

# CDE at a Glance

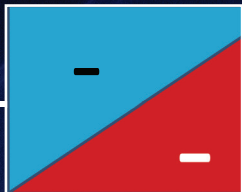
## Capacitors for Inverter Applications

Cornell Dubilier Electronics excels with leading edge aluminum electrolytic and film dielectric capacitors designed to solve the unique demands presented within each of the electronic stages of power inverters. Among CDE's 35,000 worldwide customers are leading manufacturers of welders, UPS systems, motor drives, medical imaging, medical lasers, semiconductor processing and inverters for distributed/renewable power.

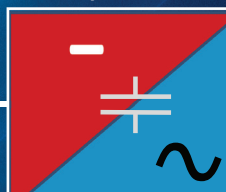
Input Filter  
Capacitors



DC Link  
Capacitors



Snubber  
Capacitors



AC Harmonic  
Filter Capacitors



Power Film  
DC Link



CDE offers the most advanced metallized film technology for long life and high reliability in DC link applications. Available in a variety of package styles, our technology combines high capacitance and very high ripple current capability needed for today's inverter designs for wind, solar, fuel cells, UPS systems, medical power and more.

<http://www.cde.com/solutions/inverters/inverter-grade-films>

Screw Terminal and  
Snap-in Capacitors



CDE is the industry's leading manufacturer of screw terminals aluminum electrolytic capacitors for inverter applications. We excel at designing high ripple current screw terminal and snap-in capacitors for critical power electronics applications.

<http://www.cde.com/solutions/inverters/inverter-grade-dc-link-bus-capacitor-selection>

IGBT Snubber  
Modules



Low inductance snubbers protect IGBT modules from overvoltage transients. Choose from our board-mount or direct-mount styles for maximum protection.

<http://www.cde.com/solutions/inverters/igbt-snubber-selection>

AC Harmonic Filter  
Capacitors



Choose from single phase (Type PC) and 3-Phase (Type PFCH) fluid filled AC capacitors designed for filtering harmonics at the input or inverter output. Oil filled types contain an environmentally friendly fluid and their built in safety pressure interrupter ensures open circuit failure mode at end of life. Use axial type ACF for the same high performance filtering where dry construction is preferred.

<http://www.cde.com/solutions/inverters/ac-harmonic-filter-capacitors>



**CORNELL  
DUBILIER**

1.800.CALL.TTI  
TTI, Inc.  
2441 Northeast Parkway  
Fort Worth, TX 76106-1816

The Specialist in Electronic Component Distribution  
A Berkshire Hathaway Company

[www.ttiinc.com](http://www.ttiinc.com)





# POWER ELECTRONIC APPLICATIONS FOR CDE CAPACITORS

|  | ALUMINUM ELECTROLYTICS            |                                       |        |            |                 |         |        |     |                  |           | DC FILM |        | MICA                    |               |               | OTHER TYPES  |      |     |                    |                 |
|-----------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|--------|------------|-----------------|---------|--------|-----|------------------|-----------|---------|--------|-------------------------|---------------|---------------|--------------|------|-----|--------------------|-----------------|
|                                                                                   | Screw Terminal - DCMC, 3186, 550C | Snap Mounts - 380LX, 381LX, SLP, SLPX | Strobe | Photoflash | MLP / MLS Flat. | Plug-In | Leaded | SMT | Aluminum Polymer | Non Polar | SMT     | Leaded | Power - 947C, UNL, 944U | IGBT Snubbers | Dipped Leaded | Transmitting | Clad | SMT | AC Harmonic Filter | SCR Commutation |
| RENEWABLE ENERGY                                                                  |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     | ♦                  | ♦               |
| Fuel Cell                                                                         | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     | ♦                  | ♦               |
| Wind Power                                                                        | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     | ♦                  |                 |
| Photovoltaic                                                                      | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| MEDICAL                                                                           |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| Laser                                                                             | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             | ♦             |              |      |     |                    |                 |
| MRI Gradient Amplifier                                                            | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             | ♦             |              |      |     |                    |                 |
| Xray                                                                              | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| ELECTRIC VEHICLES                                                                 |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| Train Inverter                                                                    | ♦                                 |                                       |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Train Door Opener                                                                 | ♦                                 |                                       |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Electric Scooters                                                                 | ♦                                 |                                       |        |            |                 |         |        |     |                  |           |         |        | ♦                       |               |               |              |      |     |                    |                 |
| Electric Cars                                                                     |                                   |                                       |        |            |                 | ♦       | ♦      |     |                  |           |         |        | ♦                       |               |               |              |      |     |                    |                 |
| Military Truck and Tanks                                                          | ♦                                 | ♦                                     |        |            | ♦               |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| POWER SUPPLIES & HOLDUP                                                           |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| UPS                                                                               | ♦                                 | ♦                                     |        |            |                 | ♦       |        |     |                  |           |         | ♦      | ♦                       | ♦             | ♦             |              |      |     | ♦                  |                 |
| SMPS                                                                              |                                   | ♦                                     |        |            |                 |         | ♦      |     |                  |           |         | ♦      | ♦                       |               |               |              |      |     |                    |                 |
| Flywheel Storage                                                                  | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Battery Chargers                                                                  | ♦                                 |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     | ♦                  |                 |
| INDUSTRIAL EQUIPMENT                                                              |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| Welding                                                                           | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     | ♦                  |                 |
| Laser torch                                                                       | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Semiconductor Processing                                                          | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| CNC Machines                                                                      | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Electric Cranes                                                                   | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Conveyors                                                                         | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Forklifts                                                                         |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| Plasma Gas Generators                                                             | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     | ♦                  |                 |
| HVAC (AIR HANDLING)                                                               |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| Rooftop Air Conditioners                                                          | ♦                                 |                                       |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     | ♦                  |                 |
| Train & Bus Air Conditioners                                                      | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| MOTION CONTROL                                                                    |                                   |                                       |        |            |                 |         |        |     |                  |           |         |        |                         |               |               |              |      |     |                    |                 |
| Elevator Drives                                                                   | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| CNC                                                                               | ♦                                 |                                       |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     |                    |                 |
| Motor Drives                                                                      | ♦                                 | ♦                                     |        |            |                 |         |        |     |                  |           |         | ♦      | ♦                       | ♦             |               |              |      |     | ♦                  | ♦               |