · · · · · · · · · · · · · · ·				
		ATOR *9	Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B Complies with IEC61000-3-2 class A						



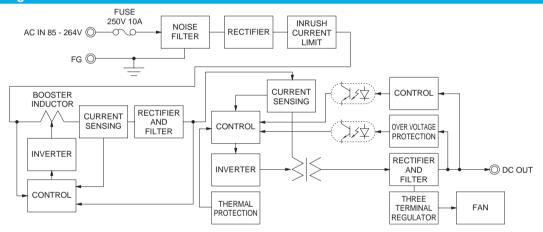
OTHERS	CASE SIZE/WEIGHT	102×41×190mm [4.02×1.61×7.48 inches] (Excluding terminal block and screw) (W×H×D) / 1.0kg max
OTHERS	COOLING METHOD *8	Forced cooling (internal fan)
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

- This is the result of measurement of the testing board with capacitors of 22 LIF and 0.1 LIF placed at 150 mm from the output terminals by a 20. MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken
  - 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 arm-up at 25℃
- Output power derating is required. Consult us if the power supply needs
- to be used for DC input, 440Hz input or AC265-277V input.
- Consult us about dynamic load and input response. Output power derating is required. See 3.2 in Instruction Manual.
- See 3.3 in Instruction Manual for more details
- Consult us about safety agency approvals for the models with optional functions.
- The fan speed slows down at no load.
- Consult us about other classes \*10 The RC terminal is added to option -R models. The RC terminal is
- isolated from input, output, and FG.
- Do not use the power supply in overcurrent conditions or in unspecified input voltage ranges. Otherwise the internal components may be
- Parallel operation is not possible with this mode
- Sound noise may be heard from the power supply when used for

#### **Features**

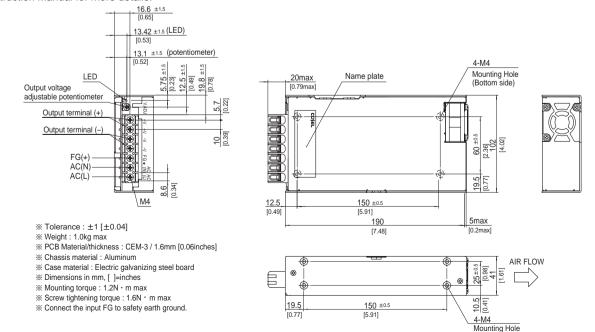
- · Cost-effective
- · Longer life (see Instruction Manual)
- · Low profile (meets 1U height = 41 mm or 1.61 inches)
- ·Wide operating temperature range (-20°C to +70°C see instruction manual)
- · Screw hold type terminal block
- · Slow fan speed at no load
- · Many optional functions
- · Complies with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

#### **Block diagram**



#### **External view**

The external size of -V option, -R option, and -T2 option models is different from the standard model. See "5. Options and Others" in Instruction Manual for more details.



# PLA600F

600





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

  - F4: Low speed fan
    T2: Horizontal terminal block
  - (non-screw-hold type)

See 5.1 in Instruction Manual.

#### **SPECIFICATIONS**

ı	MODEL		PLA600F-5	PLA600F-12	PLA600F-15	PLA600F-24	PLA600F-36	PLA600F-48	
,	VOLTAGEIVI		AC85 - 264 1 φ (O	utput derating is requ	uired at AC85V - 115	V. See 1.1 and 3.2 in	n Instruction Manual	) *4	
	VOLTAGE[V]		(DC input and AC265 - 277V input *4)						
	ACIN 100V		6.2typ (lo=90%)	6.7typ (lo=90%)					
	CURRENT[A]	ACIN 115V	6.0typ (lo=100%) 6.5typ (lo=100%)						
		ACIN 230V	3.0typ (lo=100%) 3.2typ (lo=100%)						
F	FREQUENCY[Hz]		50 / 60 (47 - 63) (DC input and 440Hz *4)						
	ACIN 1		74typ (lo=90%)	81typ (Io=90%)	81typ (Io=90%)	84typ (lo=90%)	85typ (lo=90%)	85typ (lo=90%)	
NDUT E	EFFICIENCY[%]	ACIN 115V	75typ (lo=100%)	81typ (lo=100%)	81typ (Io=100%)	84typ (lo=100%)	85typ (lo=100%)	85typ (lo=100%)	
NPUT		ACIN 230V	77typ (lo=100%)	84typ (lo=100%)	84typ (lo=100%)	88typ (lo=100%)	88typ (lo=100%)	88typ (lo=100%)	
	POWER FACTOR	ACIN 100V	0.98typ (Io=90%)						
F		ACIN 115V	0.98typ (lo=100%)						
		ACIN 230V	0.95typ (lo=100%)						
		ACIN 100V	20/40typ (lo=90%) (Primary inrush current /Secondary inrush current) (More than 3sec to re-start)						
1	INRUSH CURRENT[A] ACIN		20/40typ (lo=100%	) (Primary inrush cu	rrent /Secondary inru	ush current) (More t	han 3sec to re-start)		
		ACIN 230V	40/40typ (lo=100%	) (Primary inrush cu	rrent /Secondary inru	ush current) (More t	han 3sec to re-start)		
ī	LEAKAGE CURRENT[mA]				00%, According to IE				
١	VOLTAGE[V]		5	12	15	24	36	48	
		ACIN 85-115V	Output derating is i	equired at ACIN 115	V or less (refer to in	struction manual 3.2	!)		
	CURRENT[A]	ACIN 115V-264V	100	50	40	25	16.7	12.5	
		ACIN 85-115V	Output derating is required at ACIN 115V or less (refer to instruction manual 3.2)						
\	WATTAGE[W]	ACIN 115V-264V	500	600	600	600	601.2	600	
li li	LINE REGULATION[mV] *8		20max	48max	60max	96max	144max	192max	
_	LOAD REGULATION[mV] *8		40max	100max	120max	150max	150max	300max	
	RIPPLE[mVp-p]	0 to +50℃	80max	120max	120max	120max	150max	150max	
	*1	-20 to 0°C	140max	160max	160max	160max	160max	400max	
DUTPUT	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	150max	150max	150max	200max	200max	
'		-20 to 0°C	160max	180max	180max	180max	240max	500max	
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	120max	150max	240max	360max	480max	
Т		-20 to +50°C	75max	180max	180max	290max	440max	600max	
	DRIFT[mV] *		20max	48max	60max	96max	144max	192max	
<u> </u>	START-UP TIME[ms]		20max						
<u> </u>	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=100%)						
<u> </u>	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	
<u> </u>	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	
	OVERCURRENT PROTECTION			of rating and recover	1	24.00 to 24.50	30.00 to 37.44	140.00 10 40.02	
-	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)	13.00 10 10.00	17.23 to 21.00	27.00 to 33.00	41.40 10 30.40	33.20 10 07.20	
_	REMOTE SENSING		Optional (Option -W)						
·	REMOTE SENSING REMOTE ON/OFF		Optional (Required external power source. Option -R)						
	INPUT-OUTPUT • RC *3								
_			AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature)  AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature)						
SOLATION ⊢	INPUT-FG								
	OUTPUT • RC-FG *3		, , , , , , , , , , , , , , , , , , , ,						
	OUTPUT-RC *3		The second minimate, extension and the second secon						
	OPERATING TEMP.,HUMID.AND ALTITUDE *5								
NVIRONMENT —	STORAGE TEMP., HUMID. AND ALTITUDE VIBRATION		-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max						
_			10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axes						
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axes						
	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						
REGULATIONS	HARMONIC ATTENU	ATOR *10	Complies with IEC61000-3-2 class A						





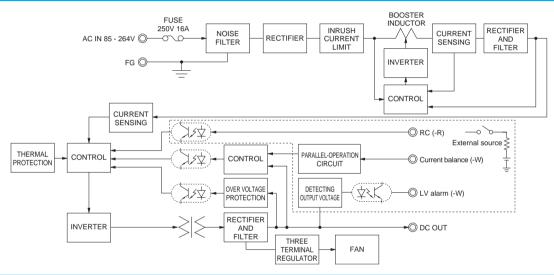
OTHERS	CASE SIZE/WEIGHT	120 X 61 X 215mm [4.72 X 2.40 X 8.46 inches] (Excluding terminal block and screw) (WX HXD) / 2.0kg max			
	COOLING METHOD *9	Forced cooling (internal fan)			
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)			

- This is the result of measurement of the testing board with capacitors of  $22\,\mu\,\text{F}$  and 0.1  $\mu\,\text{F}$  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. Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25 °C.
- The RC terminal is added to option -R models. The RC terminal is isolated from input, output, and FG.
- Output power derating is required. Consult us if the power supply needs to be used for DC input, 440Hz input or AC265-277V input. Output power derating is required. See 3.2 in Instruction Manual.
- See 3.3 in Instruction Manual for more details
- \*7 Consult us about safety agency approvals for the models with optional functions.
- Consult us about dynamic load and input response
- 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**

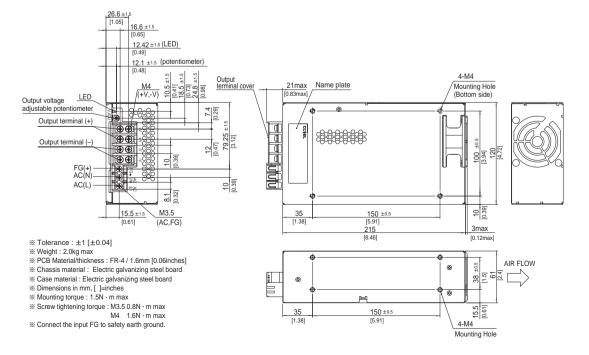
- · Cost-effective
- · Longer life (see Instruction Manual)
- · Low profile (meets 1U height = 41 mm or 1.61 inches)
- · Wide operating temperature range (-20°C to +70°C see instruction manual)
- · Screw hold type terminal block
- · Slow fan speed at no load
- · Many optional functions
- · Complies with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



# AMEYA360 Components Supply Platform

## **Authorized Distribution Brand:**

























## Website:

Welcome to visit www.ameya360.com

#### Contact Us:

## > Address:

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd Minhang District, Shanghai , China

## Sales:

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

## Customer Service :

Email service@ameya360.com

## Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com