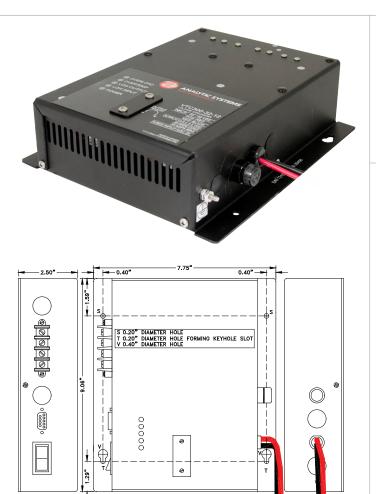


ANALYTIC SYSTEMS

Power Conversion Solutions

DC/DC PRODUCT MODEL

VTC300



Description

This all new single board design incorporates state of the art switchmode technology for unmatched efficiency and ultra-quiet operation.

Multiple stages of filtering reduce radiated or conducted noise to very low levels. Extra features include adjustable output voltage, audible and visual indicators for low input voltage, low output voltage, over temperature and overload.

Safety features include reverse input protection, over-temperature shutdown, current limiting, short circuit shutdown, a dry contact alarm relay output and output overvoltage crowbar. Optional features include a remote panel monitoring with On-Off control.

We are confident that you will get many years of reliable service from this Voltage Converter.

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

Design Features

- Adjustable output voltage
- Audible & visual indicators for constant current, low input voltage, low output voltage & over-temperature
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Current limiting protection
- Reverse input protection
- Output over-voltage crowbar
- Dry contact output fail relay
- Remote control option
- Wide Temperature operation Available
- Parallel output diodes available
- Conformal Coating and/or Harsh Environment Ruggedization available
- 3 year parts and labour warranty

Applications

- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls (OEM Applications)
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Backup Power (UPS)

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

DC/DC MODEL PRODUCT VTC300

Index MonisorVIC 200-27-7VIC 200-20-24Input Arons (no.)20 - 4530 - 45Input Arons (no.)25 A	Electrical (Input)			
Inout Amps (max) 20 22 Inout See IAGC) 25A	Model Number	VTC300-32-12	VTC300-32-24	
Input Fuse (ABC) 25A Noise on Input <25 mV	Input Volts (DC)	20 - 45	30 - 45	
Noise on Input <25 mV	Input Amps (max)	20	22	
Radia Compute Control Electrical (Output) 12 24 Duput Writs (DC) 13.8 ± 0.05 27.2 ± 0.05 Duput Vrits (DC) 13.8 ± 0.05 27.2 ± 0.05 Duput Vrits (DC) 25 cont / 35 peak 20 cont / 25 peak Current Linit 77 Anps 27 Anps Duput Downert (A) 25 cont / 35 peak 20 cont / 25 peak Current Linit 77 Anps 27 Anps Duput Downar 16.0 ± 0.5V 32.0 ± 1.0V Duput Ringle & Noise <25 mV	Input Fuse (AGC)	25A		
Butput Nohis (DD) 12 24 Output Nohis (DD) 13.6 ± 0.05 27.2 ± 0.05 Output Current (A) 25 cont / 25 peak 20 cont / 25 peak Output Current (A) 25 cont / 35 peak 20 cont / 25 peak Output Crowdar 16.0 ± 0.5V 32.0 ± 1.0V Output Crowdar <4/td> -10.5% State Duty Cycle Peak 20% for 10 min maximum Continuous 100% for 24 hours per day Efficiency >90% @ Maximum Output Environment Specification - - - - Operating Tamp, Range -25° to +50°C @ maximum output - - Inanidity 0.98% Relation Humidity (mon condensing) with optional conting - - - Audible Noise NDNE Gold 0.3 ft - - - -	Noise on Input	< 25 mV		
Chiquit Nominat Qui 12 24 Output Valus (DC) 136 ± 0.05 27.2 ± 0.05 Output Valus (DC) 136 ± 0.05 27.2 ± 0.05 Output Valus (DC) 25 cont / 25 peak 20 cont / 25 peak Output Valus (DC) 32 Amps 27 Amps Output Current ILinit 37 Amps 27 Amps Output Convotar 18.0 ± 0.5V 32.0 ± 1.0V Output Rights Aloise < 25 mV	Electrical (Output)			
Output Adjustment ± 0.5 Output Current (A) 25 cont / 25 peak Current Linit 37 Amps 27 Amps Output Covobar 16.0 ± 0.5V 32.0 ± 1.0V Output Ripple & Noise < 25 mV	Output Nominal (op)	12	24	
Dutput Current (A) 25 cont / 35 peak 20 cont / 25 peak Current Limit 37 Amps 27 Amps Dutput Crowbar 16.0 ± 0.5V 32.0 ± 1.0V Output Kinghe & Noise <25 mV	Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	
Current Limit 37 Amps 27 Amps Output Crowbar 16.0 ± 0.5V 32.0 ± 1.0V Output Ripple & Noise <25 mV	Output Adjustment	± 0.5		
Output Crowber 16.0 ± 0.5V 32.0 ± 1.0V Output Ripple & Noise <25 mV	Output Current (A)	25 cont / 35 peak	20 cont / 25 peak	
Output Ripple & Noise <25 mV	Current Limit	37 Amps	27 Amps	
Transient Response < 1V for 50% Surge	Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	
Regulation (Line & Load) <+/- 0.5%	Output Ripple & Noise	< 25 mV	< 25 mV	
Duty Cycle Peak 20% for 10 min maximum Continuous 100% for 24 hours per day Efficiency > 90% @ Maximum Output Environment Specification -25° to +50°C @ maximum output Operating Temp. Range -25° to +50°C @ maximum output Derate Linearly. 25% per °C form 50°C (Optional -40°C extra wide temp. operation avail.) Humidity 0 - 95% Relative Humidity (non-condensing) with optional conformal coating Audible Noise NONE @db @ 3 ft Typical Service Life > 10 yrs. (87.600 hrs) Isolation Any Input or Output to Case 500 VDC Input to Output to Case	Transient Response	< 1V for 50% Surge	< 1V for 50% Surge	
Duty Cycle Continuous 100% for 24 hours per day Efficiency > 90% @ Maximum Output Environment Specification -25° to +50°C @ maximum output Operating Temp. Range -25° to +50°C @ maximum output Deprate Lineardy 25% per °C from 50°C (Dytonal -40°C tom 50°C (Dyto	Regulation (Line & Load)	< +/- 0.5%	< +/- 0.5%	
Environment Specification Operating Temp. Range -25° to +50°C @ maximum output Derate Linearly 2.5% per °C from 50°C (Optional -40°C extra wide temp. operation avail.) Humidity 0 - 95% Relative Humidity (non-condensing) with optional conformal coating Audible Noise NONE Ødb @ 3 ft Typical Service Life > 10 yrs. (87,600 hrs) Isolation Any Input or Output to Case 500 VDC Input to Output - Common Negative Mechanical Specification 4.01 yr. (87,600 hrs) Length 9.1 in / 23.1 cm Width 7.8 in / 19.8 cm Height 2.5 in / 6.4 cm Material Marine Grade Aluminium Finish Black Anodize Fastenings All 18-8 Stainless Steel Weight 4.0 lb / 1.8 kg Connections #12 AWG Input Wirrs (Positive & Negative) Four contact output terminal	Duty Cycle			
Operating Temp. Range-25° to +50°C @ maximum output Derate Linearly 2.5% per °C from 50°C (Optional -40°C extra wide temp. operation avail.)Humidity0 - 95% Relative Humidity (non-condensing) with optional conformal coatingAudible NoiseNONE Ødb @ 3 ftTypical Service Life> 10 yrs. (87,600 hrs)IsolationAny Input or Output to Case 500 VDC Input or Output to Output - Common NegativeMechanical Specification9.1 in / 23.1 cmWidth7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Efficiency	> 90% @ Maximum Output	> 90% @ Maximum Output	
Operate Inearly 2.5% per °C from 50°C (Optional -40°C extra wide temp. operation avail.)Humidity0-95% Relative Humidity (non-condensing) with optional conformal coatingAudible NoiseNONE Ødb @ 3 ftTypical Service Life> 10 yrs. (87.600 hrs)IsolationAny Input or Output to Case 500 VDC Input OUtput - Common Negative Marine Grade AluminiumHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack Anodize FasteningsFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Environment Specification			
Huminity(non-condensing) with optional conformal coatingAudible NoiseNONE Ødb @ 3 ftTypical Service Life> 10 yrs. (87,600 hrs)IsolationAny Input or Output to Case 500 VDC Input to Output to Case 500 VDC Input to Output to Case 500 VDC Herein NegativeMechanical Specification9.1 in / 23.1 cmWidth7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Operating Temp. Range	Derate Linearly 2.5% per °C from 5	Derate Linearly 2.5% per °C from 50°C	
Typical Service Life> 10 yrs. (87,600 hrs)IsolationAny Input or Output to Case 500 VDC Input to Output – Common NegativeMechanical SpecificationLength9.1 in / 23.1 cmWidth7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Humidity			
IsolationAny Input or Output to Case 500 VDC Input to Output – Common NegativeMechanical SpecificationLength9.1 in / 23.1 cmWidth7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Audible Noise	NONE Ødb @ 3 ft	NONE Ødb @ 3 ft	
InstitutionInput to Output – Common NegativeMechanical SpecificationLength9.1 in / 23.1 cmWidth7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Typical Service Life	> 10 yrs. (87,600 hrs)	> 10 yrs. (87,600 hrs)	
Length9.1 in / 23.1 cmWidth7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Isolation	Any Input or Output to Case 500 VI Input to Output – Common Negativ	Any Input or Output to Case 500 VDC Input to Output – Common Negative	
Width7.8 in / 19.8 cmHeight2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Mechanical Specification			
Height2.5 in / 6.4 cmMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Length	9.1 in / 23.1 cm	9.1 in / 23.1 cm	
Material Marine Grade Aluminium Finish Black Anodize Fastenings All 18-8 Stainless Steel Weight 4.0 lb / 1.8 kg Connections #12 AWG Input Wires (Positive & Negative) Four contact output terminal	Width	7.8 in / 19.8 cm	7.8 in / 19.8 cm	
Finish Black Anodize Fastenings All 18-8 Stainless Steel Weight 4.0 lb / 1.8 kg Connections #12 AWG Input Wires (Positive & Negative) Four contact output terminal	Height	2.5 in / 6.4 cm	2.5 in / 6.4 cm	
FasteningsAll 18-8 Stainless SteelWeight4.0 lb / 1.8 kgConnections#12 AWG Input Wires (Positive & Negative) Four contact output terminal	Material	Marine Grade Aluminium	Marine Grade Aluminium	
Weight 4.0 lb / 1.8 kg Connections #12 AWG Input Wires (Positive & Negative) Four contact output terminal	Finish	Black Anodize	Black Anodize	
Connections #12 AWG Input Wires (Positive & Negative) Four contact output terminal	Fastenings	All 18-8 Stainless Steel	All 18-8 Stainless Steel	
Four contact output terminal	Weight	4.0 lb / 1.8 kg	4.0 lb / 1.8 kg	
Warranty 3 years	Connections			
	Warranty	3 years	3 years	



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