

## AC-DC Power Supplies Enclosed Type

# FETA2500BA

## Ordering information

**FET A 2500 B A -□□ -□**  
 ① ② ③ ④ ⑤ ⑥ ⑦



Example recommended EMI/EMC filter  
**NAC-20-472**



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
  - ④ 200/230V input
  - ⑤ Version
  - ⑥ Output voltage
  - ⑦ Optional
- F2: Reverse air exhaust  
 R: with Remote ON/OFF  
 Positive logic control

\*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	FETA2500BA-36	FETA2500BA-48
MAX OUTPUT WATTAGE[W]	1980	2496
DC OUTPUT	36V 55A	48V 52A

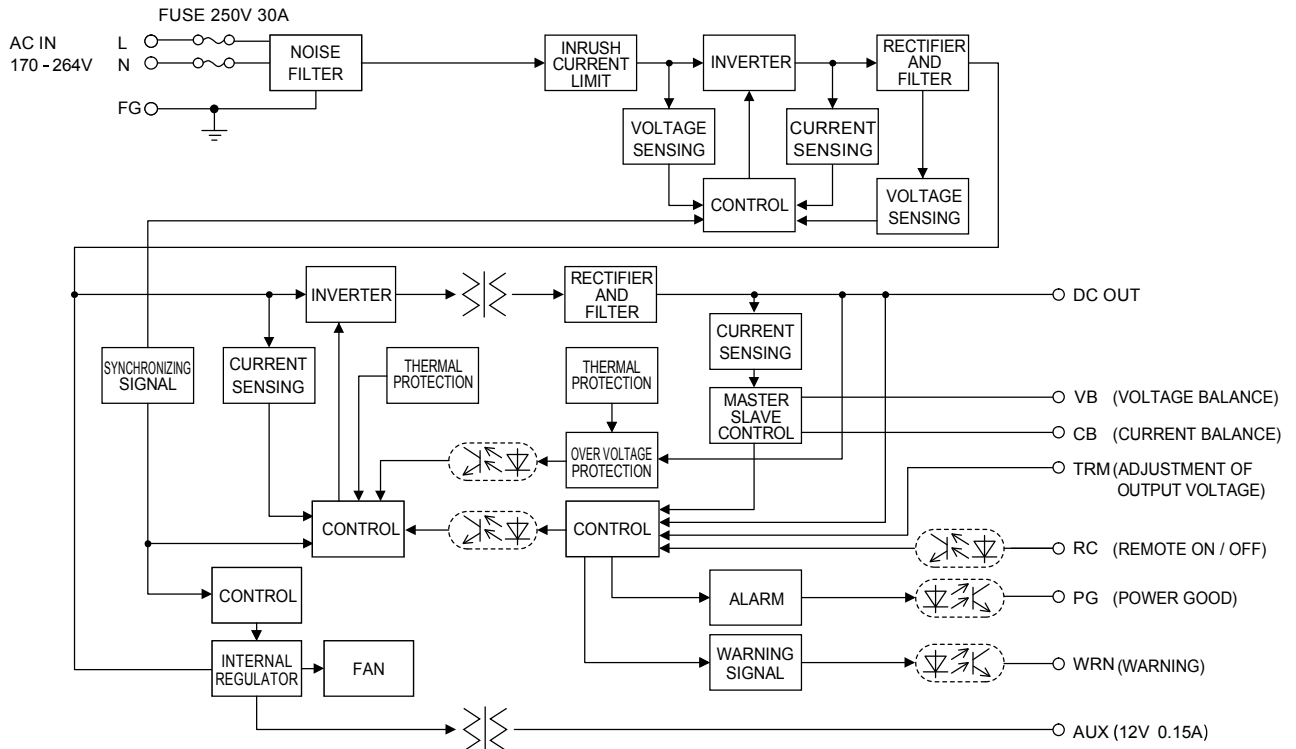
## SPECIFICATIONS

	MODEL	FETA2500BA-36	FETA2500BA-48	
INPUT	VOLTAGE[V]	AC170 - 264 1 φ (Output derating is required at AC170V - 180V. Refer to Derating)		
	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	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 IEC62368-1)		
OUTPUT	VOLTAGE[V]	36	48	
	CURRENT[A]	ACIN 170V-180V	Output derating is required at ACIN 180V or less (refer to Derating)	
		ACIN 180V-264V	55	52
	LINE REGULATION[mV]		144max	192max
	LOAD REGULATION[mV]		360max	480max
	RIPPLE[mVp-p]	0 to +50°C	300max	360max
		-10 to 0°C	360max	480max
	RIPPLE NOISE[mVp-p]	0 to +50°C	360max	480max
		-10 to 0°C	480max	600max
	TEMPERATURE REGULATION[mV]	0 to +50°C	360max	480max
		-10 to +50°C	440max	600max
	DRIFT[mV]		144max	192max
	START-UP TIME[s]		1.7max (ACIN 200V, Io=100%)	
HOLD-UP TIME[ms]	ACIN 200V	10typ (Io=100%)		
		20typ (Io=50%)		
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		28.80 - 39.60	38.40 - 52.80	
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. (Output voltage shuts down when the output voltage continuously drops due to overcurrent protection.)		
	OVERVOLTAGE PROTECTION[V]	42.00 - 45.00	56.00 - 60.00	
	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/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis		
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis		
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL62368-1, C-UL (CSA62368-1), EN62368-1		
	CONDUCTED NOISE	Complies with FCC Part 15-A, CISPR32-A, EN55032-A, VCCI-A		
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 Class A		
OTHERS	CASE SIZE/WEIGHT	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)		

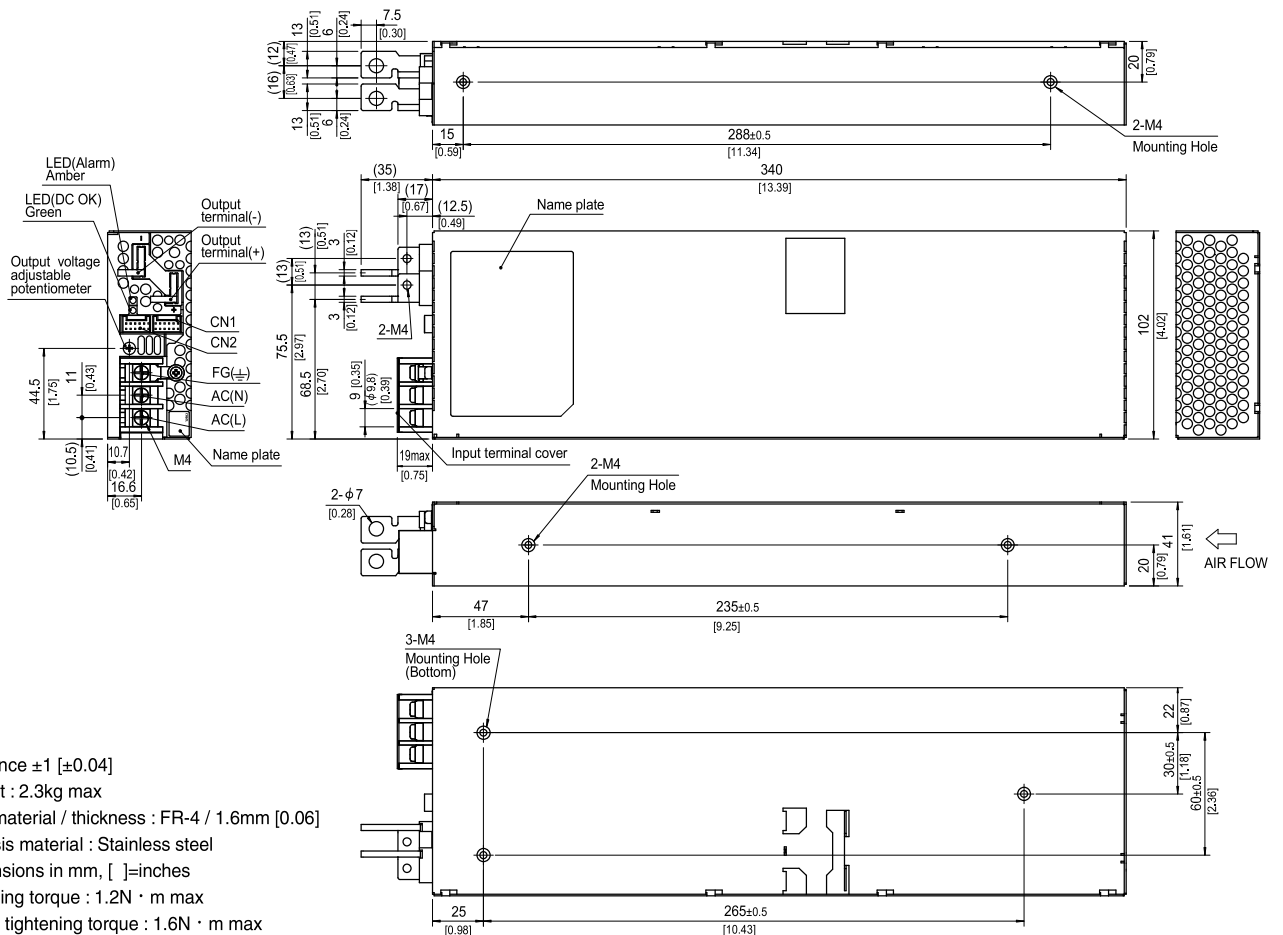
- \*1 AUX output power is not included.
- \*2 The current of input surge to a built-in noise filter (0.2ms or less) is excluded.
- \*3 Measured by 500MHz oscilloscope.  
Ripple and ripple noise is measured on measuring board with capacitor of 22μF within 150mm from the output terminal.
- \*4 Drift is 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.
- \*5 Can't be used above the rated output current and the rated output power.
- \*6 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.

- \*7 Output voltage recovers from protection by shutting down the input voltage and waiting more than 10 seconds then turning on AC input again, or turning off the output voltage by remote control.
- \*8 Please contact us about another class.
- \*9 Case size contains neither the terminal blocks, connector and screw.  
To meet the specifications, do not operate over-loaded condition.
- \* A sound may occur from power supply at peak loading.

## Block diagram



## External view



- \* Tolerance ±1 [±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.