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 - 1	15V. See 1.1 and 3.2 in Instr	uction Manual) *3			
		ACIN 100V	0.4typ (Io=90%)						
	CURRENT[A]	ACIN 115V	0.4typ (lo=100%)						
		ACIN 230V	0.25typ (lo=100%)						
	FREQUENCY[Hz]		50 / 60 (47 - 63)						
NDUT		ACIN 100V	72.5typ (Io=90%)	75.5typ (lo=90%)	77.0typ (Io=90%)	78.0typ (Io=90%)			
NPUT	EFFICIENCY[%]	ACIN 115V	73.5typ (lo=100%)	77.0typ (lo=100%)	78.5typ (lo=100%)	79.0typ (lo=100%)			
		ACIN 230V	75.5typ (lo=100%)	78.5typ (lo=100%)	79.5typ (lo=100%)	80.0typ (lo=100%)			
		ACIN 100V	16typ (lo=90%) Ta=25°C at €	cold start	'				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=25°C at	t cold start					
		ACIN 230V	32typ (lo=100%) Ta=25℃ at	cold start					
	LEAKAGE CURRENT	[mA]	0.30max (ACIN 115V / 240\	/, 60Hz, Io=100%, According t	o IEC60950-1 and DEN-AN)			
	VOLTAGE[V]		5	12	15	24			
	CURRENT[A]		3	1.3	1	0.7			
	WATTA OF DAD	ACIN 85-115V	Output derating is required a	at ACIN 115V or less (refer to	instruction manual 3.2)	,			
	WATTAGE[W]	ACIN 115V-264V	15.0	15.6	15.0	16.8			
	LINE REGULATION[n	nV] *4	20max	48max	60max	96max			
	LOAD REGULATION	mV] *4	40max	100max	120max	150max			
		0 to +50°C	80max	120max	120max	120max			
	RIPPLE[mVp-p] *1	-10 to 0℃	140max	160max	160max	160max			
		lo=0 to 35%	160max	240max	240max	280max			
UTPUT	RIPPLE NOISE[mVp-p] *1 TEMPERATURE REGULATION[mV]	0 to +50℃	120max	150max	150max	150max			
		-10 to 0℃	160max	180max	180max	180max			
		lo=0 to 35%	240max	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=1009	%) *Start-up time is 700 ms typ fo	or less than 1 minute of applying inp	out again from turning off the input voltage			
	HOLD-UP TIME[ms]		20typ (ACIN 115V, Io=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			
	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	'				
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 Ω min (At room temperature)						
SOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At room temperature)						
	OUTPUT-FG		AC500V 1minute, Cutoff current = $25mA$, DC500V $50M\Omega$ min (At room temperature)						
	OPERATING TEMP., HUMID. AND	ALTITUDE *5							
	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +75°C, 20 - 90%RH (I	Non condensing), 9,000m (30	,000 feet) max				
NVIRONMENT	VIBRATION			minutes period, 60minutes eac	· · · · · · · · · · · · · · · · · · ·				
	IMPACT		196.1m/s² (20G), 11ms, onc	e each X, Y and Z axes	<u> </u>				
SAFETY AND	AGENCY APPROVAL	S	, ,, ,	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		Complies with IEC61000-3-2 class A						



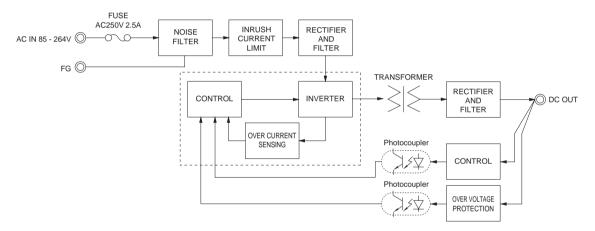
OTHERS	CASE SIZE/WEIGHT	38×80×73mm [1.50×3.15×2.87 inches] (Excluding terminal block and screw) (W×H×D) / 250g max
OTHERS	COOLING METHOD	Convection
WARRANTY	NTY WARRANTY	

- This is the result of measurement of the testing board with capacitors of 22 μ F and 0.1 μ 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.

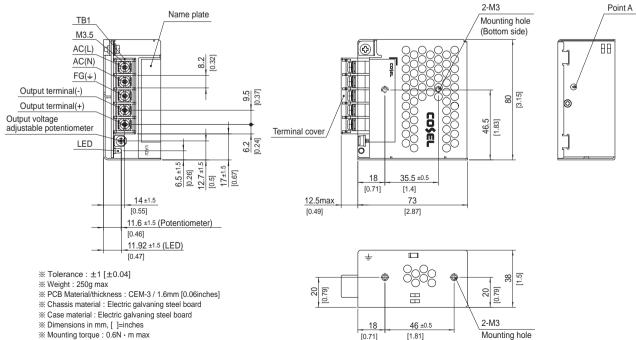
Features

- · 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



- ※ Screw tightening torque: 1.0N ⋅ m max

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.

- ①Series name ②Single output ③Output wattage ④Universal input ⑤Output 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	ting is required at AC85V - 115	5V. See 1.1 and 3.2 in Instruction	on Manual) *3		
	ACIN 100V		0.7typ (lo=90%)					
	CURRENT[A]	ACIN 115V	0.7typ (lo=100%)					
		ACIN 230V	0.4typ (Io=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63)					
INPUT		ACIN 100V	73.0typ (Io=90%)	80.0typ (Io=90%)	81.0typ (lo=90%)	82.5typ (lo=90%)		
NPUI	EFFICIENCY[%]	ACIN 115V	74.0typ (Io=100%)	80.5typ (Io=100%)	81.5typ (lo=100%)	83.0typ (lo=100%)		
		ACIN 230V	77.0typ (Io=100%)	81.0typ (lo=100%)	82.0typ (lo=100%)	83.5typ (lo=100%)		
		ACIN 100V	16typ (lo=90%) Ta=25℃ at co	old start				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=25℃ at	cold start				
		ACIN 230V	32typ (lo=100%) Ta=25℃ at	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		
	WATTAGE[W]	ACIN 85-115V	Output derating is required at	ACIN 115V or less (refer to in	struction manual 3.2)			
	WATTAGE[W]	ACIN 115V-264V	30.0	30.0	30.0	31.2		
	LINE REGULATION[m	nV] *4	20max	48max	60max	96max		
	LOAD REGULATION[mV] *4		40max	100max	120max	150max		
	DIDDI ElmVn nl	0 to +50°C	80max	120max	120max	120max		
	RIPPLE[mVp-p] *1	-10 to 0℃	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 REGULATION[mV]	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]		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 SETTING[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 ar	nd 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 cu	rrent = 10mA, DC500V 50M Ω	min (At room temperature)			
SOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At room temperature)					
	OUTPUT-FG		AC500V 1minute, Cutoff curr	ent = 25mA, DC500V 50M Ω r	nin (At room temperature)			
	OPERATING TEMP., HUMID. AND	ALTITUDE *5	-20 to +70°C, 20 - 90%RH (N	on condensing), 3,000m (10,0	00 feet) max			
NVIRONMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +75°C, 20 - 90%RH (N	on condensing), 9,000m (30,0	00 feet) max			
IN VIR UNIVIEN I	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3m	inutes period, 60minutes each	along X, Y and Z axes			
	IMPACT		196.1m/s² (20G), 11ms, once	each X, Y and Z axes				
SAFETY AND	AGENCY APPROVAL	s	UL60950-1, C-UL (CSA6095	0-1), EN60950-1, EN50178, U	L508 (Except option -J) Comp	lies with DEN-AN		
IOISE	CONDUCTED NOISE		Complies with FCC-B, VCCI-	B, CISPR22-B, EN55011-B, E	N55022-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	NTY WARRANTY	

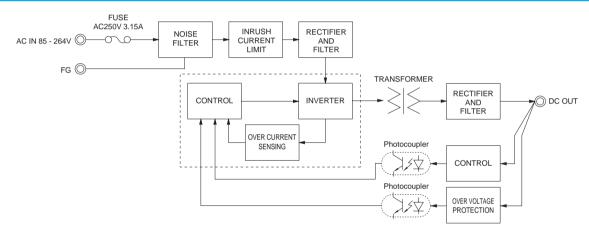
- This is the result of measurement of the testing board with capacitors of 22 μ F and 0.1 μ F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
 - See 1.6 of Instruction Manual for more details.
- *2 Drift is the change in 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

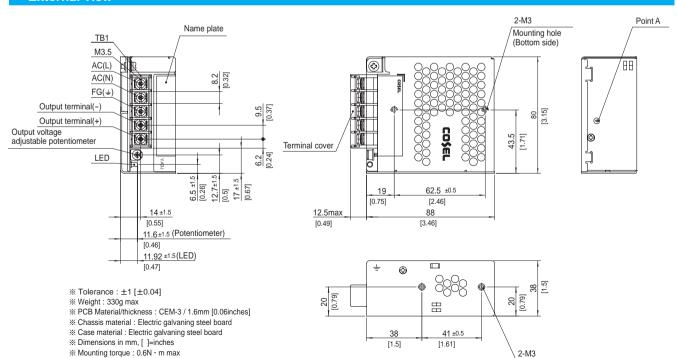
- · Compact design (Depth: 88mm 3.46inches)
- · UL508 approved (Except option -J), and complies with SEMI F47
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

Block diagram



External view

Screw tightening torque: 1.0N · m max



Mounting hole

PLA50F

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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		DI AEOE E	DI AEOE 12	DI AEOE 1E	DI AEOE 24		
	MODEL		PLA50F-5	PLA50F-12	PLA50F-15	PLA50F-24		
	VOLTAGE[V]		AC85 - 264 1 \$\phi\$ (Output derating is required at AC85V - 115V. See 1.1 and 3.2 in Instruction Manual) *3					
		ACIN 100V	0.6typ (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 (Io=90%)	80.0typ (Io=90%)	80.0typ (lo=90%)	81.5typ (Io=90%)		
	EFFICIENCY[%]	ACIN 115V	75.0typ (Io=100%)	80.5typ (Io=100%)	80.5typ (lo=100%)	82.0typ (lo=100%)		
NPUT		ACIN 230V	76.5typ (Io=100%)	82.0typ (Io=100%)	82.0typ (Io=100%)	84.0typ (lo=100%)		
		ACIN 100V	0.97typ (lo=90%)	0.98typ (lo=90%)				
	POWER FACTOR	ACIN 115V	0.97typ (Io=100%)	0.98typ (Io=100%)				
		ACIN 230V	0.85typ (lo=100%)	0.87typ (lo=100%)				
		ACIN 100V	16typ (Io=90%) Ta=25°C at c					
	INRUSH CURRENT[A]	ACIN 115V	16typ (Io=100%) Ta=25℃ at	cold start				
		ACIN 230V	32typ (Io=100%) Ta=25℃ at					
	LEAKAGE CURRENT	[mA]	0.75max (ACIN 115V / 240V,	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		
	WATTAGE[W]	ACIN 85-115V	Output derating is required a	t ACIN 115V or less (refer to in	struction manual 3.2)			
	WATTAGE[W]	ACIN 115V-264V	40.0	51.6	52.5	52.8		
	LINE REGULATION[mV] *4		20max	48max	60max	96max		
	LOAD REGULATION[mV] *4	40max	100max	120max	150max		
	RIPPLE[mVp-p] *1	0 to +45°C	80max	120max	120max	120max		
		-10 to 0°C	140max	160max	160max	160max		
DUTPUT	RIPPLE NOISE[mVp-p] *1 TEMPERATURE REGULATION[mV]	0 to +45°C	120max	150max	150max	150max		
		-10 to 0°C	160max	180max	180max	180max		
		0 to +45°C	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 RANGEIVI	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 ar			1 22 12 - 112		
ROTECTION	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)					
THERS	REMOTE SENSING		Not provided					
	REMOTE ON/OFF		Not provided Not provided					
	INPUT-OUTPUT		<u>'</u>	rrent = 10mA, DC500V 50MΩ	min (At room temperature)			
SOLATION	INPUT-FG		, ,	$Irrent = 10 \text{mA}, DC500V 50 \text{M}\Omega$, , ,			
	OUTPUT-FG							
	OPERATING TEMP., HUMID, AND	ALTITUDE *5	AC500V 1minute, Cutoff current = 25mA, DC500V 50M Ω min (At room temperature) -20 to +70°C, 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max					
	STORAGE TEMP., HUMID.AND		, , ,	0// / /				
NVIRONMENT	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		. a.o., g /1, 1 and L a/100			
SAFETY AND	AGENCY APPROVAL	S	<u> </u>	<u> </u>	L508 (Except option -J) Comp	lies with DEN-AN		
NOISE	CONDUCTED NOISE		. ,	B, CISPR22-B, EN55011-B, E		NOO WIGH DENTAIN		
REGULATIONS	HARMONIC ATTENU	ATOR **	Complies with IEC61000-3-2	 	1400022-10			
	I TARINONIC ATTENU	110K *8	Compiles with IEC01000-3-2	UIASS M				



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)

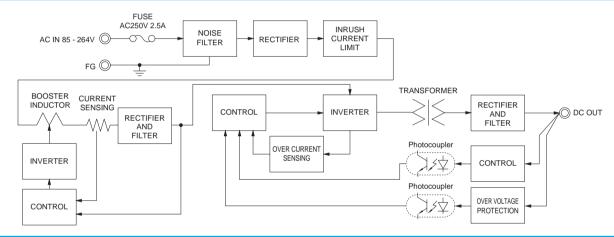
- This is the result of measurement of the testing board with capacitors of 22 μ F and 0.1 μ F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
 - See 1.6 of Instruction Manual for more details.
- *2 Drift is the change in 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.

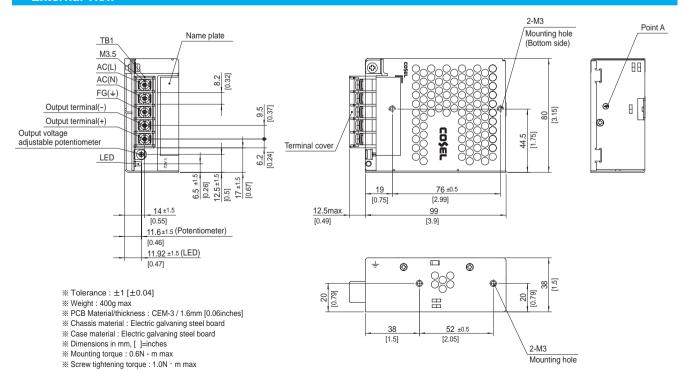
Features

- · 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 "PRA100F-5-N" about 5V output with case cover

M	IODEL		PLA100F-12	PLA100F-15	PLA100F-24	PLA100F-36	PLA100F-48	
V	OLTAGE[V]		AC85 - 264 1 φ (Outp (DC input *3)	ut derating is required a	t AC85V - 115V. See 1.	1 and 3.2 in Instruction M	fanual) *3	
	ACIN 100V		1.2typ (lo=90%)					
c	URRENT[A]	ACIN 115V	1.1typ (lo=100%)					
		ACIN 230V	0.6typ (lo=100%)					
FI	REQUENCY[Hz]		50 / 60 (47 - 63) (DC i	nput and 440Hz *3)				
		ACIN 100V	82typ (Io=90%)	83typ (lo=90%)	85typ (Io=90%)	86typ (Io=90%)	86typ (lo=90%)	
E	FFICIENCY[%]	ACIN 115V	82typ (Io=100%)	83typ (Io=100%)	85typ (Io=100%)	86typ (Io=100%)	86typ (Io=100%)	
NPUT -		ACIN 230V	85typ (Io=100%)	86typ (Io=100%)	88typ (Io=100%)	89typ (Io=100%)	89typ (Io=100%)	
		ACIN 100V	0.98typ (lo=90%)	00.17 (10 10070)	σοιγρ (10 10070)	001) [(10 10070)	σοιγρ (ισσογο	
P	OWER FACTOR	ACIN 115V	0.98typ (lo=100%)					
-		ACIN 230V	, ,	Power factor correction	is stopped at AC250V of	or more		
		ACIN 100V	16typ (Io=90%) Ta=25		10 010pp0d dt /10200 v C	, moro.		
IN	IRUSH CURRENT[A]	ACIN 115V	16typ (Io=100%) Ta=2					
"	INCOM CONNENT [A]	ACIN 230V	32typ (lo=100%) Ta=2					
11	EAKAGE CURRENT				According to IEC60950)-1 and DEN-AN)		
	OLTAGE[V]	[III/A]	12	15	24	36	48	
		ACIN 85-115V		_	ess (refer to instruction r		10	
C	URRENT[A]	ACIN 115V-264V	8.4	6.7	4.3	2.8	2.1	
		ACIN 85-115V			ess (refer to instruction r		2.1	
W	/ATTAGE[W]	ACIN 115V-264V	100.8	100.5	103.2	100.8	100.8	
<u> </u>	INE REGULATION[m		48max	60max	96max	144max	192max	
_	OAD REGULATION	lo=30 to 100%	100max	120max	150max	150max	300max	
	nV] *4			se contact us about deta		Toomax	Joonnax	
	-		120max	120max	120max	150max	150max	
R	RIPPLE[mVp-p]	-10 to 0°C	160max	160max	160max	200max	400max	
DUTPUT	lo: load factor	lo=0 to 30%		500max	500max	500max	500max	
H-		0 to +40°C		150max	150max	200max	200max	
RI	RIPPLE NOISE[mVp-p]	-10 to 0°C	180max	180max	180max	240max	500max	
	lo: load factor	lo=0 to 30%		600max	600max	600max	600max	
		0 to +40°C	120max	150max	240max	360max	480max	
TE	MPERATURE REGULATION[mV]	-10 to +40°C	180max	180max	290max	440max	600max	
<u> </u>	DRIFT[mV] *:		48max	60max	96max	144max	192max	
_	TART-UP TIME[ms]	**2			Joinax	144IIIax	192IIIdx	
_	OLD-UP TIME[ms]		500typ (ACIN 115V, Io=100%) Ta=25°C 20typ (ACIN 115V, Io=100%)					
	JTPUT VOLTAGE ADJUSTMEN	T DANGEIVI	***	13.50 to 16.50	21.60 to 26.40	32.40 to 39.60	43.20 to 52.80	
_	UTPUT VOLTAGE SETTI		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	
	VERCURRENT PROTE			ating and recovers auto	_	30.00 to 37.44	40.00 10 43.32	
	VERVOLTAGE PROTECT		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	
	PERATING INDICAT		LED (Green)	17.25 to 21.00	27.00 to 33.00	41.40 to 50.40	34.00 10 07.20	
	EMOTE SENSING	ION						
	EMOTE ON/OFF		Not provided Optional (Required external power source, Option, R)					
	IPUT-OUTPUT • RC	*0	Optional (Required external power source. Option -R) AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature)					
	IPUT-FG	*9	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature) AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature)					
SOLATION ⊢	UTPUT • RC-FG	*0			C500V 50M Ω min (At ro	· · · · · · · · · · · · · · · · · · ·		
_					,	· · · · · ·		
	UTPUT-RC	*9			C500V 50MΩ min (At ro		ot) may	
	PERATING TEMP.,HUMID.AND A				,	sing), 3,000m (10,000 fe	er) IIIdX	
NVIRONMENT —	FORAGE TEMP., HUMID.AND	ALIIIUUE	•		9,000m (30,000 feet) m			
	IBRATION ABACT				Ominutes each along X,	i ailū∠ axes		
	MPACT		. , , , .	s, once each X, Y and Z		ant anting 1) O"	with DENI AN	
	GENCY APPROVALS	3				ept option -J) Complies	WIUI DEN-AN	
	ONDUCTED NOISE		•		EN55011-B, EN55022-B			
	ARMONIC ATTENUA	VIOK *8	Complies with IEC610	JUU-3-2 CIASS A				



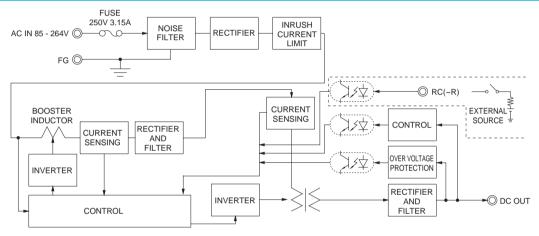
OTHERS	CASE SIZE/WEIGHT	41×97×109mm [1.61×3.82×4.29 inches] (Excluding terminal block and screw) (W×H×D) / 500g max
OTHERS	COOLING METHOD	Convection
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

- 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 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.
- 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

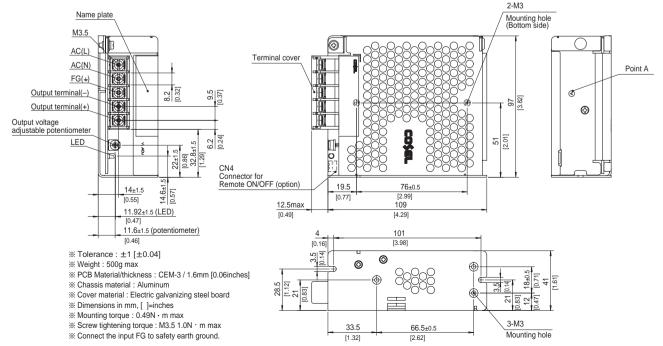
- · Compact design (Depth: 109mm 4.29inches)
- · High efficiency (88%typ PLA100F-24, AC230Vin, 100% load)
- · Low power consumption (1.5W typ AC240Vin, no load at standard model)
- · Lower power consumption (0.5Wmax AC240Vin, no load at option -L: see instruction manual)
- · UL508 approved (Except option -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.



eco

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)				
	- NEGOENOT[IIE]	ACIN 100V	84typ (Io=90%)	84typ (Io=90%)	87typ (Io=90%)	87typ (Io=90%)	87typ (Io=90%)	
	EFFICIENCY[%]	ACIN 100V	84typ (lo=100%)	84typ (lo=100%)	87typ (Io=30%)	87typ (lo=30%)	87typ (lo=30%)	
NPUT	LITTOLLING I[70]	ACIN 113V				90typ (Io=100%)		
			87typ (lo=100%)	87typ (Io=100%)	90typ (lo=100%)	90typ (10=100%)	90typ (Io=100%)	
	DOWED FACTOR	ACIN 100V	0.98typ (lo=90%)					
	POWER FACTOR	ACIN 115V	0.98typ (lo=100%)	D	:t			
		ACIN 230V	, ,		is stopped at AC250V of	or more.		
		ACIN 100V	16typ (lo=90%) Ta=25					
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=2					
		ACIN 230V	32typ (lo=100%) Ta=2					
	LEAKAGE CURRENT	[mA]			, According to IEC60950			
	VOLTAGE[V]		12	15	24	36	48	
	CURRENT[A]	ACIN 85-115V			ess (refer to instruction i			
		ACIN 115V-264V		10	6.4	4.2	3.2	
	WATTAGE[W]	ACIN 85-115V			ess (refer to instruction i			
	WATTAOL[W]	ACIN 115V-264V	150.0	150.0	153.6	151.2	153.6	
	LINE REGULATION[m	nV] *4	48max	60max	96max	144max	192max	
	LOAD REGULATION	lo=30 to 100%	100max	120max	150max	150max	300max	
	[mV] *4	lo=0 to 30%	Burst operation (Plea	se contact us about det	ail)			
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	150max	200max	200max	
	*1	-10 to 0℃	180max	180max	180max	240max	500max	
	lo: load factor		600max	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	
	START-UP TIME[ms]				1			
	HOLD-UP TIME[ms]		500typ (ACIN 115V, Io=100%) Ta=25℃ 20typ (ACIN 115V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMEN	IT RANGEIVI	***	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		00.00 10 07.77	70.00 10 40.92	
DOTECTION	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	
PROTECTION CIRCUIT AND	OPERATING INDICAT		LED (Green)	17.20 to 21.00	21.00 10 33.00	+1.40 to 50.40	34.00 10 07.20	
OTHERS	REMOTE SENSING	ION						
J.IILINO			Not provided					
	REMOTE ON/OFF	a -	Optional (Required external power source. Option -R) AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature)					
	INPUT-OUTPUT • C	*9						
SOLATION	INPUT-FG				C500V 50MΩ min (At re	· · · · · · · · · · · · · · · · · · ·		
	OUTPUT • RC-FG				C500V 50M Ω min (At ro	· · · · · ·		
	OUTPUT-RC	*9			C500V 50MΩ min (At ro			
	OPERATING TEMP., HUMID. AND				,	sing), 3,000m (10,000 fee	et) max	
NVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE			9,000m (30,000 feet) m			
	VIBRATION				Ominutes each along X,	Y and Z axes		
	IMPACT			ns, once each X, Y and I				
SAFETY AND	AGENCY APPROVAL	S				ept option -J) Complies	with DEN-AN	
NOISE	CONDUCTED NOISE		Complies with FCC-B	, VCCI-B, CISPR22-B,	EN55011-B, EN55022-B			
REGULATIONS			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) (W×H×D) / 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-

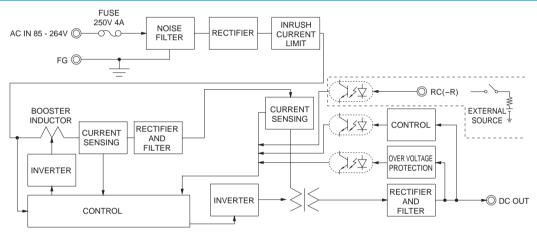
- hour warm-up at 25℃.
- Output power derating is required. As for DC input, consult us for advice Consult us about dynamic load and input response. Measure the output
- voltage by using the average mode of the tester to deal with the burst operation at 30% load or less.
- Output power derating is required. 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

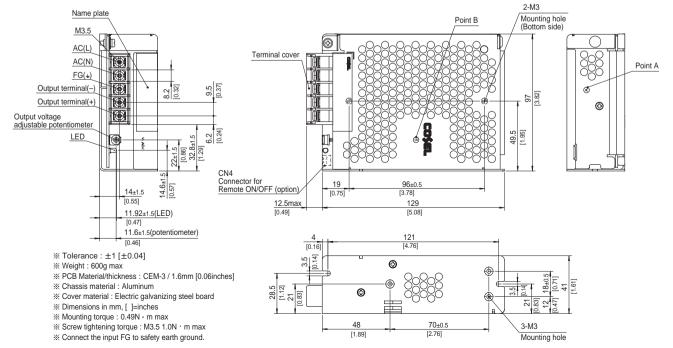
- · Compact design (Depth: 129mm 5.08inches)
- · High efficiency (90%typ PLA150F-24, AC230Vin, 100% load)
- · Low power consumption (1.5W typ AC240Vin, no load at standard model)
- · Lower power consumption (0.5Wmax AC240Vin, no load at option -L: see instruction manual)
- · UL508 approved (Except option -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 10		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 (lo=90%)	84typ (lo=90%)	
NPUT	EFFICIENCY[%]	ACIN 115V	74typ (lo=100%)	78typ (Io=100%)	80typ (Io=100%)	84typ (lo=100%)	84typ (Io=100%)	84typ (lo=100%	
NFUI		ACIN 230V	77typ (lo=100%)	81typ (lo=100%)	83typ (Io=100%)	87typ (lo=100%)	87typ (Io=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 (Io=90%) Ta=	=25℃ at cold start					
	INRUSH CURRENT[A]	ACIN 115V	20typ (Io=100%) Ta	a=25°C at cold start					
		ACIN 230V	40typ (Io=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)		
	CORRENT[A]	ACIN 115V-264V	50	25	20	12.5	8.4	6.3	
	WATTAGE[W]	ACIN 85-115V	Output derating is a	equired 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[n	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	
NUTDUT	*1	-10 to 0°C	140max	160max	160max	160max	160max	400max	
DUTPUT	RIPPLE NOISE[mVp-p] *1	0 to +50°C	120max	150max	150max	150max	200max	200max	
		-10 to 0°C	160max	180max	180max	180max	240max	500max	
	TEMPERATURE REQUILATIONS	0 to +50°C	50max	120max	150max	240max	360max	480max	
	TEMPERATURE REGULATION[mV]	-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\	/, lo=100%)					
	HOLD-UP TIME[ms]		20typ (ACIN 115V,	Io=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		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		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 = 10	mA, DC500V 50MΩ	min (At room tempe	erature)		
SOLATION	OUTPUT • RC-FG	*10	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At room temperature) AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At room temperature)						
	OUTPUT-RC	*10	AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At room temperature)						
	OPERATING TEMP., HUMID. AND				ed), 20 - 90%RH (No			X	
	STORAGE TEMP., HUMID. AND		· ·		,		, .,		
NVIRONMENT	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			1ms, once each X, Y					
SAFETY AND	AGENCY APPROVAL	s			0950-1, EN50178 Co	mplies with DEN-AN	N .		
		-				•			
NOISE	CONDUCTED NOISE		Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B Complies with IEC61000-3-2 class A						



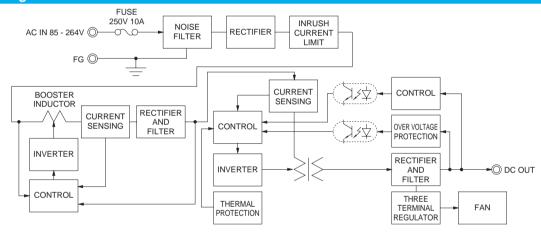
OTHERS	CASE SIZE/WEIGHT	102×41×190mm [4.02×1.61×7.48 inches] (Excluding terminal block and screw) (W×H×D) / 1.0kg max
OTHERS	COOLING METHOD *8	Forced cooling (internal fan)
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

- 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

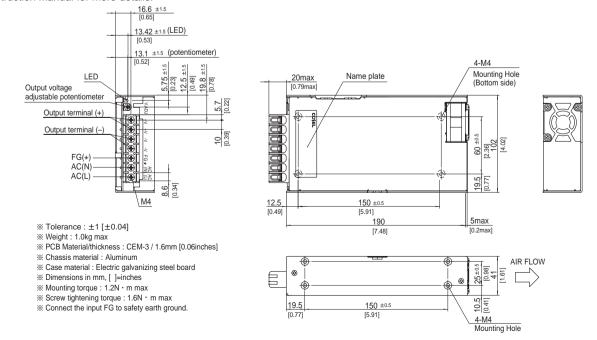
- · Cost-effective
- · Longer life (see Instruction Manual)
- · Low profile (meets 1U height = 41 mm or 1.61 inches)
- ·Wide operating temperature range (-20°C to +70°C see instruction manual)
- · Screw hold type terminal block
- · Slow fan speed at no load
- · Many optional functions
- · Complies with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



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

 - 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		
	VOLTAGE[V]				uired at AC85V - 115	V. See 1.1 and 3.2 ir	n Instruction Manual)	*4		
INPUT			(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%)						
	FREQUENCY[Hz]		50 / 60 (47 - 63) (DC input and 440Hz *4)							
	EFFICIENCY[%]	ACIN 100V	74typ (lo=90%)	81typ (lo=90%)	81typ (lo=90%)	84typ (lo=90%)	85typ (lo=90%)	85typ (lo=90%)		
		ACIN 115V	75typ (lo=100%)	81typ (lo=100%)	81typ (lo=100%)	84typ (lo=100%)	85typ (lo=100%)	85typ (lo=100%)		
		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 (lo=90%)							
		ACIN 115V	0.98typ (lo=100%)							
		ACIN 230V	0.95typ (lo=100%)							
	INRUSH CURRENT[A]	ACIN 100V	20/40typ (lo=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)							
ОՍТРИТ	VOLTAGE[V]		5	12	15	24	36	48		
	CLIPPENTIAL ACIN 85-115V		Output derating is r	equired at ACIN 115	5V or less (refer to in	struction manual 3.2)			
	CURRENT[A]	ACIN 115V-264V	100	50	40	25	16.7	12.5		
	WATTAGE[W]	ACIN 85-115V	Output derating is r	equired at ACIN 115	5V or less (refer to in	struction manual 3.2)			
	WATTAGE[W]	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]	0 to +50°C	80max	120max	120max	120max	150max	150max		
	*1	-20 to 0°C	140max	160max	160max	160max	160max	400max		
	RIPPLE NOISE[mVp-p] *1	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		
		-20 to +50°C	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% o	of rating and recover	s 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 50M Ω min (At room temperature)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At room temperature)							
	OUTPUT • RC-FG *3		AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At room temperature)							
	001101	OUTPUT-RC *3		AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At room temperature)						
		*3	AC500V Iminute, C	raton carront root	-20 to +70℃ (Output derating is required), 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max					
					ed), 20 - 90%RH (No	n condensing), 3,000	0m (10,000 feet) max	X		
ENIVIDONIMENT	OUTPUT-RC	ALTITUDE *5	-20 to +70°C (Outp	ut derating is require	ed), 20 - 90%RH (Nonsing), 9,000m (30,0		0m (10,000 feet) max	X		
ENVIRONMENT	OUTPUT-RC OPERATING TEMP.,HUMID.AND	ALTITUDE *5	-20 to +70°C (Outpo	ut derating is require 90%RH (Non conder	,-	00 feet) max	,	x		
ENVIRONMENT	OUTPUT-RC OPERATING TEMP.,HUMID.AND STORAGE TEMP.,HUMID.AND	ALTITUDE *5	-20 to +70°C (Outpote) -20 to +75°C, 20 - 9 10 - 55Hz, 19.6m/s	ut derating is require 90%RH (Non conder	nsing), 9,000m (30,00 riod, 60minutes each	00 feet) max	,	x		
ENVIRONMENT SAFETY AND	OUTPUT-RC OPERATING TEMP.,HUMID.AND STORAGE TEMP.,HUMID.AND VIBRATION	ALTITUDE *5 ALTITUDE	-20 to +70°C (Output -20 to +75°C, 20 - 9 10 - 55Hz, 19.6m/s 196.1m/s² (20G), 1	ut derating is require 90%RH (Non conder 2 (2G), 3minutes per 1ms, once each X, Y	nsing), 9,000m (30,00 riod, 60minutes each	00 feet) max along X, Y and Z ax	es	x		
	OUTPUT-RC OPERATINGTEMP.,HUMID.AND STORAGE TEMP.,HUMID.AND VIBRATION IMPACT	ALTITUDE *5 ALTITUDE	-20 to +70°C (Output -20 to +75°C, 20 - 9 10 - 55Hz, 19.6m/s 196.1m/s² (20G), 1 UL60950-1, C-UL (ut derating is require 90%RH (Non conder 2 (2G), 3minutes per 1ms, once each X, Y CSA60950-1), EN60	nsing), 9,000m (30,00 riod, 60minutes each of and Z axes	00 feet) max along X, Y and Z ax mplies with DEN-AN	es	x		



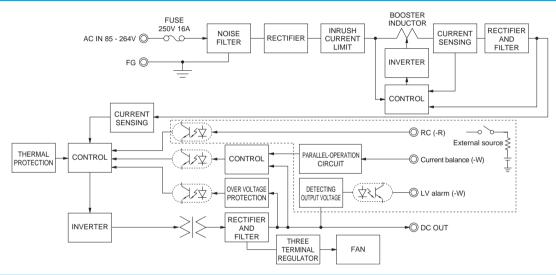
OTHERS	CASE SIZE/WEIGHT	120×61×215mm [4.72×2.40×8.46 inches] (Excluding terminal block and screw) (W×H×D) / 2.0kg max				
	COOLING METHOD *9	Forced cooling (internal fan)				
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)				

- 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.

