

# FETA2500B

FE T A 2500 B -□□

① ② ③ ④ ⑤ ⑥

FETA



Recommended EMI/EMC Filter  
NAC-20-472



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

- ① Series name
- ② External form
- T: Terminal block interface
- ③ Single output
- ④ Output wattage
- ⑤ 200/230V input
- ⑥ Output voltage

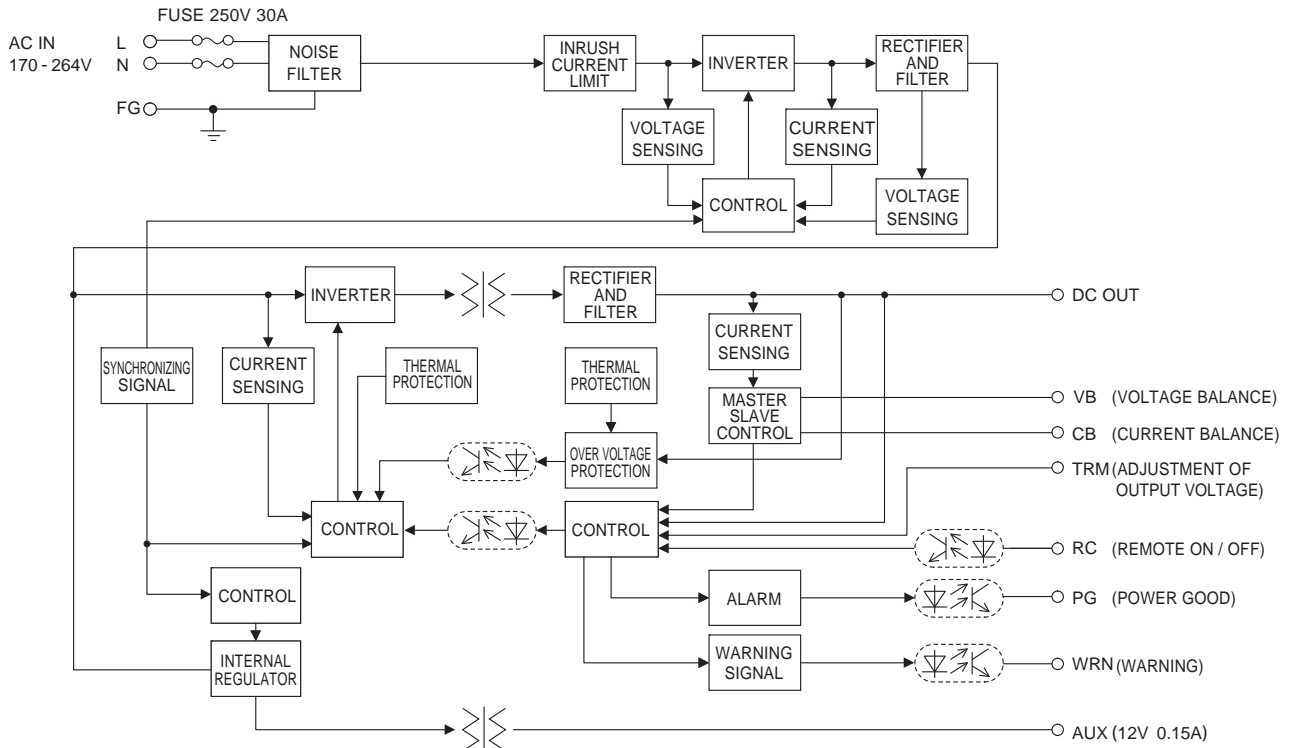
MODEL	FETA2500B-36	FETA2500B-48
MAX OUTPUT WATTAGE[W]	*1 1980	2496
DC OUTPUT	36V 55A	48V 52A

## SPECIFICATIONS

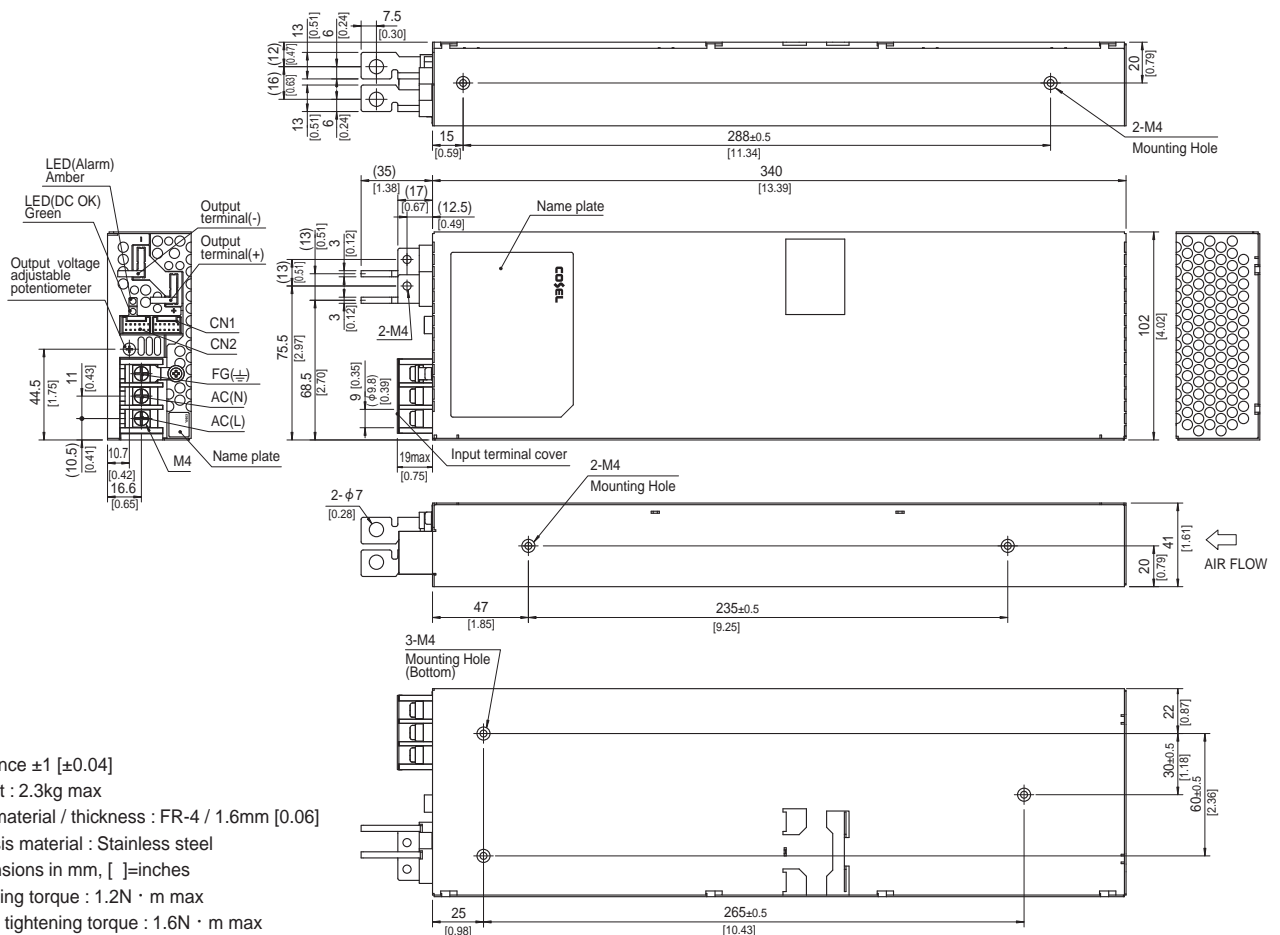
	MODEL	FETA2500B-36	FETA2500B-48	
INPUT	VOLTAGE[V]	AC170 - 264 1 φ (Output derating is required at AC170V - 180V. Refer to instruction manual 4.2)		
	CURRENT[A]	ACIN 200V 11.3typ		
	FREQUENCY[Hz]	50 / 60 (47 - 63)		
	EFFICIENCY[%]	ACIN 230V	80typ (Io=10%)	83typ (Io=10%)
			87typ (Io=20%)	89typ (Io=20%)
			91typ (Io=50%)	92.5typ (Io=50%)
			90typ (Io=100%)	91.5typ (Io=100%)
POWER FACTOR	ACIN 230V	0.98typ (Io=100%)		
INRUSH CURRENT[A]	ACIN 200V	*2 20max / 60max (Primary inrush current /Secondary inrush current) (More than 10 sec. to re-start)		
LEAKAGE CURRENT[mA]		0.85max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1)		
OUTPUT	VOLTAGE[V]	36	48	
	CURRENT[A]	ACIN 170V-180V	Output derating is required at ACIN 180V or less (refer to instruction manual 4.2)	
		ACIN 180V-264V	55	52
	LINE REGULATION[mV]	144max		
	LOAD REGULATION[mV]	360max		
	RIPPLE[mVp-p]	0 to +50°C	*3 300max	360max
		-10 to 0°C	*3 360max	480max
	RIPPLE NOISE[mVp-p]	0 to +50°C	*3 360max	480max
		-10 to 0°C	*3 480max	600max
	TEMPERATURE REGULATION[mV]	0 to +50°C	360max	480max
		-10 to +50°C	440max	600max
	DRIFT[mV]	*4	144max	192max
	START-UP TIME[s]	*10	1.7max (ACIN 200V, Io=100%)	
	HOLD-UP TIME[ms]	ACIN 200V	10typ (Io=100%)	
20typ (Io=50%)				
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	*5	32.40 - 39.60	43.20 - 52.80 *6	
OUTPUT VOLTAGE SETTING[V]		36.00 - 37.44	48.00 - 49.92	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Activate over 105% - 120% of rated current and recovers automatically. (Shut down if low-voltage protection activated)		
	OVERVOLTAGE PROTECTION[V]	*7	42.00 - 45.00	
	LOW-VOLTAGE PROTECTION[V]	*7	21.60 - 25.20	
	DC OK LAMP		LED (Green)	
	ALARM LAMP		LED (Amber)	
REMOTE ON/OFF		Provided		
ISOLATION	INPUT-OUTPUT-AUX-RC-WRN-PG	AC3,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At room temperature)		
	INPUT-FG	AC2,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At room temperature)		
	OUTPUT-AUX-RC-WRN-PG-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At room temperature)		
	OUTPUT-AUX-RC-WRN-PG	AC100V 1minute, Cutoff current = 100mA, DC100V 50MΩ min (At room temperature)		
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-10 to +70°C (Output derating is required), 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max		
	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +85°C, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max		
	VIBRATION	10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis		
	IMPACT	196.1m/s² (20G), 11ms, once each along X, Y and Z axis		
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, C-UL (CSA60950-1), EN60950-1		
	CONDUCTED NOISE	Complies with FCC Part15-A, CISPR22-A, EN55011-A, EN55022-A, VCCI-A		
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 Class A *8		
OTHERS	CASE SIZE/WEIGHT	*9 102 X 41 X 340mm [4.02 X 1.61 X 13.39 inches] (W X H X D) / 2.3kg max		
	COOLING METHOD	Forced cooling (internal fan)		

\*1 AUX output power is not included.  
 \*2 The current of input surge to a built-in noise filter (0.2ms or less) is excluded.  
 \*3 Measured by 500MHz oscilloscope.  
 \*4 Ripple and ripple noise is measured on measuring board with capacitor of 22μF within 150mm from the output terminal.  
 \*5 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.  
 \*6 Can not be used above the rated output current and the rated output power.  
 \*7 When the output voltage is adjusted to higher than 49.92V and the load factor is over 70% of the rated current, if the load current changes quickly (< 200msec), the output voltage drops approximately 5V below the setting voltage.  
 \*8 To recover output voltage, recycle input voltage after 10 or more seconds.  
 \*9 Please contact us about another class.  
 \*10 Case size contains neither the terminal blocks, connector and screw nor.  
 \*11 When input voltage recycling is needed for output recovery, AC power shall be removed and cycled after 10 seconds to reset the protection circuit.  
 \*12 Please contact us when it's necessary to restart the power supply in less than 10 seconds.  
 \*13 To meet the specifications. Do not operate over-loaded condition.  
 \*14 A sound may occur from power supply at peak loading.

## Block diagram



## External view



- \* Tolerance  $\pm 1$  [ $\pm 0.04$ ]
- \* Weight : 2.3kg max
- \* PCB material / thickness : FR-4 / 1.6mm [0.06]
- \* Chassis material : Stainless steel
- \* Dimensions in mm, [ ]=inches
- \* Mounting torque : 1.2N · m max
- \* Screw tightening torque : 1.6N · m max
- \* Please connect safety ground to FG terminal on the unit.