

# Elcon DC/DC Converter



## Instructions

### TDC - XXXX Series

The TDC-XXXX High Efficiency Series DC/DC Converter is specifically designed to provide a reduced voltage supply for auxiliary electrical systems in electric vehicles. By adapting the internationally advanced digital analogy technology, it has the excellence of high transition efficiency, mini-type, easy to install, open circuit operation for long time, lower static power, stable output voltage, larger capacity, well-found protecting function, high stability and long lifespan.

Employing soft key technology, it has the functions of fail safe for low-voltage, short-circuit protection, overheat and over current protection. High transition efficiency, allowing sustained short-circuit, reset after shorting are its advantages.

## Technical Specifications

Nominal Value	400W
Peak Pulse Power	480W
Isolated	Selectable
Input Voltage	60-84V, 84-120V, 128-168V
Output Voltage	12V 13.8V 24V 27.6V
Current Limitation @12V	30A
Nominal Output Current(1hour)	25A
Current Limitation @24V	15A
Nominal Output Current (1hour)	12.5A
Voltage Regulation	≤1.5%
Ripple Factor	≤1%
Maximal Efficiency	92%
Output Short circuit Protection	Yes
Input Voltage Range	Nominal Voltage×150%
Overheat Protection	Thermal switch cuts off at 90°C and resets at 60°C (internal temperature)
Range of Working Temp	- 40 ~ +55°C
Shock and Vibration	SAEJ1378
Size	165mmx115mmx80mm

## Mode Description

### TDC-4812DGC A

A=with switch line No=None

G=Isolated GC=Isolated with charging mode  
None=non-isolated

A=50W B=100W C=200W D=300W  
E=400W F=500W G=600W H=800W  
I=1000W

Output Voltage: 12=12V, 14=14V

Input Voltage: 48=apply to 48V battery pack