samlexamerica 45A

DC-DC Step Up Converters

Model

VTC605-12-12
45 Amps
VTC605-12-24
45 Amps

Design Features

- Shock and vibration tolerance
- Mount in almost any location
- Compact and light weight
- Reverse polarity protection
- Current limiting circuit
- Over voltage crowbar circuit
- Non-isolated for negative ground system
- Ultra quiet low EMI operation
- Rugged marine grade aluminum case
- 3 year warranty

Applications

- RV vehicles, Heavy trucks, Buses
- Marine vehicles
- Land mobile radios, CB radios
- 12 Volt lighting systems
- AM / FM sound systems
- Solar / Alternative power systems
- Any 12 V or 24 V equipment

MODEL NO.	VTC605-12-12	VTC605-12-24
INPUT VOLTAGE RANGE	10.5 - 18 VDC	10.5 - 28 VDC
INPUT CURRENT (Maxium)	50 A	50 A
INPUT FUSE	30 x 2 A AGC	30 x 2 A AGC
OUTPUT (Nominal)	12 V	24 V
OUTPUT VOLTAGE (DC)	Input - 1 V or 13.5 to 17.0 Whichever is greater	Input - 1 V or 24.0 to 27.5 Whichever is greater
OUTPUT CURRENT*	45 A	45 A
CURRENT LIMIT	50 Amps in	50 Amps in
ISOLATION INPUT - OUTPUT	Common negative	Common negative
ISOLATION CASE TO INPUT OR OUTPUT	> 500 VDC	> 500 VDC
AUDIBLE NOISE	None Ø db @ 3 ft	None Ø db @ 3 ft
NOISE ON INPUT	< 50 mV	< 50 mV
OUTPUT RIPPLE & NOISE	< 50 mV	< 50 mV
LOW INPUT VOLTAGE ALARM	10.5 VDC	10.5 VDC
LOW OUTPUT VOLTAGE ALARM	Programmed output voltage minus 2.5 VDC	
OUTPUT CROWBAR	Programmed output volts x 1.2	
TRANSIENT RESPONSE	< 1 V for 50% surge	< 1 V for 50% surge
REGULATION (Line and load)	< +/- 0.5%	< +/- 0.5%
DUTY CYCLE (Continuous)	100% for 24 hrs per day	100% for 24 hrs per day
OPERATING TEMPERATURE RANGE	-25° C to +40° C, de-rate linearly 2.5% per 0° C from 40° C	
HUMIDITY (Non-condensing)	Maximum 95%	
EFFICIENCY	> 90% @ maximum output	
CONNECTIONS	Four contact output terminals	
MATERIAL	Marine grade aluminium	
FINISH	Black anodize / power epoxy coat	
FASTENINGS	All 18-8 stainless steel	
DIMENSIONS, MM (L x W x H)	231 x 198 x 108	231 x 198 x 108
DIMENSIONS, INCHES (L x W x H)	9.1 x 7.8 x 4.3	9.1 x 7.8 x 4.3
WEIGHT, KG	2.7	2.7
WEIGHT, LB	6.0	6.0

Note: Specifications are subject to change without notice

*** 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 10.5 VDC in and 13.6 VDC out, the output current = 10.5/13.6 x 45 = 34.7 Amps.**