AC-DC Power Supplies Enclosed Type











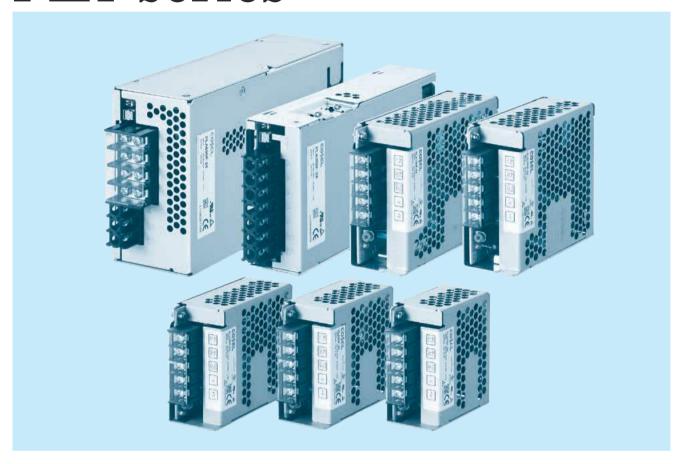








PLA-series



Feature

Low Profile (15, 30, 50, 100, 150, 300W: 1U size.

600W : 2U size)

Wide temperature range (-20 $^{\circ}\!\! C$ to +70 $^{\circ}\!\! C$, Derating is required) Harmonic attenuator (Complies with IEC61000-3-2 class A)

Universal input (AC85 - 264V, Derating is required)

Low power consumption at no load

Screw hold type terminal block (Only PLA300F and PLA600F)
Complies with SEMI F-47 (Option -U : Refer to instruction manual)
Many optional functions

Safety agency approvals

UL60950-1, C-UL (CSA60950-1), EN62368-1 UL508 (PLA15F-150F) approved Complies with DEN-AN

5-year warranty (See Instruction Manual)

CE marking

Low Voltage Directive

UKCA marking

Electrical Equipment Safety Regulations RoHS Regulations

EMI

Complies with FCC-B, CISPR22-B, EN55011-B, EN55022-B, VCCI-B

EMS Compliance : EN61204-3, EN61000-6-2

EN61000-4-2

EN61000-4-3

EN61000-4-4

EN61000-4-5

EN61000-4-6

EN61000-4-8

EN61000-4-11

PLA15F

A 15









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

*A higher current rating EMI/EMC filter may be recommended in view of the other devices that could be connected in parallel with the power supply.

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

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

 : with DIN rail

See 5.1 in Instruction Manual.

*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

	MODEL		PLA15F-5	PLA15F-12	PLA15F-15	PLA15F-24			
	VOLTAGE[V]		AC85 - 264 1 ϕ (Output derating is required at AC85V - 115V. See 1.1 and 3.2 in Instruction Manual) *3						
	ACIN 100V		0.4typ (lo=90%)						
	CURRENT[A]	ACIN 115V	0.4typ (lo=100%)						
		ACIN 230V	0.25typ (lo=100%)						
	FREQUENCY[Hz]		50 / 60 (47 - 63)						
		ACIN 100V	72.5typ (lo=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 (Io=100%)			
		ACIN 100V	16typ (lo=90%) Ta=25℃ at o	cold start	,				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=25°C at	cold start					
		ACIN 230V	32typ (lo=100%) Ta=25℃ at	cold start					
	LEAKAGE CURRENT	[mA]	0.30max (ACIN 115V / 240V	/, 60Hz, lo=100%, According t	o IEC62368-1 and DEN-AN				
	VOLTAGE[V]		5	12	15	24			
	CURRENT[A]		3	1.3	1	0.7			
		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℃	80max	120max	120max	120max			
	RIPPLE[mVp-p] *1	-10 to 0℃	140max	160max	160max	160max			
		lo=0 to 35%	160max	240max	240max	280max			
OUTPUT	RIPPLE NOISE[mVp-p] *1 TEMPERATURE REGULATION[mV]	0 to +50°C	120max	150max	150max	150max			
		-10 to 0°C	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=100%) *Start-up time is 700 ms typ for less than 1 minute of applying input again from turning off the input volta						
	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		1	1			
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)	1					
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	-		urrent = 10mA, DC500V 50M		<u>'</u>			
	OUTPUT-FG			rent = 25mA, DC500V 50M Ω		,			
	OPERATING TEMP., HUMID. AND	ALTITUDE *5		Non condensing), 3,000m (10					
	STORAGE TEMP., HUMID. AND		,	Non condensing), 9,000m (30	·				
ENVIRONMENT	VIBRATION		,	minutes period, 60minutes each	· · · · · · · · · · · · · · · · · · ·				
	IMPACT		196.1m/s² (20G), 11ms, onc		g ,				
SAFETY AND	AGENCY APPROVAL	S		50-1), EN62368-1, UL508 (Ex	cept option -J) Complies wit	th DEN-AN			
NOISE	CONDUCTED NOISE	-	' '						
			Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B Complies with IEC61000-3-2 class A						

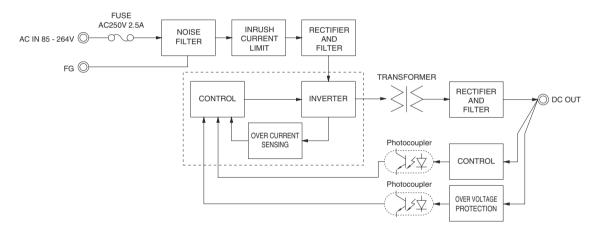
OTHERS	CASE SIZE/WEIGHT	38×80×73mm [1.50×3.15×2.87 inches] (Excluding terminal block and screw) (W×H×D) / 250g max
OTHERS	COOLING METHOD	Convection
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

- *1 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.
- *3 As for DC input, consult us for advice.
- *4 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.
- *5 Output power derating is required. See 3.2 in Instruction Manual.
 *6 See 3.3 in Instruction Manual for more details.
- *7 Consult us about safety agency approvals for the models with optional functions
- *8 Consult us about 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.

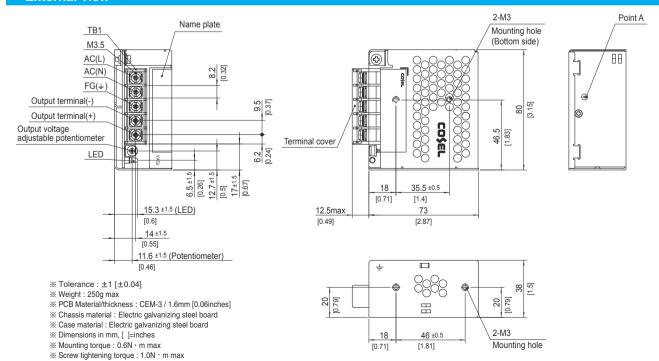
Features

- · 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

30







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

*A higher current rating EMI/EMC filter may be recommended in view of the other devices that could be connected in parallel with the power supply.



- ①Series name ②Single output ③Output wattage ④Universal input
- ⑤Output voltage
- ®Optional *7
 C: with Coating
 J: Connector interface
- T : Vertical terminal block
- -N

 : with DIN rail

See 5.1 in Instruction Manual.

*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

	MODEL		PLA30F-5	PLA30F-12	PLA30F-15	PLA30F-24		
	VOLTAGE[V]		AC85 - 264 1 φ (Output dera	ting is required at AC85V - 11	5V. See 1.1 and 3.2 in Instructi	on 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)					
NPUT		ACIN 100V	73.0typ (lo=90%)	80.0typ (Io=90%)	81.0typ (Io=90%)	82.5typ (lo=90%)		
NPUI	EFFICIENCY[%]	ACIN 115V	74.0typ (lo=100%)	80.5typ (Io=100%)	81.5typ (lo=100%)	83.0typ (Io=100%)		
		ACIN 230V	77.0typ (Io=100%)	81.0typ (Io=100%)	82.0typ (lo=100%)	83.5typ (Io=100%)		
		ACIN 100V	16typ (lo=90%) Ta=25°C at c	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	IEC62368-1 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 a	t ACIN 115V or less (refer to in	nstruction manual 3.2)			
	WATTAGE[W]	ACIN 115V-264V	30.0	30.0	30.0	31.2		
	LINE REGULATION[n	nV] *4	20max	48max	60max	96max		
	LOAD REGULATION[mV] *4	40max	100max	120max	150max		
	DIDDI E[m\/n n]	0 to +50°C	80max	120max	120max	120max		
	RIPPLE[mVp-p] *1	-10 to 0℃	140max	160max	160max	160max		
UTPUT	RIPPLE NOISE[mVp-p] *1	0 to +50°C	120max	150max	150max	150max		
		-10 to 0°C	160max	180max	180max	180max		
	TEMPERATURE REQUIREMENT AT ANY AND	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 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 current = 10mA, DC500V 50M Ω min (At room temperature)					
SOLATION	INPUT-FG	-	AC2,000V 1minute, Cutoff cu	irrent = 10mA, DC500V 50MΩ	min (At room temperature)			
	OUTPUT-FG		AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At room temperature)					
	OPERATING TEMP., HUMID. AND	ALTITUDE *5	-20 to +70°C, 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max					
NVIRONMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +75°C, 20 - 90%RH (N	on condensing), 9,000m (30,0	000 feet) max			
INVINUNINENT	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3m	ninutes period, 60minutes each	along X, Y and Z axes			
	IMPACT		196.1m/s² (20G), 11ms, once	e each X, Y and Z axes				
AFETY AND	AGENCY APPROVAL	s	UL60950-1, C-UL (CSA6095	0-1), EN62368-1, UL508 (Exc	ept option -J) Complies with D	EN-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	WARRANTY *6	5 years (subject to the operating conditions)

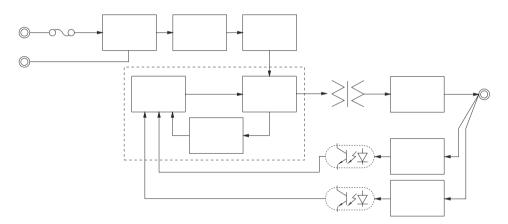
- This is the result of measurement of the testing board with capacitors of 22 μ F and 0.1 μ F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
 - See 1.6 of Instruction Manual for more details.
- *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
 *3 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

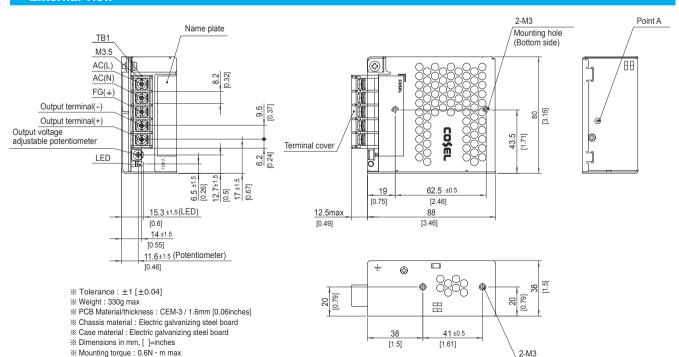
- · Compact design (Depth: 88mm 3.46inches)
- · UL508 approved (Except option -J), and complies with SEMI F47
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

Block diagram



External view

Screw tightening torque: 1.0N · m max



Mounting hole

PLA50F

50









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

*A higher current rating EMI/EMC filter may be recommended in view of the other devices that could be connected in parallel with the power supply.



- ⑤Output voltage
- ®Optional *7
 C: with Coating
 J: Connector interface
 - T : Vertical terminal block
- -N

 : with DIN rail

See 5.1 in Instruction Manual.

*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

	MODEL		PLA50F-5	PLA50F-12	PLA50F-15	PLA50F-24		
	VOLTAGE[V]		AC85 - 264 1 φ (Output dera	ating is required at AC85V - 1	15V. See 1.1 and 3.2 in Instr	ruction Manual) *3		
	ACIN 100V		0.6typ (lo=90%) 0.7typ (lo=90%)					
	CURRENT[A]	ACIN 115V	0.6typ (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 (lo=90%)	80.0typ (Io=90%)	81.5typ (lo=90%)		
	EFFICIENCY[%]	ACIN 115V	75.0typ (lo=100%)	80.5typ (lo=100%)	80.5typ (lo=100%)	82.0typ (lo=100%)		
NPUT		ACIN 230V	76.5typ (lo=100%)	82.0typ (lo=100%)	82.0typ (Io=100%)	84.0typ (Io=100%)		
		ACIN 100V	0.97typ (lo=90%)	0.98typ (lo=90%)	1	3), (
	POWER FACTOR	ACIN 115V	0.97typ (lo=100%)	0.98typ (Io=100%)				
		ACIN 230V	0.85typ (Io=100%)	0.87typ (Io=100%)				
		ACIN 100V	16typ (Io=90%) Ta=25℃ at o	71 (/				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=25°C at					
	manoon oonnean[A]	ACIN 230V	32typ (lo=100%) Ta=25℃ at					
	LEAKAGE CURRENT		*' '	, 60Hz, lo=100%, According	to IEC62368-1 and DEN-AN)		
	VOLTAGE[V]	[5	12	15	24		
	CURRENT[A]		8	4.3	3.5	2.2		
	CONTENTIAL	ACIN 85-115V	Output derating is required a			2.2		
	WATTAGE[W]	ACIN 05-115V ACIN 115V-264V	40.0	51.6	52.5	52.8		
	LINE REGULATION[n		20max	48max	60max	96max		
	LOAD REGULATION		40max	100max	120max	150max		
	RIPPLE[mVp-p] *1 RIPPLE NOISE[mVp-p] *1 TEMPERATURE REGULATION[mV]	0 to +45℃	80max	120max	120max	120max		
			140max	160max	160max			
OUTDUT		-10 to 0°C				160max		
OUTPUT		0 to +45℃	120max	150max	150max	150max		
		-10 to 0°C	160max	180max	180max	180max		
		0 to +45℃	50max	120max	150max	240max		
		-10 to +45℃	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%)	,	1			
	OUTPUT VOLTAGE ADJUSTMEN		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	ION	LED (Green)					
OTHERS	REMOTE SENSING		Not provided					
	REMOTE ON/OFF		Not provided					
	INPUT-OUTPUT			urrent = 10mA, DC500V 50M		/		
SOLATION	INPUT-FG			urrent = 10mA, DC500V 50M		e)		
	OUTPUT-FG			rent = 25mA, DC500V 50M Ω		,		
	OPERATING TEMP., HUMID. AND		<u> </u>	Non condensing), 3,000m (10				
NVIRONMENT	STORAGE TEMP., HUMID.AND	ALTITUDE		Non condensing), 9,000m (30	·			
-14 A IU O IAIMEIA I	VIBRATION		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					
SAFETY AND	AGENCY APPROVAL	s	UL60950-1, C-UL (CSA6095	50-1), EN62368-1, UL508 (Ex	cept option -J) Complies wit	h DEN-AN		
NOISE	CONDUCTED NOISE		Complies with FCC-B, VCCI	-B, CISPR22-B, EN55011-B,	EN55022-B	<u> </u>		
REGULATIONS			Complies with IEC61000-3-2	P class A				



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)

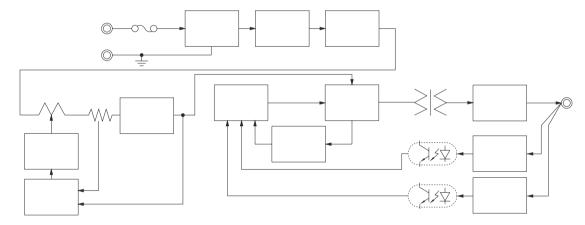
- This is the result of measurement of the testing board with capacitors of 22 μ F and 0.1 μ F placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
 - See 1.6 of Instruction Manual for more details.
- *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
 *3 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

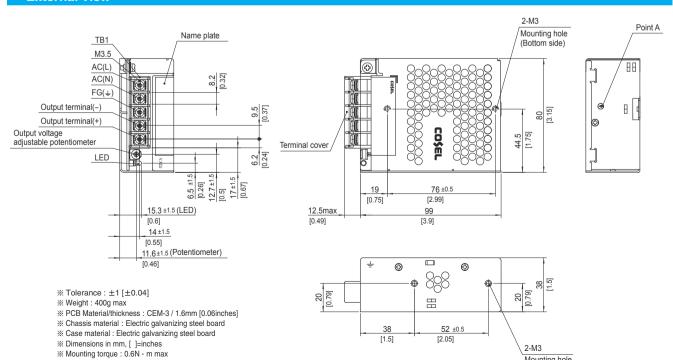
- · Compact design (Depth: 99mm 3.90inches)
- · UL508 approved (Except option -J), and complies with SEMI F47
- · Various connection interface options (vertical terminal [-T], AMP connector [-J])

Block diagram



External view

※ Screw tightening torque: 1.0N ⋅ m max



Mounting hole

PLA100F

100









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

*A higher current rating EMI/EMC filter may be recommended in view of the other devices that could be connected in parallel with the power supply.

- ①Series name ②Single output ③Output wattage ④Universal input
- ⑤Output voltage
- ®Optional *7
 C: with Coating
 R: Remote on/off (Required external
- power source)
 J : Connector interface
- T : Vertical terminal block -N□ : with DIN rail

See 5.1 in Instruction Manual.

*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

SPECIFICATIONS

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

				100F-5-N" about 5V outpu			T=	
	MODEL		PLA100F-12	PLA100F-15	PLA100F-24	PLA100F-36	PLA100F-48	
<u> </u>	VOLTAGE[V]			t derating is required at	AC85V - 115V. See 1.1	and 3.2 in Instruction Ma	nual) *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)					
		ACIN 100V	82typ (lo=90%)	83typ (lo=90%)	85typ (Io=90%)	86typ (lo=90%)	86typ (lo=90%)	
	EFFICIENCY[%]	ACIN 115V	82typ (lo=100%)	83typ (lo=100%)	85typ (Io=100%)	86typ (lo=100%)	86typ (lo=100%)	
IPUT		ACIN 230V	85typ (lo=100%)	86typ (lo=100%)	88typ (Io=100%)	89typ (Io=100%)	89typ (lo=100%)	
		ACIN 100V	0.98typ (lo=90%)					
	POWER FACTOR	ACIN 115V	0.98typ (lo=100%)					
		ACIN 230V	0.95typ (lo=100%) * F	Power factor correction is	stopped at AC250V or	more.		
		ACIN 100V	16typ (lo=90%) Ta=25°	C at cold start				
	INRUSH CURRENT[A]	ACIN 115V	16typ (lo=100%) Ta=25	5℃ at cold start				
		ACIN 230V	32typ (lo=100%) Ta=25	5°C at cold start				
	LEAKAGE CURRENT	[mA]	0.75max (ACIN 115V /	240V, 60Hz, Io=100%, A	According to IEC62368-	1 and DEN-AN)		
	VOLTAGE[V]		12	15	24	36	48	
		ACIN 85-115V	Output derating is requ	ired at ACIN 115V or les	s (refer to instruction ma	anual 3.2)		
	CURRENT[A]	ACIN 115V-264V	8.4	6.7	4.3	2.8	2.1	
	_	ACIN 85-115V	Output derating is requ	ired at ACIN 115V or les	s (refer to instruction ma	anual 3.2)		
'	WATTAGE[W]	ACIN 115V-264V	100.8	100.5	103.2	100.8	100.8	
	LINE REGULATION[m	1V1 *4	48max	60max	96max	144max	192max	
H	LOAD REGULATION	lo=30 to 100%	100max	120max	150max	150max	300max	
	[mV] *4	lo=0 to 30%		e contact us about detail		Toomax	Coomax	
F		0 to +40°C	120max	120max	120max	150max	150max	
	RIPPLE[mVp-p]	-10 to 0°C	160max	160max	160max	200max	400max	
UTPUT	lo: load factor	lo=0 to 30%	500max	500max	500max	500max	500max	
		0 to +40°C	150max	150max	150max	200max	200max	
	RIPPLE NOISE[mVp-p]	-10 to 0°C	180max	180max	180max	240max	500max	
	lo: load factor	lo=0 to 30%	600max	600max	600max	600max	600max	
-		0 to +40°C	120max	150max	240max	360max	480max	
Ι.	TEMPERATURE REGULATION[mV]	-10 to +40°C	180max	180max	290max	440max	600max	
-	DRIFT[mV]	*2	48max	60max	96max	144max	192max	
	START-UP TIME[ms]	72	500typ (ACIN 115V, Io=		Joinax	144IIIax	192IIIax	
	HOLD-UP TIME[ms] OUTPUT VOLTAGE ADJUSTMEN	T DANGERA	20typ (ACIN 115V, Io=1 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 ADJUSTMEN		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			ting and recovers autom		30.00 to 37.44	140.00 (0 49.92	
⊢				· -		41 40 to 50 40	E4 00 to 67 00	
	OVERVOLTAGE PROTE OPERATING INDICAT							
		ION	LED (Green)					
- L	REMOTE SENSING		Not provided Optional (Required external power source. Option -R)					
	REMOTE ON/OFF INPUT-OUTPUT • RC	*9	· · ·			m tomporatura)		
	INPUT-OUTPUT • RC	*9		toff current = 10mA, DC				
OLATION ⊢				toff current = 10mA, DC	<u> </u>			
<u> </u>	OUTPUT RC-FG	*9		off current = 100mA, DC5				
	OUTPUT-RC	*9		off current = 100mA, DC5			\	
-	OPERATING TEMP., HUMID. AND		· · ·			ng), 3,000m (10,000 feet) max	
VIRONMENT -	STORAGE TEMP., HUMID. AND	ALIIIUDE		RH (Non condensing), 9				
	VIBRATION			G), 3minutes period, 60n		and ∠ axes		
	IMPACT			s, once each X, Y and Z a				
	AGENCY APPROVAL	S		· · · · · · · · · · · · · · · · · · ·		I) Complies with DEN-AN	1	
⊢	CONDUCTED NOISE			VCCI-B, CISPR22-B, EN	I55011-B, EN55022-B			
EGULATIONS	HARMONIC ATTENUA	ATOR *8	Complies with IEC6100	00-3-2 class 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)				

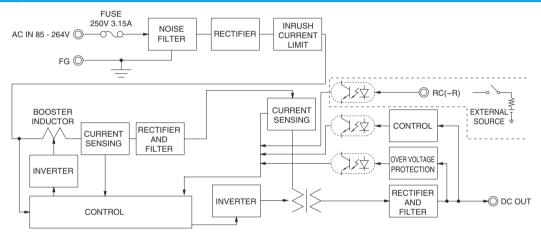
- *1 This is the result of measurement of the testing board with canacitors of 22 U.F. and 0.1 U.F. placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103. See 1.6 of Instruction Manual for more details.
 - When the load factor is 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℃.
- 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
- Sound noise may be heard from the power supply when used for pulse load.

Features

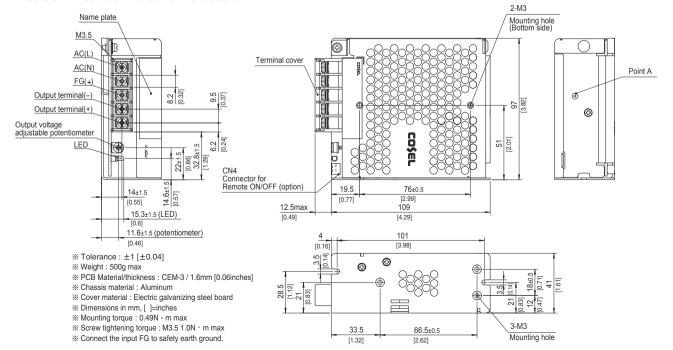
- · Compact design (Depth: 109mm 4.29inches)
- · High efficiency (88%typ PLA100F-24, AC230Vin, 100% load)
- · Low power consumption (1.5W typ AC240Vin, no load at standard model)
- · UL508 approved (Except option -J), and complies with SEMI F47 (see instruction manual 1.1)
- · Various connection interface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

150





Example recommended EMI/EMC filter NAC-04-472



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

*A higher current rating EMI/EMC filter may be recommended in view of the other devices that could be connected in parallel with the power supply.

- ①Series name ②Single output ③Output wattage ④Universal input
- ⑤Output voltage
- ®Optional *7
 C: with Coating
 R: Remote on/off
 - (Required external
- power source)
 J : Connector interface
- T : Vertical terminal block -N: with DIN rail

See 5.1 in Instruction Manual.

*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

SPECIFICATIONS

* Please consider "PBA150F-5-N" about 5V output with case cover.

				30F-3-N about 3V outp	_			
	MODEL		PLA150F-12	PLA150F-15	PLA150F-24	PLA150F-36	PLA150F-48	
	VOLTAGE[V]		AC85 - 264 1 φ (Output	derating is required at	AC85V - 115V. See 1.1	and 3.2 in Instruction Ma	anual) *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)					
		ACIN 100V	84typ (lo=90%)	84typ (lo=90%)	87typ (lo=90%)	87typ (lo=90%)	87typ (lo=90%)	
	EFFICIENCY[%]	ACIN 115V	84typ (lo=100%)	84typ (lo=100%)	87typ (lo=100%)	87typ (Io=100%)	87typ (lo=100%)	
NPUT		ACIN 230V	87typ (lo=100%)	87typ (lo=100%)	90typ (lo=100%)	90typ (Io=100%)	90typ (lo=100%)	
		ACIN 100V	0.98typ (lo=90%)	, , ,	, , , , ,	,	, ,, ,	
	POWER FACTOR	ACIN 115V	0.98typ (lo=100%)					
		ACIN 230V	0.95typ (lo=100%) * P	ower factor correction is	s stopped at AC250V or	more.		
		ACIN 100V	16typ (lo=90%) Ta=25°					
	INRUSH CURRENT[A]	ACIN 115V	16typ (Io=100%) Ta=25					
		ACIN 230V	32typ (lo=100%) Ta=25					
	LEAKAGE CURRENT				According to IEC62368-	1 and DEN-AN)		
	VOLTAGE[V]	į	12	15	24	36	48	
		ACIN 85-115V			ss (refer to instruction m			
	CURRENT[A]	ACIN 115V-264V	12.5	10	6.4	4.2	3.2	
		ACIN 85-115V			ss (refer to instruction m		1	
	WATTAGE[W]	ACIN 115V-264V	150.0	150.0	153.6	151.2	153.6	
	LINE REGULATION[m		48max	60max	96max	144max	192max	
	LOAD REGULATION	lo=30 to 100%	100max	120max	150max	150max	300max	
	[mV] *4	lo=0 to 30%	Burst operation (Please			Toomax	Joonnax	
	RIPPLE[mVp-p] *1 lo: load factor	0 to +40°C	120max	120max	120max	150max	150max	
		-10 to 0°C	160max	160max	160max	200max	400max	
UTPUT			500max	500max	500max	500max	500max	
OUIPUI		0 to +40°C	150max	150max	150max	200max	200max	
	RIPPLE NOISE[mVp-p] *1 lo: load factor TEMPERATURE REGULATION[mV]	-10 to 0°C	180max	180max	180max		500max	
			600max	600max	600max	240max 600max	600max	
		0 to +40°C	120max	150max	240max			
		-10 to +40°C				360max	480max	
	DDIETEVI	*2	180max	180max 60max	290max	440max	600max	
	DRIFT[mV]	*2	48max		96max	144max	192max	
	START-UP TIME[ms]		500typ (ACIN 115V, Io=					
	HOLD-UP TIME[ms]	IT DANOEDO	20typ (ACIN 115V, lo=1		04.00 +- 00.40	00.40.100.00	40.00 +- 50.00	
	OUTPUT VOLTAGE ADJUSTMEN		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	
	OVERCURRENT PROTE		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		Works over 105% of rat			41 40 to 50 40	E4 00 to 07 00	
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	
THERS	OPERATING INDICAT	ION	LED (Green)					
,,,,L,,,	REMOTE SENSING		Not provided					
	REMOTE ON/OFF	*9	Optional (Required external power source. Option -R)					
	INPUT-OUTPUT • RC	*9	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At room temperature) AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At room temperature)					
SOLATION	INPUT-FG	J-			· · · · · · · · · · · · · · · · · · ·			
	OUTPUT PC	*9	AC500V 1minute, Cuto					
	OUTPUT-RC	*9			500V 50MΩ min (At roo		1)	
	OPERATING TEMP., HUMID. AND					ng), 3,000m (10,000 feet	ı) max	
NVIRONMENT	STORAGE TEMP., HUMID. AND	ALIIIUDE			9,000m (30,000 feet) ma			
	VIBRATION	-		,, , , , , , , , , , , , , , , , , , ,	minutes each along X, Y	and ∠ axes		
	IMPACT		196.1m/s² (20G), 11ms					
SAFETY AND	AGENCY APPROVAL	S				J) Complies with DEN-Al	V	
NOISE	CONDUCTED NOISE		Complies with FCC-B, \		N55011-B, EN55022-B			
REGULATIONS	HARMONIC ATTENUA	ATOR *8	Complies with IEC6100	0-3-2 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 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

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

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

hour warm-up at 25℃. 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
- 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

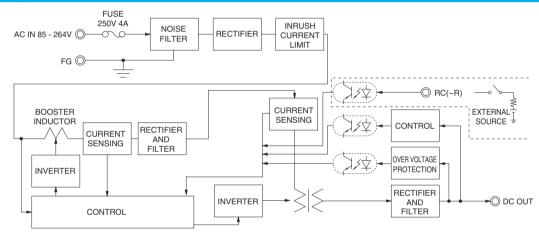
operation at 30% load or less.

- 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
- Sound noise may be heard from the power supply when used for pulse load.

Features

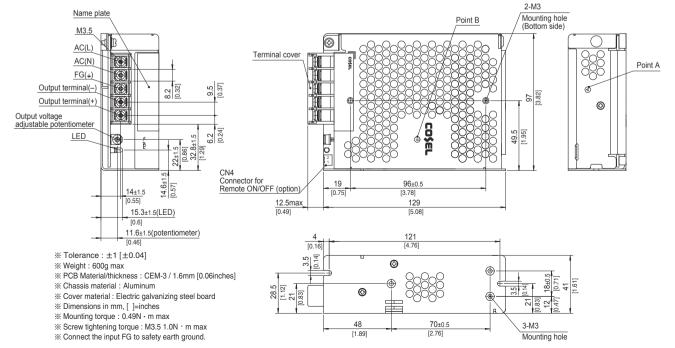
- · Compact design (Depth: 129mm 5.08inches)
- · High efficiency (90%typ PLA150F-24, AC230Vin, 100% load)
- · Low power consumption (1.5W typ AC240Vin, no load at standard model)
- · UL508 approved (Except option -J), and complies with SEMI F47 (see instruction manual 1.1)
- · Various connection interface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

PL A 300 F - - -



*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

	MODEL		PLA300F-5	PLA300F-12	PLA300F-15	PLA300F-24	PLA300F-36	PLA300F-48		
	VOLTAGE[V]		AC85 - 264 1 φ (Οι	utput derating is requ	ired at AC85V - 115	V. See 1.1 and 3.2 ir	Instruction Manual)	*3		
	ACIN 100V		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)	, , , , , , , , , , , , , , , , , , , ,						
		ACIN 100V	73typ (lo=90%)	78typ (lo=90%)	79typ (lo=90%)	81typ (lo=90%)	81typ (lo=90%)	82typ (lo=90%)		
	EFFICIENCY[%]	ACIN 115V	74typ (lo=100%)	78typ (lo=100%)	80typ (lo=100%)	82typ (lo=100%)	82typ (lo=100%)	83typ (lo=100%)		
INPUT		ACIN 230V	77typ (lo=100%)	81typ (lo=100%)	83typ (lo=100%)	86typ (lo=100%)	86typ (lo=100%)	86typ (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	=25°C at cold start						
		ACIN 230V	40typ (lo=100%) Ta	=25°C at cold start						
	LEAKAGE CURRENT	[mA]	0.75max (ACIN 115	5V / 240V, 60Hz, lo=	100%, According to I	EC62368-1 and DE	N-AN)			
	VOLTAGE[V]		5	12	15	24	36	48		
	CURRENT[A]	ACIN 85-115V	Output derating is r	equired at ACIN 115	V or less (refer to ins	struction manual 3.2)			
	CURRENT[A]	ACIN 115V-264V	50	25	20	12.5	8.4	6.3		
	WATTACEDAD	ACIN 85-115V	Output derating is r	equired at ACIN 115	V or less (refer to ins	struction manual 3.2)			
	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		
OUTPUT	*1	-10 to 0℃	140max	160max	160max	160max	160max	400max		
OUIPUI	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	150max	150max	150max	200max	200max		
	*1	-10 to 0℃	160max	180max	180max	180max	240max	500max		
	TEMPERATURE REGULATION(mV)	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 115V	, lo=100%)						
	HOLD-UP TIME[ms]		20typ (ACIN 115V,	lo=100%)						
	OUTPUT VOLTAGE ADJUSTME	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	ECTION	Works over 105% of	of rating and recovers	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	TION	LED (Green)							
OTHERS	REMOTE SENSING		Not provided							
	REMOTE ON/OFF		<u> </u>	external power sour						
	INPUT-OUTPUT • RC	*10	AC3,000V 1minute	Cutoff current = 10	mA, DC500V 50M Ω	min (At room tempe	rature)			
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At room temperature)							
COLATION	OUTPUT • RC-FG	*10			nA, DC500V 50M Ω I					
	OUTPUT-RC	*10			nA, DC500V 50MΩ ι					
	OPERATING TEMP., HUMID. AND				d), 20 - 90%RH (Nor		m (10,000 feet) max			
ENVIRONMENT	STORAGE TEMP., HUMID.AND	ALTITUDE			sing), 9,000m (30,00		-			
L	VIBRATION				iod, 60minutes each	along X, Y and Z ax	es			
	IMPACT			1ms, once each X, Y						
SAFETY AND	AGENCY APPROVAL		,		2368-1 Complies with					
NOISE	CONDUCTED NOISE		Complies with FCC	-B, VCCI-B, CISPR2	22-B, EN55011-B, EN	N55022-B				
REGULATIONS	HARMONIC ATTENU	ATOD ±0	Complies with IECE	61000-3-2 class A						



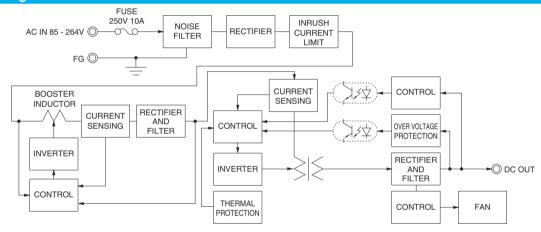
OTHERS	CASE SIZE/WEIGHT	102 X 41 X 190mm [4.02 X 1.61 X 7.48 inches] (Excluding terminal block and screw) (WXHXD) / 1.0kg max
OTHERS	COOLING METHOD *8	Forced cooling (internal fan)
WARRANTY	WARRANTY *6	5 years (subject to the operating conditions)

- *1 This is the result of measurement of the testing board with capacitors of 22 LIE and 0.1 LIE 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°C Output power derating is required. As for DC input, consult us for advice.
- 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 damaged.
- Parallel operation is not possible with this mode.
- Sound noise may be heard from the power supply when used for pulse load.

Features

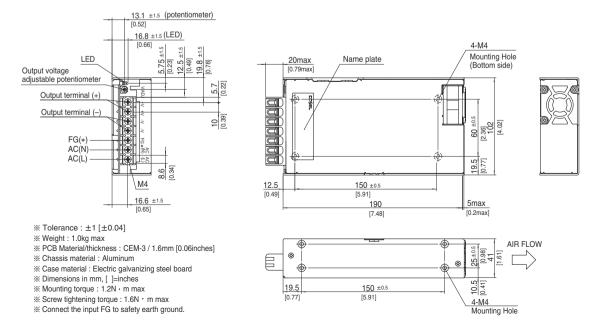
- · Cost-effective
- · Longer life (see Instruction Manual)
- · Low profile (meets 1U height = 41 mm or 1.61 inches)
- ·Wide operating temperature range (-20°C to +70°C see instruction manual)
- · Screw hold type terminal block
- · Slow fan speed at no load
- · Many optional functions
- · Complies with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

Block diagram



External view

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



PLA600F

PL A 600 F - - -



*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

*Please consider "PJA600F-5" about 5V output.

	MODEL		PLA600F-12	PLA600F-15	PLA600F-24	PLA600F-36	PLA600F-48	
	VOLTAGE[V]		AC85 - 264 1 φ (Outpu	ut derating is required at	AC85V - 115V. See 1.1 a	and 3.2 in Instruction Mar	nual) *4	
INPUT	ACIN 100V		6.7typ (Io=90%)					
	CURRENT[A]	ACIN 115V	6.5typ (lo=100%)					
		ACIN 230V	3.2typ (lo=100%)					
	FREQUENCY[Hz]		50 / 60 (47 - 63)					
		ACIN 100V	81typ (lo=90%)	81typ (lo=90%)	84typ (lo=90%)	85typ (Io=90%)	85typ (lo=90%)	
	EFFICIENCY[%]	ACIN 115V	81typ (lo=100%)	81typ (lo=100%)	84typ (lo=100%)	85typ (lo=100%)	85typ (lo=100%)	
		ACIN 230V	84typ (lo=100%)	84typ (lo=100%)	88typ (Io=100%)	88typ (Io=100%)	88typ (lo=100%)	
	POWER FACTOR	ACIN 100V	0.98typ (lo=90%)					
		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)					
	INRUSH CURRENT[A]	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 IEC62368-1 and DEN-AN)					
	VOLTAGE[V]		12	15	24	36	48	
	CURRENT[A]	ACIN 85-115V	Output derating is requ	ired at ACIN 115V or les	s (refer to instruction ma	inual 3.2)		
		ACIN 115V-264V	50	40	25	16.7	12.5	
	WATTAGE[W]	ACIN 85-115V	Output derating is requ	ired at ACIN 115V or les	s (refer to instruction ma	nual 3.2)		
		ACIN 115V-264V	600	600	600	601.2	600	
	LINE REGULATION[n	nV] *8	48max	60max	96max	144max	192max	
	LOAD REGULATION[mV] *8		100max	120max	150max	150max	300max	
ОИТРИТ	RIPPLE[mVp-p]	0 to +50°C	120max	120max	120max	150max	150max	
		-20 to 0°C	160max	160max	160max	160max	400max	
	RIPPLE NOISE[mVp-p] *1 TEMPERATURE REGULATION[mV]	0 to +50°C	150max	150max	150max	200max	200max	
		-20 to 0°C	180max	180max	180max	240max	500max	
		0 to +50°C	120max	150max	240max	360max	480max	
		-20 to +50°C	180max	180max	290max	440max	600max	
	DRIFT[mV] *2		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]		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]	12.00 to 12.48	15.00 to 15.60	24.00 to 24.96	36.00 to 37.44	48.00 to 49.92	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION[V]		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							
	OUTPUT-RC *3		AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At room temperature)					
	OPERATING TEMP.,HUMID.AND ALTITUDE *5		-20 to +70℃ (Output derating is required), 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max					
ENVIRONMENT	STORAGE TEMP., HUMID. AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max					
	VIBRATION		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					
SAFETY AND	AGENCY APPROVALS CONDUCTED NOISE		UL60950-1, C-UL (CSA60950-1), EN62368-1 Complies with DEN-AN					
IOISE			Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B					
REGULATIONS	HARMONIC ATTENUA	ATOR *10	Complies with IEC610	00-3-2 class A				





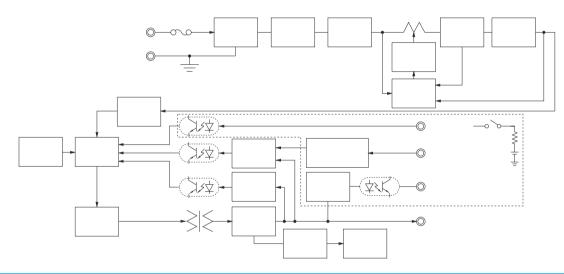
OTHERS	CASE SIZE/WEIGHT	120×61×215mm [4.72×2.40×8.46 inches] (Excluding terminal block and screw) (W×H×D) / 2.0kg max
	COOLING METHOD	*9 Forced cooling (internal fan)
WARRANTY	WARRANTY	*6 5 years (subject to the operating conditions)

- This is the result of measurement of the testing board with capacitors of 22 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. Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25 °C.
- The BC terminal is added to option -B models. The BC terminal is
- isolated from input, output, and FG. As for DC input, consult us for advice
- 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. *8 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 2U height = 61 mm or 2.40 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.

