

400W Isolated DC/DC Converter



Specification

| Model | Spec | Input Nominal Voltage | Output Voltage |
|--------------|------|-----------------------|------------------------------|
| TDC-36V/12V | | 36V | 12.5V ± 0.2V 13.8V ± 0.2V |
| TDC-48V/12V | | 48V | |
| TDC-72V/12V | | 72V | |
| TDC-96V/12V | | 96V | |
| TDC-120V/12V | | 120V | |
| TDC-144V/12V | | 144V | |
| TDC-192V/12V | | 192V | |
| TDC-36V/24V | | 36V | 24.5V ± 0.2V 27.6V ± 0.2V |
| TDC-48V/24V | | 48V | |
| TDC-72V/24V | | 72V | |
| TDC-96V/24V | | 96V | |
| TDC-120V/24V | | 120V | |
| TDC-144V/24V | | 144V | |
| TDC-192V/24V | | 192V | |

Technical Parameter

| | |
|-------------------------------------|--|
| Nominal Power | 400W |
| Peak Pulse Power | 480W |
| Isolated or not | Isolated |
| Current Limitation (1 hour) @12V | 30A |
| Nominal Output Current (Constantly) | 20A |
| Current Limitation (1 hour) @24V | 15A |
| Nominal Output Current (Constantly) | 12.5A |
| Voltage Regulation | ≤1.5% |
| Ripple Factor | ≤1% |
| Maximal Efficiency | 94% |
| Output Short-Circuit Protection | Yes |
| Input Allowable Over-voltage | Nominal Voltage × 150% |
| Overheat Protection | Thermal switch cuts off at internal temperature of 90°C and resets at 80°C |
| Range of Working Temp | -40°C ~ +60°C (-40°F ~ +131°F) |
| Shock & Vibration | SAEJ1378 |
| Net Weight | 2.4kg |

Features :

1. Natural heat dissipation, efficiency more than 94%,

significantly reducing the size of the radiator and heating value.

2. Isolated DC/DC converter can separate the DC input from the output to ensure the safety load.

3. Available for constantly operation with heavy load.

4. Static low-power, can reduce battery consumption.

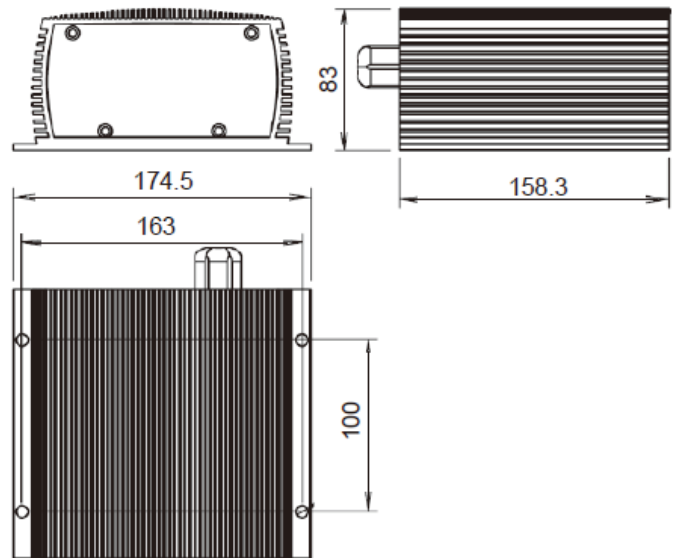
5. Steady output voltage with soft-start technology, no over-charge of output voltage on power-on.

6. Output over-current limitation

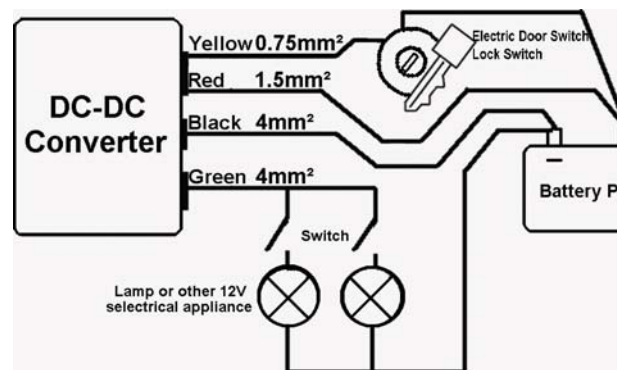
7. Output short-circuit protection. DC/DC converter is free from damage if connects output directly in short or long time, constant short-circuit permissible, and can automatically resume working after the short-circuit disappears.

8. Fully Protection functions such as low-voltage protection, output over-voltage protection, circuit malfunction protection etc., can enhance the reliability of the circuit.

9. Isolated DC/DC converter has a unique charge mode and can connect a backup battery at the output terminal, It can charge the backup battery in a standard charge mode, then goes to floating charge to ensure no electricity shortage and overcharge to the backup battery.



Mode of Connection (e.g. TDC-72-12EGA)



400W Non-isolated DC/DC Converter



Specification

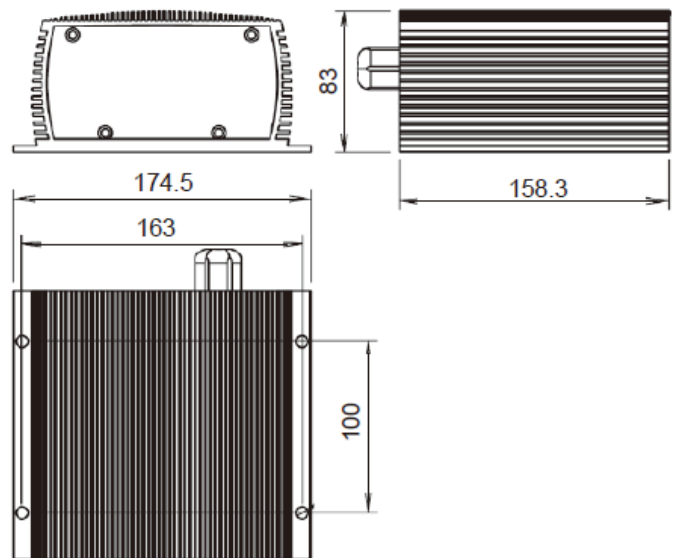
| Model | Spec | Input Rated Voltage | Output Voltage |
|-------------|------|---------------------|--------------------------|
| TDC-36V/12V | | 36V | 12.5V±0.2V 13.8V±0.2V |
| TDC-48V/12V | | 48V | |
| TDC-72V/12V | | 72V | 24.5V±0.2V 27.6V±0.2V |
| TDC-36V/24V | | 36V | |
| TDC-48V/24V | | 48V | |
| TDC-72V/24V | | 72V | |

Technical Parameter

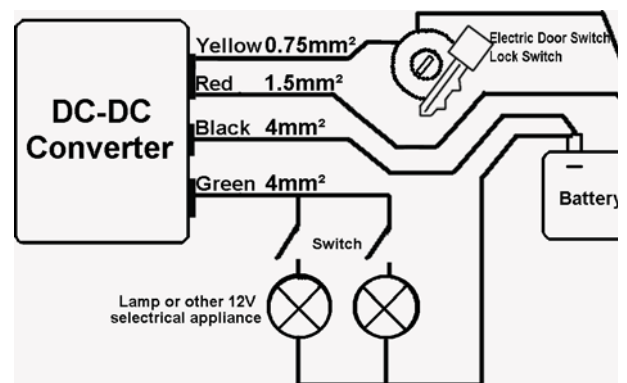
| | |
|-------------------------------------|---------------------------------|
| Nominal Power | 400W |
| Peak Pulse Power | 480W |
| Isolated or not | Non-Isolated |
| Current Limitation (1 hour) @12V | 30A |
| Nominal Output Current (Constantly) | 20A |
| Current Limitation (1 hour) @24V | 15A |
| Nominal Output Current (Constantly) | 12.5A |
| Voltage Regulation | ≤1.5% |
| Ripple Factor | ≤1% |
| Maximal Efficiency | 94% |
| Output Short-Circuit Protection | Yes |
| Input Allowable Over-voltage | Rated Voltage×150% |
| Range of Working Temp | -40℃ ~ +60℃ (-40°F ~ +131°F) |
| Shock & Vibration | SAEJ1378 |
| Net Weight | 2.1kg |

- 1.Natural heat dissipation,efficiency more than 94%, significantly reducing the size of the radiator and heating value.
- 2.Available for constantly operation with heavy load.
- 3.Static low-power,can reduce battery consumption.
- 4.Steady output voltage with soft-start technology, no over-charge of output voltage on power-on.
- 5.Output over-current limitation
- 6.Output short-circuit protection. DC/DC converter is free from damage if connects output directly in short or long time, constant short-circuit permissible, and can automatically resume working after the short-circuit disappears.
- 7.Fully Protection functions such as low-voltage protection, output over-voltage protection, circuit malfunction protection etc., can enhance the reliability of the circuit.

Size: 174.5mm×158.3mm×83mm



Mode of Connection (e.g.TDC-48-12EA)



Features :