



Power sensitive electronics without interference

Ultra quiet operation (no fans)

Simple operation

Rugged and reliable



3 YEAR WARRANTY



VTC605 COMMON NEGATIVE VOLTAGE CONVERTER

Step up a 12 VDC battery to between 13.5 and 17.0 or 24.0 and 27.5 DC in 0.5 VDC increments (via 3 position DIP switch), or stabilize a 12 or 24 VDC power system.

Safety features include reverse input protection, low input voltage alarm, low output voltage alarm, over temperature shutdown and alarm, a dry contact alarm relay output and output overvoltage crowbar. If the input voltage exceeds the regulated output voltage, the unit simply passes the voltage through with full LC filtering and a single schottky diode drop (0.5 VDC or less). Optional features include remote panel monitoring with On/Off control.

Applications include temporarily brightening 12 volt headlights or work lights, increasing voltage into an automotive or marine ignition system for hotter spark and/or prevention of failures due to voltage drop during engine start, stabilizing 12V and 24 VDC power systems in marine, automotive or aeronautical environments and more.

Available models

Input

10.5-18

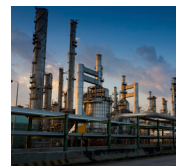
10.5-28

Output

12V

24V

Applications



VTC605 | COMMON NEGATIVE VOLTAGE CONVERTER

INPUT

Input Volts Nominal (DC)	10.5 - 18	10.5 - 28
Input Amps (max)	50	
Input Fuse (AGC)	25 x 2 Amp	
Noise on Input Voltage Alarm	< 50 mV	
Current Limit	50 Amps In	

OUTPUT

Output Volts Nominal VDC	12	24
Output Volts Actual (DC)	Input - 1 Volt or 13.5 to 17.0 Volts (set by DIP switch), whichever is greater	Input - 1 Volt or 24.0 - 27.5 Volts (set by DIP switch), whichever is greater
Output Current (Amps)	*45	

*** The actual output current capability depends upon the input/output voltage ratio. To obtain the actual output current capability at any given input voltage, use the following formula:**

Output Amps = Input Volts/Output Volts x 45

For example, at 11 VDC in and 13.6 VDC out, the output current = 11/13.6 x 45 = 36.4 amps

Output Crowbar	Programmed output volts x (1.3 ± 1%)
Output Ripples & Noise	< 50 mV
Low Output Voltage Alarm	Program Output Voltage minus 2.5 VDC
Transient Response	< 1V for 50% Surge
Regulation (Line & Load)	< +/- 0.5%
Duty Cycle	Continuous 100% for 24 hrs per day
Efficiency	> 90% @ Maximum Output

MECHANICAL

Dimensions	9.1 in / 23.1 cm Long x 7.8 in / 19.8 cm Wide x 4.3" / 10.9 cm High
Clearance	1.0" / 2.5cm all around
Weight	6.0 lb / 2.7 kg
Material and Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
Mounting	Wall or Shelf Mount
Connections	Input: Flying Leads – Red & Black, 4 ft / 1.25 m length, 2 x 10 AWG Output: Beau 4 position terminal block, 2 positive, 2 negative

ENVIRONMENTAL AND SAFETY

Operating Temperature Range	-25°C to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C wide temperature range available)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Emissions	Meets FCC Part 15, Class B
Isolation	Input-Case, Input-Output and Output-Case 1500 VDC
Audible Noise	None
Duty Cycle	Continuous
Warranty	Three years parts and labor
Safety	Designed to meet CSA 22.2.107.1 & UL458

OPTIONS

Paralleling Diodes

European ROHS Compliant
(Lead Free Manufactured)

Electric Fork Lift
(Filtering and Surge Suppression)

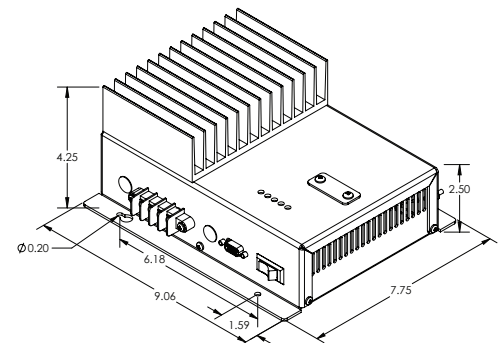
Open Frame
(No chassis just heat sink bars)

Safety Special Inspection (CSA/UL)

Heavy duty ruggedization with wide temperature range

Custom input/output available

DIMENSIONS



ANALYTIC SYSTEMS
Power Conversion Solutions

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