C&D TECHNOLOGIES
Power Solutions

C&D® DYNASTY® DCS

41-9020

RETURN RECYCLE LEAD

# DEEP CYCLE SERIES

# DCS-75IT

## VALVE REGULATED LEAD ACID BATTERY

## FOR DEEP CYCLE APPLICATIONS

## FEATURES & BENEFITS

- Robust plate for extended cycle life.
- Computer-generated grid design optimized for high power density.
- Low calcium grid alloy for reduced gas emissions and ease of recycling.
- Flame-arresting one-way pressure-relief vent for safety and long life.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Case and cover available in standard polypropylene.
- Thermally welded case-to-cover bond to eliminate leakage.
- Can be used in any orientation. Upright, side, or end mounting recommended.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Not restricted for air transport – Complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport – classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport – classified as non-hazardous material per IMDG Amendment 27.
- Low-profile terminals with threaded copper alloy inserts for reduced height, reduced maintenance and increased safety

## 12 VOLTS - 75 AMPERE HOUR CAPACITY @ 8 HOUR RATE

**Ampere Hour Capacity to 1.75 Volts per Cell @ 77°F (25°C)**

| Discharge in hrs. | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 10.00 | 12.00 | 20.00 | 24.00 | 72.00 | 100.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Amp-Hr Capacity | 43.5 | 53.2 | 58.5 | 62.0 | 64.5 | 66.6 | 68.6 | 69.6 | 71.0 | 72.0 | 75.0 | 75.6 | 77.6 | 78.0 |

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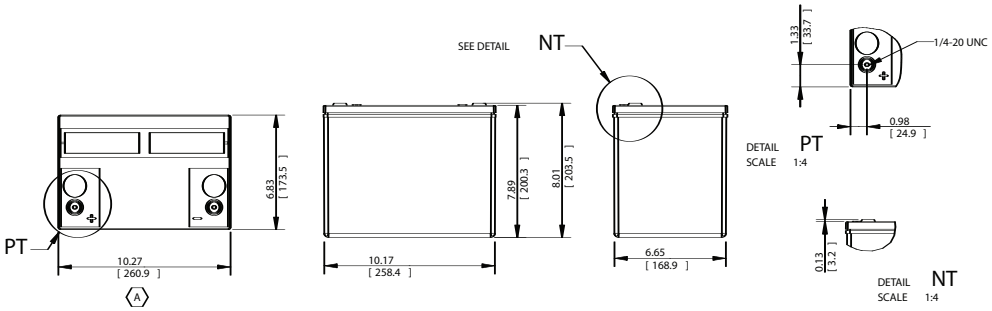


*All dimensions in inches and (millimeters). All dimensions are for reference only.
Contact a C&D Representative for complete dimension information.

## SPECIFICATIONS

| Cells Per Unit | Voltage Per Unit | Weight | Electrolyte | Maximum Discharge Current | Short Circuit Current | Ohms Imped. 60Hz ( Ω ) |
|---|---|---|---|---|---|---|
| 6 | 12.84 | 54 lbs. 25 kg. | Absorbed H2SO4 SG - 1.300 | 600 Amps | 3100 Amps @ 0.1 sec. | 0.0045 Ohms |

| | |
|---|---|
| **Capacity** | 64.5 Ah @ 5 hr. rate to 1.75 volts per cell @ 77˚F (25˚C)<br>75.0 Ah @ 20 hr. rate to 1.75 volts per cell @ 77˚F (25˚C)<br>68.2 Ah @ 10 hr. rate to 1.80 volts per cell @ 20˚C (68˚F) |
| **Operating Temperature Range (with temperature compensation)** | Discharge; -40˚F (-40˚C) to +160 F (71˚C)<br>Charge; -10˚F (-23˚C) to +140 F (60˚C) |
| **Nominal Operating Temperature Range** | +74˚F (23˚C) to + 80˚F (27˚C) |
| **Recommended Maximum Charging Current Limit** | C/5 amperes (15.0 amperes @ 100% depth of discharge) @ 20 hour rate |
| **Float Charging Voltage** | 13.5 to 13.8 VDC/unit average @ 77˚F (25˚C) |
| **Equalization and Cycle Service Charging and Current Limits** | 14.4 to 14.8 VDC per unit average @ 77˚F (25˚C)<br>C/5 amperes (15.0 amperes @ 100% depth of discharge) @ 20 hour rate |
| **Maximum AC Ripple (Charger)** | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.<br>Maximum AC ripple float charge voltage allowed = (4% P-P)<br>Maximum AC ripple current allowed = 3.75 amperes RMS (C/20) |
| **Self Discharge** | Dynasty batteries may be stored for up to 6 months at 77 F (25˚C) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| **Accessories** | Inter unit connectors, racks and cabinet systems are available. |
| **Terminal** | Threaded copper alloy insert terminal to accept 1/4-20 UNC screws. |
| **Terminal Hardware Initial Torque** | 110 in.-lbs. (12.4 N-m). |

## CONSTANT CURRENT DISCHARGE RATINGS - AMPERES @77°F (25°C)

**Operating Time to End Point Voltage (in hours)**

| End Point Volts/Cells | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 10.00 | 12.00 | 20.00 | 24.00 | 72.00 | 100.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1.90** | 34.0 | 21.0 | 15.5 | 12.3 | 10.30 | 8.90 | 7.84 | 7.00 | 5.80 | 5.00 | 3.20 | 2.70 | 0.95 | 0.69 |
| **1.85** | 38.2 | 23.8 | 17.7 | 14.3 | 11.90 | 10.30 | 9.00 | 8.10 | 6.66 | 5.60 | 3.50 | 2.95 | 1.02 | 0.74 |
| **1.80** | 41.0 | 25.3 | 18.8 | 15.0 | 12.50 | 10.80 | 9.50 | 8.50 | 6.96 | 5.90 | 3.70 | 3.10 | 1.06 | 0.77 |
| **1.75** | 43.5 | 26.6 | 19.5 | 15.5 | 12.90 | 11.10 | 9.80 | 8.70 | 7.10 | 6.00 | 3.75 | 3.15 | 1.08 | 0.78 |

**Note:** Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.
Above ratings do not include interunit connector drops.


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