Ordering information **COSEL** AC-DC Power Supplies Bus Converter Power Module Type **TUNS50F** 50 F 05 TUN 2 1 Series name
 Single output
 Output wattage
 Universal Input \*Providing heat sink as option **RoHS** 5 Output voltage (a) Optional T : with Mounting hole  $(\phi 3.4 \text{ thru})$ eco 1

\*Avoid short circuit between +BC and -BC. It may cause the failure of inside components. \*Keep TRM open, if output voltage adjustment is not necessary.

MODEL	TUNS50F05	TUNS50F12	TUNS50F24
MAX OUTPUT WATTAGE[W]	50.0	50.4	50.4
DC OUTPUT	5V 10A	12V 4.2A	24V 2.1A

SPECIFICATION	IS
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			TUNS50F05	TUNS50F12	TUNS50F24		
	VOLTAGE[V]		AC85 - 264 1 $\phi$ (Please refer to the i	AC85 - 264 1 ¢ (Please refer to the instruction manual, 6.5 Derating)			
		ACIN 100V	0.67typ (lo=100%)				
	CURRENT[A] ACIN 200V		0.35typ (lo=100%)				
	FREQUENCY[Hz]		50/60 (47 - 63)				
NIBUT		ACIN 100V	79typ	83typ	84typ		
INPUT	EFFICIENCY[%]	ACIN 200V	81typ	84typ	86typ		
		ACIN 100V	0.95typ				
	POWER FACTOR (lo=100%)	ACIN 200V	0.90typ				
	INRUSH CURRENT		Limited by external components (The	ermistor)			
	LEAKAGE CURREN	T[mA]	0.75max (ACIN 240V 60Hz, lo=100%	6, According to IEC60950-1)			
	VOLTAGE[V]		5	12	24		
	CURRENT[A]		10	4.2	2.1		
	LINE REGULATION	mV]	10max	24max	48max		
	LOAD REGULATION	[mV]	10max	24max	48max		
		0 to +100℃*1	80max	120max	120max		
	RIPPLE[mVp-p]	-40 to 0℃ *1	120max	150max	150max		
		0 to 15% Load * 1	200max	280max	380max		
OUTDUT	RIPPLE NOISE[mVp-p]	0 to +100℃*1	120max	150max	150max		
OUTPUT		-40 to 0°C *1	200max	200max	250max		
		0 to 15% Load * 1	280max	360max	460max		
	TEMPERATURE REGULATION[mV]	0 to +65℃	50max	120max	240max		
		-40 to +100℃	100max	240max	480max		
	DRIFT[mV]	*2	20max	40max	90max		
	OUTPUT VOLTAGE ADJUSTMEN		Fixed (TRM pin open), adjustable by external resistor or external signal				
	OUTPUT VOLIAGE ADJUSTINE		4.50 - 6.00	10.80 - 13.20	21.60 - 26.40		
	OUTPUT VOLTAGE SET	TING[V]	4.97 - 5.13	11.91 - 12.29	23.62 - 24.38		
	OVERCURRENT PROT	ECTION	Works over 105% of rating and recovers automatically				
PROTECTION		CTION[V]	6.30 - 7.00	13.90 - 16.35	27.60 - 32.40		
CIRCUIT AND OTHERS	REMOTE SENSING		Not provided				
OTTIENS	REMOTE ON/OFF		Not provided				
	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)				
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15°C)				
	OPERATING TEMP., HUMID.AND	ALTITUDE	-40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) ma				
ENVIRONMENT	STORAGE TEMP., HUMID.AND	ALTITUDE	-40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max				
ENVIRONMENT	VIBRATION		10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT		196.1m/s <sup>2</sup> (20G), 11ms, once each a	long X, Y and Z axis			
SAFETY AND	AGENCY APPROVAL	LS	UL60950-1, C-UL (CSA60950-1), EN	160950-1, EN50178			
NOISE REGULATIONS	HARMONIC ATTENU	JATOR	Complies with IEC61000-3-2 (Class	A) *3			
OTHERS	CASE SIZE/WEIGHT		58.4×12.7×37.3mm [2.3×0.5×1.4	7 inches] (W×H×D) / 80g max			
ULLERS	COOLING METHOD		Conduction cooling (e.g. heat radiation	on from the aluminum base plate to th	e attached heat sink)		

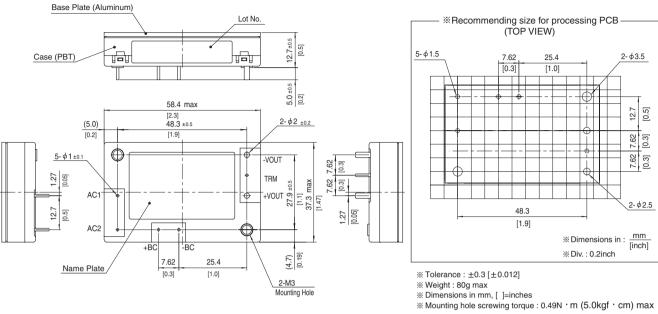
\*1 Refer to instruction manual for measuring method of electric characteristics.

Point 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. Please contact us about another class.

\*2 \*3



### **External view**



Ordering information **COSEL** AC-DC Power Supplies Bus Converter Power Module Type **TUNS100F** 100 F 05 S TUN 3 2 1 Series name
 Single output
 Output wattage
 Universal Input \*Providing heat sink as option **RoHS** 5 Output voltage Optional
 T : with Mounting hole  $(\phi 3.4 \text{ thru})$ A . Nu (E

\*Avoid short circuit between +BC and -BC. It may cause the failure of inside components. \*Keep TRM open, if output voltage adjustment is not necessary.

TUNS 100F05 COSEL

\*If remote sensing is not necessary, connect between +Vout & +S and between -Vout & -S.

MODEL	TUNS100F05	TUNS100F12	TUNS100F24
MAX OUTPUT WATTAGE[W]	100.0	100.8	100.8
DC OUTPUT	5V 20A	12V 8.4A	24V 4.2A

### **SPECIFICATIONS**

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	MODEL		TUNS100F05	TUNS100F12	TUNS100F24		
	VOLTAGE[V]		AC85 - 264 1 $\phi$ (Please refer to the instruction manual, 6.5 Derating)				
		ACIN 100V	1.3typ (lo=100%)				
	CURRENT[A]	ACIN 200V	0.7typ (lo=100%)				
INPUT	FREQUENCY[Hz]		50/60 (47 - 63)				
		ACIN 100V	82typ	83typ	84typ		
	EFFICIENCY[%]	ACIN 200V	85typ	85typ	86typ		
		ACIN 100V	0.95typ				
	POWER FACTOR (Io=100%)	ACIN 200V	0.90typ				
	· · · · · · · · · · · · · · · · · · ·		Limited by external components (The	rmistor)			
	LEAKAGE CURREN	T[mA]	0.75max (ACIN 240V 60Hz, lo=100%, According to IEC60950-1)				
	VOLTAGE[V]		5	12	24		
	CURRENT[A]		20	8.4	4.2		
	LINE REGULATION	mV]	10max	24max	48max		
	LOAD REGULATION	[mV]	10max	24max	48max		
		0 to +100℃*1	80max	120max	120max		
RIF	RIPPLE[mVp-p]	-40 to 0°C *1	120max	150max	150max		
		0 to 15% Load *1	160max	240max	240max		
		0 to +100℃*1	120max	150max	150max		
OUTPUT RIPPLE NOISE[m	RIPPLE NOISE[mVp-p]	-40 to 0°C *1	200max	200max	250max		
		0 to 15% Load *1	240max	300max	300max		
		0 to +65°C	50max	120max	240max		
	TEMPERATURE REGULATION[mV]	-40 to +100℃	100max	240max	480max		
	DRIFT[mV]	*2	20max	40max	90max		
		TRANSFOR	Fixed (TRM pin open), adjustable by	external resistor or external signal			
	OUTPUT VOLTAGE ADJUSTMEN	II RANGE[V]	4.50 - 6.00	10.80 - 13.20	21.60 - 26.40		
	OUTPUT VOLTAGE SET	TING[V]	4.97 - 5.13	11.91 - 12.29	23.62 - 24.38		
	OVERCURRENT PROT	ECTION	Works over 105% of rating and recov	ers automatically			
PROTECTION	OVERVOLTAGE PROTEC	CTION[V]	6.30 - 7.00	13.90 - 16.35	27.60 - 32.40		
CIRCUIT AND OTHERS	REMOTE SENSING		Provided				
UTILING	REMOTE ON/OFF		Not provided				
	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)				
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 1	I0mA, DC500V 50MΩ min (20±15℃)			
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)				
	OPERATING TEMP., HUMID. AND	ALTITUDE	-40 to +100°C (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°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max				
ENVIRONMENT	VIBRATION		10 - 55Hz, 49.0m/s² (5G), 3minutes p	eriod, 60minutes each along X, Y and	Z axis		
	IMPACT		196.1m/s <sup>2</sup> (20G), 11ms, once each al	ong X, Y and Z axis			
SAFETY AND	AGENCY APPROVAL	LS	UL60950-1, C-UL (CSA60950-1), EN	60950-1, EN50178			
NOISE REGULATIONS	HARMONIC ATTENU	JATOR	Complies with IEC61000-3-2 (Class /	<b>A) *</b> 3			
OTUEDO	CASE SIZE/WEIGHT		58.4×12.7×61.0mm [2.3×0.5×2.4	inches] (W×H×D) / 120g max			
OTHERS	COOLING METHOD		Conduction cooling (e.g. heat radiatio	on from the aluminum base plate to the	attached heat sink)		

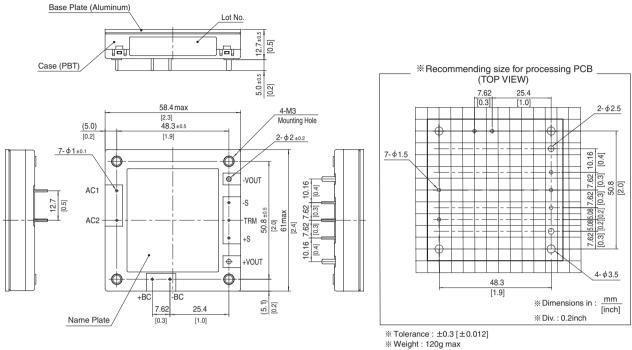
\*1 Refer to instruction manual for measuring method of electric characteristics.

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. \*2

\*3 Please contact us about another class.

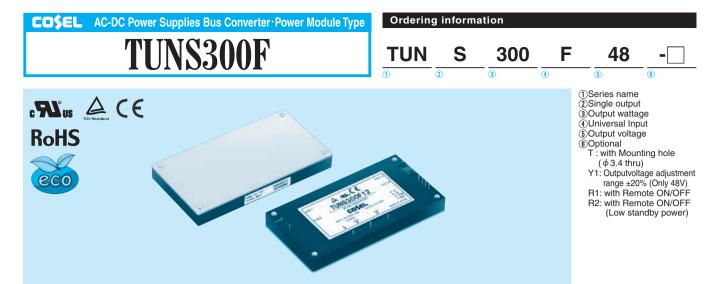
TUNS100F | COŞEL

### **External view**



\* Dimensions in mm, [ ]=inches

\* Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max



\*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	TUNS300F12	TUNS300F28	TUNS300F48
MAX OUTPUT WATTAGE[W]	300	308	312
DC OUTPUT	12V 25A	28V 11A	48V 6.5A

### **SPECIFICATIONS**

	MODEL		TUNS300F12	TUNS300F28	TUNS300F48		
	VOLTAGE[V]		AC85 - 264 1 φ				
	CURRENT[A]	ACIN 100V	3.6typ (lo=100%)				
-	CONNENT[A]	ACIN 200V	1.8typ (lo=100%)				
	FREQUENCY[Hz]		50/60 (47 - 63)				
	EFFICIENCY[%]	ACIN 100V	84typ	87typ	87typ		
INPUT		ACIN 200V	86typ	89typ	90typ		
		ACIN 100V	0.96typ	·	·		
Ļ	POWER FACTOR (lo=100%)	ACIN 200V	0.93typ				
Γ	INRUSH CURRENT		Limited by external resistance				
	LEAKAGE CURREN	T[mA]	0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1)				
1	VOLTAGE[V]		12	28	48		
	CURRENT[A]		25	11	6.5		
	LINE REGULATION[mV]		24max	56max	96max		
	LOAD REGULATION		24max	56max	96max		
F		0 to +100℃*1	120max	180max	250max		
	RIPPLE[mVp-p]	-40 to 0°C *1	150max	200max	300max		
		0 to +100℃*1	150max	200max	300max		
OUTPUT	RIPPLE NOISE[mVp-p]	-40 to 0°C *1	200max	300max	450max		
	TEMPERATURE REGULATION[mV]	0 to +65°C	120max	280max	480max		
		-40 to +100℃	240max	560max	960max		
-	DRIFT[mV]	*2	40max	90max	180max		
-	•••		Fixed (TRM pin open), adjustable by external resistor or external signal				
	OUTPUT VOLTAGE ADJUSTMEN	IT RANGE[V]	9.60 - 14.40	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.6		
-	OUTPUT VOLTAGE SET	TING[V]	11.91 - 12.29	27.56 - 28.44	47.24 - 48.76		
	OVERCURRENT PROT		Works over 105% of rating and recov				
PROTECTION	OVERVOLTAGE PROTEC		15.00 - 16.80	35.00 - 39.20	55.20 - 64.80 (-Y1 Option : 60.0 - 67.2		
CIRCUIT AND	REMOTE SENSING		Provided				
OTHERS	REMOTE ON/OFF		Optional (External power supply is required)				
	INPUT-OUTPUT · RC	*4		I0mA, DC500V 50MΩ min (20±15℃)			
-	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15°C)				
	OUTPUT · RC-FG	*4	AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15 $\degree$ )				
-	OUTPUT-RC	*4	AC100V 1minute, Cutoff current = 10	, , , , , , , , , , , , , , , , , , , ,	· ·		
	OPERATING TEMP., HUMID. AND	ALTITUDE					
	STORAGE TEMP., HUMID.AND		$-40$ to $+100^{\circ}$ C, 20 - 95% RH (Non condensing), 9,000m (30,000 feet) max				
ENVIRONMENT ⊢	VIBRATION		10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 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				
	AGENCY APPROVAL	S	UL60950-1, C-UL (CSA60950-1), EN				
	HARMONIC ATTENU		Complies with IEC61000-3-2 (Class A				
	CASE SIZE/WEIGHT			2.42 inches] (W×H×D) / 190g max			
OTHERS	CASE SIZE/WEILIN						

Refer to instruction manual for measuring method of electric characteristics. \*1

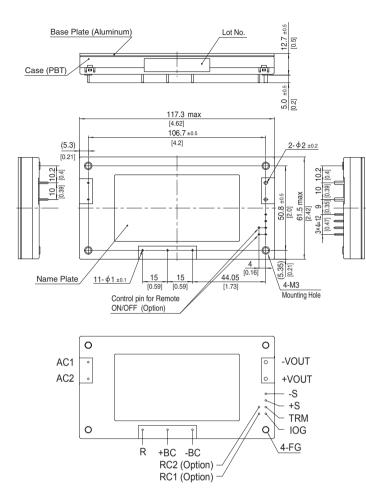
**\***2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

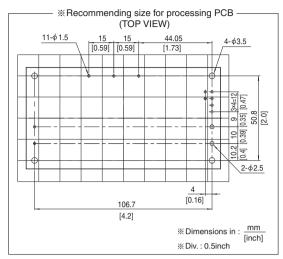
\*3 \*4

Please contact us about another class. "RC" is applicable when remote control (optional) is added.



### **External view**



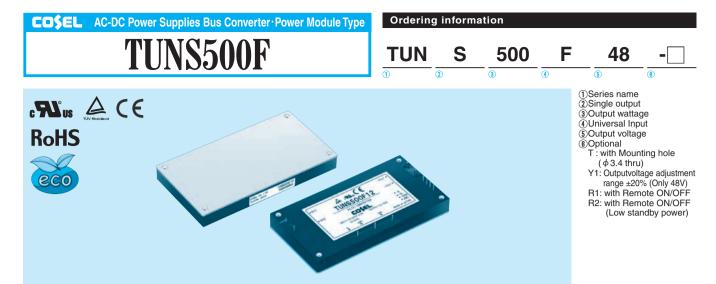


% Tolerance : ±0.3 [±0.012]

% Weight : 190g max

% Dimensions in mm, [ ]=inches

% Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max



\*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		
	VOLTAGE[V]		AC85 - 264 1 ¢				
	CURRENT[A]	ACIN 100V	6.0typ (lo=100%)				
INPUT I	CONNENT[A]	ACIN 200V	3.0typ (lo=100%)				
	FREQUENCY[Hz]		50/60 (47 - 63)				
	EFFICIENCY[%]	ACIN 100V	84typ	87typ	88typ		
		ACIN 200V	86typ	90typ	90.5typ		
	POWER FACTOR (lo=100%)	ACIN 100V	0.96typ				
	FOWER FACTOR (IU=100%)	ACIN 200V	0.93typ				
	INRUSH CURRENT		Limited by external resistance				
			0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1)				
	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		
		0 to +100℃*1	120max	180max	250max		
	RIPPLE[mVp-p]	-40 to 0°C *1	150max	200max	300max		
OUTPUT		0 to +100℃*1	150max	200max	300max		
OUIPUI	RIPPLE NOISE[mVp-p]	-40 to 0°C *1	200max	300max	450max		
	TEMPERATURE REGULATION[mV]	0 to +65°C	120max	280max	480max		
		-40 to +100℃	240max	560max	960max		
	DRIFT[mV] *2		40max	90max	180max		
			Fixed (TRM pin open), adjustable by external resistor or external signal				
	OUTPUT VOLTAGE ADJUSTMEN	II KANGE[V]	9.60 - 14.40	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.		
	OUTPUT VOLTAGE SET	TING[V]	11.91 - 12.29	27.56 - 28.44	47.24 - 48.76		
	OVERCURRENT PROT	ECTION	Works over 101% of peak current and	d recovers automatically			
PROTECTION	OVERVOLTAGE PROTEC	CTION[V]	15.00 - 16.80	35.00 - 39.20	55.20 - 64.80 (-Y1 Option : 60.0 - 67.		
CIRCUIT AND OTHERS	REMOTE SENSING		Provided		- <u>-</u>		
UTHENS	REMOTE ON/OFF		Optional (External power supply is required)				
	INPUT-OUTPUT · RC	*5	AC3,000V 1minute, Cutoff current = 1	I0mA, DC500V 50MΩ min (20±15℃)			
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15°C)				
ISOLATION	OUTPUT · RC-FG	*5	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)				
	OUTPUT-RC	*5					
	OPERATING TEMP., HUMID. AND	ALTITUDE					
	STORAGE TEMP., HUMID. AND	ALTITUDE	-40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max				
ENVIRONMENT	VIBRATION		10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 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	AGENCY APPROVAL	S	UL60950-1, C-UL (CSA60950-1), EN	60950-1			
	HARMONIC ATTENU	ATOR	Complies with IEC61000-3-2 (Class A				
0711500	CASE SIZE/WEIGHT		117.3×12.7×61.5mm [4.62×0.5×2	2.42 inches] (W×H×D) / 190g max			
OTHERS	COOLING METHOD		Conduction cooling (e.g. heat radiatio	n from the aluminum base plate to the	e attached heat sink)		

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°C, with the input voltage held constant at the rated input/output.

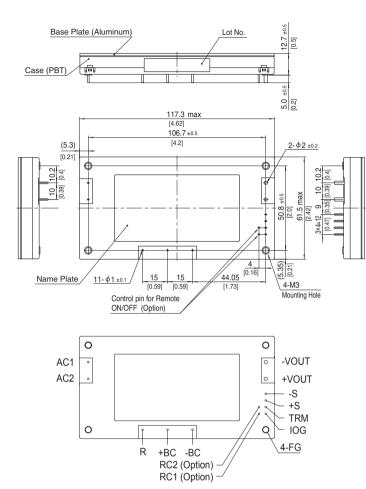
() means peak current. Avoid operating with peak current continuously. It may cause failure of the components inside the product. There are limitation of available condition of the peak current, such as peak time, duty etc. (Refer to the instruction manual in detail.) \*3

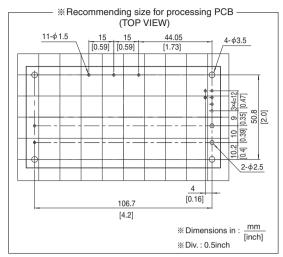
Please contact us about another class

**\***4 **\***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

**COŞEL** AC-DC Power Supplies Bus Converter Power Module Type

Ordering information

# **TUNS700F**

**.** 

## TUN S 700 F 48

() Series name (2) Single output (3) Output wattage (4) Universal Input (5) Output voltage (6) Optional T : with Mounting hole ( $\phi$ 3.4 thru) Y1: Outputvoltage adjustment range ±20% (Only 48V) R1: with Remote ON/OFF R2: with Remote ON/OFF

R2: with Remote ON/OFF (Low standby power) P: Parallel operation (Output voltage variable,

Remote sensing disabled)



\*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 |TUNS700F12 |TUNS700F28

MODEL	TUNS700F12	TUNS700F28	TUNS700F48
MAX OUTPUT WATTAGE[W]	700.8	700.0	700.8
DC OUTPUT	12V 58.4A	28V 25A	48V 14.6A

### **SPECIFICATIONS**

	MODEL		TUNS700F12	TUNS700F28	TUNS700F48			
	VOLTAGE[V]		AC85 - 264 1 φ	·				
		ACIN 100V	8.6typ (lo=100%)					
	CURRENT[A]	ACIN 200V	4.1typ (lo=100%)					
-	FREQUENCY[Hz]		50/60 (47 - 63)					
INPUT	EFFICIENCY[%]	ACIN 100V	83typ	86typ	87typ			
INPUT	EFFICIENC [%]	ACIN 200V	86typ	89typ	90typ			
	POWER FACTOR	ACIN 100V						
	(lo=100%)	ACIN 200V	0.93typ					
	INRUSH CURRENT LEAKAGE CURRENT[mA]		Limited by external resistance					
			0.75max (ACIN 240V 60Hz, lo=100%	0.75max (ACIN 240V 60Hz, lo=100%, According to IEC60950-1)				
	VOLTAGE[V]		12	28	48			
	CURRENT[A]		58.4	25	14.6			
	LINE REGULATION[	mV]	24max	56max	96max			
LOAD REGULAT	LOAD REGULATION	[mV]	24max	56max	96max			
	RIPPLE[mVp-p]	0 to +100℃*1	120max	180max	250max			
	nieerefiii.sh-hì	-40 to 0°C *1	150max	200max	300max			
OUTPUT	RIPPLE NOISE[mVp-p]	0 to +100°C * 1	150max	200max	300max			
OUIPUI	hipple NOISeliinAb-bì	-40 to 0°C *1	200max	300max	450max			
	TEMPERATURE REGULATION[mV]	0 to +65°C	120max	280max	480max			
		-40 to +100℃	240max	560max	960max			
	DRIFT[mV]	*2	40max	90max	180max			
	OUTPUT VOLTAGE ADJUSTMEN	Т	Fixed (TRM pin open), adjustable by	external resistor or external signal				
	RANGE[V]		9.60 - 14.40	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.6)			
	OUTPUT VOLTAGE SET		11.91 - 12.29	27.56 - 28.44	47.24 - 48.76			
PROTECTION	OVERCURRENT PROT	ECTION	Works over 105% of rating and recover	ers automatically				
PROTECTION	OVERVOLTAGE PROTEC	TION[V]	15.00 - 16.80	35.00 - 39.20	55.20 - 64.80 (-Y1 Option : 60.0 - 67.2)			
CIRCUIT AND OTHERS	REMOTE SENSING		Provided					
UITERS	REMOTE ON/OFF		Optional (External power supply is real	quired)				
MODEL			TUNS700F12-P	TUNS700F28-P	TUNS700F48-P			
MAX OUTPL	JT WATTAGE[W]		700.8	700.0	700.8			
DC OUTPUT			12V 58.4A	28V 25A	48V 14.6A			

### **SPECIFICATIONS**

	MODEL		TUNS700F12-P	TUNS700F28-P	TUNS700F48-P
	VOLTAGE[V]		AC85 - 264 1 φ	· · · · · · · · · · · · · · · · · · ·	·
CURRENT[A] FREQUENCY[H:		ACIN 100V	8.6typ (lo=100%)		
	CORRENT[A]	ACIN 200V	4.1typ (lo=100%)		
	FREQUENCY[Hz]		50/60 (47 - 63)		
		ACIN 100V	83typ	86typ	87typ
INPUT	EFFICIENCY[%]	ACIN 200V	86typ	89typ	90typ
	POWER FACTOR	ACIN 100V	0.96typ		
	(Io=100%) ACIN 200		0.93typ		
INRUSH CURREN		Т	Limited by external resistance		
		ENT[mA]	0.75max (ACIN 240V 60Hz, lo=10	00%, According to IEC60950-1)	
	VOLTAGE[V]		12	28	48
	CURRENT[A]		58.4	25	14.6
	VOLTAGE ACCUR	ACY[%]	+5, -3	+5, -3	+5, -3
		0 to +100℃ *1	240max	360max	600max
OUTPUT	RIPPLE[mVp-p]	-40 to 0°C *1	300max	400max	700max
		0 to +30% Load *1	360max	540max	900max
		0 to +100℃ *1	300max	400max	700max
	RIPPLE NOISE[mVp-p]	-40 to 0°C *1	400max	600max	1000max
		0 to +30% Load *1	450max	600max	1000max
PROTECTION	OVERCURRENT PR	OTECTION	Works over 105% of rating and re	covers automatically	
CIRCUIT AND	OVERVOLTAGE PROT	ECTION[V]	15.00 - 16.80	35.00 - 39.20	55.20 - 64.80
OTHERS	<b>REMOTE ON/OFF</b>		Optional (External power supply i	s required)	



### **GENERAL SPECIFICATIONS**

ISOLATION	INPUT-OUTPUT · RC *4	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15°C)
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15°C)
	OUTPUT · RC-FG *4	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)
	OUTPUT-RC *4	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15℃)
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-40 to +100°C (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°C, 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/s <sup>2</sup> (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) *3
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)

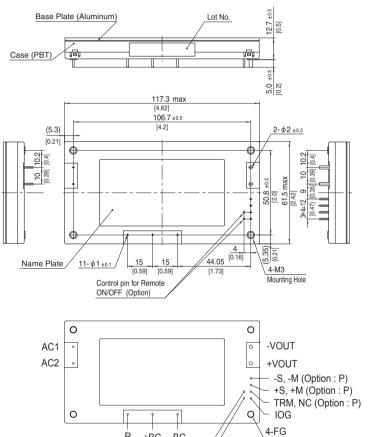
\*1

Refer to instruction manual for measuring method of electric characteristics. 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. \*2

\*3 Please contact us about another class.

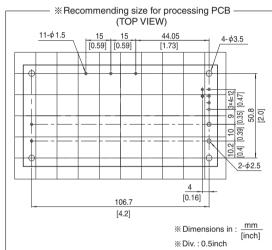
"RC" is applicable when remote control (optional) is added. \*4

#### **External view**



R

+BC -BC RC2 (Option : R1/R2) RC1 (Option : R1/R2)



% Tolerance : ±0.3 [±0.012]

% Weight : 190g max

\* Dimensions in mm, [ ]=inches

\* Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max