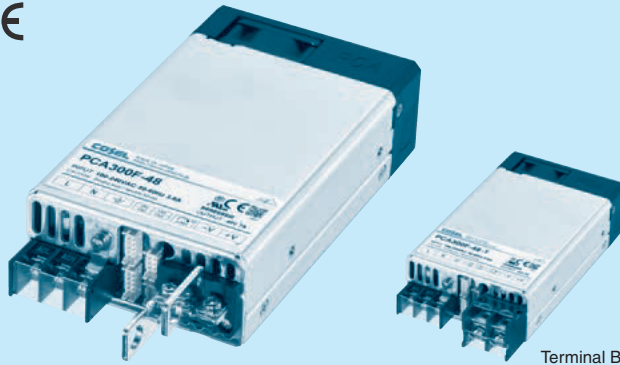
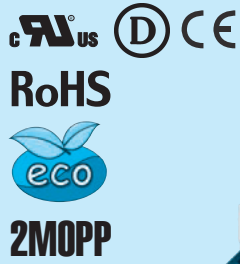


PCA300F

PC A 300 F -5 -□

① ② ③ ④ ⑤ ⑥



Example recommended EMI/EMC filter
NAC-06-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series
* A higher current rating EMI/EMC filter may be recommended in view of the other devices that could be connected in parallel with the power supply.

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal input
- ⑤ Output voltage
- ⑥ Optional *7
C :with Coating
G :Low leakage current
T : Terminal Block Style
I :with PMBus interface
F2 :Reverse air exhaust type
P3 :Master-slave Operation
W1 :Alarm function

For option details, refer to instruction manual 7.1.

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

MODEL	PCA300F-5	PCA300F-12	PCA300F-15	PCA300F-24	PCA300F-32	PCA300F-48
MAX OUTPUT WATTAGE[W]	300	324	330	336	320	336
DC OUTPUT	5V 60A	12V 27A	15V 22A	24V 14A	32V 10A	48V 7A

SPECIFICATIONS

MODEL		PCA300F-5	PCA300F-12	PCA300F-15	PCA300F-24	PCA300F-32	PCA300F-48	
INPUT	VOLTAGE	[VAC] 85 - 264 1 φ [VDC] *1 88 - 370						
	CURRENT[A]	ACIN 100V 3.8typ ACIN 230V 1.6typ						
	FREQUENCY[Hz]	50/60 (45 - 66)						
	EFFICIENCY[%]	ACIN 100V (lo=50%) 86typ (lo=100%) 87typ	87typ	87typ	88typ	88typ	88typ	
		ACIN 230V (lo=50%) 87typ (lo=100%) 89typ	88typ	88typ	89typ	89typ	89typ	
	POWER FACTOR	ACIN 100V 0.98typ (lo=100%) ACIN 230V 0.95typ (lo=100%)						
	INRUSH CURRENT[A]	ACIN 100V*2 20/40 typ (lo=100%) (Primary inrush current / Secondary inrush current) (More than 3 sec. to re-start)						
		ACIN 230V*2 40/40 typ (lo=100%) (Primary inrush current / Secondary inrush current) (More than 3 sec. to re-start)						
	LEAKAGE CURRENT[ma]	0.5max (ACIN 240V 60Hz, lo=100%, According to IEC60601-1)						
	OUTPUT	VOLTAGE[V]	5	12	15	24	32	48
CURRENT[A]		60	27	22	14	10	7	
LINE REGULATION[mV]		20max	48max	60max	96max	128max	192max	
LOAD REGULATION[mV]		40max	100max	120max	150max	150max	480max	
RIPPLE[mVp-p]		0 to +50°C *3*4 160max -20 to 0°C *3 280max	240max	320max	320max	320max	420max	640max
		0 to +50°C *3*4 240max -20 to 0°C *3 320max	300max	360max	360max	360max	480max	720max
TEMPERATURE REGULATION[mV]		0 to +50°C *4 50max -20 to +50°C *4 75max	120max	180max	180max	290max	400max	600max
		DRIFT[mV] *5 20max	48max	60max	96max	128max	192max	
START-UP TIME[ms]		700typ (ACIN 100/230V lo=100%)						
HOLD-UP TIME[ms]		20typ (ACIN 230V lo=80%) / 16typ (ACIN 230V lo=100%)						
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	3.00 to 6.00	7.20 to 14.40	9.00 to 18.00	14.40 to 28.80	19.20 to 38.40	28.80 to 57.60		
OUTPUT VOLTAGE SETTING[V]	5.00 to 5.05	12.00 to 12.12	15.00 to 15.15	24.00 to 24.24	32.00 to 32.32	48.00 to 48.48		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (Recovers automatically, Hiccup overcurrent)						
	OVERVOLTAGE PROTECTION[V]	6.25 to 7.00	15.00 to 16.80	18.75 to 21.00	30.00 to 33.60	40.00 to 44.80	60.00 to 67.20	
	REMOTE SENSING	Provided						
	REMOTE ON/OFF (RC)	Provided						
	DC_OK LAMP	LED (Blue)						
	ALARM LAMP	LED (Orange)						
COMMUNICATION FUNCTION	Provided (Extended UART)							
ISOLATION	INPUT-OUTPUT	AC4,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) 2MOPP						
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature) 1MOPP						
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)						
	OUTPUT-AUX·RC·PG·INFO·DS·ADDR0·ADDR1·ADDR2	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)						
ENVIRONMENT	OPERATING TEMP., HUMIDITY AND ALTITUDE	-20 to +70°C, 20 - 90%RH (Non condensing)						
	STORAGE TEMP., HUMIDITY AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing)						
	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						
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL62368-1, EN62368-1, C-UL (equivalent to CAN/CSA-C22.2 No.62368-1), ANSI/AAMI ES60601-1, EN60601-1 3rd, C-UL (equivalent to CAN/CSA-C22.2 No.60601-1), Complies with IEC60601-1-2 4th Ed.						
	CONDUCTED NOISE	Complies with FCC Part15 classB, VCCI-B, CISPR32-B, EN55011-B, EN55032-B						
	HARMONIC ATTENUATOR *6	Complies with IEC61000-3-2 (class A)						

SPECIFICATIONS

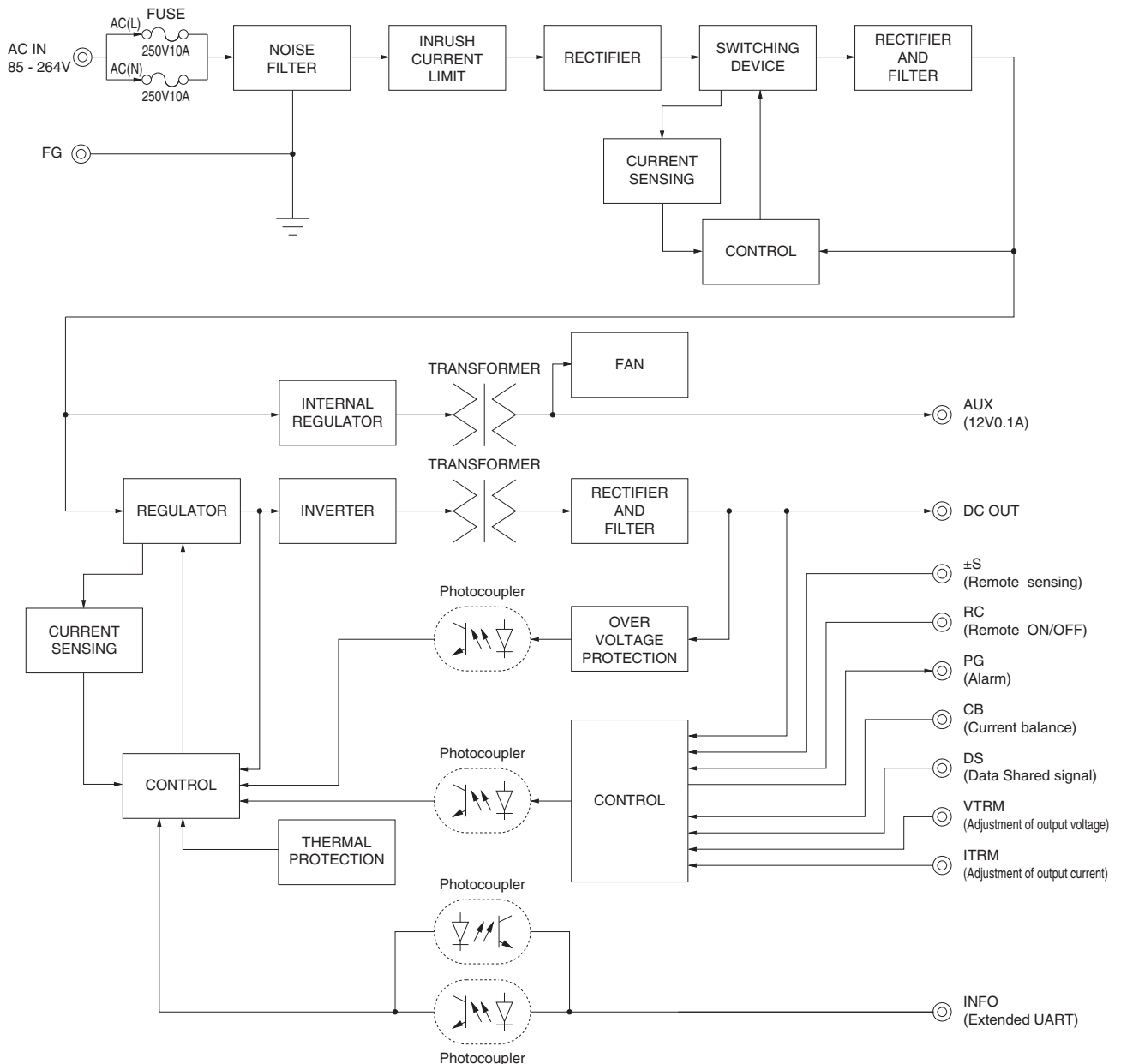
OTHERS	CASE SIZE/WEIGHT	89 X 41 X 152mm [3.50 X 1.61 X 5.98 inches] (without terminal block and screw) (W X H X D) / 840g max
	COOLING METHOD	Forced cooling (internal fan)

- *1 DC input safety agency approvals deleted.
- *2 The value is primary surge. The current of input surge to a built-in EMI/EMS Filter(0.2ms or less) is excluded.
- *3 Measured by 20MHz oscilloscope or Ripple-Noise meter (equivalent to KEISOKU-GIKEN:RM103). Please refer to the instruction manual 2.2.
- *4 5V output product, the maximum temperature of 40°C.
- *5 Drift is the change in DC output for an eight hours period after a half-hour warm-up at 25°C.
- *6 Please contact us about another class.
- *7 The listed options may affect the published standard specifications. Please contact us for detailed product specifications and safety approvals.
- * A sound may occur from power supply at pulse loading.

Features

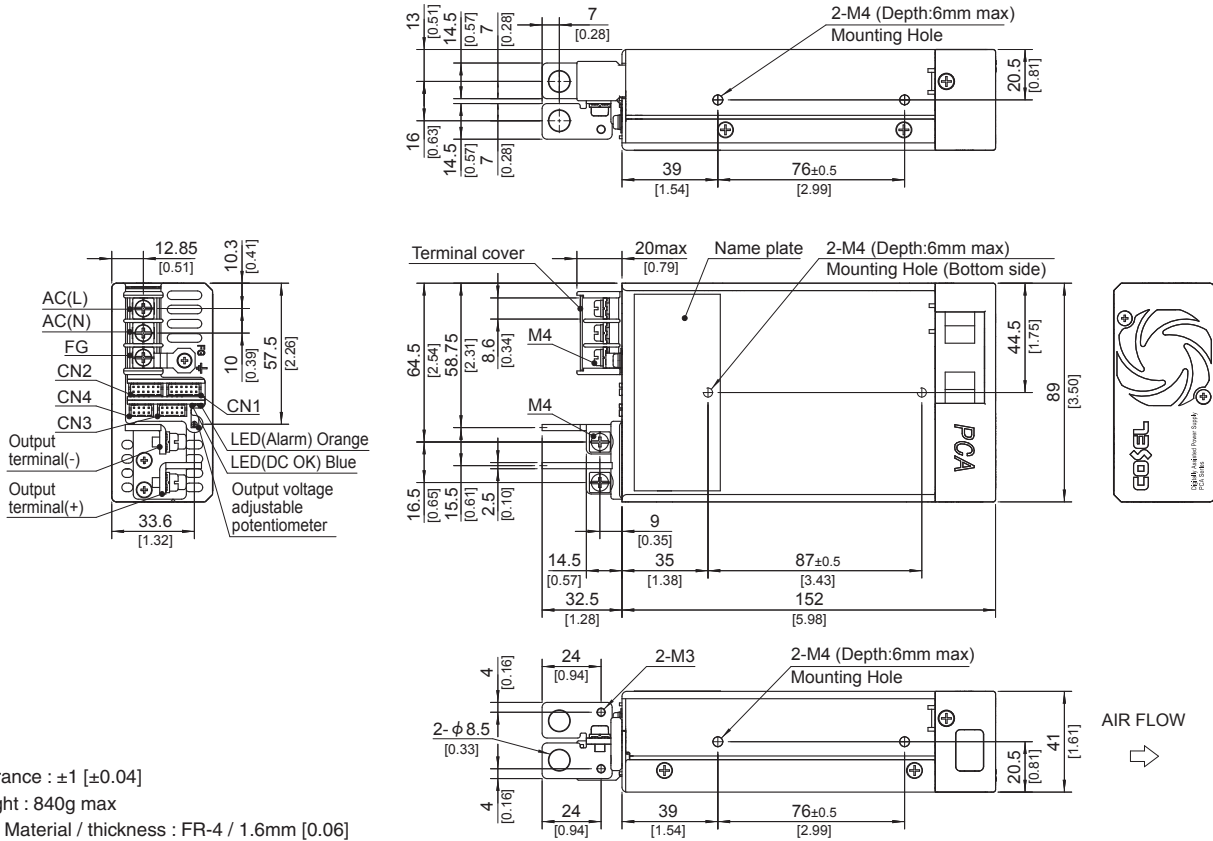
- Low profile (41mm, 1.61 inch = meet to 1U height)
- Universal input 85 - 264VAC
- DC input 88 - 370VDC possible
- For medical electric equipment (ANSI/AAMI ES60601-1, EN60601-1 3rd, IEC60601-1-2 4th Ed.)
- Medical Isolation Grade 2MOPP
- With AUX output 12V 0.1A (Voltage variable range 5 - 12V)
- Constant current regulation
- Output voltage can be varied to near 0V (Refer to item 3.6)
- With various alarms
- Parallel Operation / N+1 Parallel Redundancy Operation possible
- Monitoring function by communication and various setting values can be changed (Refer to item 3.11)

Block diagram



External view

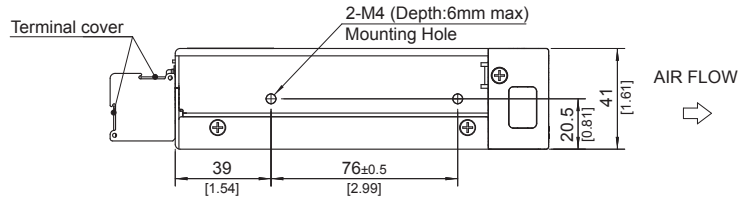
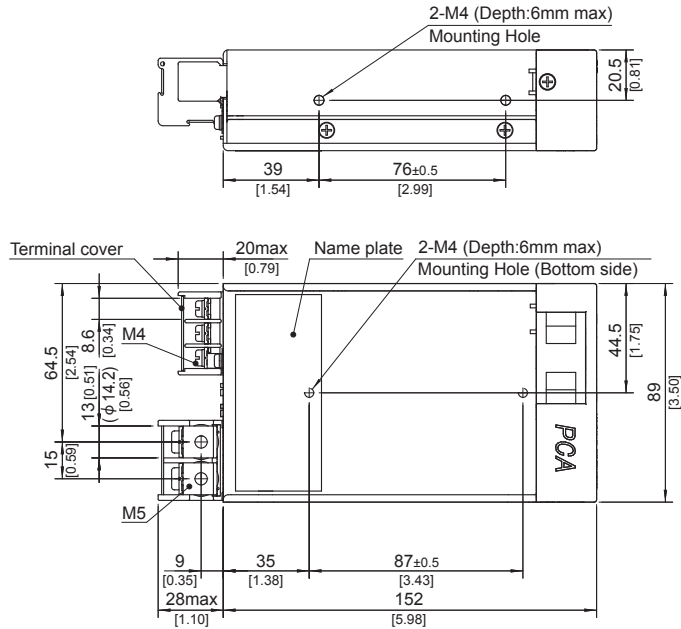
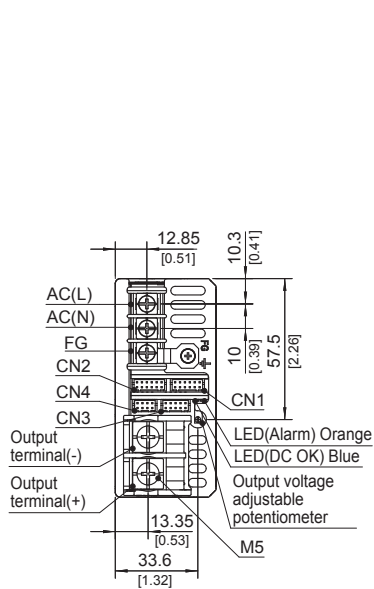
<PCA300F-□ (Bus Bar Style) >



- ※ Tolerance : ±1 [±0.04]
- ※ Weight : 840g max
- ※ PCB Material / thickness : FR-4 / 1.6mm [0.06]
- ※ Chassis Material : Aluminum
- ※ Fan cover Material : PBT
- ※ Dimensions in mm, [] = inches
- ※ Mounting torque : 1.2N·m max
- ※ Input and output terminal screw tightening torque
 - M3 0.6N·m max
 - M4 1.6N·m max
- ※ Please connect safety ground to FG terminal on the unit.

External view

<PCA300F-□-T (Terminal Block Style) >



- ※ Tolerance : ±1 [±0.04]
- ※ Weight : 840g max
- ※ PCB Material / thickness : FR-4 / 1.6mm [0.06]
- ※ Chassis Material : Aluminum
- ※ Fan cover Material : PBT
- ※ Dimensions in mm, [] = inches
- ※ Mounting torque : 1.2N·m max
- ※ Input and output terminal screw tightening torque
 - M4 1.6N·m max
 - M5 2.5N·m max
- ※ Please connect safety ground to FG terminal on the unit.