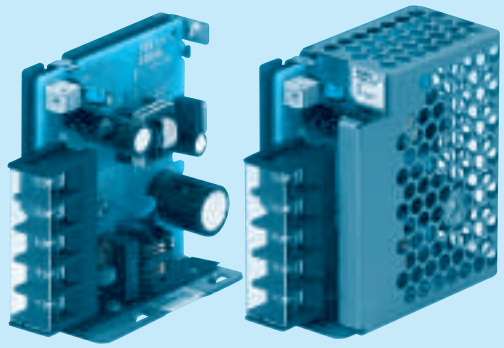
COSEL **Unit type**

PBA10F

Ordering information

PB	A	10	F	-□	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current
E :Low leakage current and EMI class A
T :Vertical terminal block
J :Connector type
N :with Cover
(Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

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

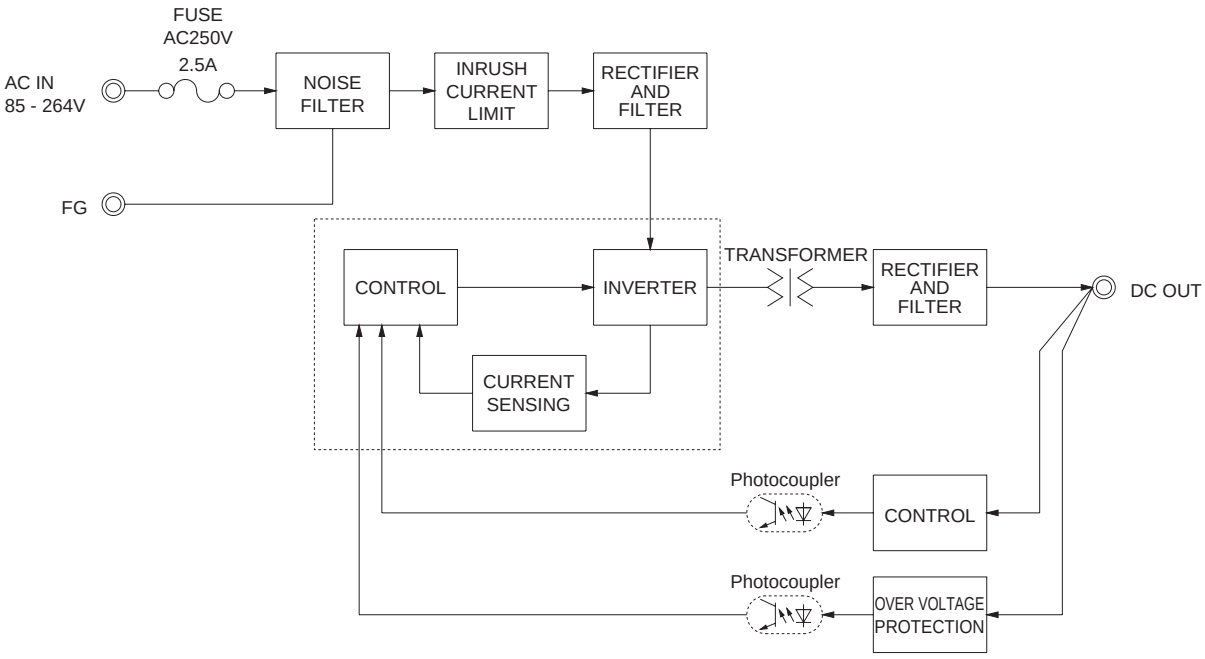
SPECIFICATIONS

	MODEL		PBA10F-5	PBA10F-12	PBA10F-24
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊3)		
	CURRENT[A]	ACIN 100V	0.30typ (Io=100%)		
		ACIN 200V	0.20typ (Io=100%)		
	FREQUENCY[Hz]		50/60 (47 - 440) or DC		
	EFFICIENCY[%]	ACIN 100V	74typ	76typ	77typ
		ACIN 200V	74typ	76typ	77typ
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%)		
		ACIN 200V	30typ (Io=100%)		
	LEAKAGE CURRENT[mA]		0.15/0.30max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)		
OUTPUT	VOLTAGE[V]		5	12	24
	CURRENT[A]		2	0.9	0.5
	LINE REGULATION[mV]		20max	48max	96max
	LOAD REGULATION[mV]		40max	100max	150max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	120max	120max
		-10 - 0℃ ＊1	140max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	150max	150max
		-10 - 0℃ ＊1	160max	180max	180max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	120max	240max
		-10 to +50℃	60max	150max	290max
	DRIFT[mV] ＊2		20max	48max	96max
	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%)		
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		4.50 - 5.50	10.0 - 13.2	19.2 - 27.0
	OUTPUT VOLTAGE SETTING[V]		5.00 - 5.15	12.00 - 12.48	24.00 - 24.96
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically		
	OVERVOLTAGE PROTECTION[V]		5.75 - 7.00	15.0 - 18.0	30.0 - 37.0
	OPERATING INDICATION		LED (Green)		
	REMOTE ON/OFF		None		
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)		
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)		
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)		
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max		
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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		
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis		
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN		
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B		
	CE MARKING		Low Voltage Directive, EMC Directive		
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2 (Not built-in to active filter ＊4)		
OTHERS	CASE SIZE/WEIGHT		31×78×68mm (without terminal block) (W×H×D) / 150g max (without cover)		
	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℃.
＊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.

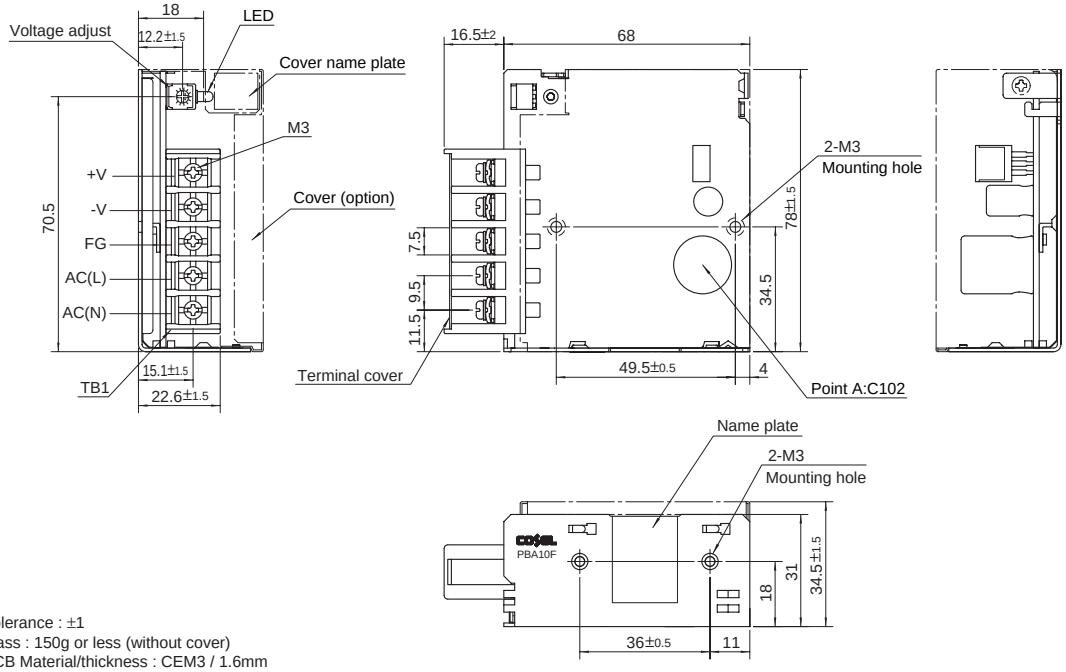
＊ Parallel operation with other model is not possible.
＊ Derating is required when operated with cover.
＊ A sound may occur from power supply at peak loading.

Block diagram



External view

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



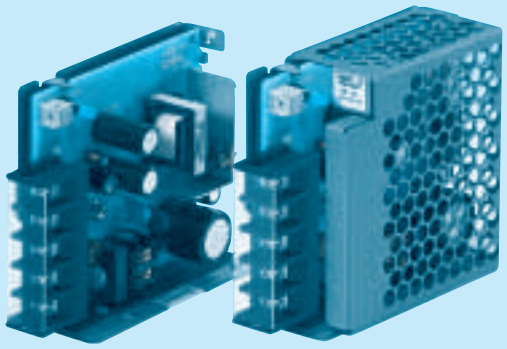
※ Tolerance : ±1
※ Mass : 150g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Electric galvanizing steel board
※ Dimensions in mm
※ Mounting torque : 0.6N • m(6.3kgf • cm)max
※ Screw tighting torque : M3 0.8N • m(8.5kgf • cm)max
※ Please conect earth to the unit in 2-M3 holes.

COSEL **Unit type**

PBA15F

Ordering information

PB	A	15	F	-□	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current
E :Low leakage current and EMI class A
T :Vertical terminal block
J :Connector type
N :with Cover
(Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

MODEL	PBA15F-3R3	PBA15F-5	PBA15F-9	PBA15F-12	PBA15F-15	PBA15F-24	PBA15F-48
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

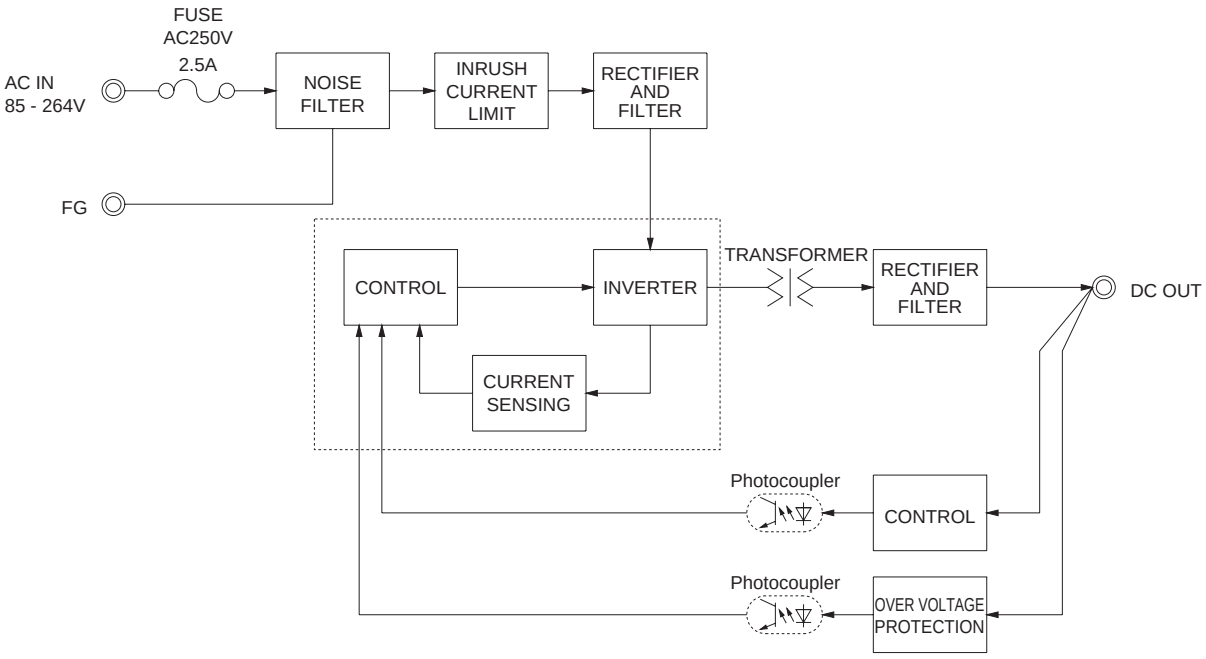
SPECIFICATIONS

	MODEL		PBA15F-3R3	PBA15F-5	PBA15F-9	PBA15F-12	PBA15F-15	PBA15F-24	PBA15F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊3)						
	CURRENT[A]	ACIN 100V	0.30typ (Io=100%)	0.4typ (Io=100%)					
		ACIN 200V	0.15typ (Io=100%)	0.2typ (Io=100%)					
	FREQUENCY[Hz]		50/60 (47 - 440) or DC						
	EFFICIENCY[%]	ACIN 100V	68typ	74typ	75typ	75typ	77typ	75typ	75typ
		ACIN 200V	68typ	75typ	77typ	78typ	80typ	78typ	78typ
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)						
		ACIN 200V	30typ (Io=100%) (At cold start)						
	LEAKAGE CURRENT[mA]		0.15/0.30max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)						
OUTPUT	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]		20max	20max	36max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	150max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	90max	120max	150max	240max	480max
		-10 to +50℃	60max	60max	120max	150max	180max	290max	600max
	DRIFT[mV]	＊2	20max	20max	36max	48max	60max	96max	192max
	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%)						
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.60	4.50 - 5.50	7.50 - 10.0	10.0 - 13.2	13.2 - 13.0	19.2 - 27.0	39.0 - 53.0
	OUTPUT VOLTAGE SETTING[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 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically						
	OVERVOLTAGE PROTECTION[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
	OPERATING INDICATION		LED (Green)						
	REMOTE ON/OFF		None						
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)						
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)						
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)						
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max						
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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						
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis						
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN						
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B						
	CE MARKING		Low Voltage Directive, EMC Directive						
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2 (Not built-in to active filter ＊4)						
OTHERS	CASE SIZE/WEIGHT		31×78×88mm (without terminal block) (W×H×D) / 200g max (without cover)						
	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℃.
＊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.

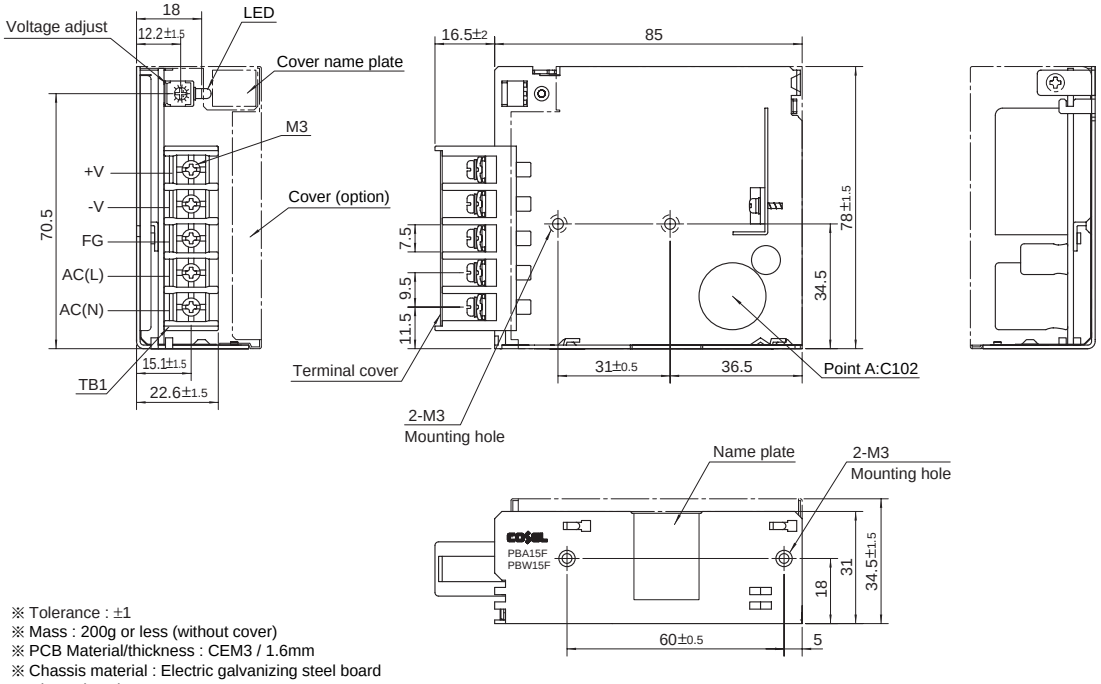
＊ Parallel operation with other model is not possible.
＊ Derating is required when operated with cover.
＊ A sound may occur from power supply at peak loading.

Block diagram



External view

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



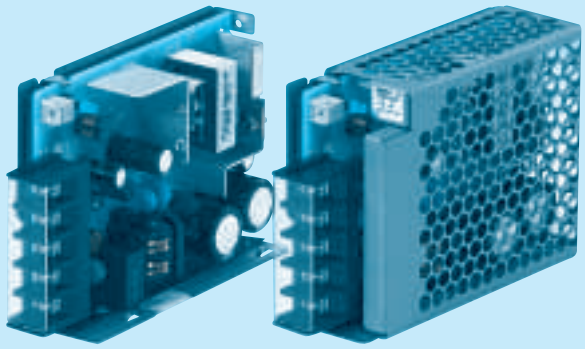
※ Tolerance : ±1
※ Mass : 200g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Electric galvanizing steel board
※ Dimensions in mm
※ Mounting torque : 0.6N • m(6.3kgf • cm)max
※ Screw tighting torque : M3 0.8N • m(8.5kgf • cm)max
※ Please conect earth to the unit in 2-M3 holes.

COSEL **Unit type**

PBA30F

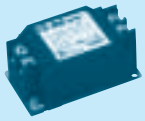
Ordering information

PB	A	30	F	-□	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472



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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current
E :Low leakage current and EMI class A
T :Vertical terminal block
J :Connector type
N :with Cover
(Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

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

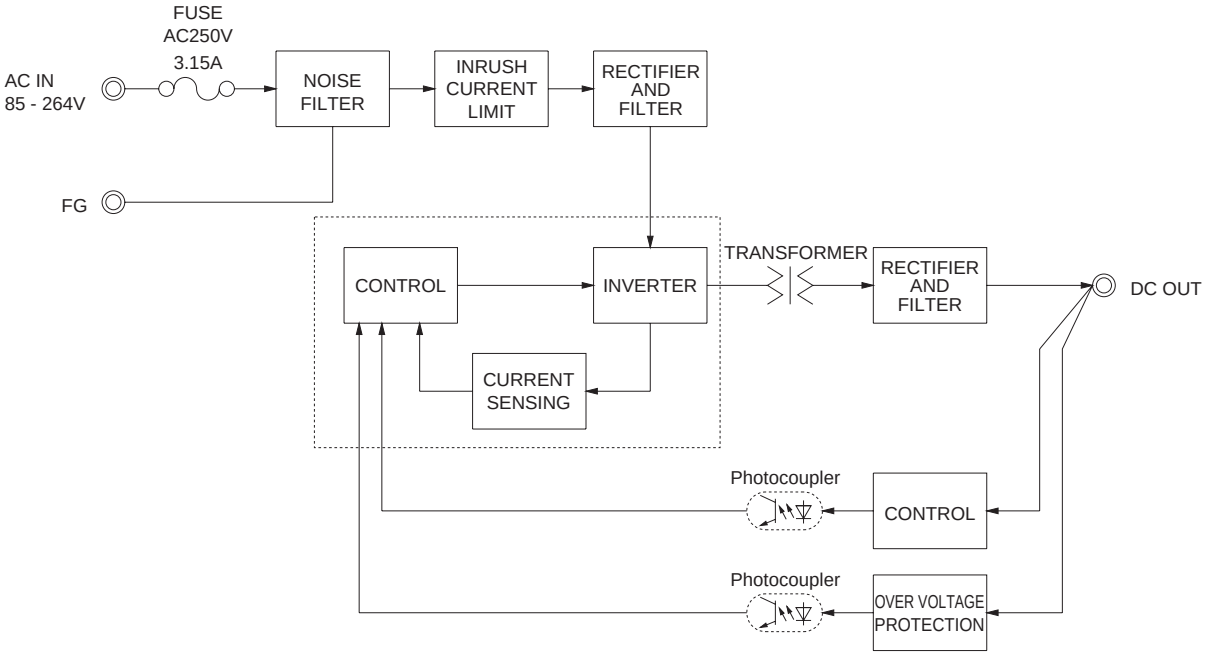
SPECIFICATIONS

	MODEL		PBA30F-3R3	PBA30F-5	PBA30F-9	PBA30F-12	PBA30F-15	PBA30F-24	PBA30F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊3)						
	CURRENT[A]	ACIN 100V	0.50typ (Io=100%)	0.70typ (Io=100%)					
		ACIN 200V	0.30typ (Io=100%)	0.40typ (Io=100%)					
	FREQUENCY[Hz]		50/60 (47 - 440) or DC						
	EFFICIENCY[%]	ACIN 100V	68typ	74typ	75typ	76typ	78typ	78typ	79typ
		ACIN 200V	69typ	77typ	77typ	78typ	81typ	81typ	81typ
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)						
		ACIN 200V	30typ (Io=100%) (At cold start)						
	LEAKAGE CURRENT[mA]		0.30/0.65max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)						
OUTPUT	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]		20max	20max	36max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	150max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	90max	120max	150max	240max	480max
		-10 to +50℃	60max	60max	120max	150max	180max	290max	600max
	DRIFT[mV] ＊2		20max	20max	36max	48max	60max	96max	192max
	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%)						
	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	39.0 - 53.0
	OUTPUT VOLTAGE SETTING[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 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically						
	OVERVOLTAGE PROTECTION[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
	OPERATING INDICATION		LED (Green)						
	REMOTE ON/OFF		None						
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)						
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)						
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)						
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max						
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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						
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis						
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN						
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B						
	CE MARKING		Low Voltage Directive, EMC Directive						
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2 (Not built-in to active filter ＊4)						
OTHERS	CASE SIZE/WEIGHT		31×78×103mm (without terminal block) (W×H×D) / 270g max (without cover)						
	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℃.
＊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.

＊ 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

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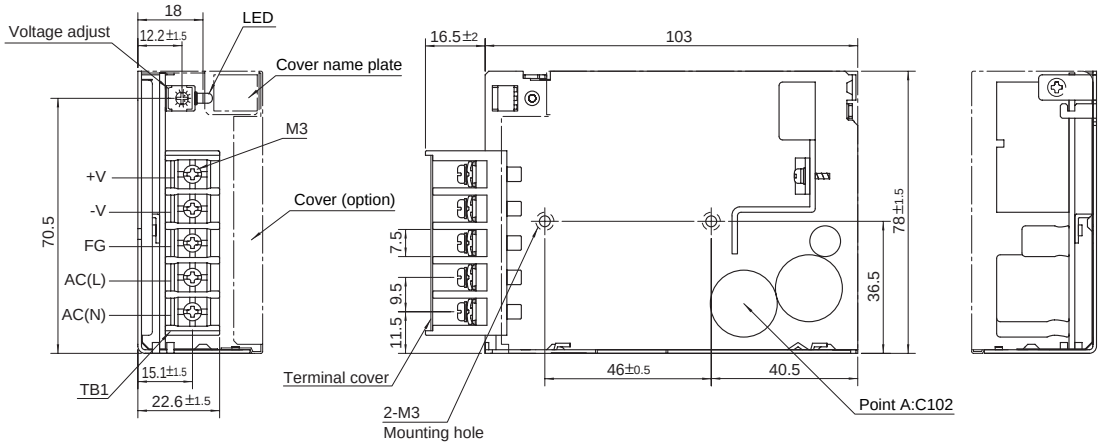
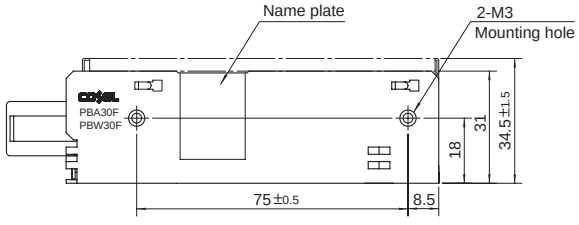




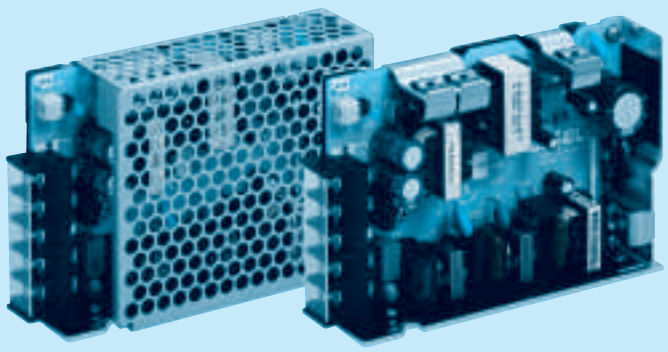
※ Tolerance : ±1
※ Mass : 270g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Electric galvanizing steel board
※ Dimensions in mm
※ Mounting torque : 0.6N • m(6.3kgf • cm)max
※ Screw tighting torque : M3 0.8N • m(8.5kgf • cm)max
※ Please conect earth to the unit in 2-M3 holes.

COSEL **Unit type**

PBA50F

Ordering information

PB	A	50	F	-5	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current (0.15mA max / ACIN 240V)
E :Low leakage current and EMI class A (0.5mA max / ACIN 240V)
T :Vertical terminal block
J :Connector type
R :with Remote ON/OFF
N :with Cover (Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

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

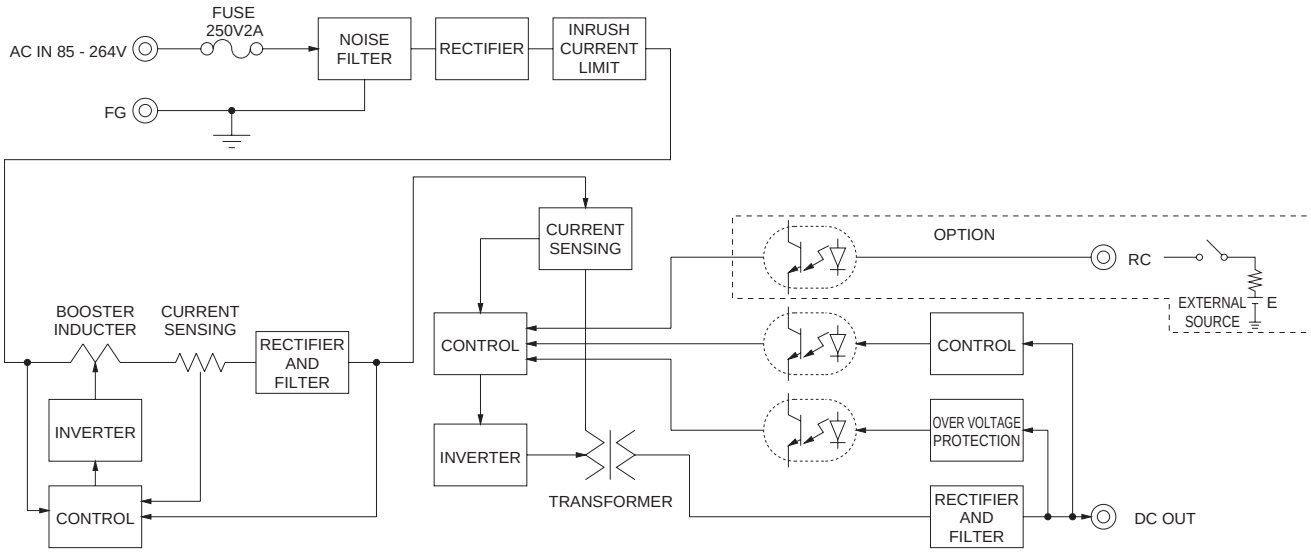
SPECIFICATIONS

	MODEL		PBA50F-3R3	PBA50F-5	PBA50F-9	PBA50F-12	PBA50F-15	PBA50F-24	PBA50F-36	PBA50F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊4)							
	CURRENT[A]	ACIN 100V	0.5typ	0.7typ						
		ACIN 200V	0.3typ	0.4typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	75typ	80typ	79typ	80typ	81typ	82typ	83typ	83typ
		ACIN 200V	76typ	82typ	81typ	82typ	83typ	84typ	85typ	85typ
	POWER FACTOR(Io=100%)	ACIN 100V	0.98typ	0.99typ						
		ACIN 200V	0.87typ	0.93typ						
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)							
		ACIN 200V	30typ (Io=100%) (At cold start)							
	LEAKAGE CURRENT[mA]		0.4/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)							
OUTPUT	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[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	150max	240max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	200max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	250max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	300max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	90max	120max	150max	240max	360max	480max
		-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 100V, Io=100%)							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=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 SETTING[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	35.00 - 37.44	48.00 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically							
	OVERVOLTAGE PROTECTION[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)							
	REMOTE ON/OFF		Optional (Required external power source)							
ISOLATION	INPUT-OUTPUT · RC ＊3		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT · RC-FG ＊3		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		31×82×120mm (without terminal block) (W×H×D) / 280g max (without cover)							
	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℃.
＊3 Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and FG.
＊4 Derating is required.

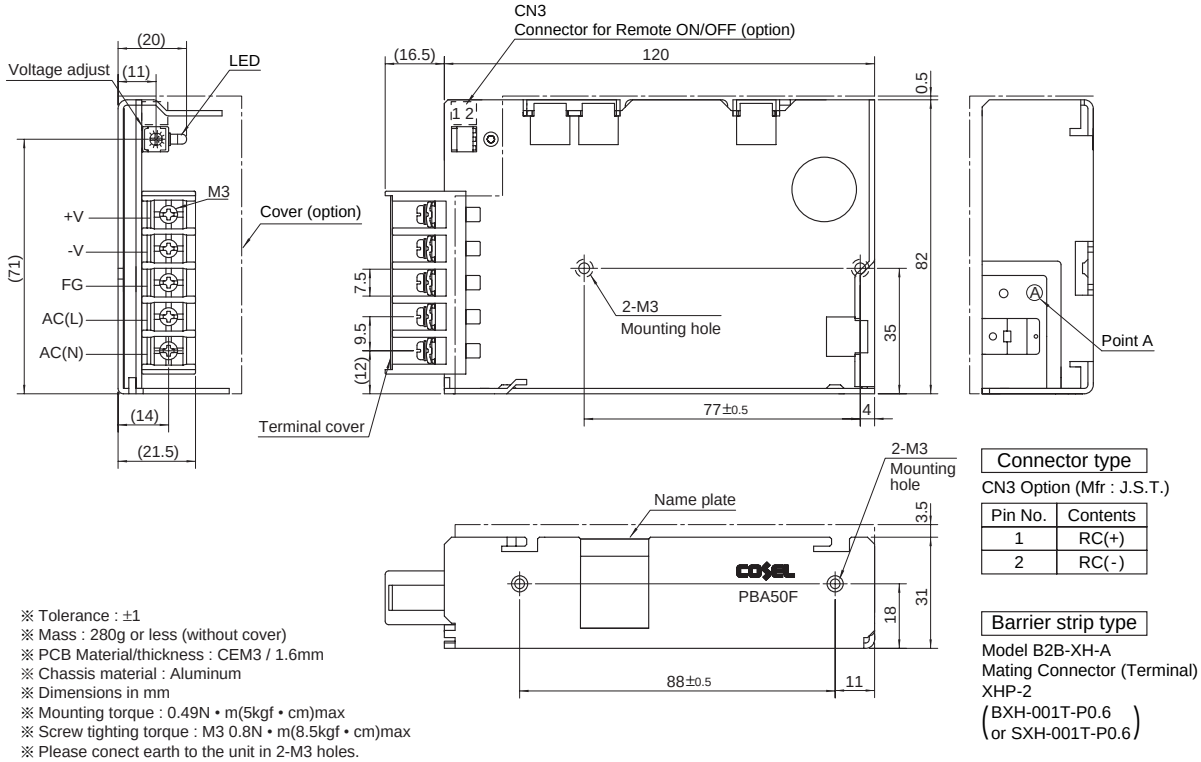
＊ Parallel operation with other model is not possible.
＊ Derating is required when operated with cover.
＊ A sound may occur from power supply at peak loading.

Block diagram



External view

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



※ Tolerance : ±1
※ Mass : 280g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 0.49N • m(5kgf • cm)max
※ Screw tighting torque : M3 0.8N • m(8.5kgf • cm)max
※ Please conect earth to the unit in 2-M3 holes.

Connector type

CN3 Option (Mfr : J.S.T.)

Pin No.	Contents
1	RC(+)
2	RC(-)

Barrier strip type

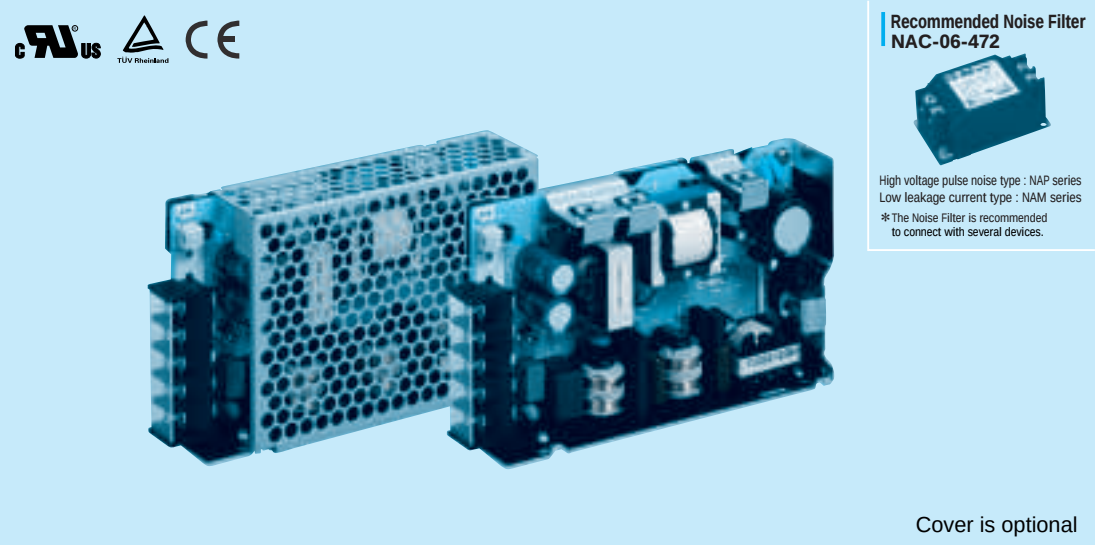
Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)

COSEL **Unit type**

PBA75F

Ordering information

PB	A	75	F	-5	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current (0.15mA max / ACIN 240V)
E :Low leakage current and EMI class A (0.5mA max / ACIN 240V)
T :Vertical terminal block
J :Connector type
R :with Remote ON/OFF
N :with Cover (Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

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

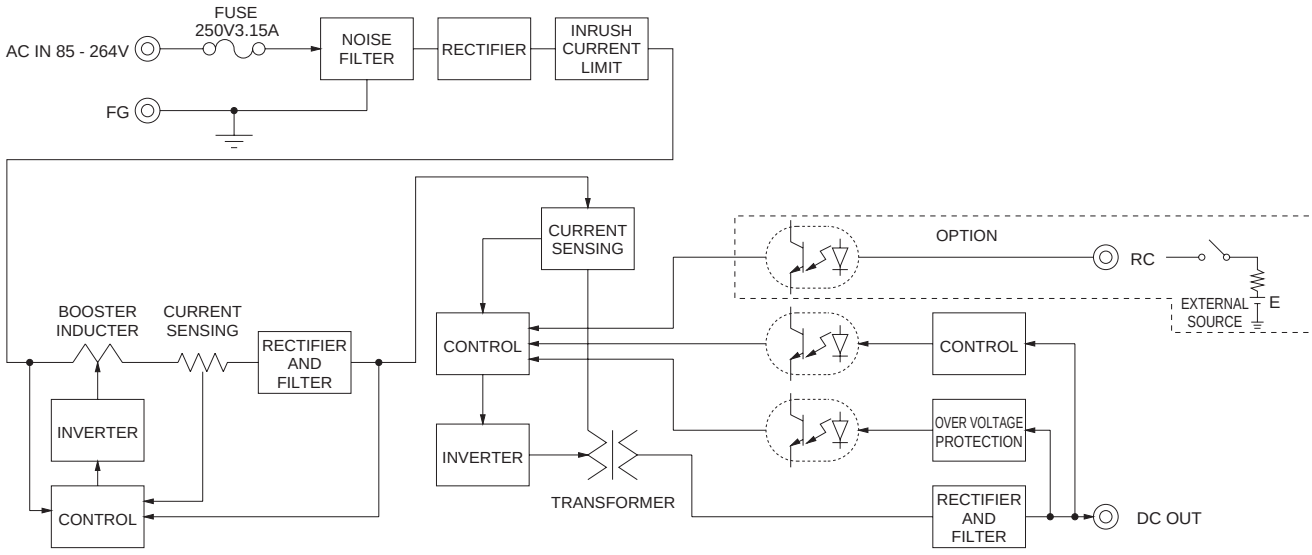
SPECIFICATIONS

	MODEL		PBA75F-3R3	PBA75F-5	PBA75F-9	PBA75F-12	PBA75F-15	PBA75F-24	PBA75F-36	PBA75F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊4)							
	CURRENT[A]	ACIN 100V	0.7typ	1.0typ						
		ACIN 200V	0.4typ	0.5typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	77typ	81typ	80typ	81typ	82typ	83typ	84typ	84typ
		ACIN 200V	78typ	83typ	82typ	83typ	84typ	85typ	86typ	86typ
	POWER FACTOR(Io=100%)	ACIN 100V	0.98typ	0.99typ						
		ACIN 200V	0.87typ	0.93typ						
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)							
		ACIN 200V	30typ (Io=100%) (At cold start)							
	LEAKAGE CURRENT[mA]		0.4/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)							
OUTPUT	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[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	150max	240max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	200max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	250max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	300max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	90max	120max	150max	240max	360max	480max
		-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 100V, Io=100%)							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=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 SETTING[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
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically							
	OVERVOLTAGE PROTECTION[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)							
	REMOTE ON/OFF		Optional (Required external power source)							
ISOLATION	INPUT-OUTPUT · RC ＊3		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT · RC-FG ＊3		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		32×82×135mm (without terminal block) (W×H×D) / 350g max (without cover)							
	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℃.
＊3 Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and FG.
＊4 Derating is required.

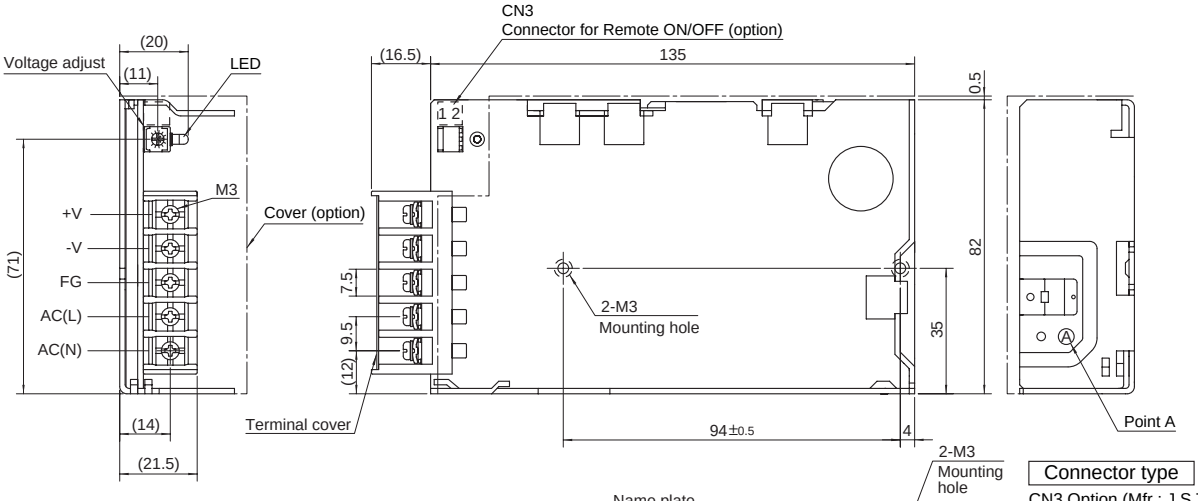
＊ Parallel operation with other model is not possible.
＊ Derating is required when operated with cover.
＊ A sound may occur from power supply at peak loading.

Block diagram



External view

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



※ Tolerance : ±1
※ Mass : 350g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 0.49N • m(5kgf • cm)max
※ Screw tighting torque : M3 0.8N • m(8.5kgf • cm)max
※ Please conect earth to the unit in 2-M3 holes.

Connector type

CN3 Option (Mfr : J.S.T.)

Pin No.	Contents
1	RC(+)
2	RC(-)

Barrier strip type

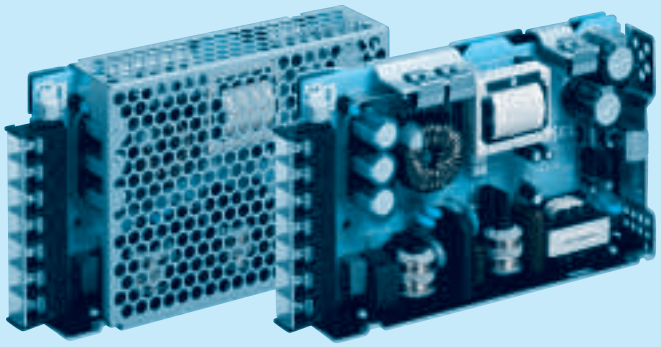
Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)

COSEL **Unit type**

PBA100F

Ordering information

PB	A	100	F	-5	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current (0.15mA max / ACIN 240V)
E :Low leakage current and EMI class A (0.5mA max / ACIN 240V)
T :Vertical terminal block
J :Connector type (Only -12,-15,-24,-36,-48)
R :with Remote ON/OFF
N :with Cover (Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

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

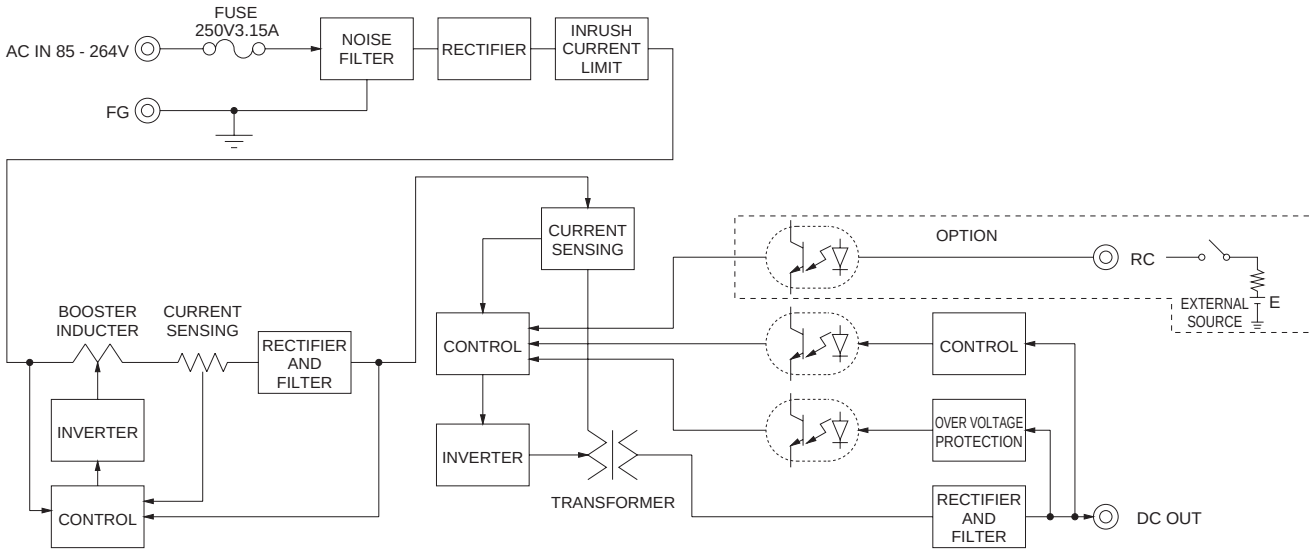
SPECIFICATIONS

	MODEL		PBA100F-3R3	PBA100F-5	PBA100F-9	PBA100F-12	PBA100F-15	PBA100F-24	PBA100F-36	PBA100F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊4)							
	CURRENT[A]	ACIN 100V	0.9typ	1.3typ						
		ACIN 200V	0.5typ	0.7typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	77typ	82typ	80typ	81typ	83typ	84typ	84typ	84typ
		ACIN 200V	79typ	84typ	82typ	83typ	86typ	86typ	86typ	86typ
	POWER FACTOR(Io=100%)	ACIN 100V	0.98typ	0.99typ						
		ACIN 200V	0.87typ	0.93typ						
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%) (At cold start)							
		ACIN 200V	40typ (Io=100%) (At cold start)							
	LEAKAGE CURRENT[mA]		0.4/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)							
OUTPUT	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[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	150max	240max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	200max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	250max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	300max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	90max	120max	150max	240max	360max	480max
		-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 100V, Io=100%)							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=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 SETTING[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
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically							
	OVERVOLTAGE PROTECTION[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)							
	REMOTE SENSING		Optional (Only -3R3, -5 Option -K)							
	REMOTE ON/OFF		Optional (Required external power source)							
ISOLATION	INPUT-OUTPUT · RC ＊3		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT · RC-FG ＊3		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		32×93×147mm (without terminal block) (W×H×D) / 440g max (without cover)							
	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℃.
＊3 Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and FG.
＊4 Derating is required.

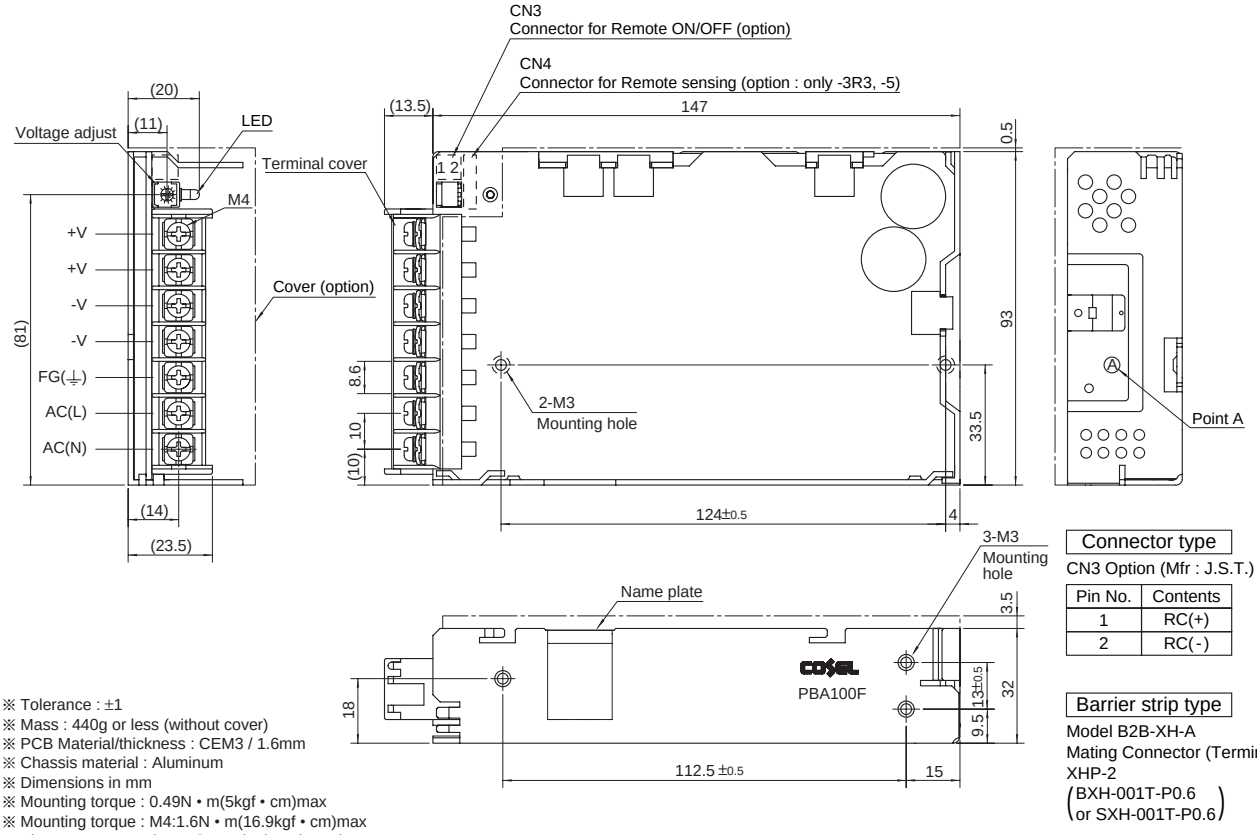
＊ Parallel operation with other model is not possible.
＊ Derating is required when operated with cover.
＊ A sound may occur from power supply at peak loading.

Block diagram



External view

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



※ Tolerance : ±1
※ Mass : 440g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 0.49N • m(5kgf • cm)max
※ Mounting torque : M4:1.6N • m(16.9kgf • cm)max
※ Please conect earth to FG terminal on the unit.

Connector type

CN3 Option (Mfr : J.S.T.)

Pin No.	Contents
1	RC(+)
2	RC(-)

Barrier strip type

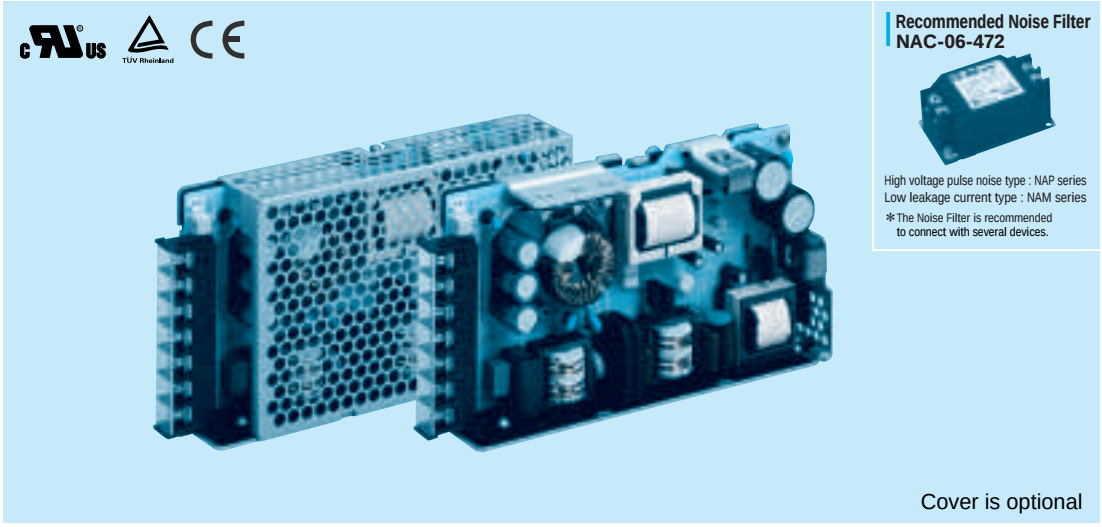
Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)

COSEL **Unit type**

PBA150F

Ordering information

PB	A	150	F	-5	-□
①	②	③	④	⑤	⑧



Cover is optional

Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C :with Coating
G :Low leakage current (0.15mA max / ACIN 240V)
E :Low leakage current and EMI class A (0.5mA max / ACIN 240V)
T :Vertical terminal block
J :Connector type (Only -12,-15,-24,-36,-48)
R :with Remote ON/OFF
N :with Cover (Only 24V UL508 is acquired)
N1 :with DIN rail
V :Output voltage setting potentiometer externally

MODEL	PBA150F-3R3	PBA150F-5	PBA150F-9	PBA150F-12	PBA150F-15	PBA150F-24	PBA150F-36	PBA150F-48
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

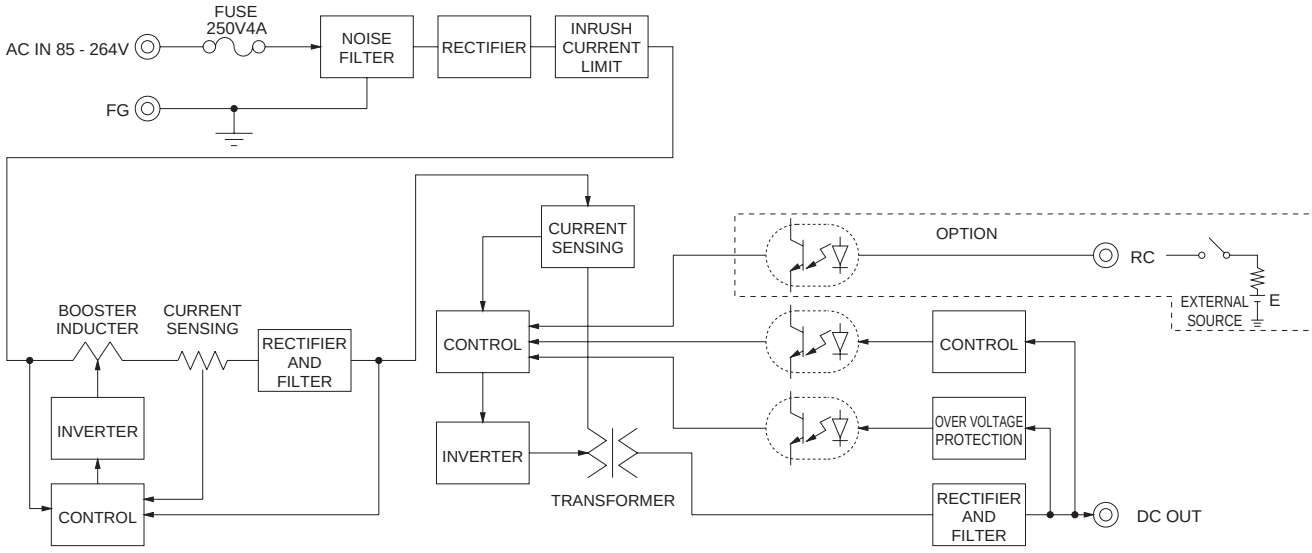
SPECIFICATIONS

	MODEL		PBA150F-3R3	PBA150F-5	PBA150F-9	PBA150F-12	PBA150F-15	PBA150F-24	PBA150F-36	PBA150F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage ＊4)							
	CURRENT[A]	ACIN 100V	1.3typ	2.0typ						
		ACIN 200V	0.7typ	1.0typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	80typ	83typ	82typ	83typ	84typ	85typ	85typ	85typ
		ACIN 200V	82typ	86typ	85typ	86typ	87typ	88typ	88typ	88typ
	POWER FACTOR(Io=100%)	ACIN 100V	0.98typ	0.99typ						
		ACIN 200V	0.87typ	0.93typ						
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%) (At cold start)							
		ACIN 200V	40typ (Io=100%) (At cold start)							
	LEAKAGE CURRENT[mA]		0.4/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)							
OUTPUT	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[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	100max	100max	120max	150max	240max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	200max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	250max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	300max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	90max	120max	150max	240max	360max	480max
		-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 100V, Io=100%)							
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=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 SETTING[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
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current and recovers automatically							
	OVERVOLTAGE PROTECTION[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)							
	REMOTE SENSING		Optional (Only -3R3, -5 Option -K)							
	REMOTE ON/OFF		Optional (Required external power source)							
ISOLATION	INPUT-OUTPUT · RC ＊3		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT · RC-FG ＊3		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		34×93×168mm (without terminal block) (W×H×D) / 560g max (without cover)							
	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℃.
＊3 Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and FG.
＊4 Derating is required.

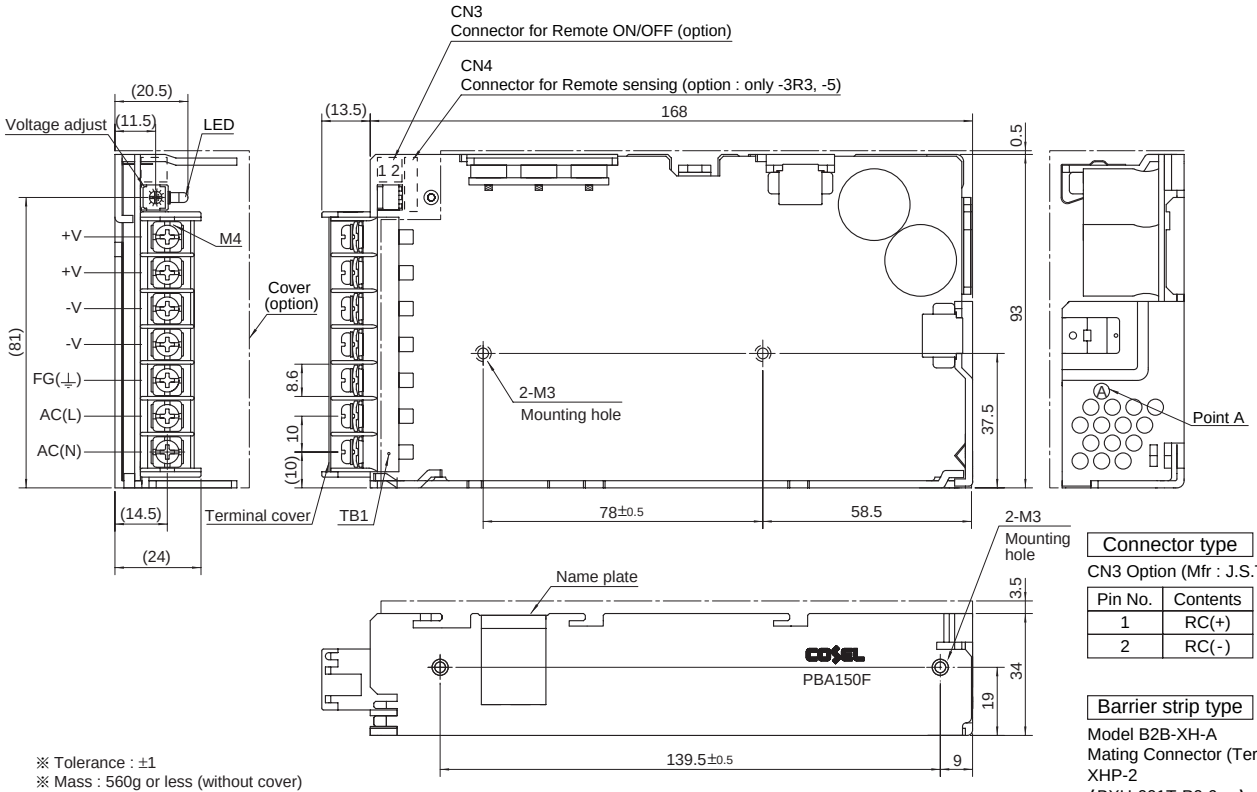
＊ Parallel operation with other model is not possible.
＊ Derating is required when operated with cover.
＊ A sound may occur from power supply at peak loading.

Block diagram



External view

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



Connector type

CN3 Option (Mfr : J.S.T.)

Pin No.	Contents
1	RC(+)
2	RC(-)

Barrier strip type

Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6 or SXH-001T-P0.6)

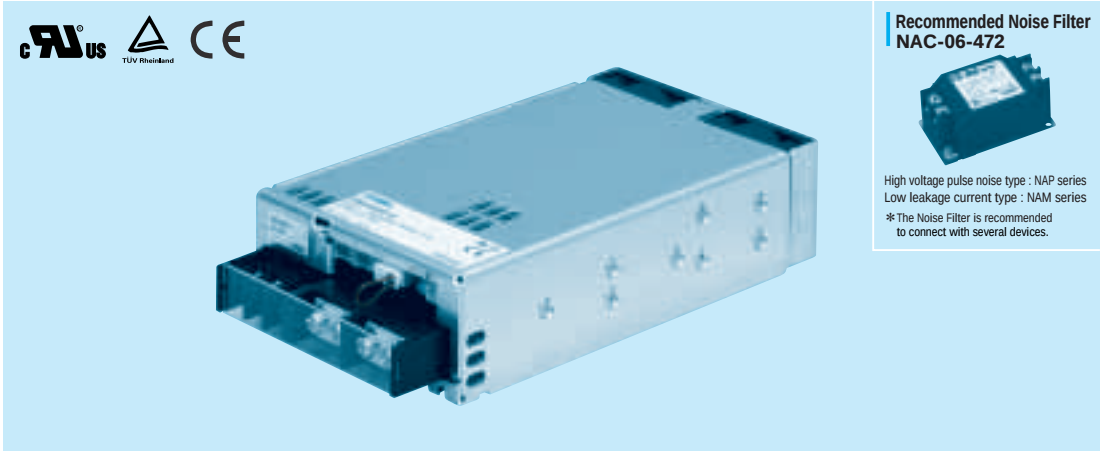
※ Tolerance : ±1
※ Mass : 560g or less (without cover)
※ PCB Material/thickness : CEM3 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 0.49N • m(5kgf • cm)max
※ Mounting torque : M4:1.6N • m(16.9kgf • cm)max
※ Keep drawing current per pin below 20A for TB1.
※ Please conect earth to FG terminal on the unit.

COSEL **Unit type**

PBA300F

Ordering information

PB	A	300	F	-5	-□
①	②	③	④	⑤	⑧



Recommended Noise Filter
NAC-06-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C :with Coating
G :Low leakage current
U :Operation stop voltage is set at a lower value
F3 :Reverse air exhaust type
F4 :Low speed fan

Refer to instruction manual 7.1.

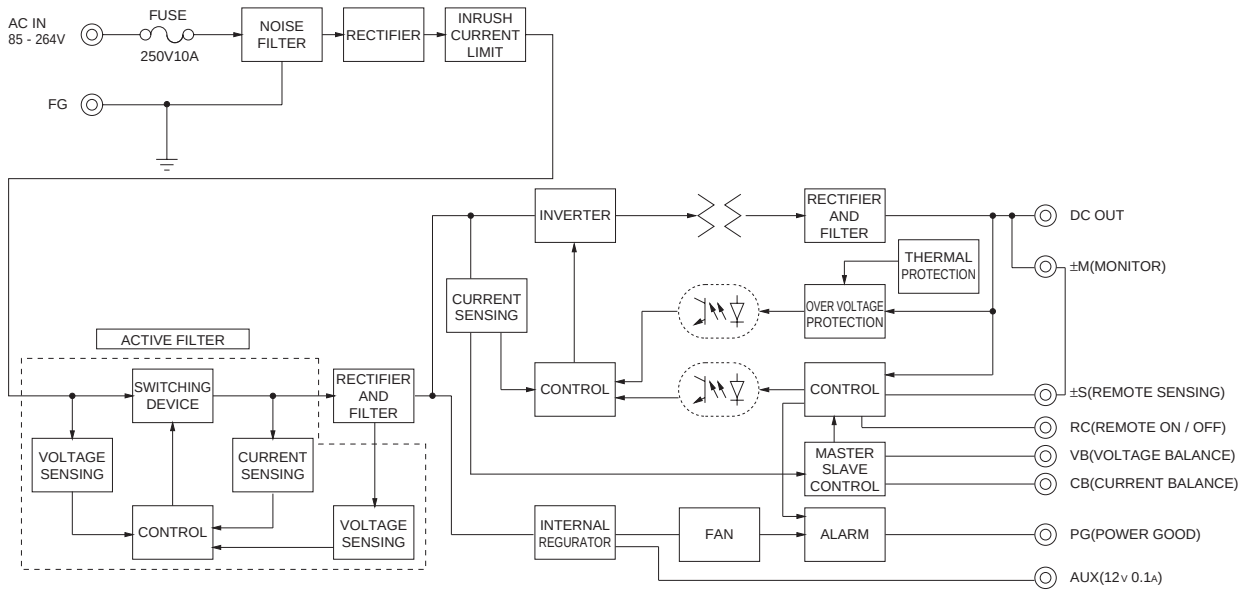
MODEL		PBA300F-3R3	PBA300F-5	PBA300F-7R5	PBA300F-12	PBA300F-15	PBA300F-24	PBA300F-36	PBA300F-48
MAX OUTPUT WATTAGE[W]		198	300	300	324	330	336	324	336
DC OUTPUT	ACIN 100V	3.3V 60A	5V 60A	7.5V 40A	12V 27A	15V 22A	24V 14A	36V 9A	48V 7A
	ACIN 200V ＊3	3.3V 60A	5V 60A	7.5V 40A	12V 27A	15V 22A	24V 14(16.5)A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

SPECIFICATIONS

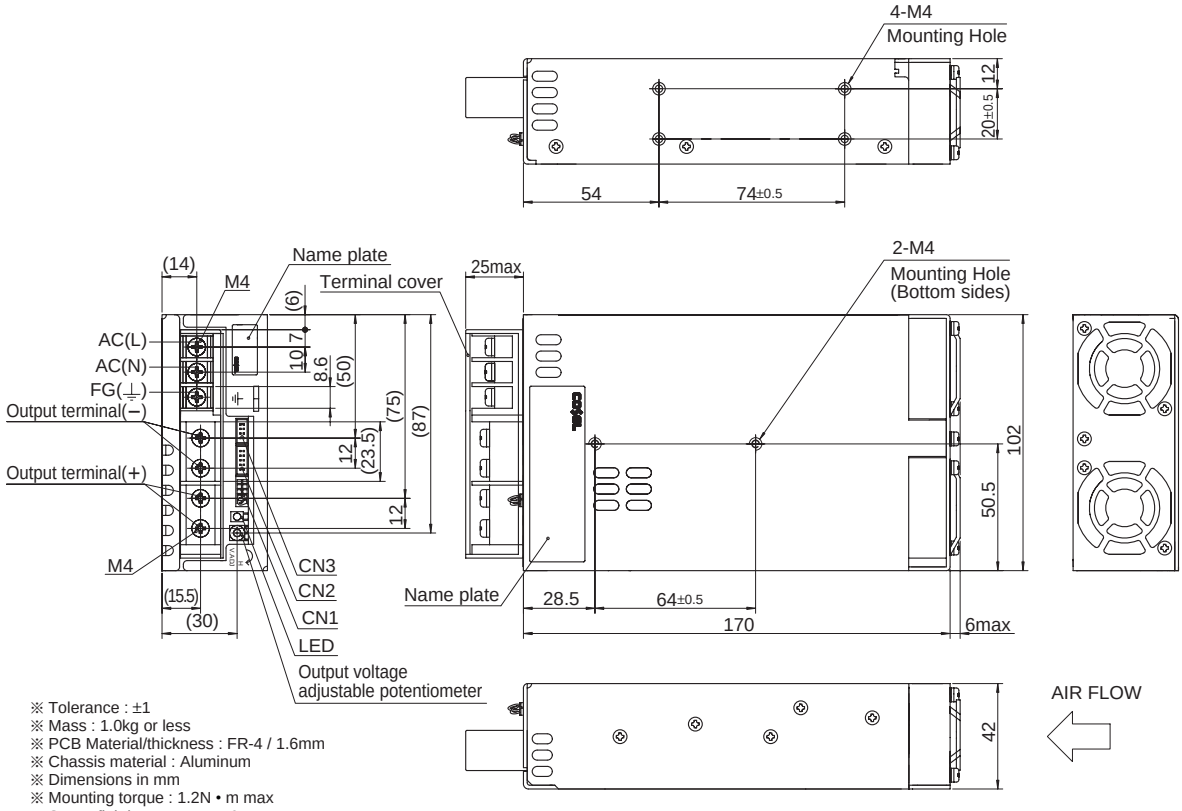
	MODEL		PBA300F-3R3	PBA300F-5	PBA300F-7R5	PBA300F-12	PBA300F-15	PBA300F-24	PBA300F-36	PBA300F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 350 (AC50 or DC70 Please refer to the instruction manual 7. option ＊4)							
	CURRENT[A]	ACIN 100V	3typ	4.1typ						
		ACIN 200V	1.6typ	2typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	68typ	74typ	76typ	78typ	78typ	79typ	81typ	79typ
		ACIN 200V	71typ	77typ	79typ	81typ	81typ	82typ	84typ	82typ
	POWER FACTOR	ACIN 100V	0.98typ (Io=100%)							
		ACIN 200V	0.95typ (Io=100%)							
	INRUSH CURRENT[A]	ACIN 100V	20/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More then 3 sec. to re-start)							
		ACIN 200V	40/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More then 3 sec. to re-start)							
	LEAKAGE CURRENT[mA]		0.45/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)							
OUTPUT	VOLTAGE[V]		3.3	5	7.5	12	15	24	36	48
	CURRENT[A]	ACIN 100V	60	60	40	27	22	14	9	7
		ACIN 200V ＊3	60	60	40	27	22	14(16.5)	9	7
	LINE REGULATION[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	60max	100max	120max	150max	150max	300max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-20 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	160max	400max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	200max	200max
		-20 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	240max	500max
	TEMPERATURE REGULATION[mV]	0 to +50℃ ＊1	40max	50max	75max	120max	150max	240max	360max	480max
		-20 to +50℃ ＊1	60max	75max	120max	180max	180max	290max	440max	600max
	DRIFT[mV] ＊2		12max	20max	30max	48max	60max	96max	144max	192max
	START-UP TIME[ms]		300typ(ACIN 100/200V, Io=100%) ＊Start-up time is 500ms typ for less than 1minute of applying input again from turning off the input voltage.							
	HOLD-UP TIME[ms]		20typ (ACIN 100/200V, Io=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 - 56.00
	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 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current or 101% of peak current and recovers automatically							
	OVERVOLTAGE PROTECTION[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 INDICATION		LED (Green)							
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided							
ISOLATION	INPUT-OUTPUT · RC		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG		AC2.000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT · RC · AUX-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT-RC · AUX		AC100V 1minute, Cutoff current = 100mA, DC100V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-20 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		102×42×170mm (without terminal block and screw) (W×H×D) /1.0kg max							
	COOLING METHOD		Forced cooling (internal fan)							

＊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℃.
＊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.
＊ A sound may occur from power supply at pulse loading.

Block diagram



External view



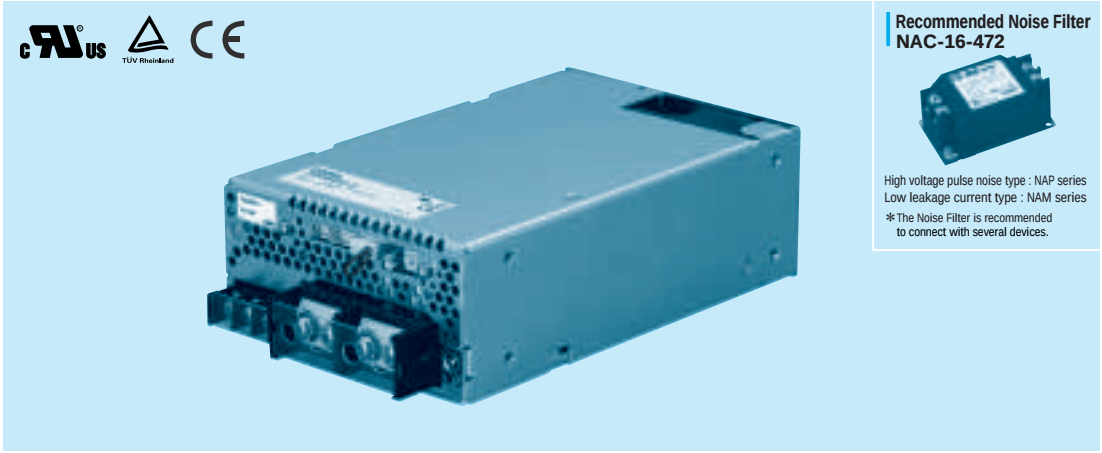
※ Tolerance : ±1
※ Mass : 1.0kg or less
※ PCB Material/thickness : FR-4 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 1.2N • m max
※ Screw fighting torque : 1.6N • m max
※ The housing for the remote sensing unused is mounted on CN1
※ Please conect earth to FG terminal on the unit.

COSEL **Unit type**

PBA600F

Ordering information

PB	A	600	F	-5	-□
①	②	③	④	⑤	⑧



Recommended Noise Filter
NAC-16-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C :with Coating
G :Low leakage current
U :Operation stop voltage is set at a lower value
F1 :With Long-Life fan
F3 :Reverse air exhaust type
F4 :Low speed fan

Refer to instruction manual 7.1.

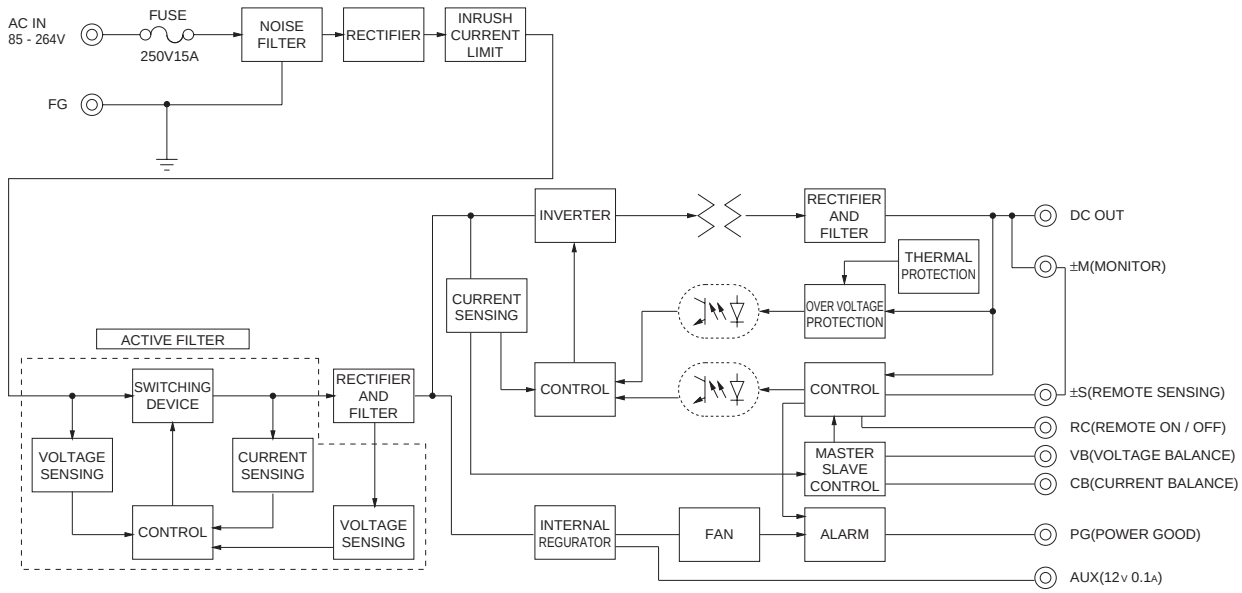
MODEL		PBA600F-3R3	PBA600F-5	PBA600F-7R5	PBA600F-12	PBA600F-15	PBA600F-24	PBA600F-36	PBA600F-48
MAX OUTPUT WATTAGE[W]		396	600	600	636	645	648	648	624
DC OUTPUT	ACIN 100V	3.3V 120A	5V 120A	7.5V 80A	12V 53A	15V 43A	24V 27A	36V 18A	48V 13A
	ACIN 200V ＊3	3.3V 120A	5V 120A	7.5V 80A	12V 53A	15V 43A	24V 27(31)A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

SPECIFICATIONS

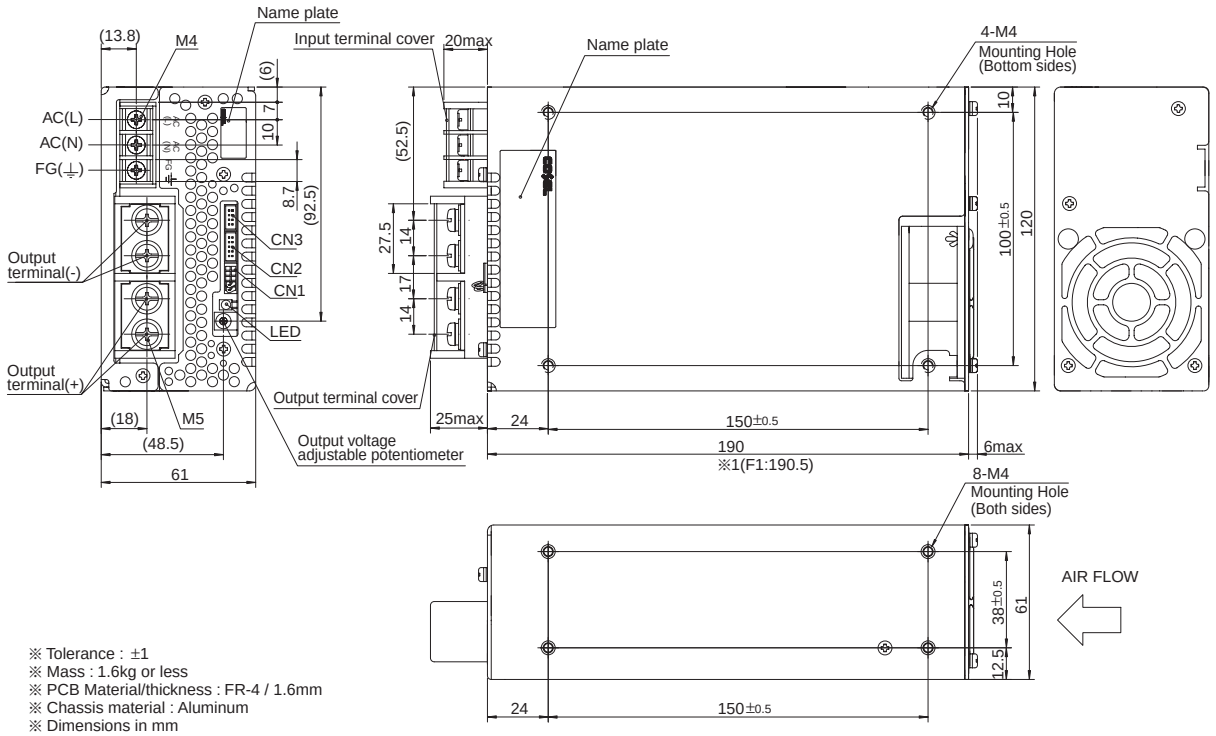
	MODEL		PBA600F-3R3	PBA600F-5	PBA600F-7R5	PBA600F-12	PBA600F-15	PBA600F-24	PBA600F-36	PBA600F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 350 (AC50 or DC70 Please refer to the instruction manual 7. option ＊5)							
	CURRENT[A]	ACIN 100V	5.8typ	8.2typ						
		ACIN 200V	3typ	4.1typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	70typ	75typ	76typ	79typ	79typ	81typ	82typ	81typ
		ACIN 200V	72typ	77typ	79typ	82typ	82typ	84typ	84typ	83typ
	POWER FACTOR	ACIN 100V	0.98typ (Io=100%)							
		ACIN 200V	0.95typ (Io=100%)							
	INRUSH CURRENT[A]	ACIN 100V	20/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)							
		ACIN 200V	40/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)							
	LEAKAGE CURRENT[mA]		0.45/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1, DENAN)							
OUTPUT	VOLTAGE[V]		3.3	5	7.5	12	15	24	36	48
	CURRENT[A]	ACIN 100V	120	120	80	53	43	27	18	13
		ACIN 200V ＊3	120	120	80	53	43	27(31)	18	13
	LINE REGULATION[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	60max	100max	120max	150max	150max	300max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-20 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	160max	400max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	200max	200max
		-20 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	240max	500max
	TEMPERATURE REGULATION[mV]	0 to +50℃ ＊1	40max	50max	75max	120max	150max	240max	360max	480max
		-20 to +50℃ ＊1	60max	75max	120max	180max	180max	290max	440max	600max
	DRIFT[mV] ＊2		12max	20max	30max	48max	60max	96max	144max	192max
	START-UP TIME[ms]		400typ(ACIN 100/200V, Io=100%) ＊Start-up time is 500ms typ for less than 1minute of applying input again from turning off the input voltage.							
	HOLD-UP TIME[ms]		20typ (ACIN 100/200V, Io=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 - 56.00
	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 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current or 101% of peak current and recovers automatically							
	OVERVOLTAGE PROTECTION[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
	OPERATING INDICATION		LED (Green)							
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided							
ISOLATION	INPUT-OUTPUT · RC		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT · RC · AUX-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
	OUTPUT-RC · AUX		AC100V 1minute, Cutoff current = 100mA, DC100V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-20 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		120×61×190mm (without terminal block and screw) (W×H×D) /1.6kg max							
	COOLING METHOD		Forced cooling (internal fan)							

＊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℃.
＊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.
＊5 Derating is required.Consult us for details.
＊ A sound may occur from power supply at pulse loading.

Block diagram



External view



※ Tolerance : ±1
※ Mass : 1.6kg or less
※ PCB Material/thickness : FR-4 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 1.2N · m(12.8kgf·cm)max
※ Screw tighting torque : M4 1.6N • m(16.9kgf • cm)max
M5 2.5N • m(24.5kgf • cm)max
※ The housing for the remote sensing unused is mounted on CN1
※1 F1(Optional):190.5
※ Please conect earth to FG terminal on the unit.

COSEL **Unit type**

PBA1000F

Ordering information

PB	A	1000	F	-5	-□
①	②	③	④	⑤	⑧

Recommended Noise Filter
NAC-20-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional
C :with Coating
G :Low leakage current
U :Operation stop voltage is set at a lower value
F1 :With Long-Life fan
F3 :Reverse air exhaust type
F4 :Low speed fan

Refer to instruction manual 7.1.

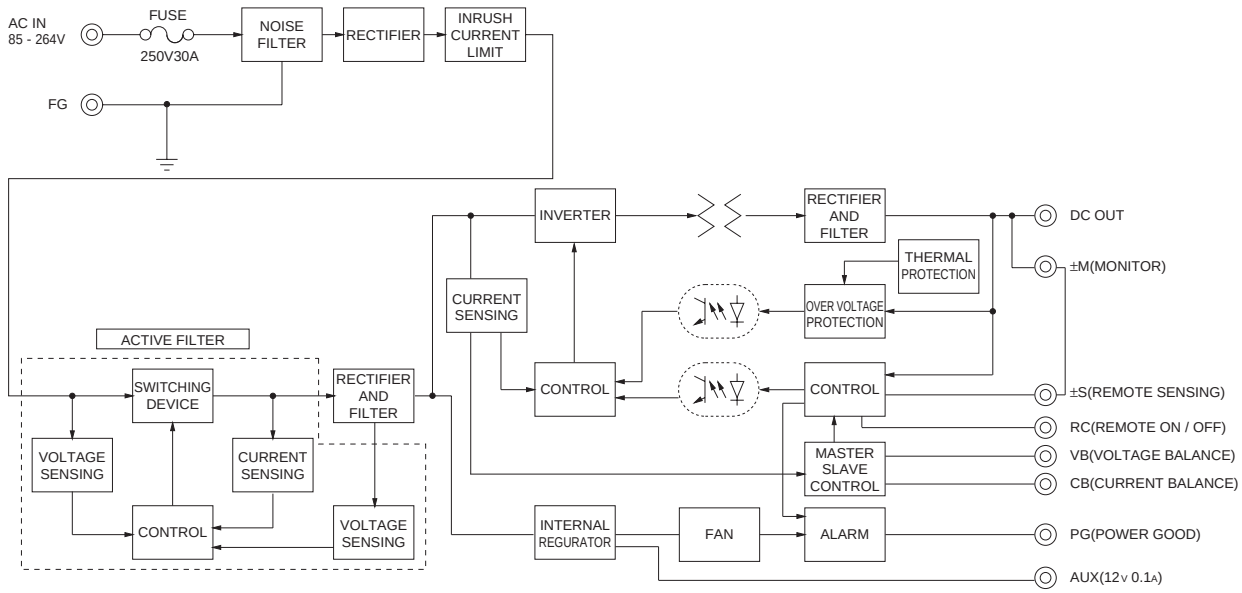
MODEL		PBA1000F-3R3	PBA1000F-5	PBA1000F-7R5	PBA1000F-12	PBA1000F-15	PBA1000F-24	PBA1000F-36	PBA1000F-48
MAX OUTPUT WATTAGE[W]		660	1000	1005	1056	1050	1056	1044	1056
DC OUTPUT	ACIN 100V	3.3V 200A	5V 200A	7.5V 134A	12V 88A	15V 70A	24V 44A	36V 29A	48V 22A
	ACIN 200V ＊3	3.3V 200A	5V 200A	7.5V 134A	12V 88A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

SPECIFICATIONS

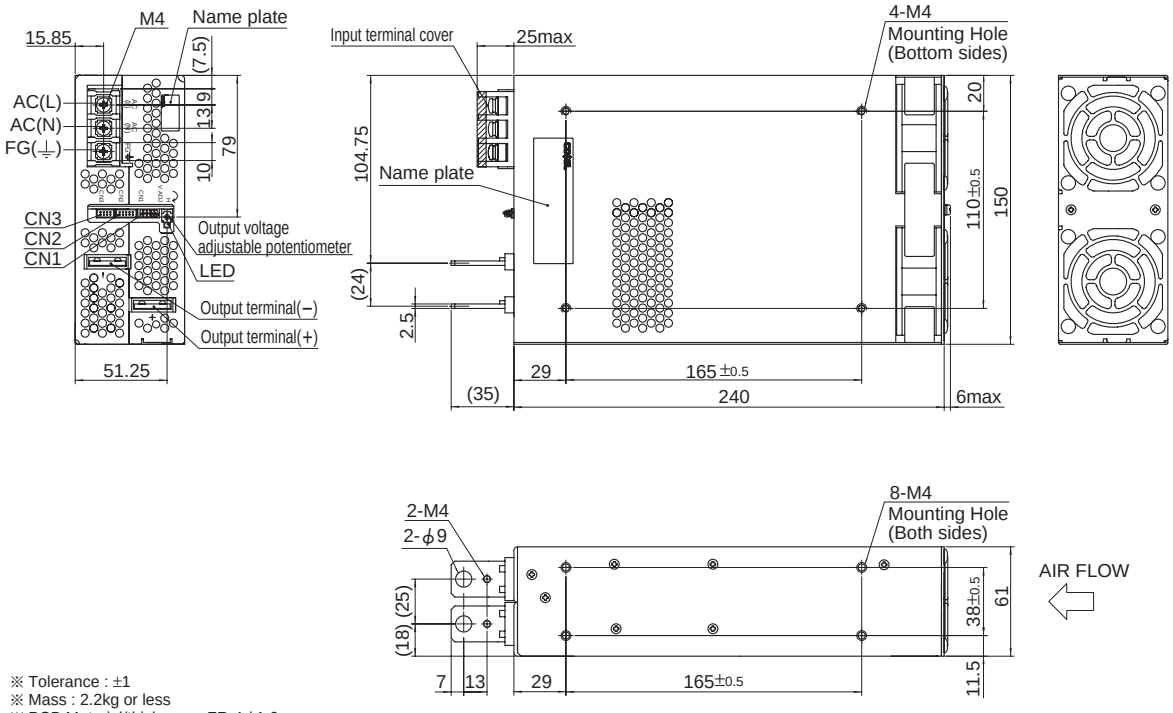
	MODEL		PBA1000F-3R3	PBA1000F-5	PBA1000F-7R5	PBA1000F-12	PBA1000F-15	PBA1000F-24	PBA1000F-36	PBA1000F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 350 (AC50 or DC70 Please refer to the instruction manual 7. option ＊5)							
	CURRENT[A]	ACIN 100V	9typ	13typ						
		ACIN 200V	5typ	7typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	74typ	79typ	80typ	82typ	82typ	84typ	84typ	84typ
		ACIN 200V	76typ	81typ	83typ	84typ	84typ	86typ	86typ	86typ
	POWER FACTOR	ACIN 100V	0.98typ (Io=100%)							
		ACIN 200V	0.95typ (Io=100%)							
	INRUSH CURRENT[A]	ACIN 100V	20/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More then 10 sec. to re-start)							
		ACIN 200V	40/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More then 10 sec. to re-start)							
	LEAKAGE CURRENT[mA]		0.5/1.0max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1, DENAN)							
OUTPUT	VOLTAGE[V]		3.3	5	7.5	12	15	24	36	48
	CURRENT[A]	ACIN 100V	200	200	134	88	70	44	29	22
		ACIN 200V ＊3	200	200	134	88	70	44(51)	29	22
	LINE REGULATION[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	60max	100max	120max	150max	150max	300max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-20 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	160max	400max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	200max	200max
		-20 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	240max	500max
	TEMPERATURE REGULATION[mV]	0 to +50℃ ＊1	40max	50max	75max	120max	150max	240max	360max	480max
		-20 to +50℃ ＊1	60max	75max	120max	180max	180max	290max	440max	600max
	DRIFT[mV] ＊2		12max	20max	30max	48max	60max	96max	144max	192max
	START-UP TIME[ms]		400typ(ACIN 100/200V, Io=100%) ＊Start-up time is 500ms typ for less than 1minute of applying input again from turning off the input voltage.							
	HOLD-UP TIME[ms]		20typ (ACIN 100/200V, Io=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 - 56.00
	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 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current or 101% of peak current and recovers automatically							
	OVERVOLTAGE PROTECTION[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
	OPERATING INDICATION		LED (Green)							
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided							
ISOLATION	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		AC100V 1minute, Cutoff current = 100mA, DC100V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-20 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		150×61×240mm (without terminal block and screw) (W×H×D) /2.2kg max							
	COOLING METHOD		Forced cooling (internal fan)							

＊1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).
Ripple and ripple noise is measured on measuring board with capacitor of 22μF 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℃.
＊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.
＊5 Derating is required.Consult us for details.
＊ A sound may occur from power supply at pulse loading.

Block diagram



External view



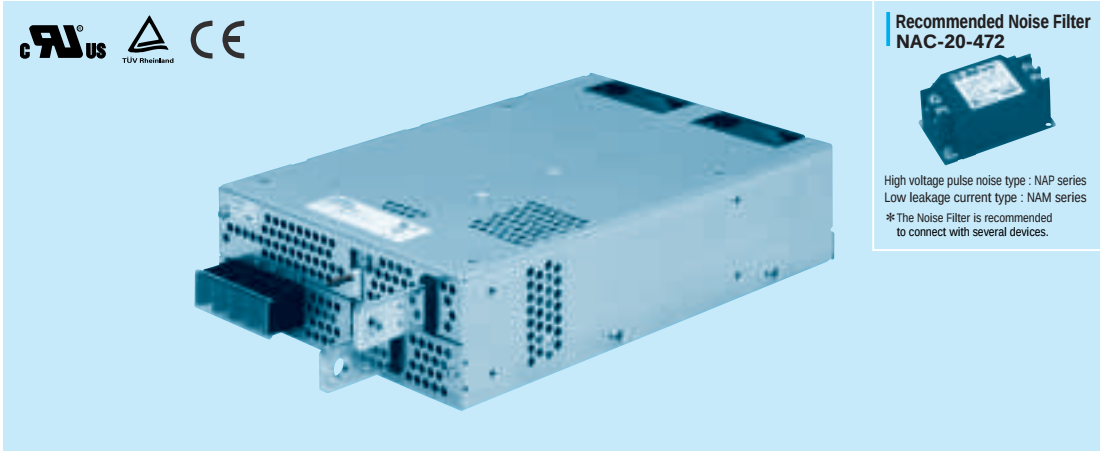
※ Tolerance : ±1
※ Mass : 2.2kg or less
※ PCB Material/thickness : FR-4 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 1.2N • m(12.8kgf • cm)max
※ Screw tighting torque : 1.6N • m(16.9kgf • cm)max
※ The housing for the remote sensing unused is mounted on CN1
※ Please conect earth to FG terminal on the unit.

COSEL **Unit type**

PBA1500F

Ordering information

PB	A	1500	F	-5	-□
①	②	③	④	⑤	⑧



Recommended Noise Filter
NAC-20-472

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C :with Coating
G :Low leakage current
U :Operation stop voltage is set at a lower value
F1 :With Long-Life fan
F3 :Reverse air exhaust type
F4 :Low speed fan

Refer to instruction manual 7.1.

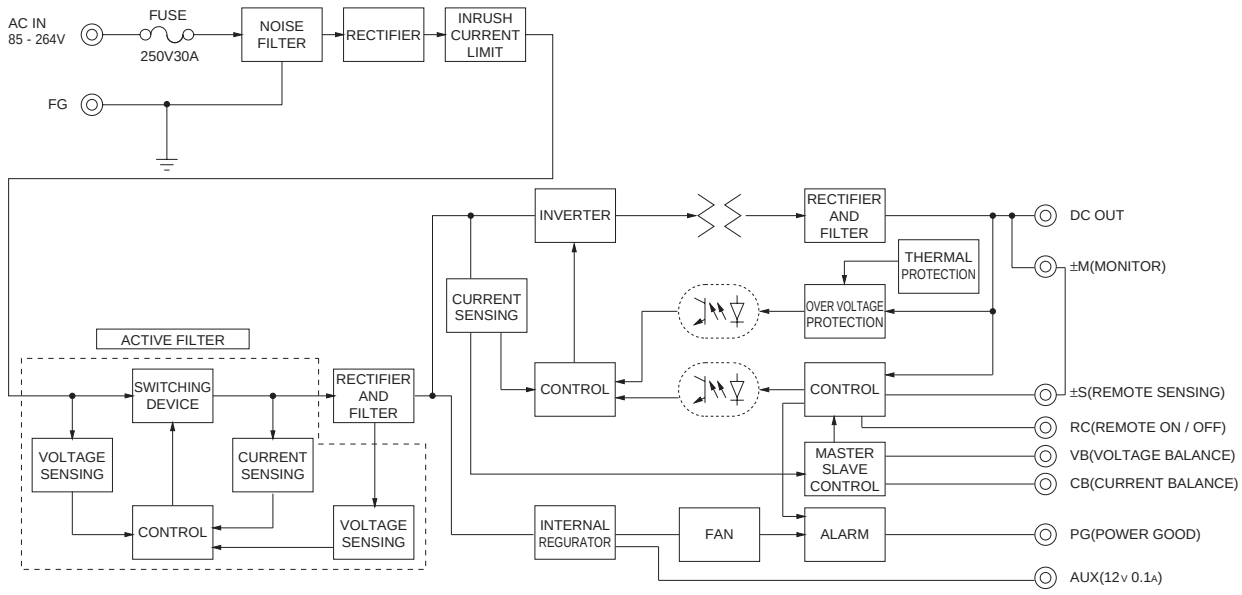
MODEL		PBA1500F-3R3	PBA1500F-5	PBA1500F-7R5	PBA1500F-12	PBA1500F-15	PBA1500F-24	PBA1500F-36	PBA1500F-48
MAX OUTPUT WATTAGE[W]		990	1500	1500	1500	1500	1680	1692	1680
DC OUTPUT	ACIN 100V	3.3V 300A	5V 300A	7.5V 200A	12V 125A	15V 100A	24V 65A	36V 42A	48V 32A
	ACIN 200V ＊3	3.3V 300A	5V 300A	7.5V 200A	12V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

SPECIFICATIONS

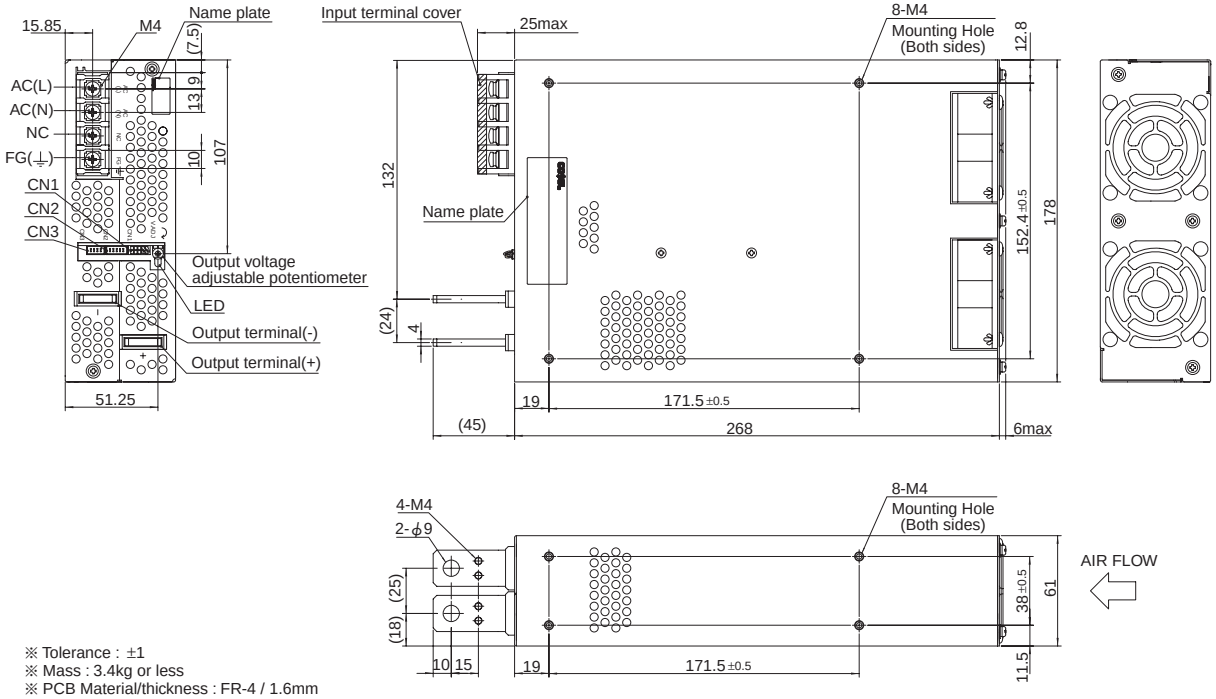
	MODEL		PBA1500F-3R3	PBA1500F-5	PBA1500F-7R5	PBA1500F-12	PBA1500F-15	PBA1500F-24	PBA1500F-36	PBA1500F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 7. option ＊5)							
	CURRENT[A]	ACIN 100V	15typ	19typ						
		ACIN 200V	8typ	10typ						
	FREQUENCY[Hz]		50/60 (47 - 63)							
	EFFICIENCY[%]	ACIN 100V	72typ	77typ	81typ	81typ	83typ	84typ	84typ	84typ
		ACIN 200V	75typ	81typ	83typ	84typ	86typ	87typ	87typ	87typ
	POWER FACTOR	ACIN 100V	0.98typ (Io=100%)							
		ACIN 200V	0.95typ (Io=100%)							
	INRUSH CURRENT[A]	ACIN 100V	20/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 10 sec. to re-start)							
		ACIN 200V	40/40typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 10 sec. to re-start)							
	LEAKAGE CURRENT[mA]		0.9/1.5max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1, DENAN)							
OUTPUT	VOLTAGE[V]		3.3	5	7.5	12	15	24	36	48
	CURRENT[A]	ACIN 100V	300	300	200	125	100	65	42	32
		ACIN 200V ＊3	300	300	200	125	100	70(105)	47(70)	35
	LINE REGULATION[mV]		20max	20max	36max	48max	60max	96max	144max	192max
	LOAD REGULATION[mV]		40max	40max	60max	100max	120max	150max	150max	300max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	120max	150max	150max
		-20 - 0℃ ＊1	140max	140max	160max	160max	160max	160max	160max	400max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	150max	200max	200max
		-20 - 0℃ ＊1	160max	160max	180max	180max	180max	180max	240max	500max
	TEMPERATURE REGULATION[mV]	0 to +50℃ ＊1	40max	50max	75max	120max	150max	240max	360max	480max
		-20 to +50℃ ＊1	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, Io=100%)							
	HOLD-UP TIME[ms]		20typ (ACIN 100/200V, Io=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 - 56.00
	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 - 49.92
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rated current or 101% of peak current and recovers automatically							
	OVERVOLTAGE PROTECTION[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
	OPERATING INDICATION		LED (Green)							
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided							
ISOLATION	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		AC100V 1minute, Cutoff current = 100mA, DC100V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-20 to +71℃ (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 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							
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)		UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN							
	CONDUCTED NOISE		Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B, additional noise filter required for meeting class B							
	CE MARKING		Low Voltage Directive, EMC Directive							
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT		178×61×268mm (without terminal block and screw) (W×H×D) /3.4kg max							
	COOLING METHOD		Forced cooling (internal fan)							

＊1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).
Ripple and ripple noise is measured on measuring board with capacitor of 22μF 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℃.
＊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.
＊5 Derating is required.Consult us for details.
＊ A sound may occur from power supply at pulse loading.

Block diagram



External view



※ Tolerance : ±1
※ Mass : 3.4kg or less
※ PCB Material/thickness : FR-4 / 1.6mm
※ Chassis material : Aluminum
※ Dimensions in mm
※ Mounting torque : 1.2N • m(12.8kgf • cm)max
※ Screw tighting torque : 1.6N • m(16.9kgf • cm)max
※ The housing for the remote sensing unused is mounted on CN1
※ Please conect earth to FG terminal on the unit.