Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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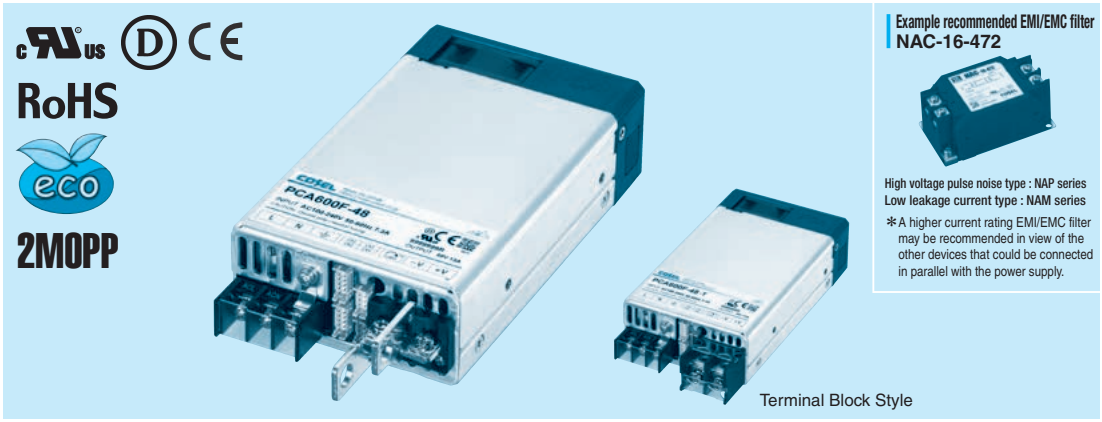
COSEL AC-DC Power Supplies Enclosed Type

PCA600F

Ordering information

PC	A	600	F	-5	-□
①	②	③	④	⑤	⑧



Example recommended EMI/EMC filter
NAC-16-472

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

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

①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑥Optional ＊7
T :Terminal Block Style
I :with PMBus interface

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	PCA600F-5	PCA600F-12	PCA600F-15	PCA600F-24	PCA600F-32	PCA600F-48
MAX OUTPUT WATTAGE[W]	600	636	645	648	640	624
DC OUTPUT	5V 120A	12V 53A	15V 43A	24V 27A	32V 20A	48V 13A

SPECIFICATIONS

	MODEL			PCA600F-5	PCA600F-12	PCA600F-15	PCA600F-24	PCA600F-32	PCA600F-48
INPUT	VOLTAGE		[VAC]	85 - 264 1φ (Output derating is required at less than 90V. Refer to instruction manual 5.2.)					
			[VDC] ＊1	88 - 370 (Output derating is required at less than 110V.Refer to instruction manual 5.2.)					
	CURRENT[A]		ACIN 100V	7.3typ					
			ACIN 230V	3.2typ					
	FREQUENCY[Hz]			50/60 (45 - 66)					
	EFFICIENCY[%]	ACIN 100V	(Io=50%)	90typ	91typ	91typ	91typ	91typ	91typ
			(Io=100%)	89typ	90typ	90typ	91typ	91typ	91typ
		ACIN 230V	(Io=50%)	92typ	92typ	92typ	93typ	93typ	93typ
			(Io=100%)	91typ	92typ	92typ	93typ	93typ	93typ
	POWER FACTOR		ACIN 100V	0.98typ (Io=100%)					
			ACIN 230V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]		ACIN 100V＊2	20/40 typ (Io=100%) (Primary inrush current / Secondary inrush current) (More than 3 sec. to re-start)					
			ACIN 230V＊2	40/40 typ (Io=100%) (Primary inrush current / Secondary inrush current) (More than 3 sec. to re-start)					
	LEAKAGE CURRENT[mA]			0.5max (ACIN 240V 60Hz, Io=100%, According to IEC60601-1)					
OUTPUT	VOLTAGE[V]			5	12	15	24	32	48
	CURRENT[A]			120	53	43	27	20	13
	LINE REGULATION[mV]			20max	48max	60max	96max	128max	192max
	LOAD REGULATION[mV]			40max	100max	120max	150max	150max	480max
	RIPPLE[mVp-p]	0 to +50℃ ＊3＊4		160max	240max	240max	240max	320max	480max
		-20 to 0℃ ＊3		280max	320max	320max	320max	420max	640max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊3＊4		240max	300max	300max	300max	400max	600max
		-20 to 0℃ ＊3		320max	360max	360max	360max	480max	720max
	TEMPERATURE REGULATION[mV]	0 to +50℃ ＊4		50max	120max	150max	240max	320max	480max
		-20 to +50℃ ＊4		75max	180max	180max	290max	400max	600max
	DRIFT[mV]	＊5		20max	48max	60max	96max	128max	192max
	START-UP TIME[ms]			700typ (ACIN 100/230V Io=100%)					
	HOLD-UP TIME[ms]			20typ (ACIN 230V Io=80%) / 16typ (ACIN 230V Io=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, Intermittent 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℃, 20 - 90%RH (Non condensing)					
	STORAGE TEMP.,HUMIDITY.AND ALTITUDE			-20 to +75℃, 20 - 90%RH (Non condensing)					
	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			UL60950-1, C-UL (CSA60950-1), EN60950-1, ANSI/AAMI ES60601-1, EN60601-1 3rd, 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

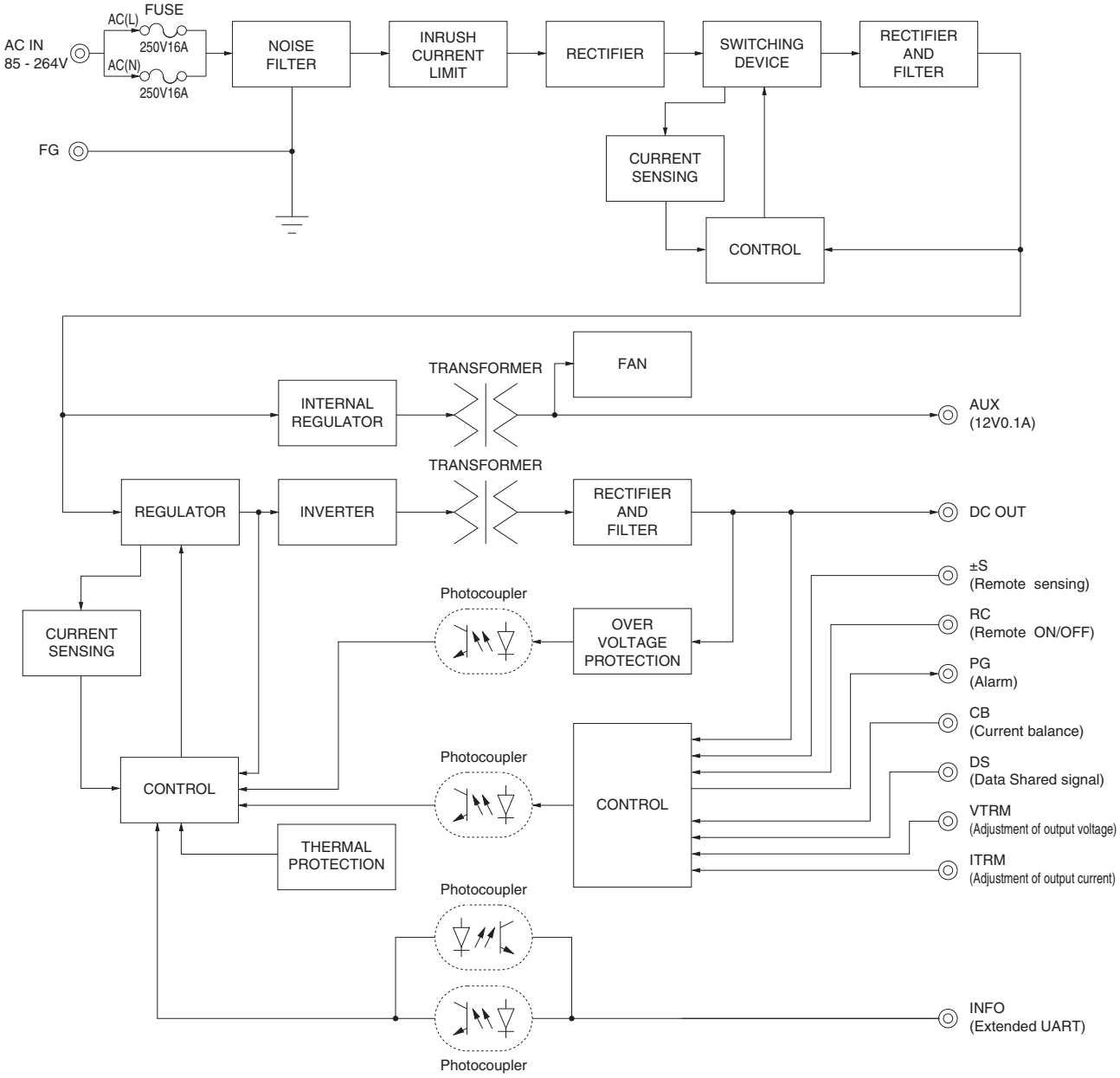
OTHERS	CASE SIZE/WEIGHT	89×41×152mm [3.50×1.61×5.98 inches] (without terminal block and screw) (W×H×D) / 840g max
	COOLING METHOD	Forced cooling (internal fan)

∗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).
∗4 5V output product, the maximum temperature of 40℃.
∗5 Drift is the change in DC output for an eight hours period after a half-hour warm-up at 25℃.
∗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

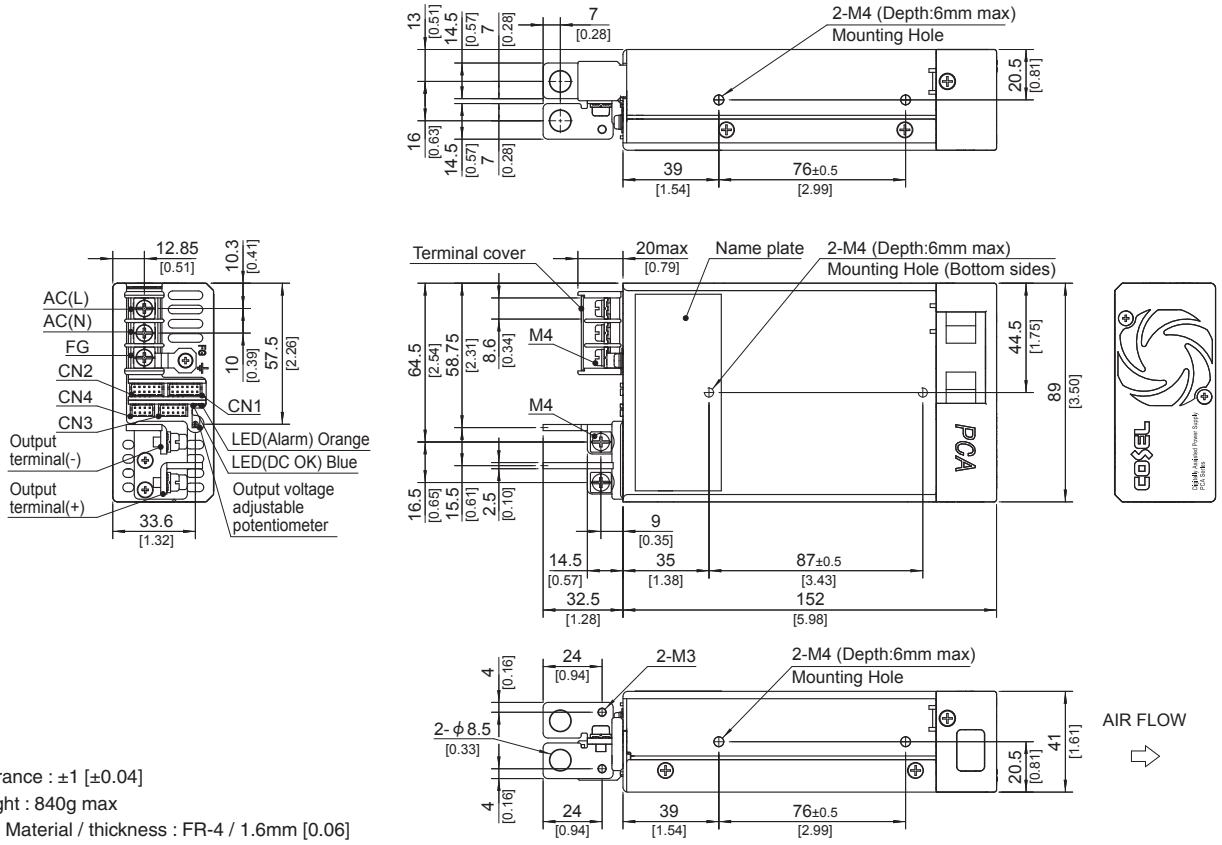
- Low profile (41mm, 1.61 inch = meet to 1U height)
- Universal input 85 - 264VAC (Refer to item 5.2, when using at 85 - 90VAC)
- DC input 88 - 370VDC possible (Refer to item 5.2, when using at 88 - 110VDC)
- For medical electric equipment (ANSI/AAMI ES60601-1, EN60601-1 3rd, IEC60601-1-2 4th Ed.)
- 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

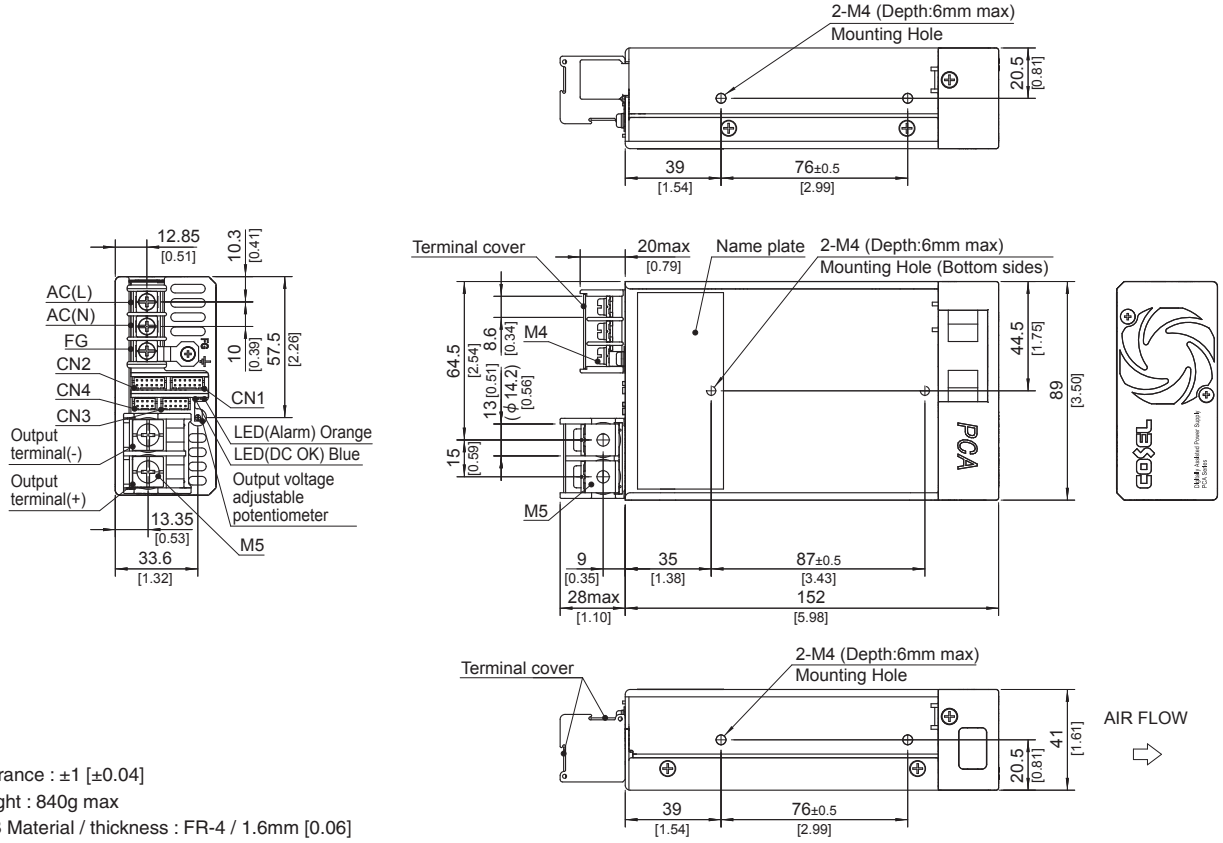
<PCA600F-□ (Bus Bar Style) >



※ 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

<PCA600F-□-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.