AC-DC Power Supplies Enclosed Type



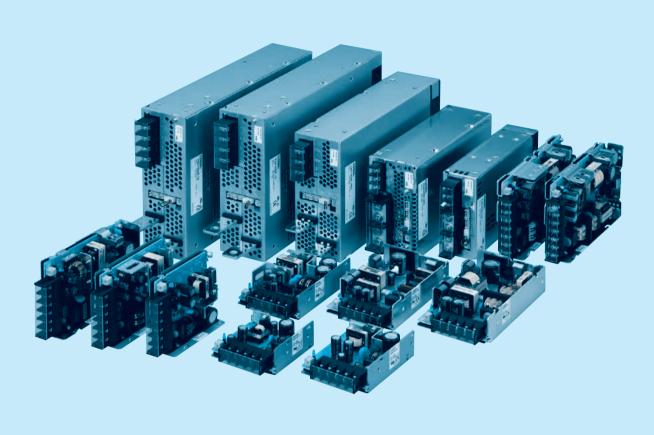








PBA, PBW-series



Feature

Small-size & light weight

Harmonic attenuator (Complies with IEC61000-3-2) : except PBA1500T Universal input (AC85 - 264V) : PBA1500T(AC170 - 264V 3ϕ) Efficiency increased with synchronous rectification technology (PBA50F - 150F) Variety of option (PBA10F - 150F, PBW15F - 50F) Parallel operation and Parallel redandancy operation (PBA300F - 1500F, PBA1500T) Fan alarm, Remote ON/OFF and other functions

(PBA300F - 1500F, PBA1500T)

Safety agency approvals

UL60950-1, C-UL(CSA60950-1), EN62368-1 UL508 (PBA10F - 150F, -24, with cover) Complies with DEN-AN

EMI

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

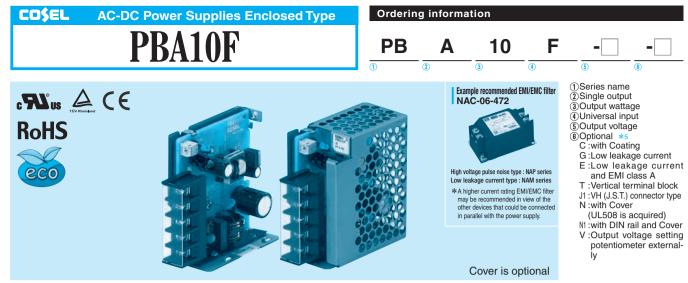
CE marking

Low Voltage Directive RoHS Directive

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

5-year warranty (refer to Instruction Manual)



MODEL	PBA10F-5	PBA10F-12	PBA10F-24
MAX OUTPUT WATTAGE[W]	10	10.8	12
DC OUTPUT	5V 2A	12V 0.9A	24V 0.5A

SPECIFICATIONS

	MODEL		PBA10F-5	PBA10F-12	PBA10F-24
	VOLTAGE[V]		AC85 - 264 1 \ or DC110 - 370 (AC5	50 or DC70 Please refer to the i	nstruction manual 1.1 Input voltage *3)
		ACIN 100V	0.30typ (lo=100%)		· · · ·
	CURRENT[A]	ACIN 200V	0.20typ (Io=100%)		
	FREQUENCY[Hz]		50/60 (47 - 440) or DC		
IPUT		ACIN 100V	74typ	76typ	77typ
	EFFICIENCY[%]	ACIN 200V	74typ	76typ	77typ
		ACIN 100V	15typ (lo=100%)		·
	INRUSH CURRENT[A]	ACIN 200V	30typ (lo=100%)		
	LEAKAGE CURREN	T[mA]	0.15/0.30max (ACIN 100V/240V 60H)	z, Io=100%, According to IEC62	368-1, DENAN)
	VOLTAGE[V]		5	12	24
	CURRENT[A]		2	0.9	0.5
	LINE REGULATION	mV] *6	20max	48max	96max
	LOAD REGULATION	[mV] *6	40max	100max	150max
		0 to +50°C *1	80max	120max	120max
	RIPPLE[mVp-p]	-10 - 0℃ *1	140max	160max	160max
		0 to +50°C *1	120max	150max	150max
UTPUT	RIPPLE NOISE[mVp-p]	-10 - 0℃ *1	160max	180max	180max
		0 to +50℃	50max	120max	240max
	TEMPERATURE REGULATION[mV] -10 to +50%		60max	150max	290max
	DRIFT[mV] *		20max	48max	96max
	START-UP TIME[ms]		200typ(ACIN 100V, Io=100%) *Start-up tim	e is 700ms typ for less than 1minute c	of applying input again from turning off the input volta
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)		
	OUTPUT VOLTAGE ADJUSTMEN	T RANGE[V]	4.50 - 5.50	10.0 - 13.2	19.2 - 27.0
	OUTPUT VOLTAGE SET	TING[V]	5.00 - 5.15	12.00 - 12.48	24.00 - 24.96
	OVERCURRENT PROT	ECTION	Works over 105% of rated current an	d recovers automatically	
ROTECTION	OVERVOLTAGE PROTEC	TION[V]	5.75 - 7.00	15.0 - 18.0	30.0 - 37.0
RCUIT AND	OPERATING INDICA	TION	LED (Green)		
	REMOTE ON/OFF		None		
	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 1	10mA, DC500V 50M Ω min (At R	loom Temperature)
OLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 1	10mA, DC500V 50MΩmin (At R	loom Temperature)
	OUTPUT-FG		AC500V 1minute, Cutoff current = 25	mA, DC500V 50MΩmin (At Roo	om Temperature)
	OPERATING TEMP.,HUMID.AND	ALTITUDE	-10 to +71℃ (Refer to "Derating"), 20	- 90%RH (Non condensing) 3,0	000m (10,000feet) max
VIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 20 - 90%RH (Non conc		
	VIBRATION		10 - 55Hz, 19.6m/s2 (2G), 3minutes p	period, 60minutes each along X,	Y and Z axis
	IMPACT		196.1m/s2 (20G), 11ms, once each X	, Y and Z axis	
FETY AND	AGENCY APPROVALS (At only	y AC input)	UL60950-1, C-UL(CSA60950-1), EN6	2368-1 Complies with DEN-AN	
OISE	CONDUCTED NOISE		Complies with FCC Part15 classB, V	CCI-B, CISPR22-B, EN55011-B	, EN55022-B
EGULATIONS	HARMONIC ATTENU	ATOR	Complies with IEC61000-3-2 (Not bui	It-in to active filter +4) *7	
THERS	CASE SIZE/WEIGHT		31 × 78 × 68mm [1.22 × 3.07 × 2.68 ind	ches] (without terminal block) (W	/×H×D) / 150g max (with cover : 180g ma
INERS	COOLING METHOD		Convection		

scope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. \$2 *3 Derating is required.

*4 When two or more units are used, they may not comply with the harmonic attenuator. Please contact us for details.

with option.

*6 Please contact us about dynamic load and input response.
*7 Please contact us about class C.

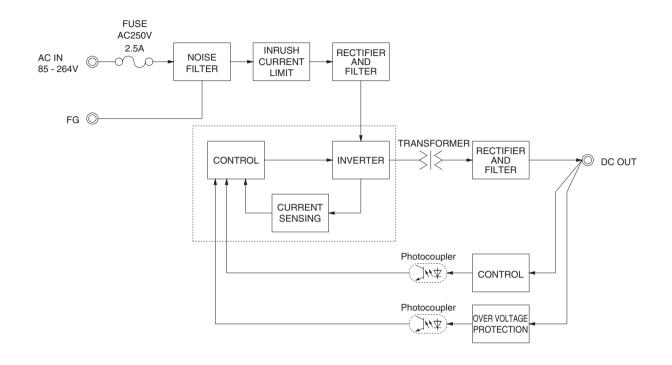
*

Parallel operation with other model is not possible. *

Derating is required when operated with cover. A sound may occur from power supply at peak loading.

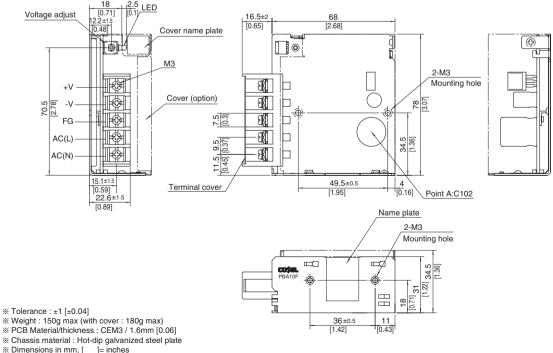
*

Block diagram



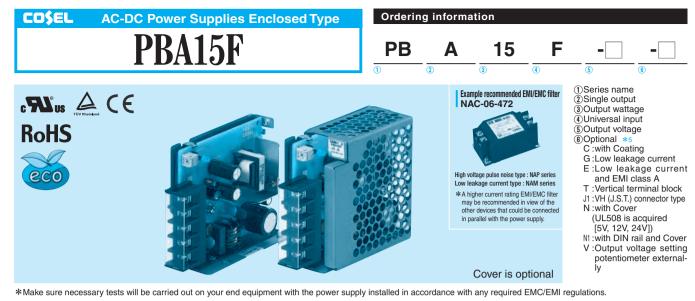
External view

% External size of option T,J1,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.



Dimensions in mm, []= inches
 Mounting torque : 0.6N • m(6.3kgf • cm)max
 Screw tightening torque : M3 0.8N • m(8.5kgf • cm)max

% Please connect safety ground to the unit in 2-M3 holes.



PRA15E-3R3 PRA15E-5 PRA15E-9 PRA15E-12 PRA15E-15 PRA15E-24 PRA15E-48 MODEL

WODLE	F DATST-SHS	PDATSI-5	FDATSI-5	FDATSI-12	PDATSI-15	FDAIJI-24	F DATST - 40
MAX OUTPUT WATTAGE[W]	9.9	15	15.3	15.6	15	16.8	16.8
DC OUTPUT	3.3V 3A	5V 3A	9V 1.7A	12V 1.3A	15V 1A	24V 0.7A	48V 0.35A

SPECIFICATIONS

	MODEL		PBA15F-3R3	PBA15F-5	PBA15F-9	PBA15F-12	PBA15F-15	PBA15F-24	PBA15F-48			
	VOLTAGE[V]		AC85 - 264 1 φ	or DC110 - 370	(AC50 or DC70	Please refer to the	ne instruction ma	nual 1.1 Input vo	oltage *3)			
		ACIN 100V	0.30typ (lo=100%)	0.4typ (lo=100%	6)							
	CORRENT[A]	ACIN 200V	0.15typ (lo=100%)	0.2typ (lo=100%	6)							
	FREQUENCY[Hz]		50/60 (47 - 440) or DC									
IPUT		ACIN 100V	68typ	74typ	75typ	75typ	77typ	75typ	75typ			
	EFFICIENCY[%]	ACIN 200V	68typ	75typ	77typ	78typ	80typ	78typ	78typ			
		ACIN 100V	15typ (lo=100%	5typ (lo=100%) (At cold start)								
	VOLTAGE[V] CURRENT[A] ACIN ACIN ACIN FREQUENCY[Hz] EFFICIENCY[%] ACIN ACIN ACIN ACIN ACIN ACIN ACIN ACIN		30typ (lo=100%) (At cold start)								
	LEAKAGE CURREN	T[mA]	0.15/0.30max (A	ACIN 100V/240V	60Hz, lo=100%,	According to IEC	C62368-1,DENA	N)				
	VOLTAGE[V]		3.3	5	9	12	15	24	48			
	CURRENT[A]		3	3	1.7	1.3	1	0.7	0.35			
	LINE REGULATION	mV] *6	20max	20max	36max	48max	60max	96max	192max			
	LOAD REGULATION	- [mV] *	40max	40max	100max	100max	120max	150max	240max			
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max			
	RIPPLE[mvp-p]	-10 - 0°C *1	140max	140max	160max	160max	160max	160max	200max			
		0 to +50°C * 1	120max	120max	150max	150max	150max	150max	250max			
	RIPPLE NOISE[mVp-p]	-10 - 0°C *1	160max	160max	180max	180max	180max	180max	300max			
		0 to +50°C	50max	50max	90max	120max	150max	240max	480max			
	TEMPERATURE REGULATION[mV]	-10 to +50°C	60max	60max	120max	150max	180max	290max	600max			
			20max	20max	36max	48max	60max	96max	192max			
	START-UP TIME[ms]		200typ(ACIN 100V	, lo=100%) *Start-u	up time is 700ms typ	for less than 1minu	ite of applying input	again from turning	off the input volta			
	HOLD-UP TIME[ms]		20typ (ACIN 10	0V, lo=100%)								
	OUTPUT VOLTAGE ADJUSTMEN	T RANGE[V]	2.85 - 3.60	4.50 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 18.0	19.2 - 27.0	39.0 - 53.0			
	START-UP TIME[ms] HOLD-UP TIME[ms] OUTPUT VOLTAGE ADJUSTMENT RANGE OUTPUT VOLTAGE SETTING[TING[V]	3.30 - 3.40	5.00 - 5.15	9.00 - 9.36	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	48.00 - 49.9			
	OVERCURRENT PROT	ECTION	Works over 105	% of rated currer	nt and recovers a	utomatically						
ROTECTION	OVERVOLTAGE PROTEC	TION[V]	4.00 - 5.25	5.75 - 7.00	11.5 - 14.0	15.0 - 18.0	20.0 - 25.0	30.0 - 37.0	58.0 - 65.0			
IRCUIT AND	OPERATING INDICA	TION	LED (Green)				•					
	REMOTE ON/OFF		None									
	INPUT-OUTPUT		AC3,000V 1min	ute, Cutoff currer	nt = 10mA, DC50	$00V 50M\Omega$ min (A	At Room Tempera	ature)				
SOLATION	INPUT-FG		AC2,000V 1min	ute, Cutoff currer	nt = 10mA, DC50	$00V 50M_{\Omega}$ min (A	At Room Tempera	ature)				
	OUTPUT-FG		AC500V 1minut	e, Cutoff current	= 25mA, DC500	V 50MΩmin (At	Room Temperati	ure)				
	OPERATING TEMP.,HUMID.AND	ALTITUDE	-10 to +71℃ (R	efer to "Derating"), 20 - 90%RH (I	Non condensing)	3,000m (10,000	feet) max				
	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 20) - 90%RH (Non	condensing) 9,0	00m (30,000feet)	max					
VIRONMENT	VIBRATION		10 - 55Hz, 19.6	m/s² (2G), 3min	utes period, 60m	inutes each alon	g X, Y and Z axi	S				
	IMPACT		196.1m/s ² (20G), 11ms, once each X, Y and Z axis									
AFFTY AND	AGENCY APPROVALS (At only	y AC input)	UL60950-1, C-L	JL(CSA60950-1),	EN62368-1 Con	nplies with DEN-	AN					
OISE	CONDUCTED NOISE		Complies with F	CC Part15 class	B, VCCI-B, CISF	R22-B, EN5501	1-B, EN55022-B					
EGULATIONS	HARMONIC ATTENU	IATOR	Complies with I	EC61000-3-2 (No	ot built-in to activ	e filter *4) *7						
	CASE SIZE/WEIGHT				35 inches] (withou		(WXHXD) / 20	00g max (with co	over : 235g max			
THERS	COOLING METHOD		Convection			· · · ·			ž			

MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. *3 Derating is required.

*4 When two or more units are used, they may not comply with the harmonic attenuator. Please contact us for details.

I with option.

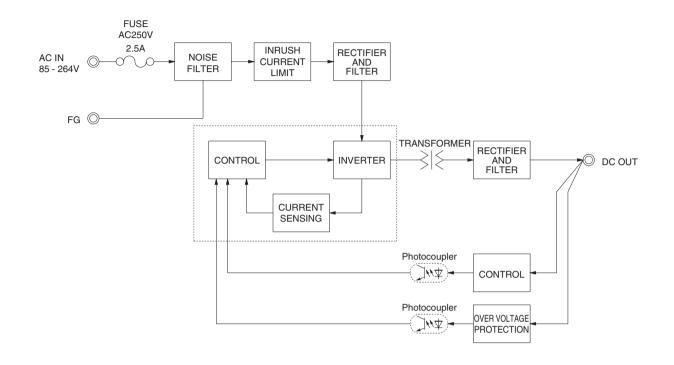
*

Parallel operation with other model is not possible. *

Derating is required when operated with cover. A sound may occur from power supply at peak loading. *

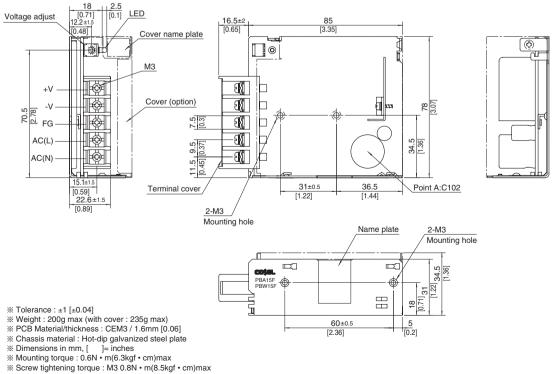
^{*6} Please contact us about dynamic load and input response. *7 Please contact us about class C.

Block diagram

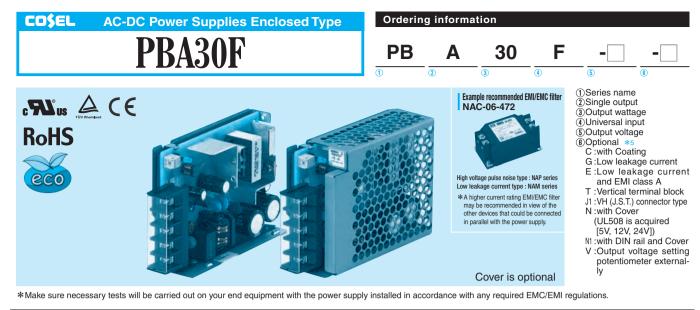


External view

* External size of option T,J1,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.



* Please connect safety ground to the unit in 2-M3 holes.



MODEL	PBA30F-3R3	PBA30F-5	PBA30F-9	PBA30F-12	PBA30F-15	PBA30F-24	PBA30F-48
MAX OUTPUT WATTAGE[W]	19.8	30	30.6	30	30	31.2	31.2
DC OUTPUT	3.3V 6A	5V 6A	9V 3.4A	12V 2.5A	15V 2A	24V 1.3A	48V 0.65A

SPECIFICATIONS

	MODEL		PBA30F-3R3	PBA30F-5	PBA30F-9	PBA30F-12	PBA30F-15	PBA30F-24	PBA30F-48		
	VOLTAGE[V]		AC85 - 264 1 φ	or DC110 - 370	(AC50 or DC70	Please refer to t	he instruction ma	anual 1.1 Input vo	oltage *3)		
		ACIN 100V	0.50typ (lo=100%)	0.70typ (lo=100	1%)						
	CURRENT[A]	ACIN 200V	0.30typ (lo=100%)	0.40typ (Io=100	1%)						
	FREQUENCY[Hz]		50/60 (47 - 440) or DC							
VPUT		ACIN 100V	68typ	74typ	75typ	76typ	78typ	78typ	79typ		
	EFFICIENCY[%]	ACIN 200V	69typ	77typ	77typ	78typ	81typ	81typ	81typ		
		ACIN 100V	15typ (lo=100%) (At cold start)								
	INRUSH CURRENT[A]	ACIN 200V	30typ (lo=100%) (At cold start)							
	LEAKAGE CURREN	T[mA]	0.30/0.65max (/	ACIN 100V/240V	60Hz, lo=100%,	According to IE	C62368-1,DENA	N)			
	VOLTAGE[V]		3.3	5	9	12	15	24	48		
	CURRENT[A]		6	6	3.4	2.5	2	1.3	0.65		
	LINE REGULATION[mV] *6	20max	20max	36max	48max	60max	96max	192max		
	LOAD REGULATION	- [mV] *6	40max	40max	100max	100max	120max	150max	240max		
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max		
	RIPPLE[mVp-p]	-10 - 0℃ *1	140max	140max	160max	160max	160max	160max	200max		
		0 to +50°C *1	120max	120max	150max	150max	150max	150max	250max		
OUTPUT	RIPPLE NOISE[mVp-p]	-10 - 0℃ *1	160max	160max	180max	180max	180max	180max	300max		
-		0 to +50℃	50max	50max	90max	120max	150max	240max	480max		
	TEMPERATURE REGULATION[mV]	-10 to +50℃	60max	60max	120max	150max	180max	290max	600max		
	DRIFT[mV] *		20max	20max	36max	48max	60max	96max	192max		
	START-UP TIME[ms]		200typ(ACIN 100V	, lo=100%) *Start-	up time is 700ms typ	o for less than 1min	ute of applying input	again from turning	off the input volt		
	HOLD-UP TIME[ms]		20typ (ACIN 10	0V, lo=100%)	· · ·						
	OUTPUT VOLTAGE ADJUSTMEN	T RANGE[V]	2.85 - 3.60	4.50 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 18.0	19.2 - 27.0	39.0 - 53.0		
	OUTPUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	9.00 - 9.36	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	48.00 - 49.9		
	OVERCURRENT PROT	ECTION	Works over 105	% of rated curre	nt and recovers a	automatically	·	·	·		
ROTECTION	OVERVOLTAGE PROTEC	TION[V]	4.00 - 5.25	5.75 - 7.00	11.5 - 14.0	15.0 - 18.0	20.0 - 25.0	30.0 - 37.0	58.0 - 65.0		
IRCUIT AND	OPERATING INDICA	TION	LED (Green)			•					
	REMOTE ON/OFF		None								
	INPUT-OUTPUT		AC3,000V 1min	ute, Cutoff curre	nt = 10mA, DC50	00V 50MΩmin (/	At Room Temper	ature)			
SOLATION	INPUT-FG		AC2,000V 1min	ute, Cutoff curre	nt = 10mA, DC50	00V 50MΩmin (/	At Room Temper	ature)			
	OUTPUT-FG		AC500V 1minut	e, Cutoff current	= 25mA, DC500	V 50MΩmin (At	Room Temperat	ure)			
	OPERATING TEMP., HUMID. AND	ALTITUDE	-10 to +71℃ (R	efer to "Derating"	'), 20 - 90%RH (I	Non condensing)	3,000m (10,000	feet) max			
NVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 2	0 - 90%RH (Non	condensing) 9,0	00m (30,000feet) max				
NVIRONMENT	VIBRATION		10 - 55Hz, 19.6	m/s² (2G), 3min	utes period, 60m	inutes each alor	ng X, Y and Z ax	S			
	IMPACT		196.1m/s ² (20G), 11ms, once ea	ach X, Y and Z a	xis					
AFETY AND	AGENCY APPROVALS (At only	y AC input)	UL60950-1, C-l	JL(CSA60950-1),	EN62368-1 Con	nplies with DEN-	AN				
IOISE	CONDUCTED NOISE		Complies with F	CC Part15 class	B, VCCI-B, CISF	PR22-B, EN5501	1-B, EN55022-B				
EGULATIONS	HARMONIC ATTENU	JATOR		EC61000-3-2 (No							
	CASE SIZE/WEIGHT		31 x 78 x 103m	m[1.22×3.07×4	.06 inches] (with	out terminal bloc	k) (W×H×D) / 2	270g max (with c	over : 310g ma		
DTHERS	COOLING METHOD		Convection						-		

cope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101). \$2

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. *3 Derating is required.

*4 When two or more units are used, they may not comply with the harmonic attenuator. Please contact us for details.

*6 Please contact us about dynamic load and input response.
*7 Please contact us about class C.

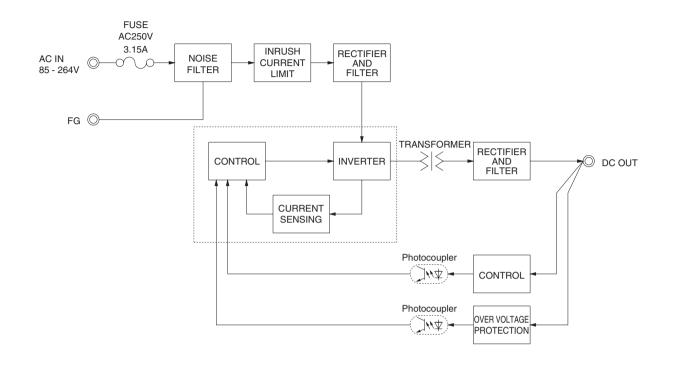
*

Parallel operation with other model is not possible. *

Derating is required when operated with cover. A sound may occur from power supply at peak loading.

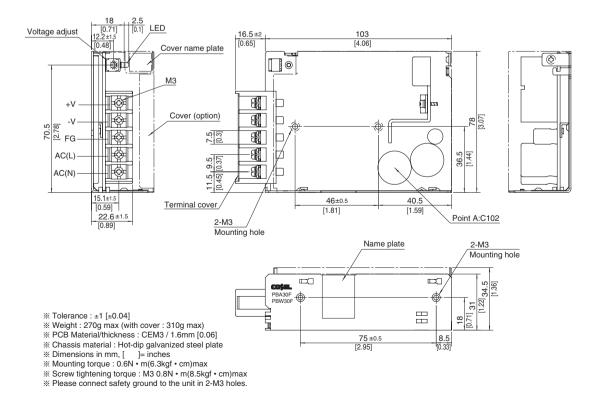
*

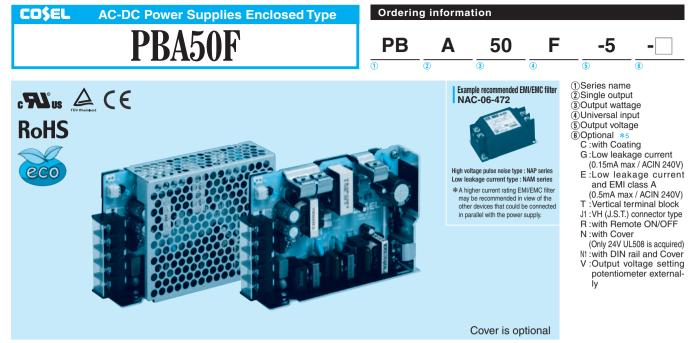
Block diagram



External view

% External size of option T,J1,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.





MODEL	PBA50F-3R3	PBA50F-5	PBA50F-9	PBA50F-12	PBA50F-15	PBA50F-24	PBA50F-36	PBA50F-48
MAX OUTPUT WATTAGE[W]	33	50	50.4	51.6	52.5	52.8	50.4	52.8
DC OUTPUT	3.3V 10A	5V 10A	9V 5.6A	12V 4.3A	15V 3.5A	24V 2.2A	36V 1.4A	48V 1.1A

SPECIFICATIONS

	MODEL		PBA50F-3R3	PBA50F-5	PBA50F-9	PBA50F-12	PBA50F-15	PBA50F-24	PBA50F-36	PBA50F-48	
	VOLTAGE[V]		AC85 - 264 1 ¢	or DC120 - 37	0 (AC50 or DC7	0 Please refer to	the instruction r	nanual 1.1 Input	voltage *4)		
		ACIN 100V	0.5typ	0.7typ					-		
	CURRENT[A]	ACIN 200V	0.3typ	0.4typ							
	FREQUENCY[Hz]		50/60 (47 - 63)								
		ACIN 100V	75typ	80typ	79typ	80typ	81typ	82typ	83typ	83typ	
IPUT	EFFICIENCY[%]	ACIN 200V		82typ	81typ	82typ	83typ	84typ	85typ	85typ	
		ACIN 100V									
	POWER FACTOR(Io=100%)	ACIN 200V	0.87typ	0.93typ							
		ACIN 100V	15typ (lo=100%								
	INRUSH CURRENT[A]	ACIN 200V	30typ (lo=100%	(At cold start)							
	LEAKAGE CURRENT[r				60Hz, lo=100%	According to IE	C62368-1,DENA	N)			
	VOLTAGE[V]		3.3	5	9	12	15	24	36	48	
	CURRENT[A]		10	10	5.6	4.3	3.5	2.2	1.4	1.1	
	LINE REGULATION[m]	/1	20max	20max	36max	48max	60max	96max	144max	192max	
	LOAD REGULATION[m		40max	40max	100max	100max	120max	150max	240max	240max	
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max	
	RIPPLE[mVp-p]	-10 - 0°C *1	140max	140max	160max	160max	160max	160max	200max	200max	
		0 to +50°C *1	120max	120max	150max	150max	150max	150max	250max	250max	
	RIPPLE NOISE[mVp-p]	-10 - 0°C *1	160max	160max	180max	180max	180max	180max	300max	300max	
		0 to +50℃	50max	50max	90max	120max	150max	240max	360max	480max	
	TEMPERATURE REGULATION[mV]	-10 to +50°C	60max	60max	120max	150max	180max	290max	450max	600max	
	DRIFT[mV]	*2	20max	20max	36max	48max	60max	96max	144max	192max	
	START-UP TIME[ms]		350typ(ACIN 10		oomax	Tornax	oomax	oomax		TOLINGX	
	HOLD-UP TIME[ms]		20typ (ACIN 10								
	OUTPUT VOLTAGE ADJUSTMENT			4.00 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 18.0	19.2 - 27.0	28.8 - 39.6	39.0 - 53.0	
	OUTPUT VOLTAGE SET		3.30 - 3.40	5.00 - 5.15	9.00 - 9.36	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	35.00 - 37.44	48.00 - 49.9	
	OVERCURRENT PROT			5% of rated curre			10.00 10.00	21100 21100	00.00 0	10100 1010	
ROTECTION	OVERVOLTAGE PROTEC		4.00 - 5.25	5.75 - 7.00	11.5 - 14.0	15.0 - 18.0	20.0 - 25.0	30.0 - 37.0	43.0 - 50.0	58.0 - 65.0	
IRCUIT AND	OPERATING INDICATIO		LED (Green)	0.00 7.00	1110 1110	10.0 10.0	2010 2010	0010 0110	1010 0010	00.0 00.0	
THERS	REMOTE ON/OFF	511	()	ired external por	Ner source)						
	INPUT-OUTPUT · RC	*3				500V 50M 0 min	(At Room Temp	erature)			
OLATION	INPUT-FG						(At Room Temp				
O LAHON	OUTPUT · RC-FG	*3					(At Room Tempe				
	OPERATING TEMP., HUMID.AND						g) 3,000m (10,00				
	STORAGE TEMP.,HUMID.AND					,000m (30,000fe					
VIRONMENT	VIBRATION	ALINOBE					ong X, Y and Z a	avis			
	IMPACT			a), 11ms, once e							
	AGENCY APPROVALS (At only	AC input)				omplies with DEI	N-AN				
AFETY AND	CONDUCTED NOISE	Ao input/						B			
	CASE SIZE/WEIGHT					thout terminal bl	ock) (WXHXD)	280a max (wit	h cover · 325a m	av)	
THERS	COOLING METHOD		Convection	111 [1.22 × 0.20 ×	∠ IIICIIE3] (WI	inout terminal Dit	JON (WATTAD)	2009 max (Will	1 cover . ozog m	un)	
	COOLING METHOD		CONVECTION								

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and *2

*3

FG.

*4 Derating is required.

*

*

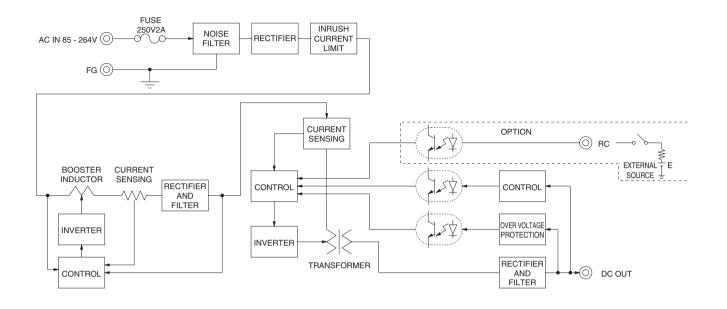
*6 Please contact us about class C.

Parallel operation with other model is not possible.

A sound may occur from power supply at peak loading.

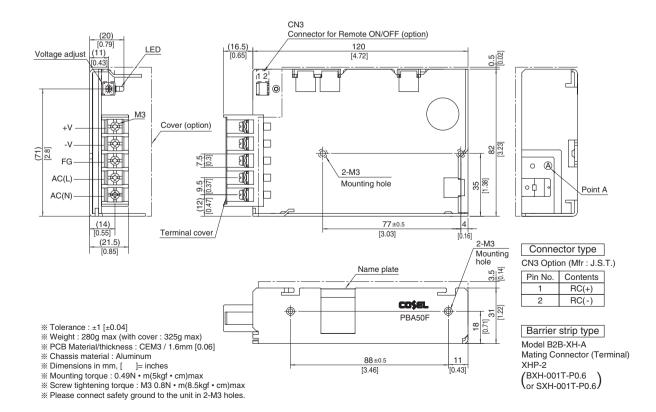
Derating is required when operated with cover.

PBA50F | CO\$EL



External view

* External size of option T,J1,R,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.



CO\$EL AC-DC Power Supplies Enclosed Type	Ordering information
PBA75F	PB A 75 F -5 - 0
<image/> <image/> <image/> <section-header><section-header></section-header></section-header>	 Series name Single output Output watage Output voltage Output voltage
	Cover is optional

MODEL	PBA75F-3R3	PBA75F-5	PBA75F-9	PBA75F-12	PBA75F-15	PBA75F-24	PBA75F-36	PBA75F-48
MAX OUTPUT WATTAGE[W]	49.5	75	75.6	75.6	75	76.8	75.6	76.8
DC OUTPUT	3.3V 15A	5V 15A	9V 8.4A	12V 6.3A	15V 5A	24V 3.2A	36V 2.1A	48V 1.6A

SPECIFICATIONS

	MODEL		PBA75F-3R3	PBA75F-5	PBA75F-9	PBA75F-12	PBA75F-15	PBA75F-24	PBA75F-36	PBA75F-48		
	VOLTAGE[V]		AC85 - 264 1¢	or DC120 - 370) (AC50 or DC7	0 Please refer to	the instruction r	nanual 1.1 Input	voltage *4)			
		ACIN 100V	0.7typ	1.0typ								
	CURRENT[A]	ACIN 200V		0.5typ								
	FREQUENCY[Hz]		50/60 (47 - 63)									
		ACIN 100V	77typ	81typ	80typ	81typ	82typ	83typ	84typ	84typ		
NPUT	EFFICIENCY[%]	ACIN 200V	78typ	83typ	82typ	83typ	84typ	85typ	86typ	86typ		
		ACIN 100V	0.98typ	0.99typ								
	POWER FACTOR(Io=100%)	ACIN 200V	0.87typ	0.93typ								
		ACIN 100V	15typ (lo=100%	b) (At cold start)								
	INRUSH CURRENT[A]	ACIN 200V	30typ (lo=100%	(At cold start)								
	LEAKAGE CURRENT[I	nA]	0.4/0.75max (A	CIN 100V/240V	60Hz, lo=100%	According to IE	C62368-1,DENA	N)				
	VOLTAGE[V]		3.3	5	9	12	15	24	36	48		
	CURRENT[A]		15	15	8.4	6.3	5	3.2	2.1	1.6		
	LINE REGULATION[m	/]	20max	20max	36max	48max	60max	96max	144max	192max		
	LOAD REGULATION[m	۰ آV]	40max	40max	100max	100max	120max	150max	240max	240max		
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max		
	RIPPLE[mVp-p]	-10 - 0℃ *1	140max	140max	160max	160max	160max	160max	200max	200max		
OUTPUT		0 to +50°C * 1	120max	120max	150max	150max	150max	150max	250max	250max		
	RIPPLE NOISE[mVp-p]	-10 - 0℃ *1	160max	160max	180max	180max	180max	180max	300max	300max		
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	50max	90max	120max	150max	240max	360max	480max		
	TEMPERATURE REGULATION[mV]	-10 to +50°C	60max	60max	120max	150max	180max	290max	450max	600max		
	DRIFT[mV]	*2	20max	20max	36max	48max	60max	96max	144max	192max		
	START-UP TIME[ms]		350typ(ACIN 1	00V, lo=100%)								
	HOLD-UP TIME[ms]		20typ (ACIN 10	0V, lo=100%)								
	OUTPUT VOLTAGE ADJUSTMEN	T RANGE[V]	2.85 - 3.63	4.00 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 18.0	19.2 - 27.0	28.8 - 39.6	39.0 - 53.0		
	OUTPUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	9.00 - 9.36	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.92		
	OVERCURRENT PROT	ECTION	Works over 10	5% of rated curre	ent and recovers	automatically						
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC	TION[V]	4.00 - 5.25	5.75 - 7.00	11.5 - 14.0	15.0 - 18.0	20.0 - 25.0	30.0 - 37.0	43.0 - 50.0	58.0 - 65.0		
THERS	OPERATING INDICATION	ON	LED (Green)									
	REMOTE ON/OFF			ired external pov								
	INPUT-OUTPUT · RC	*3				500V 50M Ω min						
SOLATION	INPUT-FG		AC2,000V 1mir	nute, Cutoff curre	ent = 10mA, DC	500V 50M Ω min	(At Room Temp	erature)				
	OUTPUT · RC-FG	*3	AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	500V 50MΩmin	At Room Tempe	rature)				
	OPERATING TEMP., HUMID.AND	ALTITUDE				(Non condensin		00feet) max				
NVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE				000m (30,000fee						
	VIBRATION		10 - 55Hz, 19.6	6m/s² (2G), 3mi	nutes period, 60	minutes each ale	ong X, Y and Z a	axis				
	IMPACT 196.1m/s ² (20G), 11ms, once each X, Y and Z axis											
AFETY AND	AGENCY APPROVALS (At only	y AC input)	UL60950-1, C-	JL(CSA60950-1), EN62368-1 C	omplies with DEI	N-AN					
IOISE	CONDUCTED NOISE					SPR22-B, EN550	11-B, EN55022-	В				
REGULATIONS	HARMONIC ATTENUAT	FOR		EC61000-3-2 *								
OTHERS	CASE SIZE/WEIGHT		32 x 82 x 135m	m [1.26 x 3.23 x	5.31 inches] (wi	hout terminal blo	ock) (W×H×D)	350g max (wit	h cover : 400g m	ax)		
JINERS	COOLING METHOD		Convection									

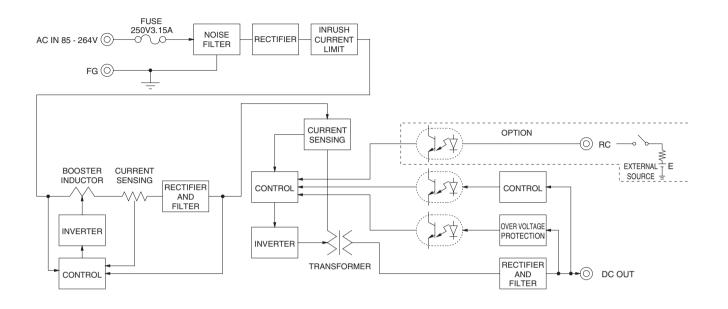
*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).

2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
 *3 Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and FG.

*5 Please contact us about safety approvals for the model with option.
*6 Please contact us about class C.
* Parallel operation with other model is not possible.
* Derating is required when operated with cover.
* A sound may occur from power supply at peak loading.

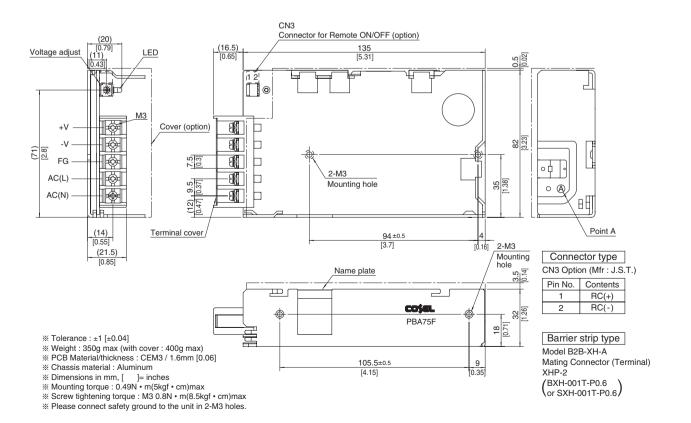
*4 Derating is required.

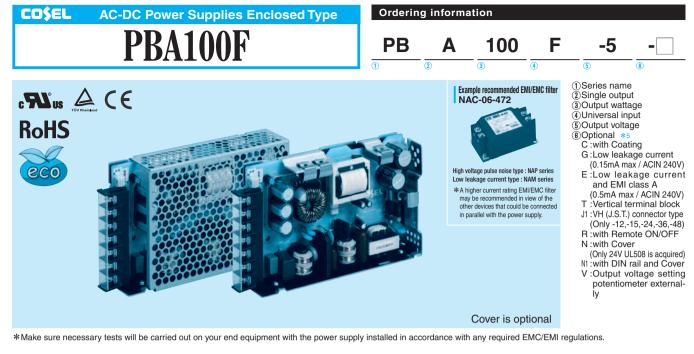




External view

* External size of option T,J1,R,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.





MODEL	PBA100F-3R3	PBA100F-5	PBA100F-9	PBA100F-12	PBA100F-15	PBA100F-24	PBA100F-36	PBA100F-48
MAX OUTPUT WATTAGE[W]	66	100	94.5	102	105	108	100.8	100.8
DC OUTPUT	3.3V 20A	5V 20A	9V 10.5A	12V 8.5A	15V 7A	24V 4.5A	36V 2.8A	48V 2.1A

SPECIFICATIONS

	MODEL		PBA100F-3R3	PBA100F-5	PBA100F-9	PBA100F-12	PBA100F-15	PBA100F-24	PBA100F-36	PBA100F-48
	VOLTAGE[V]		AC85 - 264 1 φ	or DC120 - 37	0 (AC50 or DC7	0 Please refer to	the instruction r	nanual 1.1 Input	voltage *4)	•
		ACIN 100V	0.9typ	1.3typ					-	
	CURRENT[A]	ACIN 200V	0.5typ	0.7typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
		ACIN 100V	77typ	82typ	80typ	81typ	83typ	84typ	84typ	84typ
NPUT	EFFICIENCY[%]	ACIN 200V	79typ	84typ	82typ	83typ	86typ	86typ	86typ	86typ
		ACIN 100V	0.98typ	0.99typ						
	POWER FACTOR(Io=100%)	ACIN 200V	0.87typ	0.93typ						
		ACIN 100V	20typ (lo=100%) (At cold start)						
	INRUSH CURRENT[A]	ACIN 200V	40typ (lo=100%) (At cold start)						
	LEAKAGE CURRENT[r	nA]	0.4/0.75max (A	CIN 100V/240V	60Hz, lo=100%	, According to IE	C62368-1, DEN	AN)		
	VOLTAGE[V]		3.3	5	9	12	15	24	36	48
	CURRENT[A]		20	20	10.5	8.5	7	4.5	2.8	2.1
	LINE REGULATION[m\	/]	20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[m		40max	40max	100max	100max	120max	150max	240max	240max
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max
	RIPPLE[mVp-p]	-10 - 0°C *1	140max	140max	160max	160max	160max	160max	200max	200max
		0 to +50°C *1	120max	120max	150max	150max	150max	150max	250max	250max
OUTPUT	RIPPLE NOISE[mVp-p]	-10 - 0°C *1	160max	160max	180max	180max	180max	180max	300max	300max
		0 to +50℃	50max	50max	90max	120max	150max	240max	360max	480max
	TEMPERATURE REGULATION[mV]	-10 to +50℃	60max	60max	120max	150max	180max	290max	450max	600max
	DRIFT[mV]	*2	20max	20max	36max	48max	60max	96max	144max	192max
	START-UP TIME[ms]		350typ(ACIN 10	00V, lo=100%)						
	HOLD-UP TIME[ms]		20typ (ACIN 10	0V, lo=100%)						
	OUTPUT VOLTAGE ADJUSTMENT	RANGE[V]	2.85 - 3.63	4.00 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 18.0	19.2 - 27.0	28.8 - 39.6	39.0 - 53.0
	OUTPUT VOLTAGE SET	TING[V]	3.20 - 3.40	5.00 - 5.15	9.00 - 9.36	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.92
	OVERCURRENT PROT	ECTION	Works over 105	% of rated curr	ent and recover	s automatically				
ROTECTION	OVERVOLTAGE PROTEC	TION[V]	4.00 - 5.25	5.75 - 7.00	11.5 - 14.0	15.0 - 18.0	20.0 - 25.0	30.0 - 37.0	43.0 - 50.0	58.0 - 65.0
IRCUIT AND	OPERATING INDICATIO	NC	LED (Green)							
THERS	REMOTE SENSING		Optional (Only	-3R3, -5 Option	-K)					
	REMOTE ON/OFF		Optional (Requ	ired external po	wer source)					
	INPUT-OUTPUT · RC	*3	AC3,000V 1mir	ute, Cutoff curr	ent = 10mA, DC	500V 50MΩmin	(At Room Tempe	erature)		
SOLATION	INPUT-FG		AC2,000V 1mir	ute, Cutoff curr	ent = 10mA, DC	500V 50MΩmin	(At Room Tempe	erature)		
	OUTPUT · RC-FG	*3	AC500V 1minu	te, Cutoff curren	nt = 100mA, DC	500V 50M Ω min	(At Room Tempe	rature)		
	OPERATING TEMP., HUMID.AND	ALTITUDE	-10 to +71℃ (F	lefer to "Derating	g"), 20 - 90%RH	(Non condensin	g) 3,000m (10,00	00feet) max		
NVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 2	0 - 90%RH (No	n condensing) 9	,000m (30,000fe	et) max			
	VIBRATION		10 - 55Hz, 19.6	im/s² (2G), 3mi	inutes period, 60	minutes each al	ong X, Y and Z a	axis		
	IMPACT		196.1m/s ² (200	a), 11ms, once e	each X, Y and Z	axis				
AFETY AND	AGENCY APPROVALS (At only	/ AC input)	UL60950-1, C-I	JL(CSA60950-1), EN62368-1 C	omplies with DEI	N-AN			
OISE	CONDUCTED NOISE		Complies with I	CC Part15 clas	ssB, VCCI-B, CI	SPR22-B, EN550	11-B, EN55022-	В		
EGULATIONS	HARMONIC ATTENUAT	OR	Complies with I							
OTHERS	CASE SIZE/WEIGHT		32×93×147mm [1.26×3.66×5.79 inches] (without terminal block) (W×H×D) / 440g max (with cover : 500g max)							
/IIILN0	COOLING METHOD		Convection							

ter(equivalent to KEISOKU-GIKEN :RM101).

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and *2

*3 FG.

*4 Derating is required.

*

*

*

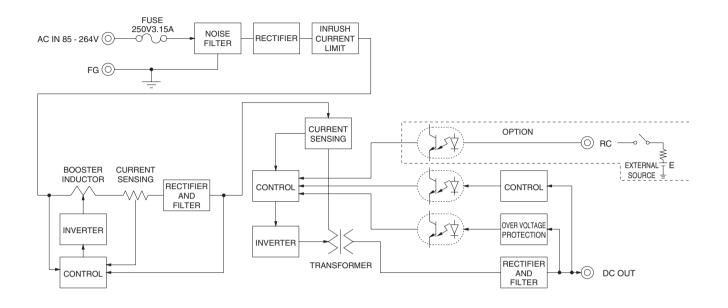
*6 Please contact us about class C.

Parallel operation with other model is not possible.

A sound may occur from power supply at peak loading.

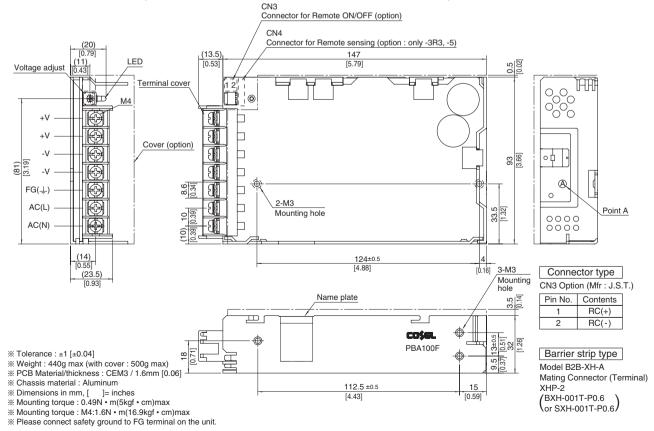
Derating is required when operated with cover.

PBA100F | CO\$EL

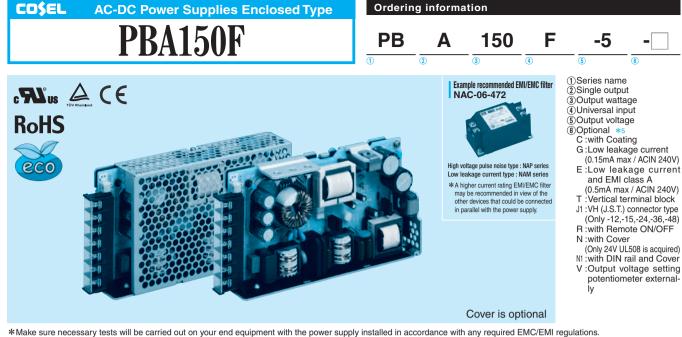


External view





March 08, 2022



MAX OUTPUT WATTAGE[W] 99 150 150.3 156 150 156 154.8 158.4 DC OUTPUT 3.3V 30A 5V 30A 9V 16.7A 12V 13A 15V 10A 24V 6.5A 36V 4.3A 48V 3.3A	MODEL	PBA150F-3R3	PBA150F-5	PBA150F-9	PBA150F-12	PBA150F-15	PBA150F-24	PBA150F-36	PBA150F-48
DC OUTPUT 3.3V 30A 5V 30A 9V 16.7A 12V 13A 15V 10A 24V 6.5A 36V 4.3A 48V 3.3A	MAX OUTPUT WATTAGE[W]	99	150	150.3	156	150	156	154.8	158.4
	DC OUTPUT	3.3V 30A	5V 30A	9V 16.7A	12V 13A	15V 10A	24V 6.5A	36V 4.3A	48V 3.3A

SPECIFICATIONS

	MODEL		PBA150F-3R3	PBA150F-5	PBA150F-9	PBA150F-12	PBA150F-15	PBA150F-24	PBA150F-36	PBA150F-48
	VOLTAGE[V]			or DC120 - 37	0 (AC50 or DC7	0 Please refer to	the instruction r	nanual 1.1 Input	voltage *4)	
		ACIN 100V	1.3typ	2.0typ						
	CURRENT[A]	ACIN 200V	0.7typ	1.0typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
		ACIN 100V	80typ	83typ	82typ	83typ	84typ	85typ	85typ	85typ
NPUT	EFFICIENCY[%]	ACIN 200V	82typ	86typ	85typ	86typ	87typ	88typ	88typ	88typ
		ACIN 100V	0.98typ	0.99typ						
	POWER FACTOR(lo=100%)	ACIN 200V	0.87typ	0.93typ						
		ACIN 100V	20typ (lo=100%	b) (At cold start)						
	INRUSH CURRENT[A]	ACIN 200V	40typ (lo=100%	b) (At cold start)						
	LEAKAGE CURRENT[I	nA]	0.4/0.75max (A	CIN 100V/240V	60Hz, lo=100%	, According to IE	C62368-1,DENA	N)		
	VOLTAGE[V]	-	3.3	5	9	12	15	24	36	48
	CURRENT[A]		30	30	16.7	13	10	6.5	4.3	3.3
	LINE REGULATION[m]	/]	20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[m	īV]	40max	40max	100max	100max	120max	150max	240max	240max
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max
	RIPPLE[mVp-p]	-10 - 0°C *1	140max	140max	160max	160max	160max	160max	200max	200max
		0 to +50°C *1	120max	120max	150max	150max	150max	150max	250max	250max
UTPUT	RIPPLE NOISE[mVp-p]	-10 - 0°C *1	160max	160max	180max	180max	180max	180max	300max	300max
		0 to +50°C	50max	50max	90max	120max	150max	240max	360max	480max
	TEMPERATURE REGULATION[mV]	-10 to +50°C	60max	60max	120max	150max	180max	290max	450max	600max
	DRIFT[mV]	*2	20max	20max	36max	48max	60max	96max	144max	192max
	START-UP TIME[ms]		350typ(ACIN 10	00V, lo=100%)						
	HOLD-UP TIME[ms]		20typ (ACIN 10							
	OUTPUT VOLTAGE ADJUSTMEN	T RANGE[V]		4.00 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 18.0	19.2 - 27.0	28.8 - 39.6	39.0 - 53.0
	OUTPUT VOLTAGE SET	TINGIVI	3.30 - 3.40	5.00 - 5.15	9.00 - 9.36	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.92
	OVERCURRENT PROT				ent and recover	s automatically				
ROTECTION	OVERVOLTAGE PROTEC	TION[V]	4.00 - 5.25	5.75 - 7.00	11.5 - 14.0	15.0 - 18.0	20.0 - 25.0	30.0 - 37.0	43.0 - 50.0	58.0 - 65.0
	OPERATING INDICATION		LED (Green)		1	1	1		1	
THERS	REMOTE SENSING		Optional (Only	-3R3, -5 Option	-K)					
	REMOTE ON/OFF		Optional (Regu	ired external po	wer source)					
	INPUT-OUTPUT · RC	*3	AC3,000V 1mir	ute, Cutoff curr	ent = 10mA, DC	500V 50MΩmin	(At Room Temp	erature)		
SOLATION	INPUT-FG		AC2,000V 1mir	ute, Cutoff curr	ent = 10mA, DC	500V 50MΩmin	(At Room Tempe	erature)		
	OUTPUT · RC-FG	*3	AC500V 1minu	te, Cutoff curren	t = 100mA, DC	500V 50MΩmin	At Room Tempe	rature)		
	OPERATING TEMP., HUMID.AND	ALTITUDE				I (Non condensin				
	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 2	0 - 90%RH (No	n condensina) 9	,000m (30,000fe	et) max			
NVIRONMENT	VIBRATION					Ominutes each al		axis		
	IMPACT			a), 11ms, once e			0			
AFETY AND	AGENCY APPROVALS (At only	AC input)	UL60950-1, C-I	JL(CSA60950-1), EN62368-1 C	omplies with DEI	N-AN			
	CONDUCTED NOISE					SPR22-B, EN550		В		
EGULATIONS	HARMONIC ATTENUAT	FOR		EC61000-3-2						
	CASE SIZE/WEIGHT					thout terminal blo	ock) (WXHXD)	560g max (wit	h cover : 630a m	ax)
OTHERS	COOLING METHOD		Convection							

ter(equivalent to KEISOKU-GIKEN :RM101).

*2

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and *3 FG.

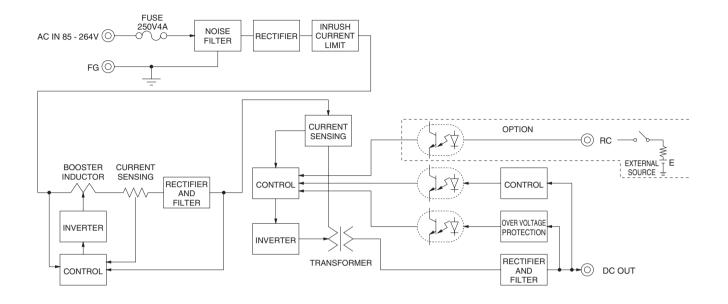
*6 Please contact us about class C. Parallel operation with other model is not possible. * Derating is required when operated with cover.

* A sound may occur from power supply at peak loading.

*4 Derating is required.

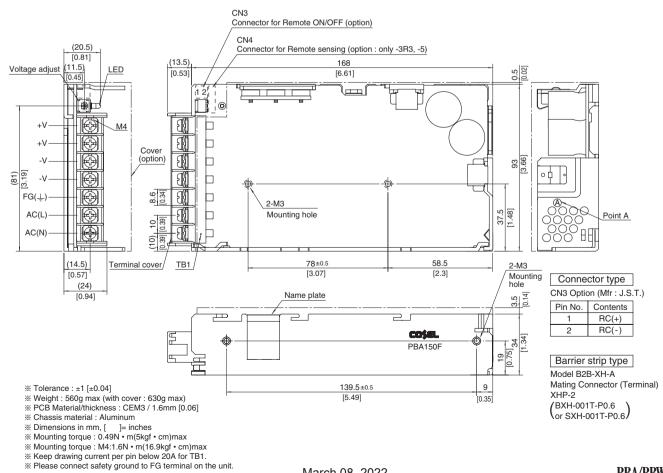
*

PBA150F | COSEL



External view

* External size of option T,J1,R,N1,V and K is different from standard model and refer to 7 Option of instruction manual for details.





MODEL		PBA300F-3R3	PBA300F-5	PBA300F-7R5	PBA300F-12	PBA300F-15	PBA300F-24	PBA300F-36	PBA300F-48
MAX OUTPUT WATTAGE[W]		198	300	300	324	330	336	324	336
DC OUTPUT	ACIN 100V	3.3V 60A	5V 60A	7.5V 40A	12V 27A	15V 22A	24V 14A	36V 9A	48V 7A
	ACIN 200V *3	3.3V 60A	5V 60A	7.5V 40A	12V 27A	15V 22A	24V 14(16.5)A	36V 9A	48V 7A

SPECIFICATIONS

	MODEL		PBA300F-3R3	PBA300F-5	PBA300F-7R5	PBA300F-12	PBA300F-15	PBA300F-24	PBA300F-36	PBA300F-48
	VOLTAGE[V]		AC85 - 264 1¢	or DC120 - 35	0 (AC50 or DC70) Please refer to	the instruction r	nanual 7. option	*4)	
	CURRENT[A]	ACIN 100V	3typ	4.1typ						
	CORRENT[A]	ACIN 200V	1.6typ	2typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
		ACIN 100V	68typ	74typ	76typ	78typ	78typ	79typ	81typ	79typ
IPUT	EFFICIENCY[%]	ACIN 200V	71typ	77typ	79typ	81typ	81typ	82typ	84typ	82typ
		ACIN 100V	0.98typ (lo=100)%)						
	POWER FACTOR	ACIN 200V	0.95typ (lo=100)%)						
		ACIN 100V	20/40typ (lo=10	00%) (Primary in	rush current /Se	condary inrush o	current) (More th	en 3 sec. to re-s	tart)	
	INRUSH CURRENT[A]	ACIN 200V	40/40typ (lo=10	00%) (Primary in	rush current /Se	condary inrush o	current) (More th	en 3 sec. to re-s	tart)	
	LEAKAGE CURRENT[r	nA]	0.45/0.75max (ACIN 100V/240	/ 60Hz, lo=100%	, According to I	EC62368-1,DEN	AN)		
	VOLTAGE[V]		3.3	5	7.5	12	15	24	36	48
		ACIN 100V	60	60	40	27	22	14	9	7
	CURRENT[A]	ACIN 200V *3	60	60	40	27	22	14(16.5)	9	7
	LINE REGULATION[m]	/]	20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[m	īV]	40max	40max	60max	100max	120max	150max	150max	300max
		0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max
	RIPPLE[mVp-p]	-20 - 0°C *1	140max	140max	160max	160max	160max	160max	160max	400max
		0 to +50°C *1	120max	120max	150max	150max	150max	150max	200max	200max
UTPUT	RIPPLE NOISE[mVp-p]	-20 - 0℃ *1	160max	160max	180max	180max	180max	180max	240max	500max
		0 to +50°C	40max	50max	75max	120max	150max	240max	360max	480max
	TEMPERATURE REGULATION[mV]	-20 to +50°C	60max	75max	120max	180max	180max	290max	440max	600max
	DRIFT[mV] *		12max	20max	30max	48max	60max	96max	144max	192max
	START-UP TIME[ms]	300typ(ACIN 100	/200V, lo=100%)	*Start-up time is	500ms typ for less	s than 1 minute of	applying input aga	in from turning off	the input voltag	
	HOLD-UP TIME[ms]		20typ (ACIN 10	0/200V, lo=100	%)					
	OUTPUT VOLTAGE ADJUSTMENT	FRANGE[V]	2.64 - 3.96	3.96 - 6.00	5.25 - 8.25	8.25 - 13.20	10.50 - 16.50	16.50 - 26.40	25.20 - 39.60	38.40 - 56.00
	OUTPUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	7.50 - 7.80	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.92
	OVERCURRENT PROT	ECTION	Works over 10	5% of rated curre	ent or 101% of p	eak current and	recovers automa	atically		
ROTECTION	OVERVOLTAGE PROTEC	TION[V]	4.3 - 6.3	6.5 - 8.0	9.0 - 11.6	14.4 - 18.6	18.0 - 23.3	28.8 - 37.2	43.2 - 54.0	57.6 - 80.0
	OPERATING INDICATIO	NC	LED (Green)							
THERS	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided							
	INPUT-OUTPUT · RC		AC3,000V 1mir	nute, Cutoff curre	ent = 10mA, DC5	500V 50M Ω min	(At Room Temp	erature)		
SOLATION	INPUT-FG		AC2,000V 1mir	nute, Cutoff curre	ent = 10mA, DC5	500V 50MΩmin	(At Room Temp	erature)		
DEATION	OUTPUT · RC · AUX-F	G			t = 100mA, DC5					
	OUTPUT-RC · AUX				t = 100mA, DC5					
	OPERATING TEMP.,HUMID.AND	ALTITUDE			g"), 20 - 90%RH			00feet) max		
NVIRONMENT	STORAGE TEMP., HUMID.AND	ALTITUDE	-20 to +75℃, 2	0 - 90%RH (Noi	n condensing) 9,	000m (30,000fee	et) max			
	VIBRATION				nutes period, 60		ong X, Y and Z a	axis		
	IMPACT		196.1m/s ² (200	a), 11ms, once e	each X, Y and Z	axis				
AFETY AND		/ AC input)), EN62368-1 Co					
OISE	CONDUCTED NOISE				sB, VCCI-B, CIS	PR22-B, EN550	11-B, EN55022-	В		
EGULATIONS	HARMONIC ATTENUAT	OR		EC61000-3-2 *						
THERS	CASE SIZE/WEIGHT				≺6.69 inches] (w	ithout terminal b	lock and screw)	(W×H×D) /1.04	kg max	
	COOLING METHOD		Forced cooling	(internal fan)						

lent to KEISOKU-GIKEN :RM101).

2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
 3 () means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual

in detail.

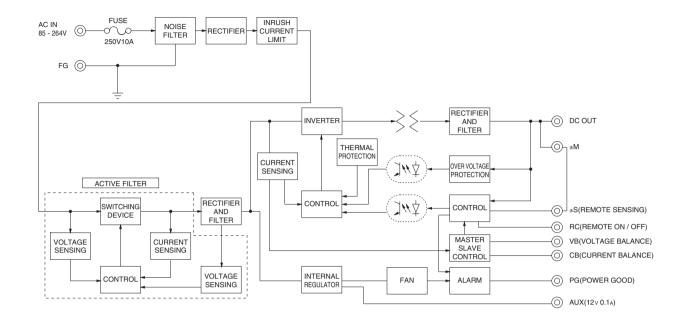
*4 Derating is required.Consult us for details.

*

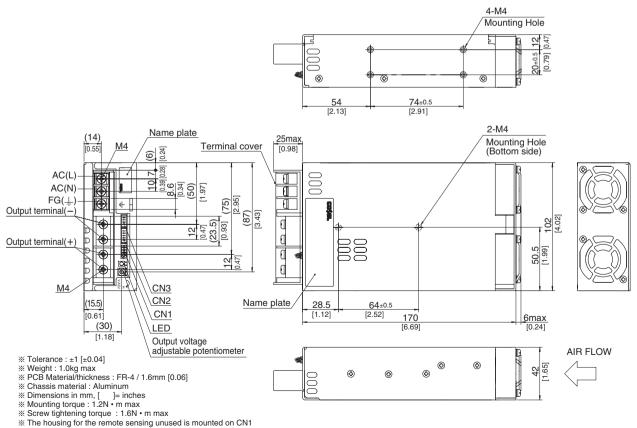
*6 Please contact us about class C.

A sound may occur from power supply at pulse loading.

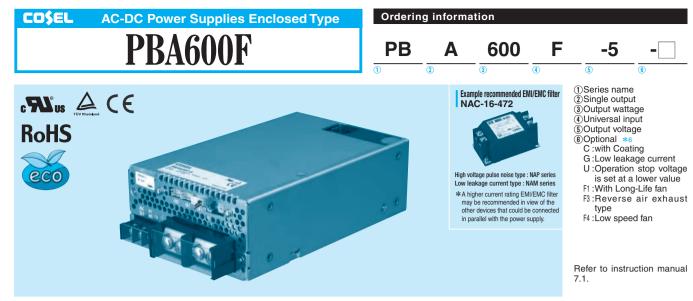
PBA300F | COSEL



External view



※ Please connect safety ground to FG terminal on the unit.



MODEL		PBA600F-3R3	PBA600F-5	PBA600F-7R5	PBA600F-12	PBA600F-15	PBA600F-24	PBA600F-36	PBA600F-48
MAX OUTPUT WATTAGE[W]		396	600	600	636	645	648	648	624
DC OUTPUT	ACIN 100V	3.3V 120A	5V 120A	7.5V 80A	12V 53A	15V 43A	24V 27A	36V 18A	48V 13A
DC OUTPUT	ACIN 200V *3	3.3V 120A	5V 120A	7.5V 80A	12V 53A	15V 43A	24V 27(31)A	36V 18A	48V 13A

SPECIFICATIONS

V]									
CURRENT[A]		AC85 - 264 1¢	or DC120 - 35	0 (AC50 or DC70	Please refer to	the instruction r	nanual 7. option	*5)	
	ACIN 100V	5.8typ	8.2typ						
[A]	ACIN 200V	3typ	4.1typ						
CY[Hz]		50/60 (47 - 63)							
	ACIN 100V	70typ	75typ	76typ	79typ	79typ	81typ	82typ	81typ
CY[%]	ACIN 200V	72typ	77typ	79typ	82typ	82typ	84typ	84typ	83typ
	ACIN 100V	0.98typ (lo=100)%)						
ACTOR	ACIN 200V	0.95typ (lo=100)%)						
	ACIN 100V	20/40typ (lo=10	0%) (Primary ir	rush current /Se	condary inrush o	current) (More th	an 3 sec. to re-s	tart)	
URRENT[A]				rush current /Se					
CURRENT[mA]	0.45/0.75max (ACIN 100V/240	V 60Hz, lo=100%	, According to II	EC62368-1, DEM	JAN)		
V1		3.3	5	7.5	12	15	24	36	48
	ACIN 100V	120	120	80	53	43	27	18	13
[A]	ACIN 200V *3	120	120	80	53	43	27(31)	18	13
ULATION[m	vi	20max	20max	36max	48max	60max	96max	144max	192max
ULATION[n		40max	40max	60max	100max	120max	150max	150max	300max
	0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max
Vp-p]	-20 - 0°C *1	140max	140max	160max	160max	160max	160max	160max	400max
	0 to +50°C *1	120max	120max	150max	150max	150max	150max	200max	200max
DISE[mVp-p]	-20 - 0°C *1	160max	160max	180max	180max	180max	180max	240max	500max
	0 to +50°C	40max	50max	75max	120max	150max	240max	360max	480max
REGULATION[mV]	-20 to +50°C	60max	75max	120max	180max	180max	290max	440max	600max
]	*2	12max	20max	30max	48max	60max	96max	144max	192max
TIME[ms]		400typ(ACIN 100	/200V, lo=100%)	*Start-up time is	500ms typ for less	than 1minute of	applying input agai	in from turning off	the input voltag
			0/200V, lo=100	%)				Ŭ	
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.64 - 3.96	3.96 - 6.00	5.25 - 8.25	8.25 - 13.20	10.50 - 16.50	16.50 - 26.40	25.20 - 39.60	38.40 - 56.00
OLTAGE SE	TTING[V]	3.30 - 3.40	5.00 - 5.15	7.50 - 7.80	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.92
RENT PRO	TECTION	Works over 10	5% of rated curr	ent or 101% of p	eak current and	recovers automa	atically		
GE PROTECT	TION[V] *4	Vo+0.66 - 1.32	Vo+1.0 - 2.0	Vo+1.5 - 3.0	Vo+2.4 - 4.8	Vo+3.0 - 6.0	Vo+4.8 - 9.6	Vo+7.2 - 14.4	Vo+4.8 - 12.0
IG INDICATI	ON	LED (Green)							
SENSING		Provided							
DN/OFF		Provided							
TPUT · RC		AC3,000V 1mir	nute, Cutoff curr	ent = 10mA, DC5	00V 50MΩmin	(At Room Tempe	erature)		
		AC2,000V 1mir	nute, Cutoff curr	ent = 10mA, DC5	00V 50MΩmin	(At Room Tempe	erature)		
RC · AUX-F	G	AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	00V 50MΩmin (At Room Tempe	rature)		
C · AUX		AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	00V 50MΩmin (At Room Tempe	rature)		
EMP.,HUMID.ANI	D ALTITUDE	-20 to +71℃ (F	Refer to "Derating	g"), 20 - 90%RH	(Non condensing	g) 3,000m (10,00	0feet) max		
MP.,HUMID.AND	ALTITUDE	-20 to +75℃, 2	0 - 90%RH (No	n condensing) 9,0	000m (30,000fee	et) max			
N		10 - 55Hz, 19.6	6m/s² (2G), 3mi	nutes period, 60r	ninutes each ald	ong X, Y and Z a	axis		
		196.1m/s ² (200	a), 11ms, once e	each X, Y and Z	axis	-			
ROVALS (At on	ly AC input)	UL60950-1, C-	UL(CSA60950-1), EN62368-1 Co	mplies with DEN	N-AN			
ED NOISE		Complies with	FCC Part15 clas	sB, VCCI-B, CIS	PR22-B, EN550	11-B, EN55022-	В		
C ATTENUA	TOR								
E/WEIGHT		120×61×190r	nm [4.72×2.4×	7.48 inches] (with	nout terminal blo	ock and screw) (W×H×D) /1.6kg	j max	
						, (
ROVA ED C A	ALS (At on NOISE ITENUA	ALS (At only AC input) NOISE ITENUATOR EIGHT	10 - 55Hz, 19.6 196.1m/s² (200 LS (At only AC input) UL60950-1, C- NOISE Complies with ITENUATOR Complies with EIGHT 120 × 61 × 190r	10 - 55Hz, 19.6m/s² (2G), 3mi 196.1m/s² (20G), 11ms, once e NOISE Complies with FCC Part15 class TENUATOR Complies with IEC61000-3-2 * EIGHT 120 x 61 x 190mm [4.72 x 2.4 x	10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60r 196.1m/s² (20G), 11ms, once each X, Y and Z ALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Co NOISE Complies with FCC Part15 classB, VCCI-B, CIS TENUATOR Complies with IEC61000-3-2 *7 EIGHT 120×61×190mm [4.72×2.4×7.48 inches] (with	10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each alk 196.1m/s² (20G), 11ms, once each X, Y and Z axis LS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN550 ITENUATOR Complies with IEC61000-3-2 *7 EIGHT 120×61×190mm [4.72×2.4×7.48 inches] (without terminal blc	10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z at 196.1m/s² (20G), 11ms, once each X, Y and Z axis LS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022- TENUATOR Complies with IEC61000-3-2 *7 EIGHT 120×61×190mm [4.72×2.4×7.48 inches] (without terminal block and screw) (Note: Complication of the screen of the scr	10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis 196.1m/s² (20G), 11ms, once each X, Y and Z axis ULS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B ITENUATOR Complies with IEC61000-3-2 *7 EIGHT 120×61×190mm [4.72×2.4×7.48 inches] (without terminal block and screw) (W×H×D) /1.6kg	10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis 196.1m/s² (20G), 11ms, once each X, Y and Z axis ULS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B ITENUATOR Complies with IEC61000-3-2 *7 EIGHT 120×61×190mm [4.72×2.4×7.48 inches] (without terminal block and screw) (W×H×D) /1.6kg max

*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
 *3 () means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual

in detail. *4 Overvoltage protection circuit to follow to output voltage setting. Standard overvoltage

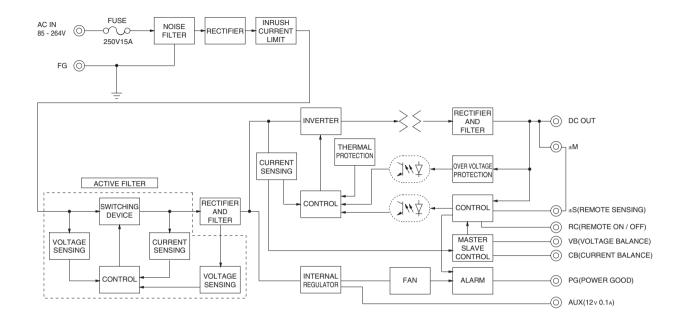
protection circuit is please contact us for details.

*

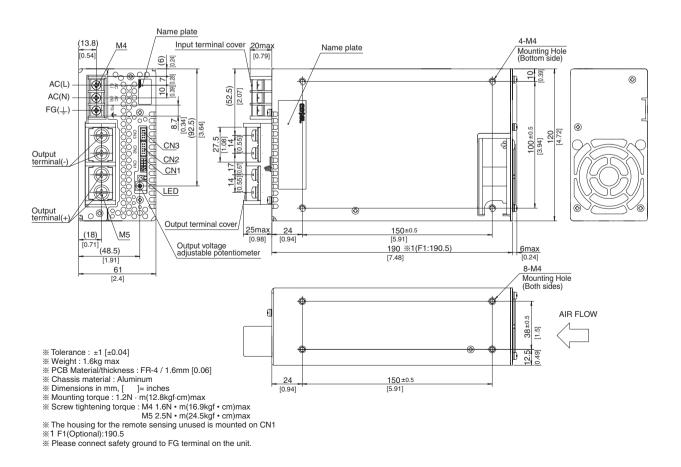
*7 Please contact us about class C.

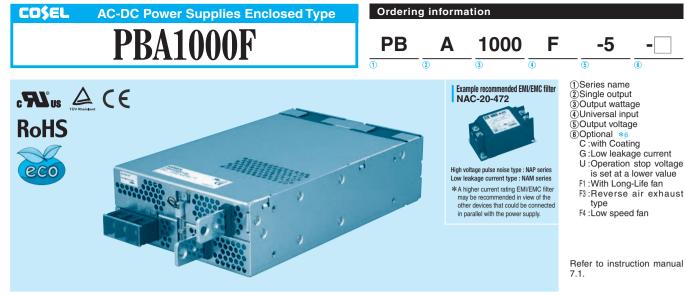
A sound may occur from power supply at pulse loading.

PBA600F | CO\$EL



External view





MODEL		PBA1000F-3R3	PBA1000F-5	PBA1000F-7R5	PBA1000F-12	PBA1000F-15	PBA1000F-24	PBA1000F-36	PBA1000F-48
MAX OUTPUT WATTAGE[W]		660	1000	1005	1056	1050	1056	1044	1056
DC OUTPUT	ACIN 100V	3.3V 200A	5V 200A	7.5V 134A	12V 88A	15V 70A	24V 44A	36V 29A	48V 22A
DC 001P01	ACIN 200V *3	3.3V 200A	5V 200A	7.5V 134A	12V 88A	15V 70A	24V 44(51)A	36V 29A	48V 22A

SPECIFICATIONS

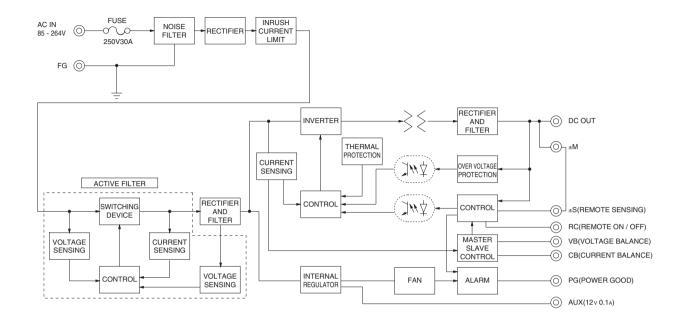
CURRE FREQU EFFICIE POWER INRUSH LEAKAG VOLTAG CURRE LINE RE LOAD F RIPPLE DUTPUT RIPPLE DUTPUT RIPPLE DUTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT CURRE RIPPLE DRIFT[r START-I HOLD-L OUTPUT CURRE RIPPLE DRIFT[r START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I HOLD-L OUTPUT START-I REMOT	TAGE[V] RENT[A] QUENCY[Hz] CIENCY[%] /ER FACTOR JSH CURRENT[A] KAGE CURRENT[A] RENT[A] E REGULATION[m*] PLE[mVp-p] PLE NOISE[mVp-p] RATURE REGULATION[m*]	ACIN 200V ACIN 100V ACIN 200V mA] ACIN 100V ACIN 200V *3	9typ 5typ 50/60 (47 - 63) 74typ 0.98typ (Io=100 0.95typ (Io=100 20/40typ (Io=10 40/40typ (Io=10 0.5/1.0max (AC 3.3 200 200 20max 40max	13typ 7typ 81typ 9%) 0%) 0%) (Primary ir 0%) (Primary ir 0%) (Primary ir 51N 100V/240V (5 200 200	80typ 83typ rush current /Se 0Hz, Io=100%, / 7.5 134	82typ 84typ condary inrush c condary inrush c According to IEC 12	82typ 84typ current) (More th current) (More th	84typ 86typ an 10 sec. to re- an 10 sec. to re-	84typ 86typ start)	84typ 86typ	
PUTPUT FREQUE FREQUE FREQUE FREQUE FREQUE FREQUE FREQUE POWER INRUSH LEAKAA VOLTAG CURRE LINE RE LOAD F RIPPLE DUTPUT RIPPLE DUTPUT RIPPLE DUTPUT RIPPLE DUTPUT RIPPLE DUTPUT RIPPLE TEMPERATU OUTPUT ROTECTION OVERVO OUTPUT ROTECTION OVERVO SOL ATION	QUENCY[Hz] CIENCY[%] /ER FACTOR JSH CURRENT[A] KAGE CURRENT[[TAGE[V] RENT[A] ERENT[A] EREGULATION[m ⁺ D REGULATION[m ⁺ D REGULATION[m ⁺ PLE[mVp-p]	ACIN 200V ACIN 2	5typ 50/60 (47 - 63) 74typ 0.98typ (lo=100 0.95typ (lo=100 0.95typ (lo=100 0.95typ (lo=100 0.95typ (lo=100 0.5/1.0max (AC 3.3 200 200 200 200 200 200 200 200 200 20	7typ 7typ 81typ 0%) 0%) (Primary ir 0%) (Primary ir CIN 100V/240V 6 5 200 200	83typ rush current /Se rush current /Se 0Hz, lo=100%, / 7.5	84typ condary inrush c condary inrush c According to IEC 12	84typ eurrent) (More th eurrent) (More th 62368-1, DENA	86typ an 10 sec. to re- an 10 sec. to re- N)	86typ start)		
IPUT FREQUI IPUT FREQUI FREQUI FREQUI POWER INRUSH LEAKAA VOLTAG CURRE LINE RE LOAD F RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[T START-1 HOLD-L OUTPUT W OUTPUT W	QUENCY[Hz] CIENCY[%] /ER FACTOR JSH CURRENT[A] KAGE CURRENT[[TAGE[V] RENT[A] ERENT[A] EREGULATION[m ⁺ D REGULATION[m ⁺ D REGULATION[m ⁺ PLE[mVp-p]	ACIN 100V ACIN 200V ACIN 100V ACIN 200V ACIN 200V ACIN 200V ACIN 200V ACIN 200V ACIN 200V ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	50/60 (47 - 63) 74typ 76typ 0.98typ (lo=100 0.95typ (lo=100 20/40typ (lo=11 40/40typ (lo=11 0.5/1.0max (AC 3.3 200 200 20max 40max	79typ 81typ)%))0%) (Primary ir)00%) (Primary ir)1N 100V/240V (5 200 200	83typ rush current /Se rush current /Se 0Hz, lo=100%, / 7.5	84typ condary inrush c condary inrush c According to IEC 12	84typ eurrent) (More th eurrent) (More th 62368-1, DENA	86typ an 10 sec. to re- an 10 sec. to re- N)	86typ start)		
PUT EFFICIE POWER INRUSH LEAKAQ VOLTAG CURRE LINE RE LOAD F RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT RIPPLE ROTECTION RCUIT AND OPERA' REMOT REMO	CIENCY[%] /ER FACTOR JSH CURRENT[A] KAGE CURRENT[[TAGE[V] RENT[A] EREGULATION[m ¹ D REGULATION[m PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 200V ACIN 100V ACIN 200V ACIN 200V ACIN 200V MA] ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	74typ 76typ 0.98typ (lo=100 0.95typ (lo=110 20/40typ (lo=11 40/40typ (lo=11 0.5/1.0max (AC 3.3 200 200 200 20max 40max	79typ 81typ)%))0%) (Primary ir)00%) (Primary ir)1N 100V/240V (5 200 200	83typ rush current /Se rush current /Se 0Hz, lo=100%, / 7.5	84typ condary inrush c condary inrush c According to IEC 12	84typ eurrent) (More th eurrent) (More th 62368-1, DENA	86typ an 10 sec. to re- an 10 sec. to re- N)	86typ start)		
PUT POWER POWER POWER INRUSH LEAKAG VOLTAG CURRE LINE RI LOAD F RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT ROTECTION RCTECTION RCTECTION RCTECTION REMOT R	/ER FACTOR JSH CURRENT[A] KAGE CURRENT[I TAGE[V] RENT[A] REGULATION[m ¹ D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 200V ACIN 100V ACIN 200V ACIN 200V ACIN 200V MA] ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	76typ 0.98typ (lo=100 0.95typ (lo=100 20/40typ (lo=110 40/40typ (lo=11 0.5/1.0max (AC 3.3 200 200 200 200 200max 40max	81typ 0%) 0%) (Primary ir 00%) (Primary ir 1N 100V/240V (5 200 200	83typ rush current /Se rush current /Se 0Hz, lo=100%, / 7.5	84typ condary inrush c condary inrush c According to IEC 12	84typ eurrent) (More th eurrent) (More th 62368-1, DENA	86typ an 10 sec. to re- an 10 sec. to re- N)	86typ start)		
IPUT POWER POWER INRUSH LEAKAG VOLTAG CURRE LINE RE LOAD F RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[F START-I HOLD-L OUTPUT ROTECTION REMOT REMOT REMOT REMOT REMOT	/ER FACTOR JSH CURRENT[A] KAGE CURRENT[I TAGE[V] RENT[A] REGULATION[m ¹ D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 100V ACIN 200V ACIN 100V ACIN 200V MA] ACIN 100V ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	0.98typ (lo=100 0.95typ (lo=100 20/40typ (lo=110 40/40typ (lo=11 0.5/1.0max (AC 3.3 200 200 200 200 200max 40max	9%) 9%) 90%) (Primary ir 90%) (Primary ir 21N 100V/240V (5 200 200	83typ rush current /Se rush current /Se 0Hz, lo=100%, / 7.5	condary inrush c condary inrush c According to IEC	84typ eurrent) (More th eurrent) (More th 62368-1, DENA	an 10 sec. to re- an 10 sec. to re- N)	start)	86typ	
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT REMOT REMOT REMOT REMOT	JSH CURRENT[A] KAGE CURRENT[TAGE[V] RENT[A] REGULATION[m ¹ D REGULATION[m PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 200V ACIN 100V ACIN 200V MA] ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	0.95typ (lo=100 20/40typ (lo=10 40/40typ (lo=10 0.5/1.0max (AC 3.3 200 200 200 200 200 200 200 200 200 20	0%) 00%) (Primary ir 00%) (Primary ir CIN 100V/240V 6 5 200 200	rush current /Se rush current /Se i0Hz, Io=100%, # 7.5	condary inrush c According to IEC	urrent) (More th 62368-1, DENA	an 10 sec. to re- N)			
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT RIPPLE OUTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT RIPPLE OUTPUT RIPPLE OUTPUT RIPPLE OUTPUT RIPPLE	JSH CURRENT[A] KAGE CURRENT[TAGE[V] RENT[A] REGULATION[m ¹ D REGULATION[m PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 100V ACIN 200V MA] ACIN 100V ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	20/40typ (lo=10 40/40typ (lo=10 0.5/1.0max (AC 3.3 200 200 200 20max 40max	00%) (Primary ir 00%) (Primary ir 01N 100V/240V 6 5 200 200	rush current /Se 60Hz, lo=100%, <i>k</i> 7.5	condary inrush c According to IEC	urrent) (More th 62368-1, DENA	an 10 sec. to re- N)			
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[r START-I HOLD-L OUTPUT ROTECTION INCUTE ROTECTION REMOT REMOT REMOT REMOT REMOT	KAGE CURRENT[TAGE[V] RENT[A] REGULATION[m D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 200V mA] ACIN 100V ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	40/40typ (lo=10 0.5/1.0max (AC 3.3 200 200 20max 40max	00%) (Primary in CIN 100V/240V (5 200 200	rush current /Se 60Hz, lo=100%, <i>k</i> 7.5	condary inrush c According to IEC	urrent) (More th 62368-1, DENA	an 10 sec. to re- N)			
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[r START-I HOLD-L OUTPUT ROTECTION INCUT AND OPERAT REMOT REMOT REMOT	KAGE CURRENT[TAGE[V] RENT[A] REGULATION[m D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 100V ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	0.5/1.0max (AC 3.3 200 200 20max 40max	CIN 100V/240V 6 5 200 200	0Hz, lo=100%, A	According to IEC	62368-1, DENA	N)	start)		
VOLTAG CURRE LINE RE LOAD F RIPPLE UTPUT RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[r START-I HOLD-L OUTPUT OUTPUT ROTECTION IRCUIT AND THERS REMOT REMOT REMOT	TAGE[V] RENT[A] E REGULATION[m ⁺ D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 100V ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	3.3 200 200 20max 40max	5 200 200	7.5	12					
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[r START-I HOLD-L OUTPUT OVERCI ROTECTION OVERVO ROTECTION OVERVO REMOT REMOT REMOT REMOT	RENT[A] REGULATION[m ¹ D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	200 200 20max 40max	200 200	-		15	24			
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE TEMPERATU DRIFT[r START-I HOLD-L OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT ROTECTION OVERVO REMOT REMOT REMOT	RENT[A] REGULATION[m ¹ D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	ACIN 200V *3 /] V] 0 to +50°C *1 -20 - 0°C *1	200 20max 40max	200	134			1 24	36	48	
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT REMOT REMOT REMOT REMOT	E REGULATION[m D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	/] V] 0 to +50℃ *1 -20 - 0℃ *1	20max 40max			88	70	44	29	22	
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT W OVERCI ROTECTION OVERCI REMOT REMOT REMOT	D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	0 to +50℃ *1 -20 - 0℃ *1	40max		134	88	70	44(51)	29	22	
UTPUT RIPPLE UTPUT RIPPLE UTPUT RIPPLE DRIFT[r START-I HOLD-L OUTPUT W OUTPUT W OUTPUT W OUTPUT W OUTPUT W OVERCI ROTECTION OVERCI REMOT REMOT REMOT	D REGULATION[n PLE[mVp-p] PLE NOISE[mVp-p]	0 to +50℃ *1 -20 - 0℃ *1	40max	20max	36max	48max	60max	96max	144max	192max	
UTPUT RIPPLE UTPUT RIPPLE TEMPERATI DRIFT[r START-I HOLD-L OUTPUT VC OUTPUT VC OUTPUT VC OUTPUT ROTECTION INCUTAND REMOT REMOT REMOT	PLE[mVp-p] PLE NOISE[mVp-p]	0 to +50℃ *1 -20 - 0℃ *1		40max	60max	100max	120max	150max	150max	300max	
UTPUT RIPPLE TEMPERATU DRIFT[r START-I HOLD-L OUTPUT OUTPUT OVERCI ROTECTION IRCUIT AND OPERAT THERS REMOT REMOT REMOT	LE NOISE[mVp-p]	-	80max	80max	120max	120max	120max	120max	150max	150max	
TEMPERATU DRIFT[r START-I HOLD-L OUTPUT OUTPUT OVERCI ROTECTION IRCUIT AND OPERAT REMOT REMOT REMOT INPUT-C		-	140max	140max	160max	160max	160max	160max	160max	400max	
TEMPERATU DRIFT[r START-I HOLD-L OUTPUT OUTPUT OVERCI ROTECTION IRCUIT AND OPERAT REMOT REMOT REMOT INPUT-C			120max	120max	150max	150max	150max	150max	200max	200max	
ROTECTION INPUT: ROTECTION INCUIT AND REMOT REMOT REMOT REMOT REMOT REMOT REMOT REMOT REMOT REMOT	RATURE REGULATION[mV]	-20 - 0°C *1	160max	160max	180max	180max	180max	180max	240max	500max	
ROTECTION ROTECTION ROTECTION ROTECTION ROTECTION RECUIT AND REMOT REMOT REMOT REMOT REMOT REMOT REMOT	RATURE REGULATION[mV]	0 to +50°C	40max	50max	75max	120max	150max	240max	360max	480max	
ROTECTION OVERCO ROTECTION OVERVO IRCUIT AND OPERA THERS REMOT REMOT		-20 to +50°C	60max	75max	120max	180max	180max	290max	440max	600max	
ROTECTION OVERO IRCUIT AND OPERA THERS REMOT REMOT	T[mV]	*2	12max	20max	30max	48max	60max	96max	144max	192max	
HOLD-L OUTPUT VI OUTPUT VI OUTPUT OVERCI OVE	RT-UP TIME[ms])/200V, lo=100%)	*Start-up time is	500ms typ for less	than 1minute of a	applving input agai	in from turning off	the input voltac	
OUTPUT OVERCI ROTECTION IRCUIT AND OPERA THERS REMOT INPUT-C	D-UP TIME[ms]			0/200V, lo=100							
OVERCI ROTECTION IRCUIT AND THERS REMOT REMOT INPUT-C	JT VOLTAGE ADJUSTMEN	T RANGE[V]		3.96 - 6.00	5.25 - 8.25	8.25 - 13.20	10.50 - 16.50	16.50 - 26.40	25.20 - 39.60	38.40 - 56.0	
ROTECTION OVERVO IRCUIT AND OPERA THERS REMOT REMOT INPUT-C	PUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	7.50 - 7.80	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.9	
ROTECTION OVERVO IRCUIT AND OPERA THERS REMOT REMOT INPUT-C	RCURRENT PROT	ECTION	Works over 10	5% of rated curr	ent or 101% of p	eak current and	recovers automa	atically			
IRCUIT AND OPERA THERS REMOT REMOT INPUT-C	RVOLTAGE PROTECT		Vo+0.66 - 1.32		Vo+1.5 - 3.0	Vo+2.4 - 4.8	Vo+3.0 - 6.0	Vo+4.8 - 9.6	Vo+7.2 - 14.4	Vo+4.8 - 12.	
REMOT REMOT	RATING INDICATI	ON	LED (Green)								
	OTE SENSING		Provided								
INPUT-F	OTE ON/OFF		Provided								
	JT-OUTPUT · RC		AC3,000V 1mir	nute, Cutoff curr	ent = 25mA, DC5	500V 50MΩmin	(At Room Tempe	erature)			
OUTPU	JT-FG		AC2,000V 1mir	nute, Cutoff curr	ent = 25mA, DC5	500V 50MΩmin	(At Room Tempe	erature)			
	PUT · RC · AUX-F	G	AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	00V 50MΩmin (At Room Tempe	rature)		-	
OUTPU	PUT-RC · AUX		AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	00V 50MΩmin (At Room Tempe	rature)			
OPERATIN	ating temp.,Humid.and	ALTITUDE	-20 to +71℃ (F	Refer to "Derating	j"), 20 - 90%RH	(Non condensing	g) 3,000m (10,00	0feet) max			
STORAGE	AGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 2	0 - 90%RH (No	n condensing) 9,0	000m (30,000fee	et) max				
VIRONMENT VIBRAT	RATION		10 - 55Hz, 19.6	6m/s² (2G), 3mi	nutes period, 60	minutes each ald	ong X, Y and Z a	ixis		-	
IMPACT	CT		196.1m/s2 (200	G), 11ms, once e	each X, Y and Z	axis					
AFETY AND AGENCY	CY APPROVALS (At onl	y AC input)	UL60950-1, C-	UL(CSA60950-1), EN62368-1 Co	mplies with DEN	I-AN				
OISE CONDU	DUCTED NOISE		Complies with	FCC Part15 clas	sB, VCCI-B, CIS	SPR22-B, EN550	11-B, EN55022-	В			
EGULATIONS		FOR	Complies with	IEC61000-3-2	7						
CASE S	MONIC ATTENUA		150×61×240r	nm [5.91 x 2.4 x	9.45 inches] (with	hout terminal blo	ck and screw) (\	V 🗙 H 🗙 D) /2.2kg	j max		
THERS COOLIN	MONIC ATTENUA E SIZE/WEIGHT		Forced cooling	Forced cooling (internal fan)							
*1 Measured by 20MH;			e meter/equivalant			vervoltage protection	on circuit to follow t		atting Standard av	arvoltago	

Ripple and ripple noise is measured on measuring board with capacitor of 22 $\mu\,F$ within 150mm from the output terminal.

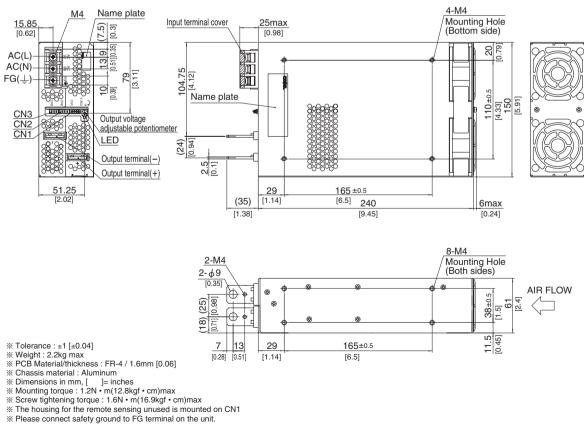
*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. *3 () means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual in detail. *5 Derating is required.Consult us for details.
*6 Please contact us about safety approvals for the model with option.

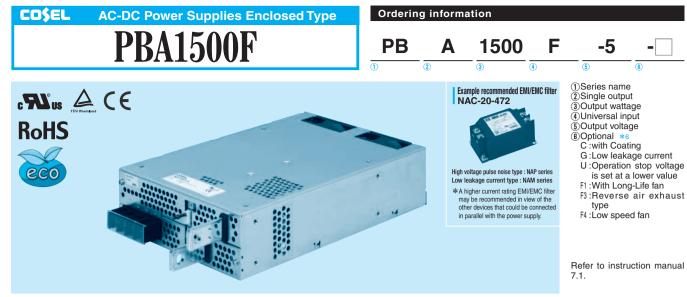
Please contact us about class C. * A sound may occur from power supply at pulse loading.

PBA1000F | CO\$EL



External view





MODEL		PBA1500F-3R3	PBA1500F-5	PBA1500F-7R5	PBA1500F-12	PBA1500F-15	PBA1500F-24	PBA1500F-36	PBA1500F-48
MAX OUTPUT WATTAGE[W]		990	1500	1500	1500	1500	1680	1692	1680
DC OUTPUT	ACIN 100V	3.3V 300A	5V 300A	7.5V 200A	12V 125A	15V 100A	24V 65A	36V 42A	48V 32A
DC 001P01	ACIN 200V *3	3.3V 300A	5V 300A	7.5V 200A	12V 125A	15V 100A	24V 70(105)A	36V 47(70)A	48V 35A

SPECIFICATIONS

OUTPUT VOLTAGE SETTING[V] 3.30 - 3.40 5.00 - 5.15 7.50 - 7.80 12.00 - 12.48 15.00 - 15.60 24.00 - 24.96 36.00 - 37.44 48.00 - 49 OVERCURRENT PROTECTION Works over 105% of rated current or 101% of peak current and recovers automatically 500 - 37.44 48.00 - 49		MODEL		PBA1500F-3R3	PBA1500F-5	PBA1500F-7R5	PBA1500F-12	PBA1500F-15	PBA1500F-24	PBA1500F-36	PBA1500F-4
UNREALING AON 2007 Bype 10type FFECUENCY[H] AON 2007 773yp 811yp 813yp 841yp 861yp 871yp 831yp 851yp 841yp 851yp 851yp <td> </td> <td>VOLTAGE[V]</td> <th></th> <td>AC85 - 264 1 ¢</td> <td>or DC120 - 37</td> <td>0 (AC50 or DC70</td> <td>) Please refer to</td> <td>the instruction n</td> <td>nanual 7. option</td> <td>*5)</td> <td></td>		VOLTAGE[V]		AC85 - 264 1 ¢	or DC120 - 37	0 (AC50 or DC70) Please refer to	the instruction n	nanual 7. option	*5)	
Index Index Index Index Index IPUT FFEQUENCY[%] ACIN 1007 ZStyp 77 typ 81 typ 83 typ 84 typ <td> </td> <td></td> <th>ACIN 100V</th> <td>15typ</td> <td>19typ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			ACIN 100V	15typ	19typ						
PUT EFFICIENCY(%) ADM 20V / Styp 77yp B1typ B1typ B3typ B4typ B4typ <td></td> <td>CORRENT[A]</td> <th>ACIN 200V</th> <td>8typ</td> <td>10typ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		CORRENT[A]	ACIN 200V	8typ	10typ						
IPPUL PRIVE Prival Rank table Staty Bityp Bittyp Bittyp Bittyp Bittyp Bittyp Bittyp Bittyp Bittyp Bittyp Bittyp <thbittyp< th=""> <thbittyp< th=""> <thbittyp< td=""><td>[</td><td>FREQUENCY[Hz]</td><th></th><td>50/60 (47 - 63)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thbittyp<></thbittyp<></thbittyp<>	[FREQUENCY[Hz]		50/60 (47 - 63)							
UPUT EPFICIENC (Trs) ADM 1000 (2000) Styp Bityp			ACIN 100V	72typ	77typ	81typ	81typ	83typ	84typ	84typ	84typ
POWER FACTOR ADN 2007 Obstry (b=100%) INRUSH CURRENT[A] ADN 2007 0.95/pp (b=100%) Permany inrush current /Secondary inrush current) (More than 10 sec. to re-start) ILEAKAGE CURRENT[TA] ADN 2007 0.91/5.05% (D=100%) Permany inrush current /Secondary inrush current) (More than 10 sec. to re-start) VULTAGE[V] 3.3 5 7.5 12 15 24 36 48 CURRENT[A] ADN 2007 300 200 125 100 65 42 32 CURRENT[A] ADN 2007 300 200 125 100 65 42 32 LIDAR EGULATION[mV] 20max 200max 200max 120max 120max 150max 150max 150max 150max 150max 120max 150max 150max 200max	IPUT	EFFICIENCY[%]	ACIN 200V	75typ		83typ	84typ	86typ	87typ	87typ	87typ
INRUSH CURRENT[A] AORI 1007 Olystyp (loc-100%) (Primary inrush current /Secondary inrush current) (More than 10 sec. to re-start) LEAKAGE CURRENT[TA] AORI 2009 0.0100%) (Primary inrush current /Secondary inrush current /Secondary inrush current) Sec. to re-start) VOLTAGE[V] 3.3 5 7.5 12 15 24 38 48 CURRENT[A] ADN 1007 300 200 125 100 65 42 32 LADA DECULATION[TV] 20max 300 200 125 100 47(70) 35 LADA DECULATION[TV] 40max 40max 60max 100max 120max 150max 150max 300max RIPPLE[mVp-p] 40-62: 120max 120max 120max 150max 150max 200max	1										
INRUSH OUHRENT[A] [ZNI 2007] 40/40/py [(0=100%) (Pimary inrush current / Secondary inrush current) (More than 10 sec. to re-start) LEAKAGE CURRENT[ma] 0.911.5max (ACIN 100V/240V 60Hz, lo=100%). According to IEC62368-1. DENAN) VOLTAGE[V] 3.3 5 7.5 12 15 24 36 48 CURRENT[A] ACM 100V 300 300 200 125 100 65 42 32 LINE REGULATION[mV] 20max 20max 36max 40max 60max 100max 120max 150max 160max 160max 160max 160max 160max 160max 160max 160max 200max		POWER FACTOR	ACIN 200V	0.95typ (lo=100)%)						
INRUSH CURRENT[IA] [201 2007] 40/40/py [Io=100%] (Primary Inrush current) (More than 10 sec. to re-start) LEAKAGE CURRENT[mA] 09/1.5max (ACIN 100V/240V 60Hz; Io=100%; According to IEC62368-1; DENAN) VOLTAGE[V] 3.3 5 7.5 12 15 2.4 3.6 4.8 CURRENT[A] ACIN 100V 300 300 200 125 100 65 4.2 32 LINE REGULATION[mV] 20max 20max 36max 40max 60max 100max 120max 150max 120max 150max 150max 150max 150max 150max 150max 150max 150max 150max 120max 150max 150max 150max 150max 150max 150max 150max			ACIN 100V	20/40typ (lo=10	0%) (Primary in	rush current /Se	condary inrush c	urrent) (More that	an 10 sec. to re-	start)	
LEAKAGE CURRENT[m4] 0.9/1.5max (ACIN 100/V240V 60Hz. 0e=100%. According to IEC62368-1. DENAN) VOLTAGE[V] 3.3 5 7.5 12 15 24 36 48 CURRENT[A] ACIN 100/ 300 300 200 125 100 65 42 32 LINE RECULATION[mV] 20max 300max 200max 125max 100 70(105) 47(70) 35 LOAD REGULATION[mV] 20max 20max 30max 48max 60max 120max 120max 120max 130max		INRUSH CURRENT[A]									
VOLTAGE[V] 3.3 5 7.5 12 15 24 36 48 CURRENT[A] AON 100V 300 300 200 125 100 65 42 32 LINE REGULATION[mV] 20max 20max 36max 48max 60max 96max 144max 192max LODA REGULATION[mV] 40max 40max 100max 120max 120max 120max 120max 130max 300max 300max 300max 300max 300max 120max 120max 150max 160max 120max 120m	1	LEAKAGE CURRENTI	nAl							,	
CURRENT(A) AON 100/ A0X 200/ A0X 200/ 200 300 200 125 100 65 42 32 LINE REGULATION[mV] 20max 300 200 125 100 70(105) 47(70) 35 LINE REGULATION[mV] 40max 20max 36max 48max 60max 150max 120max 100max 160max 160max 40max 500max 120max 120max 120max 120max 120max 120max 120max 120max <td></td> <td></td> <th>-</th> <td></td> <td></td> <td></td> <td><u>v</u></td> <td></td> <td></td> <td>36</td> <td>48</td>			-				<u>v</u>			36	48
CURRENTIAL ANX 201 300 300 200 125 100 70(105) 47(70) 85 LINE REGULATION[mV] 20max 20max 36max 48max 60max 96max 144max 192max 300max 120max 120max 150max 150max 300max 300max 300max 120max 120max 120max 150max 150max 300max 300max 300max 120max 120max 120max 150max 150max 150max 150max 150max 150max 150max 150max 100max 200max 300max 300max 180max 180max 180max 200max 300max			ACIN 100V	300	300		125	100			32
UTPUT LINE REGULATION(mV) 20max 20max 36max 48max 60max 96max 144max 192max UTPUT RIPPLE(mVp-p) 01#40;* 80max 100max 120max 120max 150max 200max 200max 200max 200max 200max 200max 200max 200max 150max 150max 150max 150max 150max 150max 150max 150max 160max 600max 600max 160max 180max 180max <td< td=""><td></td><td>CURRENT[A]</td><th></th><td></td><td>300</td><td>200</td><td></td><td>100</td><td>70(105)</td><td>47(70)</td><td>35</td></td<>		CURRENT[A]			300	200		100	70(105)	47(70)	35
LOAD REGULATION[mV] 40max 40max 60max 100max 120max 120max 150max 150max 300max 150max 200max 400max 60max 60max 60max 60max 160max 400max		LINE REGULATION(m)	/1	20max	20max	36max	48max	60max	. ,	. ,	192max
RIPPLE[mVp-p] Image bit store Bomax Bomax <thbomax< th=""> Bomax Boma</thbomax<>	1		-			1					
HPPLE[mVp-p] 20-0 C * 140max 140max 160max 160max 160max 160max 200max 200max UTPUT RiPPLE NOISE[mVp-p] 20-0 C * 140max 120max 150max 150max 150max 150max 200max 480max 160max 180max 180max 180max 290max 440max 600max 180max		· · · ·	-								
UTPUT RIPPLE NOISE[mVp-p] 0 bit s00: s1 120max 150max 150max 150max 150max 200max 160max 120max 160max 160max		RIPPLE[mVp-p]	-20 - 0°C *1				160max	160max			400max
HIPPLE NOISE[mVP-p] 20-0°C *i 160max 160max 180max 180max 180max 180max 240max 500max TEMPERATURE REGULATION[mV] 01+40°C 40max 50max 75max 120max 150max 240max 360max 480max 4			-								-
TEMPERATURE REGULATION(m) 016 +80C 40max 50max 75max 120max 150max 240max 360max 480max DRIFT[mV] **1 20max 20max 30max 48max 60max 96max 600max 600max 600max 600max 96max 144max 192max 100max 30max 48max 60max 96max 144max 192max 100max 30max 480max 100max 10	UTPUT	RIPPLE NOISE[mVp-p]									
TEMPERATURE REGULATION(M) @lb.shc 60max 75max 120max 180max 180max 290max 440max 600max DRIFT[mV] **2 12max 20max 30max 48max 60max 96max 144max 192max START-UP TIME[ms] 600typ/ACIN 100/200V, lo=100%) 00tFpUT WOLTAGE ADUSTMENT RANGE[V] 2.64 - 3.96 3.96 - 6.00 5.25 - 8.25 8.25 - 13.20 10.50 - 16.50 16.50 - 26.40 25.20 - 39.60 38.40 - 56 OUTPUT VOLTAGE SETTING[V] 3.30 - 3.40 5.00 - 5.15 7.50 - 7.80 12.00 - 12.48 15.00 - 15.60 24.00 - 24.96 36.00 - 37.44 48.00 - 49 OVERCURRENT PROTECTION Works over 105% of rated current or 10% of peak current and recovers automatically 0Ver7.2 - 14.4 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 1 REMOTE SENSING Provided REMOTE SENSING Provided INPUT-OUTPUT - RC AC3.000V 1minute. Cutoff current = 25mA. DC500V 50MΩmin (At Room Temperature) INPUT-OUTPUT - RC AC3.000V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) INPUT-FG OUTPUT - RC - AUX - FG AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature)			0 to +50°C		50max						
DRIFT[mV] *: 12max 20max 30max 48max 60max 96max 144max 192max START-UP TIME[ms] 600typ(ACIN 100/200V, Io=100%) 600typ(ACIN 100/200V, Io=100%)		TEMPERATURE REGULATION[mV]									
START-UP TIME[ms] 600typ(ACIN 100/200V. lo=100%) HOLD-UP TIME[ms] 20typ (ACIN 100/200V. lo=100%) OUTPUT VOLTAGE ADJUSTMENT RANGE[V] 2.64 - 3.96 3.96 - 6.00 5.25 - 8.25 8.25 - 13.20 10.50 - 16.50 16.50 - 26.40 25.20 - 39.60 38.40 - 56 OUTPUT VOLTAGE EXETTING[V] 3.30 - 3.40 5.00 - 5.15 7.50 - 7.80 12.00 - 12.48 15.00 - 15.60 24.00 - 24.96 36.00 - 37.44 48.00 - 49 OVERCURRENT PROTECTION Works over 105% of rated current or 101% of peak current and recovers automatically 0Ver.2 - 14.4 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 1 IRCUIT AND OPERATING INDICATION LED (Green) Provided REMOTE SENSING Provided REMOTE SENSING Provided AC3.000V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) 0UTPUT-UTPUT · RC · AUX.FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) 0UTPUT-UT-CL · AUX.FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) 0UTPUT-CL · AUX.FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (DRIFT[mV]	*2								
HOLD-UP TIME[ms] 20typ (ACIN 100/200V. lo=100%) OUTPUT VOLTAGE ADJUSTMENT RANGE(V) 2.64 - 3.96 3.96 - 6.00 5.25 - 8.25 8.25 - 13.20 10.50 - 16.50 16.50 - 26.40 25.20 - 39.60 38.40 - 56 OUTPUT VOLTAGE SETTING(V) 3.30 - 3.40 5.00 - 5.15 7.50 - 7.80 12.00 - 12.48 15.00 - 15.60 24.00 - 24.96 36.00 - 37.44 48.00 - 49 OVERCURRENT PROTECTION Works over 105% of rated current or 101% of peak current and recovers automatically 0 0 0.40 - 24.96 36.00 - 37.44 48.00 - 49 OPERATING INDICATION LED (Green) REMOTE SENSING Provided No+2.4 - 4.8 Vo+3.0 - 6.0 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 1 REMOTE ON/OFF Provided REMOTE ON/OFF Provided INPUT-OUTPUT · RC AC3.000V 1minute. Cutoff current = 25mA. DC500V 50MΩmin (At Room Temperature) 0UTPUT-RC · AUX - FG AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) 0UTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) 0UTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) Imperature) Imperature) 0UTPUT-RC · AUX AC500V 1mi				600tvp(ACIN 10	00/200V, lo=100	%)					
OUTPUT VOLTAGE ADJUSTMENT RANGE[V] 2.64 - 3.96 3.96 - 6.00 5.25 - 8.25 8.25 - 13.20 10.50 - 16.50 16.50 - 26.40 25.20 - 39.60 38.40 - 56 OUTPUT VOLTAGE SETTING[V] 3.30 - 3.40 5.00 - 5.15 7.50 - 7.80 12.00 - 12.48 15.00 - 15.60 24.00 - 24.96 36.00 - 37.44 48.00 - 49 OVERCURRENT PROTECTION Works over 105% of rated current or 101% of peak current and recovers automatically Vo+3.0 - 6.0 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 1 IRCUIT AND IRCUIT AND OPERATING INDICATION LED (Green) Remote Vo+3.0 - 6.0 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 1 REMOTE SENSING Provided Provided Provided Provided Provided Provided REMOTE ON/OFF Provided AC2.000V 1minute. Cutoff current = 25mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) Provide Provide NVIRONMENT OPERATING TEMP.HUMID.AND ALTITUDE -20 to +73°C. 20 - 90%RH (Non condensing) 9.000m (30.000fet) max <th< td=""><td></td><td></td><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>											
OVERCURRENT PROTECTION Works over 105% of rated current or 101% of peak current and recovers automatically ROTECTION IRCUIT AND OPERATING INDICATION LED (Green) REMOTE SENSING Provided REMOTE ON/OFF Provided INPUT-OUTPUT · RC AC3.000V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) INPUT-FG AC2.000V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC2.000V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) VIDPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) VIDPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperatu			T RANGE[V]				8.25 - 13.20	10.50 - 16.50	16.50 - 26.40	25.20 - 39.60	38.40 - 56.00
OVERCURRENT PROTECTION Works over 105% of rated current or 101% of peak current and recovers automatically ROTECTION IRCUIT AND OPERATING INDICATION LED (Green) REMOTE SENSING Provided REMOTE ON/OFF Provided REMOTE ON/OFF Provided INPUT-OUTPUT · RC AC3.000V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC2.000V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 25mA. DC500V 50M Ωmin (At Room Temperature) VIPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) VIPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50M Ωmin (At Room Temperature) VIPUT · RC	1	OUTPUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	7.50 - 7.80	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44	48.00 - 49.92
OVERVOLTAGE PROTECTION[V] ** Vo+0.66 - 1.32 Vo+1.0 - 2.0 Vo+1.5 - 3.0 Vo+2.4 - 4.8 Vo+3.0 - 6.0 Vo+4.8 - 9.6 Vo+7.2 - 14.4 Vo+4.8 - 1 IRCUIT AND INTERS OPERATING INDICATION LED (Green) LED (Green) REMOTE SENSING Provided REMOTE ON/OFF Provided AC3.000V 1minute, Cutoff current = 25mA, DC500V 50MΩmin (At Room Temperature) INPUT-OUTPUT · RC AC3.000V 1minute, Cutoff current = 25mA, DC500V 50MΩmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT · RC · AUX OUTPUT · RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX NVIRONMENT OPERATING TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3.000m (10.000feet) max STORAGE TEMP.HUMID.AND ALTITUDE -20 to +75°C, 20 - 90%RH (Non condensing) 9.000m (30.000feet) max IMPACT IMPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis IMPACT AFETY AND AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), ENE2368-1 Complies with DEN-AN ONSE CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting clas EGULATIONS		OVERCURRENT PROT	ECTION	Works over 105	5% of rated curre	ent or 101% of p	eak current and	recovers automa			
IRCUIT AND TTHERS OPERATING INDICATION LED (Green) REMOTE SENSING Provided REMOTE ON/OFF Provided REMOTE ON/OFF Provided SOLATION INPUT-OUTPUT · RC AC3.000V 1minute. Cutoff current = 25mA. DC500V 50MΩmin (At Room Temperature) INPUT-FG AC2.000V 1minute. Cutoff current = 25mA. DC500V 50MΩmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) VIBRATINO TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"). 20 - 90%RH (Non condensing) 3.000m (10.000feet) max VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis OISE CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter requir	BOTECTION	OVERVOLTAGE PROTECT	ION[V] *4							Vo+7.2 - 14.4	Vo+4.8 - 12.0
Number Remote Sensing Provided REMOTE ON/OFF Provided REMOTE ON/OFF Provided SOLATION INPUT-OUTPUT · RC AC3.000V 1minute. Cutoff current = 25mA. DC500V 50MΩmin (At Room Temperature) INPUT-FG AC2.000V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OPERATING TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Dearting"). 20 - 90%RH (Non condensing) 3.000m (10.000feet) max STORAGE TEMP.HUMID.AND ALTITUDE -20 to +75°C. 20 - 90%RH (Non condensing) 9.000m (30.000feet) max VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis AFETY AND AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class EGULATIONS HARMONIC ATTENUATOR Complies with IEC61000-3-2 *7 THERS CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max		OPERATING INDICATIO	ON	LED (Green)							
INPUT-OUTPUT · RC AC3.000V 1minute, Cutoff current = 25mA, DC500V 50MΩmin (At Room Temperature) SOLATION INPUT-FG AC2.000V 1minute, Cutoff current = 25mA, DC500V 50MΩmin (At Room Temperature) OUTPUT · RC · AUX-FG AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OPERATING TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3.000m (10.000feet) max STORAGE TEMP.HUMID.AND ALTITUDE -20 to +75°C, 20 - 90%RH (Non condensing) 9.000m (30.000feet) max MIRACT 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis AFETY AND AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class FGULATIONS CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max THERS COOLING METHOD Forced cooling (internal fan)	THERS	REMOTE SENSING		Provided							
SOLATION INPUT-FG AC2.000V 1minute, Cutoff current = 25mA, DC500V 50MΩmin (At Room Temperature) OUTPUT · RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OPERATING TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max NVIRONMENT STORAGE TEMP.HUMID.AND ALTITUDE -20 to +75°C, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis AFETY AND AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN ODISE EGULATIONS CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class FUHERS CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max		REMOTE ON/OFF		Provided							
OUTPUT · RC · AUX-FG AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT·RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OUTPUT·RC · AUX AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature) OPERATING TEMP,HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3.000m (10.000feet) max STORAGE TEMP,HUMID.AND ALTITUDE -20 to +75°C, 20 - 90%RH (Non condensing) 9.000m (30.000feet) max VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis IMPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis AFETY AND OISE CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting clas EGULATIONS HARMONIC ATTENUATOR Complies with IEC61000-3-2 *7 TTHERS CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max		INPUT-OUTPUT · RC		AC3,000V 1mir	nute, Cutoff curre	ent = 25mA, DC5	500V 50MΩmin	(At Room Tempe	erature)		
OUTPUT · RC · AUX-FG AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OUTPUT-RC · AUX AC500V 1minute. Cutoff current = 100mA. DC500V 50MΩmin (At Room Temperature) OPERATING TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3.000m (10.000feet) max STORAGE TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 9.000m (30.000feet) max IMPACT 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis IMPACT 196.1m/s² (20G), 11ms, once each X. Y and Z axis CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class HARMONIC ATTENUATOR Complies with IEC61000-3-2 *7 CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max COLING METHOD Forced cooling (internal fan)		INPUT-FG		AC2,000V 1mir	nute, Cutoff curre	ent = 25mA, DC5	500V 50MΩmin	(At Room Tempe	erature)		
OPERATING TEMP.HUMID.AND ALTITUDE -20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max NVIRONMENT STORAGE TEMP.HUMID.AND ALTITUDE -20 to +75°C, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis IMPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis AFETY AND OISE EGULATION AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class FHERS CASE SIZE/WEIGHT 178 x 61 x 268mm [7.01 x 2.4 x 10.55 inches] (without terminal block and screw) (W x H x D) /3.4kg max THERS Forced cooling (internal fan) Forced cooling (internal fan)	SOLATION	OUTPUT · RC · AUX-F	G	AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	00V 50MΩmin (At Room Tempe	rature)		
STORAGE TEMP,HUMID.AND ALTITUDE -20 to +75°C, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis IMPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis AFETY AND OISE EGULATION AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting clas FUHERS CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max COOLING METHOD Forced cooling (internal fan) Forced cooling (internal fan)		OUTPUT-RC · AUX		AC500V 1minu	te, Cutoff curren	t = 100mA, DC5	00V 50MΩmin (At Room Tempe	rature)		
VIBRATION 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis IMPACT 196.1m/s² (20G), 11ms, once each X, Y and Z axis AFETY AND OISE EGULATION AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN CONDUCTED NOISE EGULATIONS Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class THERS CASE SIZE/WEIGHT 178 x 61 x 268mm [7.01 x 2.4 x 10.55 inches] (without terminal block and screw) (W x H x D) /3.4kg max COOLING METHOD Forced cooling (internal fan)							() 0 000 (10 00	Ofaat) max		
VIBRATION 10 - 55H2, 19.5m/25 (26), 3minutes period, ouminutes period, ouminutes each along X, Y and Z axis IMPACT 196.1m/s2 (20G), 11ms, once each X, Y and Z axis AFETY AND OISE EGULATIONS AGENCY APPROVALS (At only AC input) UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class EGULATIONS Case size/weight 178 × 61 × 268 mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max THERS COOLING METHOD Forced cooling (internal fan)			ALTITUDE	-20 to +71℃ (F	Refer to "Derating	a"), 20 - 90%RH	(Non condensing) 3,000m (10,00			
AFETY AND OISE AGENCY APPROVALS (At only AC input) UL60950-1. C-UL(CSA60950-1). EN62368-1 Complies with DEN-AN OISE EGULATIONS CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class THERS CASE SIZE/WEIGHT 178 × 61 × 268mm [7.01 × 2.4 × 10.55 inches] (without terminal block and screw) (W × H × D) /3.4kg max FORCE MODING METHOD Forced cooling (internal fan)		OPERATING TEMP.,HUMID.AND	-		,		·		oleel/ max		
CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class EGULATIONS HARMONIC ATTENUATOR Complies with IEC61000-3-2 *7 CASE SIZE/WEIGHT 178×61×268mm [7.01×2.4×10.55 inches] (without terminal block and screw) (W×H×D) /3.4kg max COOLING METHOD Forced cooling (internal fan)	VIRONMENT	OPERATING TEMP.;HUMID.AND STORAGE TEMP.;HUMID.AND	-	-20 to +75℃, 2	0 - 90%RH (Noi	n condensing) 9,0	000m (30,000fee	et) max			
CONDUCTED NOISE Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional EMI/EMC Filter required for meeting class EGULATIONS HARMONIC ATTENUATOR Complies with IEC61000-3-2 *7 THERS CASE SIZE/WEIGHT 178×61×268mm [7.01×2.4×10.55 inches] (without terminal block and screw) (W×H×D) /3.4kg max FORCE Forced cooling (internal fan) Forced cooling (internal fan)	VVIRONMENT	OPERATING TEMP.,HUMID.AND STORAGE TEMP.,HUMID.AND VIBRATION	-	-20 to +75℃, 2 10 - 55Hz, 19.6	0 - 90%RH (Noi 6m/s² (2G), 3mi	n condensing) 9,0 nutes period, 600	000m (30,000fee minutes each alc	et) max			
CASE SIZE/WEIGHT 178×61×268mm [7.01×2.4×10.55 inches] (without terminal block and screw) (W×H×D) /3.4kg max COOLING METHOD Forced cooling (internal fan)		OPERATING TEMP.,HUMID.AND STORAGE TEMP.,HUMID.AND VIBRATION IMPACT	ALTITUDE	-20 to +75°C, 2 10 - 55Hz, 19.6 196.1m/s ² (200	0 - 90%RH (Noi Sm/s² (2G), 3mi à), 11ms, once e	n condensing) 9, nutes period, 60 each X, Y and Z	000m (30,000fee minutes each alc axis	et) max ong X, Y and Z a			
COOLING METHOD Forced cooling (internal fan)	AFETY AND OISE	OPERATING TEMP.,HUMID.AND STORAGE TEMP.,HUMID.AND VIBRATION IMPACT AGENCY APPROVALS (At only	ALTITUDE	-20 to +75°C, 2 10 - 55Hz, 19.6 196.1m/s ² (200 UL60950-1, C-	0 - 90%RH (Noi Sm/s² (2G), 3mi S), 11ms, once e UL(CSA60950-1	n condensing) 9, nutes period, 60 each X, Y and Z), EN62368-1 Co	000m (30,000fee minutes each alc axis mplies with DEN	ong X, Y and Z a	xis	-ilter required for	meeting class
COOLING METHOD Forced cooling (internal fan)	AFETY AND	OPERATING TEMPHUMID.AND STORAGE TEMPHUMID.AND VIBRATION IMPACT AGENCY APPROVALS (At only CONDUCTED NOISE	ALTITUDE y AC input)	-20 to +75°C, 2 10 - 55Hz, 19.6 196.1m/s ² (200 UL60950-1, C-I Complies with F	0 - 90%RH (Nor 3m/s ² (2G), 3mi 3), 11ms, once e UL(CSA60950-1 CC Part15 classE	n condensing) 9,0 nutes period, 600 each X, Y and Z), EN62368-1 Co 3, VCCI-B, CISPR	000m (30,000fee minutes each alc axis mplies with DEN	ong X, Y and Z a	xis	-ilter required for	meeting class I
	AFETY AND IOISE EGULATIONS	OPERATING TEMP.HUMID.AND STORAGE TEMP.HUMID.AND VIBRATION IMPACT AGENCY APPROVALS (At only CONDUCTED NOISE HARMONIC ATTENUAT	ALTITUDE y AC input)	-20 to +75°C, 2 10 - 55Hz, 19.6 196.1m/s ² (200 UL60950-1, C- Complies with F Complies with	0 - 90%RH (Nor 5m/s ² (2G), 3mi 5), 11ms, once e UL(CSA60950-1 CC Part15 classE IEC61000-3-2 *	n condensing) 9,0 nutes period, 600 each X, Y and Z), EN62368-1 Co 8, VCCI-B, CISPR 7	000m (30,000fee minutes each alc axis mplies with DEN 22-B, EN55011-B	t) max ong X, Y and Z a I-AN , EN55022-B, add	xis litional EMI/EMC I	·	meeting class I
	AFETY AND OISE EGULATIONS	OPERATING TEMP, HUMID.AND STORAGE TEMP, HUMID.AND VIBRATION IMPACT AGENCY APPROVALS (At only CONDUCTED NOISE HARMONIC ATTENUAT CASE SIZE/WEIGHT	ALTITUDE y AC input)	-20 to +75°C, 2 10 - 55Hz, 19.6 196.1m/s ² (200 UL60950-1, C-I Complies with F Complies with 178 × 61 × 268r	0 - 90%RH (Noi 3m/s ² (2G), 3mi 3), 11ms, once e UL(CSA60950-1 CC Part15 classE EC61000-3-2 * nm [7.01 x 2.4 x	n condensing) 9,0 nutes period, 600 each X, Y and Z), EN62368-1 Co 8, VCCI-B, CISPR 7	000m (30,000fee minutes each alc axis mplies with DEN 22-B, EN55011-B	t) max ong X, Y and Z a I-AN , EN55022-B, add	xis litional EMI/EMC I	·	meeting class F

Ripple and ripple noise is measured on measuring board with capacitor of 22 $\mu\,F$ within 150mm from the output terminal.

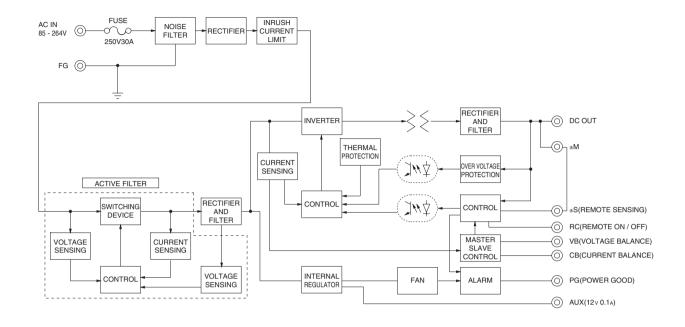
*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C. *3 () means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual

Please contact us about class C. * A sound may occur from power supply at pulse loading.

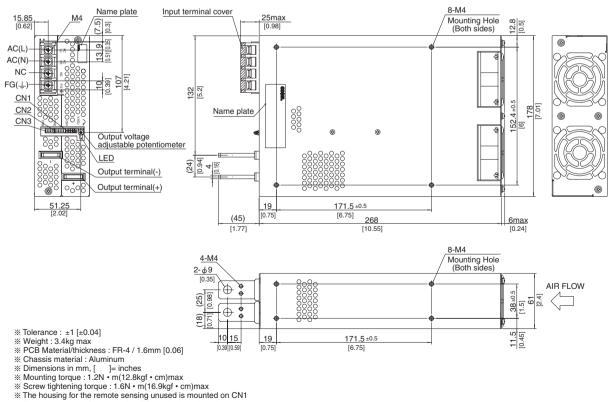
*5 Derating is required.Consult us for details.

*6 Please contact us about safety approvals for the model with option.

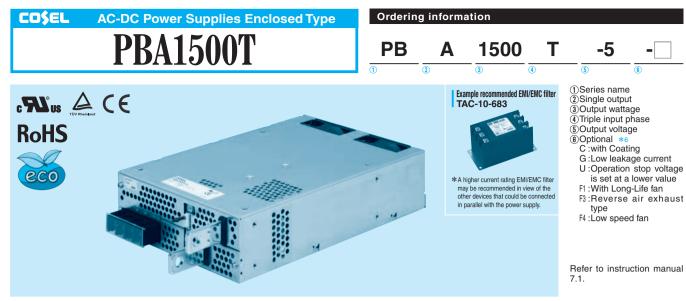
PBA1500F | CO\$EL



External view



* Please connect safety ground to FG terminal on the unit.



MODEL		PBA1500T-5	PBA1500T-12	PBA1500T-24	PBA1500T-48
MAX OUTPUT WATTAGE[W]		1500	1500	1680	1680
DC OUTPUT ACIN 200V *		5V 300A	12V 125A	24V 70(105)A	48V 35A

SPECIFICATIONS

	MODEL		PBA1500T-5	PBA1500T-12	PBA1500T-24	PBA1500T-48			
	VOLTAGE[V]		AC170 - 264 3 (AC100 Pleas	e refer to the instruction manua	I 7. option *5)	·			
	CURRENT[A]	ACIN 200V	/ 6typ						
	FREQUENCY[Hz]		50/60 (47 - 63)						
INPUT	EFFICIENCY[%]	ACIN 200V	81typ	84typ	87typ	87typ			
	POWER FACTOR	ACIN 200V	0.95typ (lo=100%)						
INPUT E F I U U U U U U U U U U U U U U U U U U	INRUSH CURRENT[A]	ACIN 200V	40/40typ (Io=100%) (Primary in	nrush current /Secondary inrush	current) (More than 10 sec. to re	ə-start)			
	LEAKAGE CURRENT[nA]	1.5max (ACIN 240V 60Hz, Io=1	100%, According to IEC62368-1	, DENAN)				
	VOLTAGE[V]		5	12	24	48			
	CURRENT[A]	ACIN 200V *3	300	125	70(105)	35			
LINE REGULATION[mV] 20max 48max 96max 7 LOAD REGULATION[mV] 40max 100max 150max 1 RIPPLE[mVp-p] 0 to +50°C *1 80max 120max 120max 120max 1 BIPPLE[mVp-p] 0 to +50°C *1 140max 160max 160max 1 4 BIPPLE NOISE(mVp-p) 0 to +50°C *1 120max 150max 150max 2	LINE REGULATION[m]	/]	20max	48max	96max	192max			
	LOAD REGULATION[m	V]	40max	100max	150max	300max			
		0 to +50°C *1	80max	120max	120max	150max			
	RIPPLE[mvp-p]	-20 - 0℃ *1	140max	160max	160max	400max			
	200max								
Ουτρυτ	RIPPLE NOISE[mvp-p]	-20 - 0℃ *1	160max	180max	180max	500max			
TEMPERATURE REGULATION[mV] -20 to +50°C 75 max 180 DRIFT[mV] *2 20 max 48 m	120max	240max	480max						
	TEMPERATURE REGULATION[mV]	-20 to +50°C	75max	180max	290max	600max			
	DRIFT[mV] *2		20max	48max	96max	192max			
	START-UP TIME[ms]		300typ(ACIN 200V, Io=100%) * Start-up time is 500ms typ for less than 1 minute of applying input again from turning off the input voltage						
	HOLD-UP TIME[ms]		20typ (ACIN 200V, Io=100%)						
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		3.96 - 6.00	8.25 - 13.20	16.50 - 26.40	38.40 - 56.00			
	OUTPUT VOLTAGE SET	TING[V]	5.00 - 5.15	12.00 - 12.48	24.00 - 24.96	48.00 - 49.92			
	OVERCURRENT PROT	ECTION	Works over 105% of rated current or 101% of peak current and recovers automatically						
PROTECTION	OVERVOLTAGE PROTECT	ION[V] *4	Vo+1.0 - 2.0	Vo+2.4 - 4.8	Vo+4.8 - 9.6	Vo+2.0 - 12.0			
CIRCUIT AND	OPERATING INDICATIO	ON	LED (Green)	1					
OTHERS	REMOTE SENSING		Provided			i) 35 192max x 300max x 150max x 400max x 200max x 400max x 400max x 400max x 500max x 600max 192max inute of applying input again from turning off the input voltag 26.40 38.40 - 56.00 24.96 48.00 - 49.92 s automatically - 9.6 Vo+2.0 - 12.0 m Temperature) m Temperature)			
	REMOTE ON/OFF		Provided						
	INPUT-OUTPUT · RC		AC3,000V 1minute, Cutoff curre	ent = 25mA, DC500V 50M Ω mi	n (At Room Temperature)				
	INPUT-FG		AC2,000V 1minute, Cutoff current = 25mA, DC500V 50MΩmin (At Room Temperature)						
ISOLATION	OUTPUT · RC · AUX-F	G	AC500V 1minute, Cutoff curren						
	OUTPUT-RC · AUX		AC500V 1minute, Cutoff curren	t = 100mA, DC500V 50MΩmir	(At Room Temperature)				
	OPERATING TEMP., HUMID.AND	ALTITUDE	-20 to +71°C (Refer to "Derating"), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max						
	STORAGE TEMP., HUMID. AND	ALTITUDE							
ENVIRONMENT	VIBRATION		10 - 55Hz, 19.6m/s ² (2G), 3mi	nutes period, 60minutes each a	long X, Y and Z axis				
	IMPACT		196.1m/s ² (20G), 11ms, once e	each X, Y and Z axis					
SAFETY AND	AGENCY APPROVALS (At only	AC input)	UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DE	EN-AN				
NOISE REGULATIONS	CONDUCTED NOISE		Complies with FCC Part15 classE	3, VCCI-B, CISPR22-B, EN55011-	B, EN55022-B, additional EMI/EMC	Filter required for meeting class B			
	CASE SIZE/WEIGHT								
OTHERS	COOLING METHOD		Forced cooling (internal fan)						

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).

*4 Overvoltage protection circuit to follow to output voltage setting. Standard overvoltage protection circuit is please contact us for details.

Ripple and ripple noise is measured on measuring board with capacitor of 22 µ F within 150mm from the output terminal.

*2 Drift is the charge in DC output for an eight hour period after a half-hour warm-up at 25°C.
 *3 () means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual

*5 Derating is required.Consult us for details.
 *6 Please contact us about safety approvals for the model with option.

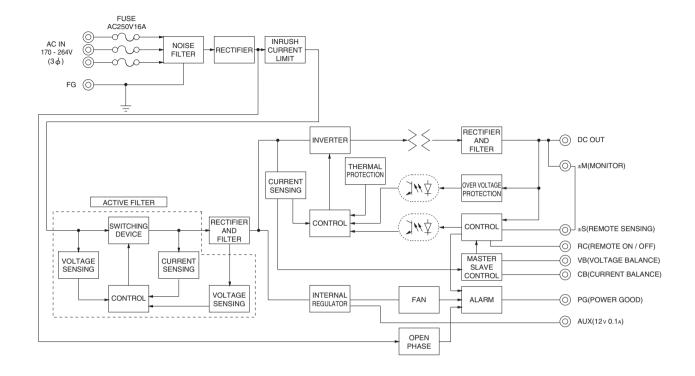
A sound may occur from power supply at pulse loading.

PBA/PBW-24

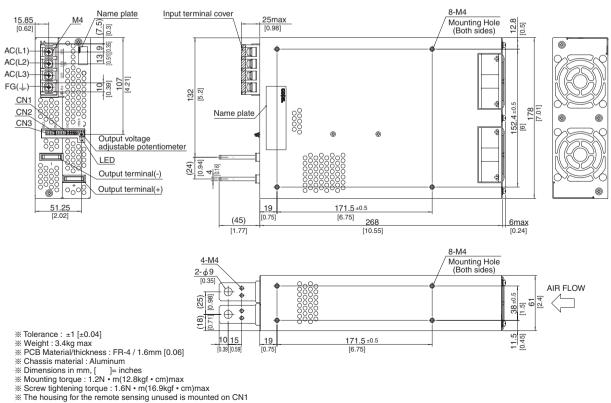
in detail.

PBA1500T | COSEL

Block diagram



External view



* Please connect safety ground to unit in M4 holes.



MODEL		PBW15F-12	PBW15F-15
MAX OUTPUT WATTAGE[W]	*5	16.8	15.0
VOLT	AGE[V] <mark>*</mark> 6	±12(+24)	±15 (+30)
DC OUTPUT CUR	RENT1[A]	0.7	0.5
CURR	ENT2[A] <mark>*</mark> 5	1.4	1.0

SPECIFICATIONS

	MODEL		PBW15F-12		PBW15F-15				
	VOLTAGE[V]		AC85 - 264 1 \$\phi\$ or E	C110 - 370 (AC50 or DC70 Please refer to	o the instruction manual	1.1 Input voltage *8)			
		ACIN 100V	0.40typ (CURRENT)		· · ·			
	CURRENT[A]	ACIN 200V	0.20typ (CURRENT)					
	FREQUENCY[Hz]			5.26(6) (47 - 440) or DC					
NPUT		ACIN 100V			78typ (CURRENT1)				
-	EFFICIENCY[%]	ACIN 200V			80typ (CURRENT1)				
		ACIN 100V		(At cold start)					
	INRUSH CURRENT[A]	ACIN 200V	30typ (CURRENT1) (At cold start)						
	LEAKAGE CURRENT[100V/240V 60Hz, Io=100%, According to	IEC62368-1, DENAN)				
	VOLTAGE[V]		±12	/ (+24V reference number)	±15	/ (+30V reference number			
	CURRENT1[A]		0.7	/ 0.7	0.5	/ 0.5			
	CURRENT2[A]	*5	1.4	/-	1.0	/-			
ł	LINE REGULATION[m]	V1 .*9	60max	/ 96max	60max	/ 96max			
	LOAD REGULATION 1		600max	/ 150max	600max	/ 150max			
	LOAD REGULATION 2		750max	/-	750max	/-			
	LOAD HEGGEAHON 2	0 to +50°C *1	120max	/ 240max	120max	/ 240max			
	RIPPLE[mVp-p]	-10 - 0°C *1	160max	/ 320max	160max	/ 320max			
UTPUT		0 to +50°C *1	150max	/ 300max	150max	/ 300max			
	RIPPLE NOISE[mVp-p]	-10 - 0°C *1	180max	/ 360max	180max	/ 360max			
		0 to +50℃	120max	/ 30011ax	150max	/ 30011ax			
	TEMPERATURE REGULATION[mV]	-10 to +50℃	150max		180max				
	DRIFT[mV]	-10 10 +300	48max		60max				
	START-UP TIME[ms]	*4		-100%) * Start up time is 700ms tup for loss		pout again from turning off the input volt			
	HOLD-UP TIME[ms]		20typ (ACIN 100V, 10 20typ (ACIN 100V, 1	=100%) *Start-up time is 700ms typ for less than 1 minute of applying input again from turning off the input volta					
	OUTPUT VOLTAGE ADJUSTMEN				10.0 16.5 (.) (and)	(are simultanequally adjusted)			
			9.60 - 13.2 (+V and -V are simultaneously adjusted) 13.2 - 16.5 (+V and -V are simultaneously adjusted)						
		UTPUT VOLTAGE SETTING[V] VERCURRENT PROTECTION		11.5 - 12.5 (+V and -V CURRENT1) 14.4 - 15.6 (+V and -V CURRENT1) Works over 105% of rated current and recovers automatically					
ROTECTION				rated current and recovers automatically	00.0.00.0				
IRCUIT AND	OVERVOLTAGE PROTEC			16.8 - 24.0 20.0 - 29.0					
THERS	OPERATING INDICATI	UN	LED (Green)						
	REMOTE ON/OFF		None	0.1.11 - 10.1 - D05001/ 5014		\ \			
	INPUT-OUTPUT			Cutoff current = 10mA , DC500V 50M Ω mi					
OLATION	INPUT-FG			Cutoff current = 10mA, DC500V 50M Ω mi)			
	OUTPUT-FG			utoff current = 25 mA, DC500V 50M Ω min					
	OPERATING TEMP.,HUMID.AND		-10 to +71°C (Refer to "Derating"). 20 - 90%RH (Non condensing) 3.000m (10.000feet) max						
VIRONMENT	STORAGE TEMP.,HUMID.AND	ALIIIUDE	-20 to +75°C, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max						
-	VIBRATION		10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis						
	IMPACT		196.1m/s ² (20G), 11ms, once each X, Y and Z axis						
	AGENCY APPROVALS (At only	y AC input)	UL60950-1, C-UL(CSA60950-1), EN62368-1 Complies with DEN-AN						
OISE EGULATIONS	CONDUCTED NOISE			Part15 classB, VCCI-B, CISPR22-B, EN55					
EGULATIONS	HARMONIC ATTENUA	TOR		1000-3-2 (Not built-in to active filter *7) *					
THERS	CASE SIZE/WEIGHT			2×3.07×3.35 inches] (without terminal blo	ck) (W×H×D) / 200g n	nax (with cover : 235g max)			
UTHERS	COOLING METHOD		Convection						

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.

Figures for 0 to rated current 1.The current not measured

*5 The sum of +power -power must be less than output power.

*6 ±12,±15 can be used as +24 and +30.
*7 When two or more units are used, they may not comply with the harmonic attenuator. Please contact us for details.

*8 Derating is required. *9 Figures to rated current 1.

*4 Figures for 0 to rated current 2.The current not measured

side is fixed.

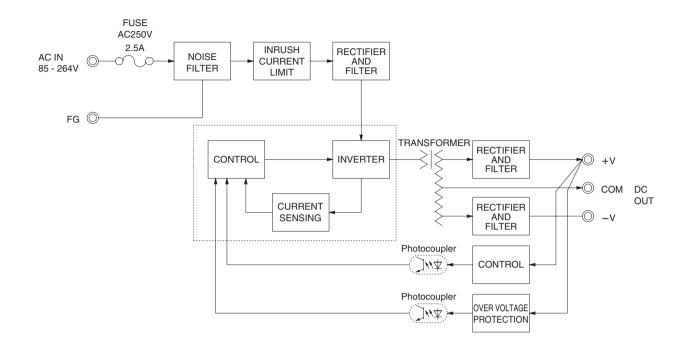
*2

*3

March 08, 2022

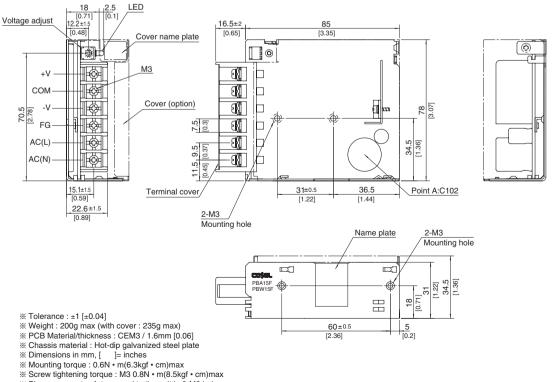
- *10 Please contact us about safety approvals for the model with option.
- *11 Please contact us about dynamic load and input response.
- *12 Please contact us about class C. *
- Parallel operation with other model is not possible.
- * Derating is required when operated with cover. *
 - A sound may occur from power supply at peak loading.

Block diagram

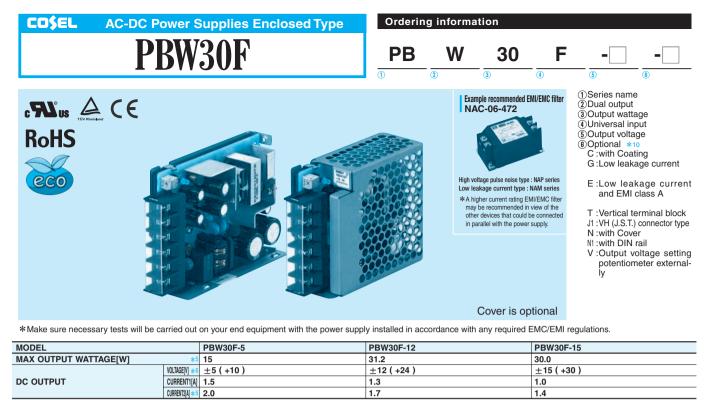


External view

% External size of option T,J1,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.



* Please connect safety ground to the unit in 2-M3 holes.



	CURRENT2[A] *5	1
SPECIFICATIONS		

	MODEL		PBW30F-5		PBW30F-12		PBW30F-15			
	VOLTAGE[V]		AC85 - 264 1 d	or DC110 - 370 (AC50 or	DC70 Please re	efer to the instruction manua	il 1.1 Input volta	ge *8)		
-		ACIN 100V	0.4typ (CURRENT1) 0.7typ			D.7typ (CURRENT1)				
	CURRENT[A]		0.25typ (CURF	RENT1)	0.4typ (CURR					
	FREQUENCY[Hz]		50/60 (47 - 44			,				
		ACIN 100V	/ 75typ (CURRENT1)		77typ (CURRE	NT1)	78typ (CURRE	NT1)		
	EFFICIENCY[%]		75typ (CURRENT1)		81tvp (CURRE		79typ (CURRE			
		ACIN 100V								
	INRUSH CURRENT[A]	ACIN 200V								
	LEAKAGE CURRENT[r			ACIN 100V/240V 60Hz, Io=	100%, Accordir	a to IEC62368-1, DENAN)				
	VOLTAGE[V]		±5	/ (+10V reference number)	±12	/ (+24V reference number)	±15	/ (+30V reference number		
	CURRENT1[A]		1.5	/ 1.5	1.3	/ 1.3	1.0	/ 1.0		
-	CURRENT2[A]	*5	2.0	/-	1.7	/ -	1.4	/-		
	LINE REGULATION Im		20max	/ 36max	60max	/ 96max	60max	/ 96max		
	LOAD REGULATION 1		250max	/ 100max	600max	/ 150max	600max	/ 150max		
				/ -	750max	/ -	750max	/ -		
	•	4.11		/ 240max		/ 240max		/ 240max		
	RIPPLE[mVp-p]							/ 320max		
DUTPUT		-						/ 320max / 300max / 360max		
	RIPPLE NOISE[mVp-p] -10 - 0°C *1 160max									
				,		,		,		
	TEMPERATURE REGULATION[mV]	-								
	DRIFT[mV] *2		2 20max							
	START-UP TIME[ms]		200typ(ACIN 100V, Io=100%) * Start-up time is 700ms typ for less than 1minute of applying input again from turning off the input voltage.							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)							
		RANGE[V]			9.60 - 13.2 (+V and -V are simultaneously adjusted)		13.2 - 16.5 (+V and -V are simultaneously adjusted			
					11.5 - 12.5 (+V and -V CURRENT1)		14.4 - 15.6 (+V and -V CURRENT1)			
	OVERCURRENT PROT	ECTION	Works over 10	5% of rated current and rec	overs automatic	ally		· · · · · · · · · · · · · · · · · · ·		
ROTECTION						20.0 - 29.0				
PROTECTION CIRCUIT AND	OPERATING INDICATIO	DN .								
JIIIEIIO	REMOTE ON/OFF	D REGULATION 2[mV] 3 500max / - 750max / - 750max / - 750max LE[mVp-p] 0 to +\$00C *1 80max / 240max 120max / 240max 120max 160max 130max 160max 130max 150max 160max 360max 150max 160max 150max 150max 150max 160max 120max 160max 150max 150max 160max 150max 150max								
	INPUT-OUTPUT		AC3,000V 1mi	nute, Cutoff current = 10mA	, DC500V 50M	Ω min (At Room Temperatu	re)			
SOLATION	INPUT-FG									
	OUTPUT-FG		AC500V 1minu	ite, Cutoff current = 25mA, I	DC500V 50MΩ	min (At Room Temperature))			
	OPERATING TEMP., HUMID.AND	ALTITUDE	-10 to +71℃ (Refer to "Derating"), 20 - 909	%RH (Non cond	lensing) 3,000m (10,000feet) max			
NVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75°C, 2	20 - 90%RH (Non condensir	ng) 9,000m (30,	000feet) max				
INVIRONMENT	VIBRATION		10 - 55Hz, 19.	6m/s ² (2G), 3minutes period	l, 60minutes ea	ch along X, Y and Z axis				
	IMPACT		196.1m/s ² (20	G), 11ms, once each X, Y a	nd Z axis					
AFETY AND	AGENCY APPROVALS (At only	AC input)	UL60950-1, C-	UL(CSA60950-1), EN62368	-1 Complies wit	h DEN-AN				
IOISE	CONDUCTED NOISE		Complies with	FCC Part15 classB, VCCI-E	, CISPR22-B, I	EN55011-B, EN55022-B				
REGULATIONS	HARMONIC ATTENUAT	OR		IEC61000-3-2 (Not built-in t						
	CASE SIZE/WEIGHT					nal block) (W×H×D) / 270	g max (with cov	er : 310g max)		
DTHERS			Convection					-		

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).

Figures for 0 to rated current 1.The current not measured

*4 Figures for 0 to rated current 2.The current not measured

The sum of +power -power must be less than output power. Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.

*6 ±5,±12,±15 can be used as +10,+24 and +30.
*7 When two or more units are used, they may not comply with

the harmonic attenuator. Please contact us for details

*8 Derating is required. *9 Figures to rated current 1.

side is fixed.

- *10 Please contact us about safety approvals for the model with option.
- *11 Please contact us about dynamic load and input response.

*12 Please contact us about class C. *

- Parallel operation with other model is not possible.
- * Derating is required when operated with cover. A sound may occur from power supply at peak loading.
- *

PBA/PBW-28

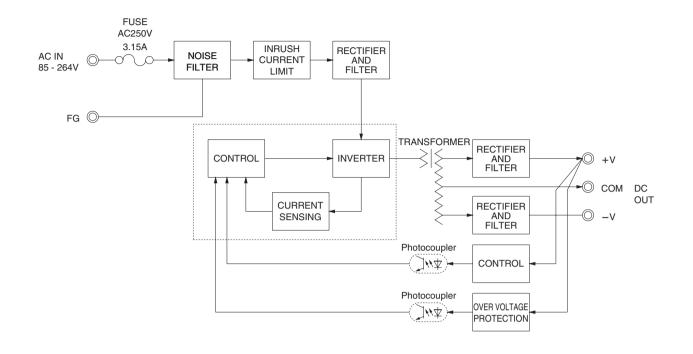
side is fixed.

*2

March 08, 2022

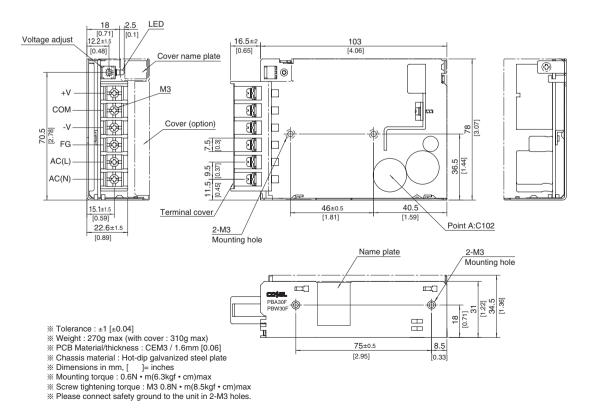
PBW30F | CO\$EL

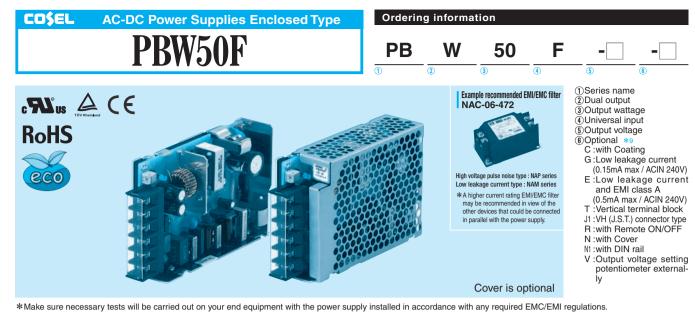
Block diagram



External view

※ External size of option T,J1,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.





MODEL		PBW50F-5	PBW50F-12	PBW50F-15
MAX OUTPUT WATTAGE[W] *		30	50.4	51
	VOLTAGE[V] *8	±5(+10)	±12 (+24)	±15(+30)
DC OUTPUT	CURRENT1[A]	3.0	2.1	1.7
	CURRENT2[A] *6	4.0	2.7	2.4

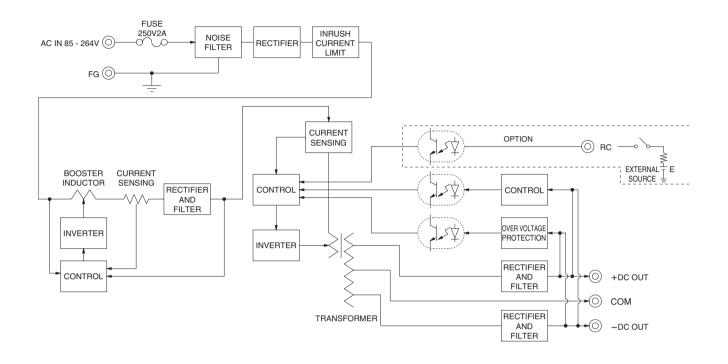
SPECIFICATIONS

	MODEL		PBW50F-5		PBW50F-12		PBW50F-15			
	VOLTAGE[V]		AC85 - 264 1 ф о	r DC120 - 370 (AC50 or	DC70 Please refer to	the instruction manua	I 1.1 Input voltage *:	3)		
		ACIN 100V	0.45typ (CURREN		0.70typ (CURRENT			- ,		
NPUT NUTPUT NUTPUT	CURRENT[A]		0.30typ (CURREN		0.40typ (CURRENT					
	FREQUENCY[Hz]		50/60 (47 - 63)	,		.,				
	ACIN 100V		76typ (CURRENT	1)	81typ (CURRENT1)		81typ (CURRENT1)			
NPUT E NPUT E NPUT E P P U U U U U U U U U U U U U	EFFICIENCY[%]		77typ (CURRENT1)		83typ (CURRENT1)		, , , , , , , , , , , , , , , , , , , ,			
		ACIN 100V			0.99typ					
	POWER FACTOR(lo=100%)		0.30typ 0.93typ 0.93typ							
			15typ (CURRENT1) (At cold start)							
	INRUSH CURRENT[A]		30typ (CURRENT) (At cold start)							
	LEAKAGE CURRENT[r			IN 100V/240V 60Hz, lo=	100% According to L					
	VOLTAGE[V]	IIAJ	±5	/ (+10V reference number)	±12	/ (+24V reference number)	±15	/ (130V reference numbe		
	CURRENT1[A]		3.0	/ 3.0	2.1	/ (+24v relefence number /	1.7			
			4.0	/ -	2.7	/ 2.1	2.4			
	CURRENT2[A]	*0 /1	4.0 20max	/ - / 36max	48max	/ - / 96max	2.4 60max			
		-								
	LOAD REGULATION 1		250max	/ 100max / -	600max	/ 150max / -	600max	put voltage *3) (CURRENT1) (CURRENT1) (CURRENT1) / +30V reference number) / 1.7 / - x / 96max iax / 150max iax / 150max iax / 240max iax / 320max iax / 320max iax / 360max iax / 360max iax iax iax iax if6.5 (+V and -V are simultaneously adjusted) - 15.6 (+V and -V CURRENT1) - 29.0 (with cover : 325g max) about safety approvals for the model with about class C. with other model is not possible. d when operated with cover.		
	LOAD REGULATION 2		500max	,	750max	,	750max			
	RIPPLE[mVp-p]	0 to +50°C *1	80max	/ 240max	120max	/ 240max	120max			
		-10 - 0℃ *1	140max	/ 320max	160max	/ 320max	160max			
OUTPUT	RIPPLE NOISE[mVp-p]	0 to +50°C *1	120max	/ 300max	150max	/ 300max	150max			
		-10 - 0℃ *1	160max	/ 360max	180max	/ 360max	180max	/ 360max		
1	TEMPERATURE REGULATION[mV]	0 to +50℃	50max		120max					
	-10 to +50°C				150max					
	DRIFT[mV]	*2	2 20max		48max		60max			
	START-UP TIME[ms]		350typ(ACIN 100V, lo=100%)							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, lo=100%)							
	OUTPUT VOLTAGE ADJUSTMENT		4.99 - 6.00 (+V and -V are simultaneously adjusted)		9.60 - 13.2 (+V and -V are simultaneously adjusted)					
	OUTPUT VOLTAGE SET		4.99 - 5.30 (+V ar		11.5 - 12.5 (+V and -V CURRENT1)		14.4 - 15.6 (+V and -V CURRENT1)			
	OVERCURRENT PROT			of rated current and rec			1			
	OVERVOLTAGE PROTEC		6.90 - 10.0 16.8 - 24.0 20.0 - 29.0							
	OPERATING INDICATION	ON	LED (Green)							
-	REMOTE ON/OFF		Optional (Required external power source)							
	INPUT-OUTPUT · RC	*7	AC3,000V 1minute	e, Cutoff current = 10mA	, DC500V 50M Ω min	(At Room Temperatur	re)			
SOLATION	INPUT-FG		AC2,000V 1minute	e, Cutoff current = 10mA	, DC500V 50M Ω min	(At Room Temperatur)			
	OUTPUT · RC-FG	*7	AC500V 1minute,	Cutoff current = 100mA,	DC500V 50M Ω min	(At Room Temperature	150max 180max 60max 13.2 - 16.5 (+V and -V are simultaneously adjust 14.4 - 15.6 (+V and -V CURRENT1) 20.0 - 29.0 ure) ure)			
	OPERATING TEMP.,HUMID.AND	ALTITUDE	-10 to +71℃ (Ref	er to "Derating"), 20 - 909	%RH (Non condensing	g) 3,000m (10,000feet)) max			
	STORAGE TEMP.,HUMID.AND	ALTITUDE								
	VIBRATION		10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis							
	IMPACT		196.1m/s ² (20G). 11ms, once each X. Y and Z axis							
AFETY AND	AGENCY APPROVALS (At only	y AC input)								
IOISE	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
EGULATIONS	HARMONIC ATTENUAT	TOR	Complies with IEC61000-3-2 *10							
TUERO	CASE SIZE/WEIGHT		31 x 82 x 120mm [1.22 x 3.23 x 4.72 inches] (without terminal block) (W x H x D) / 280g max (with cover : 325g max)							
THERS	COOLING METHOD		Convection							
 meter(equility) 2 Drift is the after a hale *3 Derating is 	by 20MHz oscilloscope or F nivalent to KEISOKU-GIKEN o change in DC output for an f-hour warm-up at 25°C. s required. r 0 to rated current 1.The cu	: RM101). eight hour	sic period *6 Th *7 R0 inp	gures for 0 to rated current 2 le is fixed. e sum of +power -power mu b is applied to remote ON/O put/output and FG. 5,±12,±15 can be used as	ist be less than output po FF option. RC is isolated	option. ower. *10 Please cont with * Parallel ope * Derating is	tact us about class C. Pration with other model is	s not possible. with cover.		

March 08, 2022

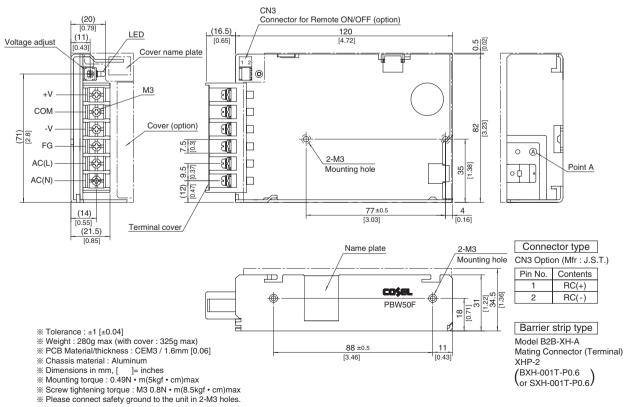
PBW50F | CO\$EL

Block diagram



External view



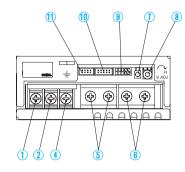


COŞEL | PBA·PBW-series

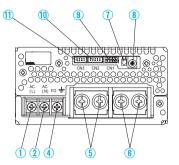
Terminal Blocks

*The following information covers PBA300F - 1500F. Please see External View for PBA10F - 150F and PBW15F - 50F.

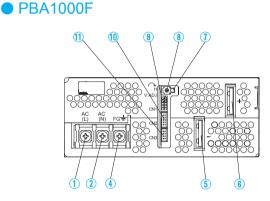
PBA300F



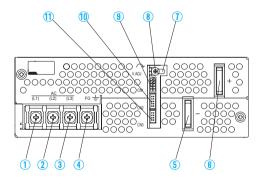
• PBA600F



• PBA1500F



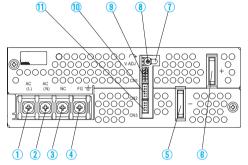
PBA1500T



*PBA300F - 1500F

 $\begin{array}{c} () AC (L) \ | \ \text{Input Terminals AC85 - 264V } \phi 47 - 63 \text{Hz} \\ () AC (N) \ (M4) \\ () MC \\ () Frame \ \text{ground } (M4 +) \\ () - Output \\ () - Output \\ () - Output \\ () - Dutput \\ () - Dutpu$

UNITED AT SOUT



*PBA1500T

①AC (L1)
②AC (L2)
③AC (L3)
④Frame ground (M4 -)
⑤-Output
⑥+Output
⑦LED
⑧Output voltage adjustable potentiometer
⑧CN1
⑩CN2
①Connectors
⑪CN3

PBA·PBW-series **COSEL**

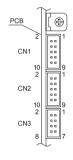


Terminal Blocks

PBA300F, 600F Pin Configuration

	CB 10 2	210	2)
			: (
7 1	9 1	19	1
CN3	CN2	CN1	

PBA1000F, 1500F Pin Configuration



Pir	Pin Configuration and Functions of CN1 and CN2							
Pin No.		Function						
1	+M	: Self sensing terminal. (Do not wire for external connection.)						
2	+S	: +Sensing						
3	-M	: Self sensing terminal. (Do not wire for external connection.)						
4	-S	: -Sensing						
5	VB	: Voltage balance						
6	CB	: Current balance						
7	TRM	: Adjustment of output voltage						
8	-S	: -Sensing						
9	RC2	: Remote ON/OFF						
10	RCG	: Remote ON/OFF (GND)						

Pin Configuration and Functions of CN3

Pin No.		Function					
1	-S	: -Sensing					
2	-S	: -Sensing					
3	AUX	: Auxiliary output	(12V 0.1A)				
4	RC1	: Remote ON/OFF					
5	AUXG	: Auxiliary output (GND)					
6	N.C.	: No connection					
7	PG	: Alarm					
8	PGG	: Alarm (GND)					

*Common signs among CN1, CN2 and CN3 such as -S represent the same potential.

Matching connecters and terminals on CN1, CN2 and CN3

Connector		Housing	Terminal		Mfr.
CN1 CN2	S10B-PHDSS	PHDR-10VS	Reel	: SPHD-002T-P0.5 : BPHD-001T-P0.5	
CN3	S8B-PHDSS	PHDR-08VS	Loose	. BFIID-0011-F0.3	

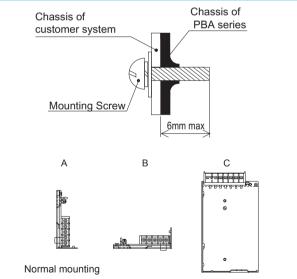
Assembling and Installation Method

Installation Method

Do not insert a screw more than 6mm from the outside of a power supply to keep enough insulation distance between the screw and internal components.

PBA10F, PBA15F, PBW15F, PBA30F, PBW30F, PBA50F, PBW50F, PBA75F, PBA100F and PBA150F

- If you use two or more power supplies side by side, please keep a sufficient distance between them to allow enough air ventilation.
- Ambient temperature around each power supply should not exceed the temperature range shown in "derating".



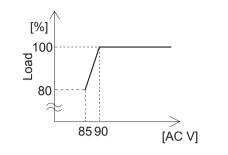
PBA300F, PBA600F, PBA1000F, PBA1500F and PBA1500T

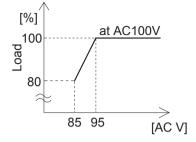
- The power supplies have a built-in forced cooling fan. Do not block ventilation at the suction side (terminal block side) and its opposite side (fan installation side). If you need to secure a power supply by screws, securely fix it, taking into consideration of its weight. You can install it in any direction.
- If you use a power supply in a dusty environment, it can give a cause for a failure. Please consider taking such countermeasures as installing an air filter near the suction area of the system to prevent a failure.
- In PBA300F, PBA1500F and PBA1500T, ventilation holes are located on the mounting side. If you would like to install the unit by using that side, please contact us for details.

COSEL | PBA·PBW-series

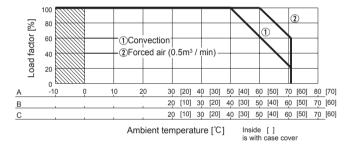
Derating

PBA10F, PBA15F, PBW15F, PBA30F, PBW30F • PBA1500F Input voltage Derating Curve Input voltage Derating Curve





●PBA10F, PBA15F, PBW15F, PBA30F, PBW30F, PBA50F, PBW50F, PBA75F, PBA100F, PBA150F Ambient temperature derating curve

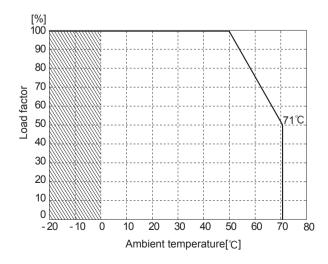


■In the hatched area, the specification of Ripple, Ripple Noise is different from other area.

The ambient temperature should be measured 5 to 10 cm away from the power supply so that it won't be influenced by the heat from the power supply. Please consult us for more details.

Make sure the temperature at point A is less than the temperatures shown in Instruction Manual 4.

PBA300F, PBA600F, PBA1000F, PBA1500F, PBA1500T Ambient temperature derating curve



In the hatched area, the specification of Ripple, Ripple Noise is different from other area.

Derating curve depending on an ambient temperature (temperature of air sucked in for a cooling purpose) is shown above.

PBA·PBW-series

Instruction Manual

◆ It is neccessary to read the "Instruction Manual" and "Before using our product" before you use our product.

Instruction Manual Instruction Manual Before using our product https://en.cosel.co.jp/product/powersupply/PBA/ https://en.cosel.co.jp/product/powersupply/PBW/ https://en.cosel.co.jp/technical/caution/index.html



COSEL

Basic Characteristics Data

Madal		Switching	Input	Rated	Inrush current	PCB/F	attern			Parallel availability
Model	Circuit method	frequency [kHz]	current [A]	input fuse	protection circuit	Material	Single sided	Double sided	Series operation	Parallel operation
PBA10F	Flyback converter	100	0.3	250V 2.5A	LF	CEM-3	Yes		Yes	*1
PBA15F	Flyback converter	100	0.4	250V 2.5A	Thermistor	CEM-3	Yes		Yes	*1
PBA30F	Flyback converter	100	0.7	250V 3.15A	Thermistor	CEM-3	Yes		Yes	*1
PBA50F	Active filter	60 - 550	0.7	250V 2A	Thermistor	CEM-3	Yes		Yes	*1
FDAGUE	Forward converter	130	0.7	250V 2A	mermistor	CEM-3	162		162	ጥ
PBA75F	Active filter	60 - 550	1.0 The	Thermistor	CEM-3	Yes		Yes	*1	
FDATSF	Forward converter	120	1.0	250V 3.15A	mermistor	CEIVI-3	tes		tes	- ጥ ነ
PBA100F	Active filter	60 - 550	1.3	250V 5.15A	Thermistor	CEM-3	Yes		Yes	*1
FDATOUF	Forward converter	120	1.5		Inermistor	CEM-3				* 1
PBA150F	Active filter	60 - 550	- 2.0 250V 4A Th	2501/ 44	Thermistor	CEM-3	Yes		Yes	*1
PDAISUF	Forward converter	120		mermistor	CEIVI-3	tes		tes	- ጥ ነ	
PBA300F	Active filter	230	4.1	250V 10A	SCR	FR-4		Yes	Yes	Yes
PDASUUF	Forward converter	330	4.1			FN-4		res	tes	165
PBA600F	Active filter	130	8.2	250V 15A	SCR	FR-4		Yes	Yes	Yes
FDA000F	Forward converter	330	0.2	250V 15A	SCR	FN-4				
PBA1000F	Active filter	130	13		SCR	FR-4		Yes	Yes	Yes
PDATUUUF	Forward converter	280	13	250V 30A	30n	ГП-4		res	tes	res
PBA1500F	Active filter	130	19	250V 50A	SCR	FR-4		Yes	Yes	Yes
FDATSOUF	Forward converter	200	19		301	FN-4		ies	162	165
PBA1500T	Active filter	130	6	250V 16A	SCR	FR-4		Yes	Yes	Yes
PDAIDUUI	Forward converter	200	0	250V 16A	300	ГП-4		res	tes	res
PBW15F	Flyback converter	100	0.4	250V 2.5A	Thermistor	CEM-3	Yes		Yes	*1
PBW30F	Flyback converter	100	0.7	250V 3.15A	Thermistor	CEM-3	Yes		Yes	*1
PBW50F	Active filter	60 - 550	0.7	250V 2A	Thermistor	CEM-3	N		Yes	ste 1
FDVIJUF	Forward converter	130	0.7	250V 2A	mermistor	CEIVI-3	Yes		res	*1

*1 Refer to Series/Parallel Operation of Instruction Manual.

* The value of input current is at ACIN 100V and rated load, ACIN 200V 3 ϕ and rated load in PBA1500T.