



AC-DC Power Supplies Telco 400

AC-DC CONVERTERS



Core Technology's Telco 400 provides up to 400 Watts in a compact, very low-profile form factor. Auto-Ranging input, Battery back-up input and thermal shutdown with auto recovery are standard. The Telco 400 provides a maximum of 400 watts to a single output. Dual outputs may be used (up to 100W on second output). DC and AC power status LED's are provided, along with an AC-good monitor contact. Available output voltages include 12, 15, 24, 28, and 48 VDC. All connectors are accessed from the top. The Telco 400 is housed in a rugged conduction cooled aluminum housing with a 0.25" thick base-plate for mounting.

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PRODUCT FEATURES

- Auto Ranging Input
- Compact Rugged Package
(6.9"W x 11.25"L x 2.25"H)
- Output Voltage Available From
5Vdc to 48Vdc
- Output voltage Adjustment From 70% to
110% nominal (adjust from top of unit)
- OVP Protection
- Over Current/Short Circuit Protected
- Over-temperature Shutdown
(With Auto Recovery)
- Battery Back-up Input
- Low Noise Outputs
- High Base-plate operating temperature
- All connectors Accessible From Top of Unit
- Keyed Locking Input and output Connectors
- Low Voltage disconnect
- Glitch free battery switch-over
- UL and CSA Approvals(Pending on some units)

OVER-TEMPERATURE SHUTDOWN

The Telco 400 will automatically shut down in the event of an over-temperature condition, and will recover when the base-plate reaches a safe operating temperature.

AC INPUT

Autoranging 90-132VAC / 180-264VAC

OUTPUT INDICATORS

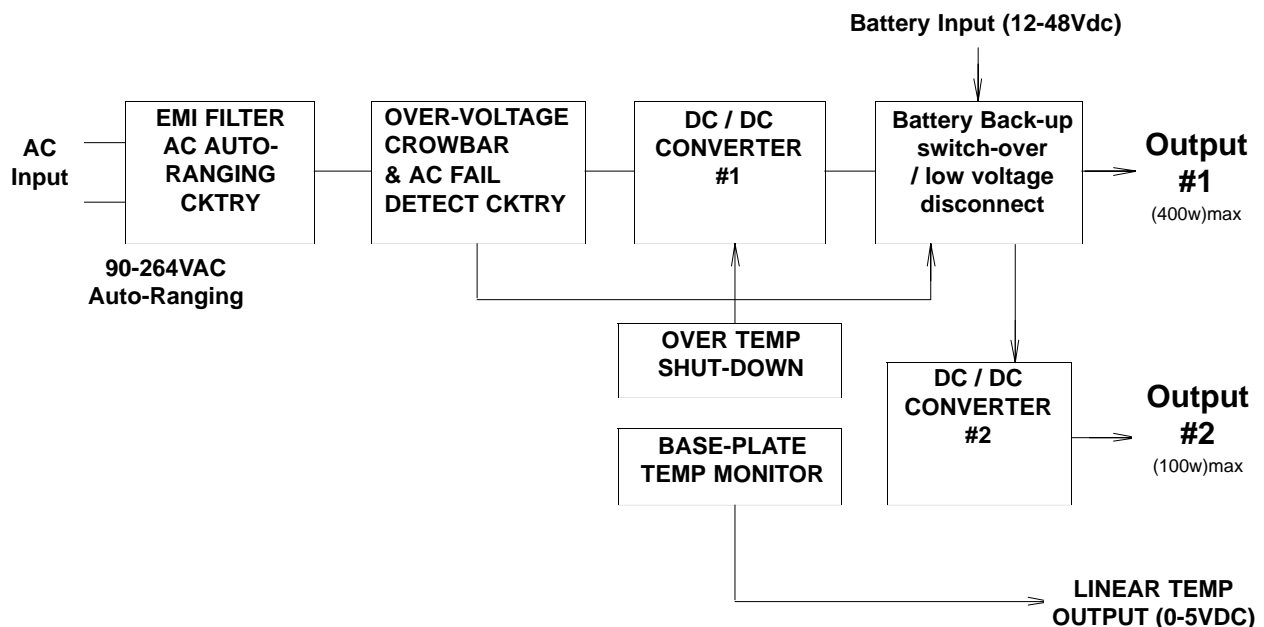
AC and DC good indicators ("AC good relay contact)

OPTIONAL HEATSINK

An optional heat sink which can be mounted to the base-plate is available.

TELCO 400 BLOCK DIAGRAM

FIGURE 1



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ELECTRICAL SPECIFICATIONS - Output #1 AND #2

Parameter	Symbol	Units						
Nominal Output Voltage	Vo	Vdc	12	15	24	26	28	48
Typical Efficiency *1	η_{eff}	%	80	81	82	83	84	84
Max Ripple & Noise	Vpp	mv	<1%	<1%	<1%	<1%	<1%	<1%
Output Voltage Accuracy	-	%	≤ 1%					
Voltage Adjustment Range	-	%	70% to 110% of Nominal output					
Maximum Line Regulation*3	-	%	≤ 0.5%					
Maximum Load Regulation*2	-	%	≤ 1.0 %					
Current Limit Type	-	%	Straight Line w/ auto Recovery					
Over Current Protection	-	%	105% - 120% of full load I_{Out}					
Overvoltage Protection	-	%	118% - 125% of nominal output					
Over-Temperature Shutdown	Tsd	celsius	+85°C - (± 5°C) (Base-plate) Auto Recovering *4					
Over temp Shutdown Hysteresis	Thy	celsius	10°C - 15°C					
Transient Response	Tr	μ sec	250 USec (20% - 80% load Step)					
Hold Up Time	T-hold	μ sec	20ms (minimum)					

ELECTRICAL SPECIFICATIONS - Input

Parameter	Symbol	Units	
Input Voltage Range	Vin	Vac	90 to 132VAC / 180 to 264VAC (Auto Ranging)
Isolation (Input to Output)	$V_{I/O}$	Vdc	3000
Isolation (Input to Case)	$V_{I/C}$	Vdc	1500
Isolation (Output to Case)	$V_{O/C}$	Vdc	500
battery back-up input	VDC in	Vdc	18 - 36 or 36 - 72

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Units							
Maximum Output Power *5	P-out	Watts	400	400	400	400	400	400	
Maximum Output Current *5	I-out	Amps	33.33	26.67	16.67	15.35	14.3	8.33	
Maximum Input Volts	Vin	VAC	264						
Base Plate Temperature	TBP	°C	-30°C to 80°C				*4 (-40°C to 90°C)		
Storage Temperature	TST	°C	-40°C to 110°C						

*1 75% of Max I.(from input to output of Dc/Dc converter)

*2 From no-load to Full Load.

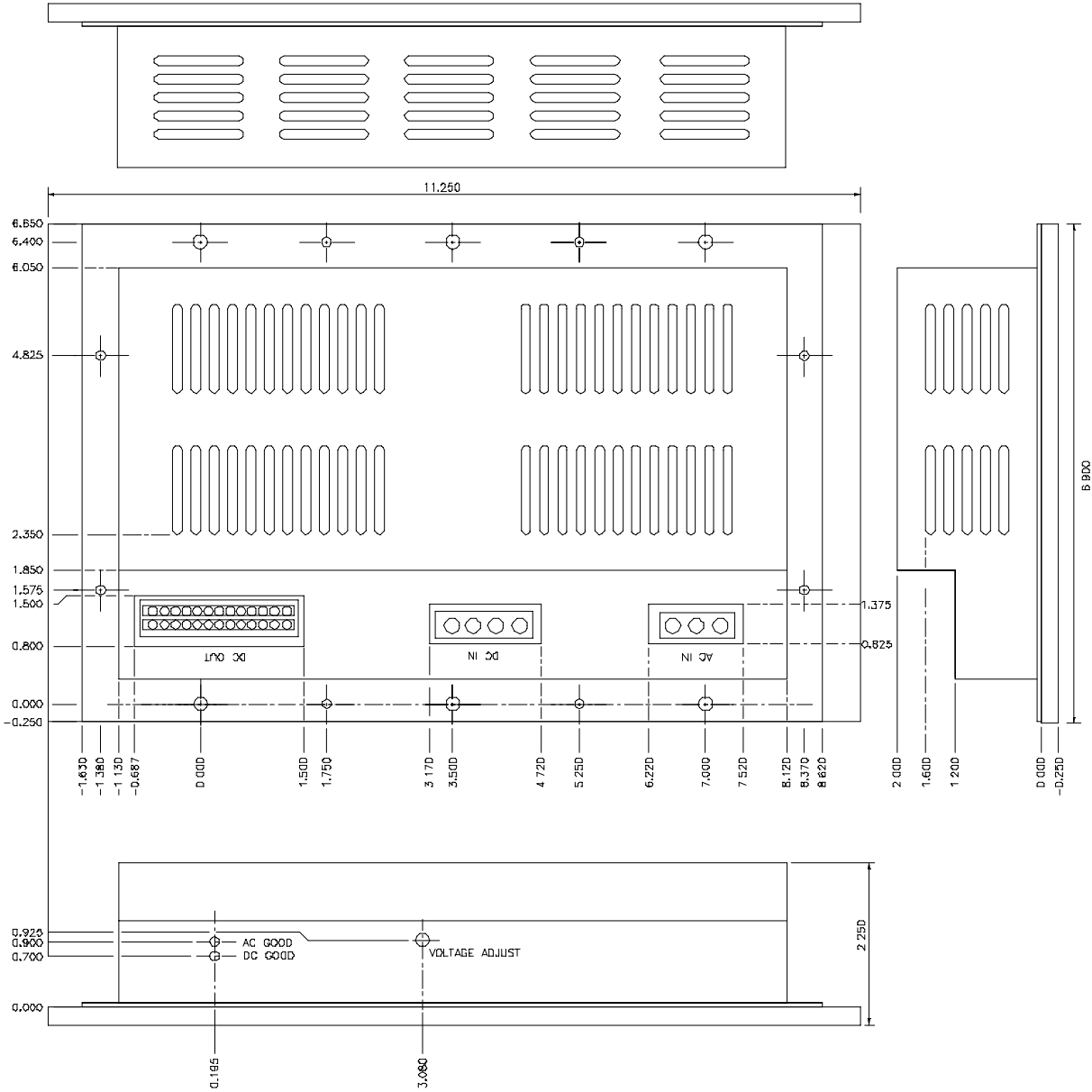
*3 From Min input to Max input voltage.

*4 Consult factory for wider operating temperature range.

*5 Output #1 has a maximum of 400 Watts output #2 has a maximum of 100 Watts. If combined the total output power is 400watts max.

NOTE - CONSULT FACTORY FOR ADDITIONAL OUTPUTS AND HIGHER POWER CAPABILITY.

FIGURE 2



Ordering Information

**Part Numbering Scheme for
TELCO 400 series AC-to-DC Power Supply**

TYPE	VOUT #1	VOUT#2	POWER #1	POWER #2	NOTES
TELCO	12 Vdc 15 Vdc 24 Vdc 26 Vdc 28 Vdc	05 Vdc 12 Vdc 15 Vdc	200 Watts 300 Watts	25 Watts 50 Watts 75 Watts 100 Watts	Total combined output power must be 400 watts or less.
TELCO-	A B	C D	E F G	H I J	

NOTE - CONSULT FACTORY FOR ADDITIONAL OUTPUTS AND HIGHER POWER CAPABILITY.

EXAMPLE - To order a Telco 400 series Converter with output #1 @24Vdc and 300 watts and output #2 @ 12Vdc and 50 watts, use the following part number.(TELCO-2412-30050).

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