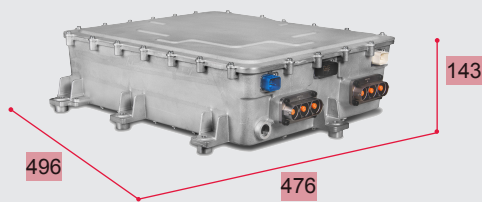


# CWTI-D840

## New Generation Dual Traction Inverter

100-900VDC  
820kWpk / 365kWc at 700VDC

Weight - 31Kg



Measurements in mm

### Typical applications:

Large Construction Vehicles  
Class 8 Trucks  
FEV Full Size Bus Diesel Electric Off-Highway  
e-Axle



**PARTNERSHIP  
SOLUTIONS**



**ADAPTIVE  
CONTROL**



**HIGH  
EFFICIENCY**



**FAULT  
PROTECTION**



**CUSTOMIZABLE  
INTERFACE**



**ROBUST  
QUALITY**

## Performance. Reliability. Flexibility.

The CWTI-D840 offers the best overall performance of any comparable IGBT inverter on the market.

- **Real-time on-die sensing** - fastest short circuit, overcurrent and thermal protection in the commercial vehicle market.
- **Robust design** - built using all vehicle grade components: AEC Q-100, 101 and 200.
- **Fast customer specific integration** - choose off-the-shelf or customized User Interface Board.
- **Designed for ISO 26262** - includes safe torque-off methodologies.
- **IGBT System integration** - technology that delivers performance comparable to SiC based inverters.
- **Overall flexibility** - improves customer time-to-market and minimizes NRE costs.

[cw-industrial.com](http://cw-industrial.com)

# Adaptive Control and High Efficiency

As a technological innovation that separates our offering from other inverters in the marketplace, our proprietary CW adaptive motor control software continuously monitors and adjusts to optimize motor performance by executing real-time “adaptive motor tuning” to compensate for changing system conditions.

Our software test results show power and torque increases up to 38% over conventional motor control methods. CW’s motor control software provides our customers with maximum motor performance, thereby optimizing the size and cost of the electric motor and the overall system.

The motor efficiency gains through the software correlate directly to improved vehicle performance and a more efficient system.

This proven technology yields many system-level options and benefits when enabled:

- Automatically adjusts during changes in motor and system conditions.
- Reduces the need for additional tuning and field support.
- Allows for smaller motor options, lighter weight, and lower cost.
- Minimizes battery consumption, that will increase miles per charge, longer battery life, lower operating cost.
- Extending the battery life also means less recycling and end-of-life costs.

## Efficiency

Up to **3%**  
improvement  
to drive system  
(motor and inverter)<sup>1</sup>

## Range

Up to **14%**  
increase in  
range from  
same charge<sup>2</sup>

## Power

Up to **38%**  
improvement  
on peak torque  
and power<sup>1</sup>

### Additional performance features of the CWTI-D840



INTEGRATION  
FEATURES



ADAPTIVE  
CONTROL



MOTOR  
AGNOSTIC



MOTOR TUNING  
CALIBRATION



CWTI SERVICE  
TOOL



REAL-TIME  
DEBUGGING



DIAGNOSTIC &  
PROTECTION



DATA  
LOGGING



BUILT-IN  
EMI FILTERS

<sup>1</sup> Figures based on adaptive control on and adaptive control off.

<sup>2</sup> Data against leading competitors in tests.

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WRIGHT**

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CWID-D840-20/05 v.1