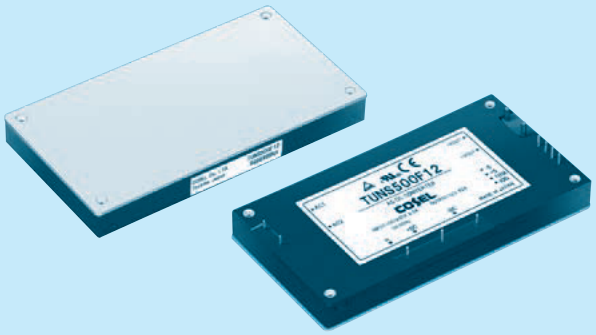
COSEL AC-DC Power Supplies Bus Converter·Power Module Type

TUNS500F

Ordering information

TUN	S	500	F	48	-□
①	②	③	④	⑤	⑥



①Series name
②Single output
③Output wattage
④Universal Input
⑤Output voltage
⑥Optional
T : with Mounting hole (φ3.4 thru)
Y1: Outputvoltage adjustment range ±20% (Only 48V)
R1: with Remote ON/OFF
R2: with Remote ON/OFF (Low standby power)

✻Avoid short circuit between +BC/R and -BC. It may cause the failure of inside components.
✻Keep TRM open, if output voltage adjustment is not necessary.
✻If remote sensing is not necessary, connect between +Vout & +S and between -Vout & -S.

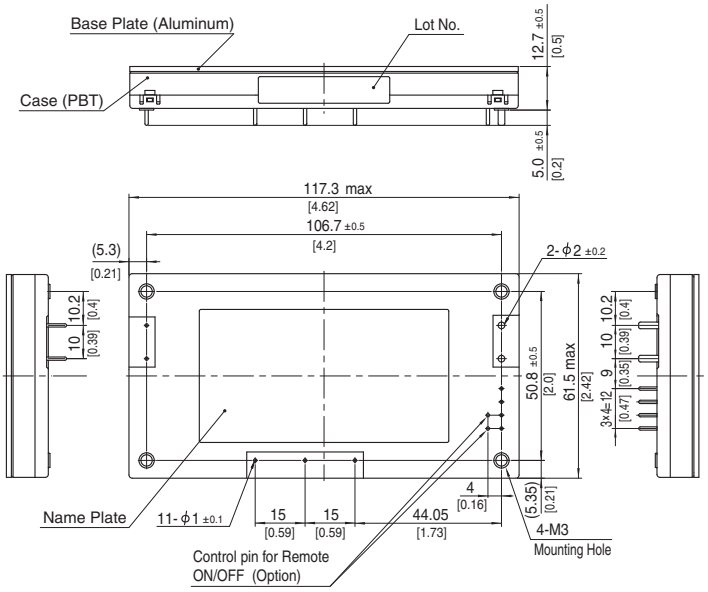
MODEL	TUNS500F12	TUNS500F28	TUNS500F48
MAX OUTPUT WATTAGE[W]	504	504	504
DC OUTPUT	12V 42A (Peak 55A)	28V 18A (Peak 24A)	48V 10.5A (Peak 14A)

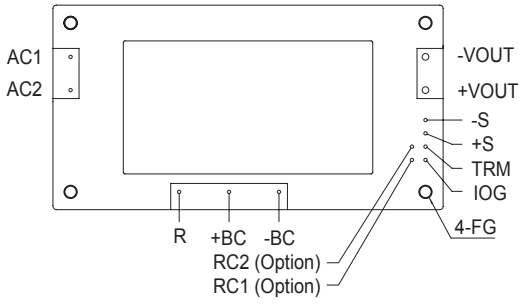
SPECIFICATIONS

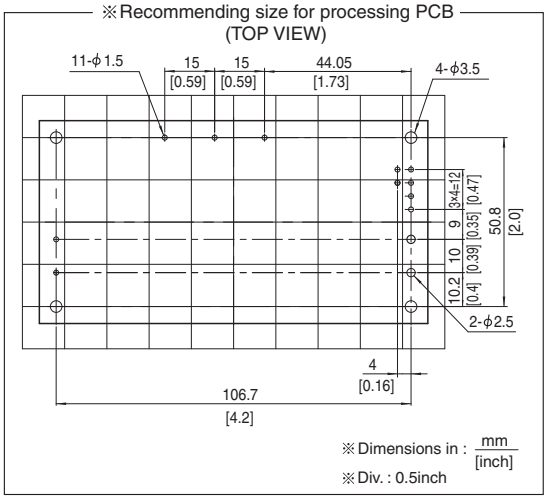
	MODEL		TUNS500F12	TUNS500F28	TUNS500F48
INPUT	VOLTAGE[V]		AC85 - 264 1φ		
	CURRENT[A]	ACIN 100V	6.0typ (Io=100%)		
		ACIN 200V	3.0typ (Io=100%)		
	FREQUENCY[Hz]		50/60 (47 - 63)		
	EFFICIENCY[%]	ACIN 100V	84typ	87typ	88typ
		ACIN 200V	86typ	90typ	90.5typ
	POWER FACTOR (Io=100%)	ACIN 100V	0.96typ		
		ACIN 200V	0.93typ		
	INRUSH CURRENT		Limited by external resistance		
	LEAKAGE CURRENT[mA]		0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1)		
OUTPUT	VOLTAGE[V]		12	28	48
	CURRENT[A]	✻3	42 (Peak 55)	18 (Peak 24)	10.5 (Peak 14)
	LINE REGULATION[mV]		24max	56max	96max
	LOAD REGULATION[mV]		24max	56max	96max
	RIPPLE[mVp-p]	0 to +100℃ ✻1	120max	180max	250max
		-40 to 0℃ ✻1	150max	200max	300max
	RIPPLE NOISE[mVp-p]	0 to +100℃ ✻1	150max	200max	300max
		-40 to 0℃ ✻1	200max	300max	450max
	TEMPERATURE REGULATION[mV]	0 to +65℃	120max	280max	480max
		-40 to +100℃	240max	560max	960max
	DRIFT[mV]	✻2	40max	90max	180max
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		Fixed (TRM pin open), adjustable by external resistor or external signal		
			9.60 - 14.40	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.6)
	OUTPUT VOLTAGE SETTING[V]		11.91 - 12.29	27.56 - 28.44	47.24 - 48.76
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 101% of peak current and recovers automatically		
	OVERVOLTAGE PROTECTION[V]		15.00 - 16.80	35.00 - 39.20	55.20 - 64.80 (-Y1 Option : 60.0 - 67.2)
	REMOTE SENSING		Provided		
	REMOTE ON/OFF		Optional (External power supply is required)		
ISOLATION	INPUT-OUTPUT · RC	✻5	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)		
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)		
	OUTPUT · RC-FG	✻5	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)		
	OUTPUT-RC	✻5	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15℃)		
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +100℃ (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max		
	STORAGE TEMP.,HUMID.AND ALTITUDE		-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max		
	VIBRATION		10 - 55Hz, 49.0m/s² (5G), 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		
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2 (Class A) ✻4		
OTHERS	CASE SIZE/WEIGHT		117.3×12.7×61.5mm [4.62×0.5×2.42 inches] (W×H×D) / 190g max		
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)		

✻1 Refer to instruction manual for measuring method of electric characteristics.
✻2 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.
✻3 ( ) means peak current. Avoid operating with peak current continuously. It may cause failure of the components inside the product. There are limitation of available condition of the peak current, such as peak time, duty etc. (Refer to the instruction manual in detail.)
✻4 Please contact us about another class.
✻5 "RC" is applicable when remote control (optional) is added.

External view







※Tolerance : ±0.3 [±0.012]
※Weight : 190g max
※Dimensions in mm, [ ]=inches
※Mounting hole screwing torque : 0.49N・m (5.0kgf・cm) max