COSEL AC-DC Power Supplies Enclosed Type

FETA2500BA

Ordering information

FE T A 2500 B A -□□ -□

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

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.

①Series name
②External form
T:Terminal block interface
③Single output
④Output wattage
⑤200/230V input
⑥Version
⑦Output voltage
⑧Optional
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.

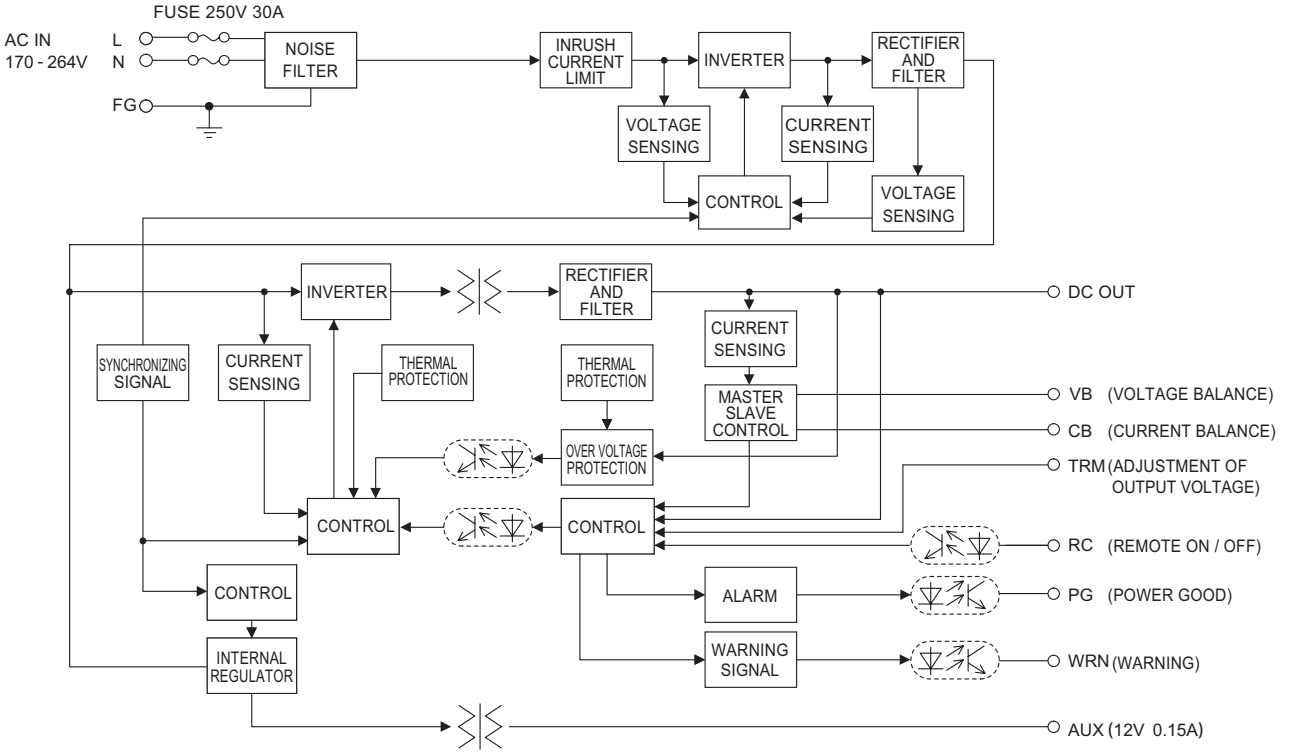
MODEL	FETA2500BA-36	FETA2500BA-48
MAX OUTPUT WATTAGE[W] ＊1	1980	2496
DC OUTPUT	36V 55A	48V 52A

SPECIFICATIONS

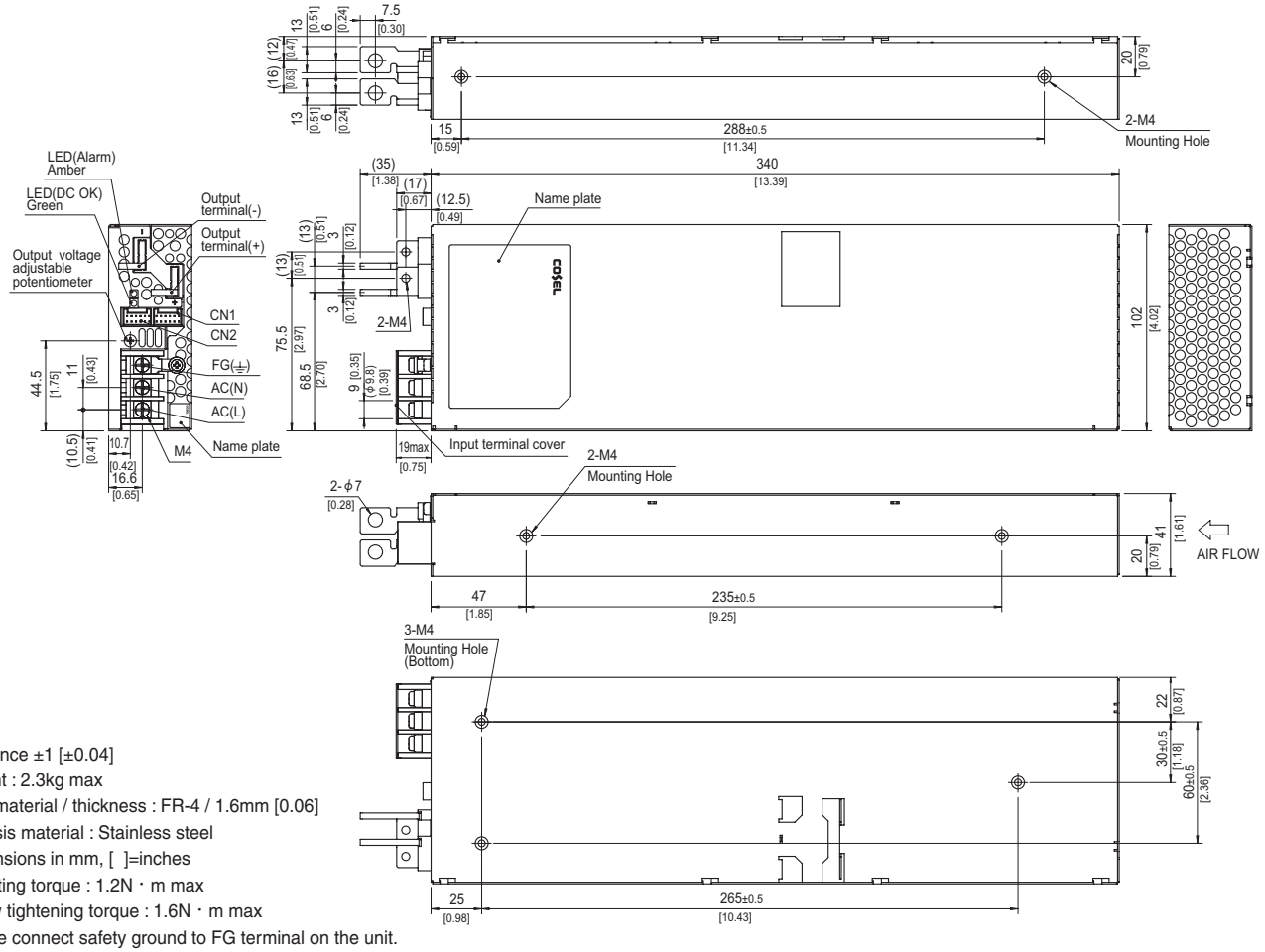
	MODEL		FETA2500BA-36	FETA2500BA-48
INPUT	VOLTAGE[V]		AC170 - 264 1φ (Output derating is required at AC170V - 180V. Refer to instruction manual 4.2)	
	CURRENT[A]	ACIN 200V	11.3typ	
	FREQUENCY[Hz]		50 / 60 (47 - 63)	
	EFFICIENCY[%]	ACIN 230V	80typ (Io=10%)	83typ (Io=10%)
			87typ (Io=20%)	89typ (Io=20%)
			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	192max
	LOAD REGULATION[mV]		360max	480max
	RIPPLE[mVp-p]	0 to +50℃ ＊3	300max	360max
		-10 to 0℃ ＊3	360max	480max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊3	360max	480max
		-10 to 0℃ ＊3	480max	600max
	TEMPERATURE REGULATION[mV]	0 to +50℃	360max	480max
		-10 to +50℃	440max	600max
	DRIFT[mV]	＊4	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] ＊5		28.80 - 39.60	38.40 - 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. (Output voltage shuts down when the output voltage continuously drops due to overcurrent protection.) ＊7	
	OVERVOLTAGE PROTECTION[V] ＊7		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℃ (Output derating is required), 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max	
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +85℃, 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	102×41×340mm [4.02×1.61×13.39 inches] (W×H×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℃, with the input voltage held constant at the rated input/output.
＊5 Can not 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 nor.
＊ 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
* Maunting torque : 1.2N・m max
* Screw tightening torque : 1.6N・m max
* Please connect safety ground to FG terminal on the unit.