



an EnerSys® company

# DCX™ Series

## Top Terminal Battery Disconnect



- High ampacity DC battery disconnect device for telecom applications; available in 400, 600, 800, 1000, and 1200A models
- Top terminal mount; direct battery terminal mounting options for common cell configurations, such as EnerSys®, GNB, C&D®, and East Penn/Unigy®
- LED indicators for on-line/off-line status, EPO trip, and general fault alarm status
- Form C relay contact output for remote monitoring
- -48VDC and +24VDC configurations available
- Integrated EPO trip feature; configurable for thermal runaway self disconnect
- Internal copper bus structure supports installation of up to four 750 kcmil cable/lugs for input/output connections

### **The DCX series of DC battery disconnect systems provides protection between primary power and equipment, featuring high-output capacity in a compact and sturdy chassis.**

The DCX disconnect product family includes multiple amperage ratings and installation mounting schemes to provide a DC or Battery source disconnect device for use in Telecom +24 or -48VDC systems as well as solar-alternate energy or other DC applications.

The primary application for the DCX system is to provide over-current protection for battery sourced equipment and wiring. The secondary function is to provide a service disconnect in order to maintain batteries or to shut down the battery source connection in an emergency.

The DCX product family includes the following circuit breaker trip ratings: 400A, 600A, 800A, 1000A, and 1200A. The electrical

configuration allows for both positive and negative connected systems as factory configured options. The DCX system includes a circuit breaker module, an internal input and output copper bus structure, a steel inner housing and a flame retardant plastic outer housing. Standard monitoring features for both local and remote alarms are provided with LED indicators and Form C relays.

The DCX comes standard with an internal 50mV current metering shunt for measuring charge & discharge current in battery applications. The 50mV shunt provides better accuracy and signal-to-noise ratio than the 25mV shunts commonly used in telecom battery busses.

Additionally, a plug-in Thermal Runaway Detection (TRD) option is available which provides pre-alert and alarm contact closures when battery stack temperature deltas exceed a safe operating range. The TRD option can be added to the DCX during initial installation or at anytime thereafter, even while the DCX is in service.

# DCX™ Series - Top Terminal Battery Disconnect Specifications

| Electrical             |   |
|------------------------|---|
| <b>Voltage:</b>        | ±48VDC, ±24VDC                          |
| <b>Input Current:</b>  | 400A, 600A, 800A, 1000A, 1200A          |
| <b>Alarm Contacts:</b> | Form-C, 60VDC @ 0.5A max.               |
| <b>Breaker AIC:</b>    | 50kA (800/1000A), 100kA (400/600/1200A) |
| <b>Shunt Rating:</b>   | 50mV/1200A                              |

| Mechanical                           |                                  |
|--------------------------------------|----------------------------------|
| <b>Dimensions L x H x D (in/mm):</b> | 13.5 x 15 x 10 / 343 x 381 x 254 |
| <b>Weight (lb/kg):</b>               | 22 / 10                          |
| <b>Mounting:</b>                     | Top terminal                     |

| Environmental                 |   |
|-------------------------------|---|
| <b>Operating Temperature:</b> | 50°C  |
| <b>Humidity:</b>              | 0 to 95% RH non-condensing                    |
| <b>Elevation:</b>             | -500m to 2800m                                |
| <b>Regulatory Compliance:</b> | <b>Safety:</b> ANSI/UL 60950-1 (Subject 1801) |

| Connections                             |   |
|---|---|
| <b>Communications Battery Positive:</b> | Terminal block; #14-16 AWG  |
| <b>Output Termination:</b>              | 1/2" Threaded insert; 1.75" CTC (x4 positions)<br>3/8" Threaded insert; 1" CTC (x3 positions) |
| <b>Chassis Ground:</b>                  | 1/4" Threaded stud; 5/8" CTC (x2 positions)   |

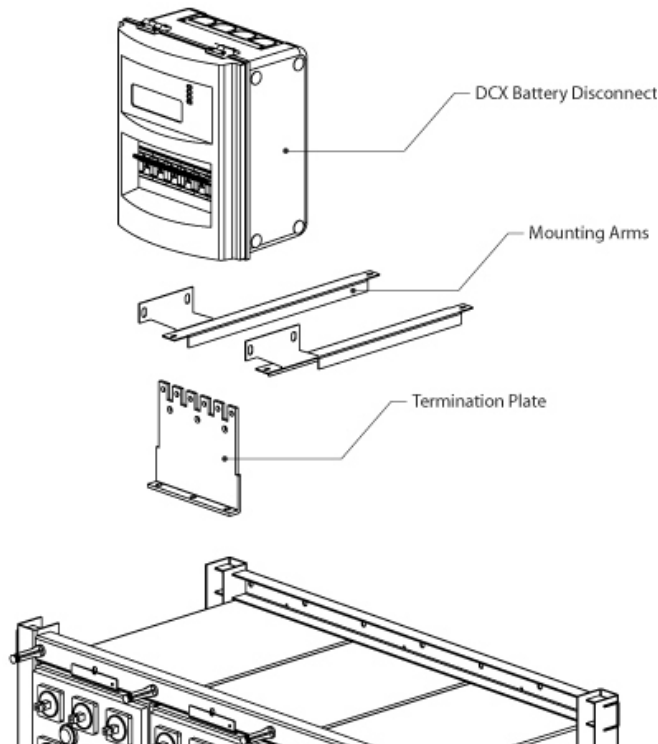


Illustration of DCX Mounting Kit (Exploded View)

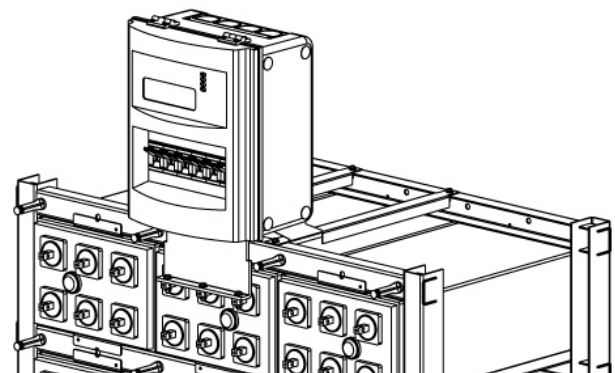


Illustration of DCX Mounting Kit (Installed)

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 Unigy® is the registered trademark of East Penn Manufacturing Co., Inc.  
 ABSOLYTE® is the registered trademark of Exide Technologies, LLC.



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