8-930 BATTERY CHARGER/CONTROLLER

TECHNICAL FEATURES

- 115 Vac, 3-phase, 400 Hz input
- 27.75 Vdc output
- 65A output
- Battery Configuration
  - 20 Cell Vented or Ultra Low Maintenance Nickel Cadmium
  - 40/48 Ampere Hours
- Battery Part Number: ELDEC BA06 or BA35
  Adaptable to other battery sizes and types

PERFORMANCE

- Developed to meet RTCA/DO-160

Applications

- Boeing 737-600, -700, -800
  (upgrade to existing 4-254)
- Boeing 747-400, 800
- Boeing 757, 767

DESCRIPTION

Since 1958, Crane Aerospace & Electronics has led the way in the development of reliable aircraft AC-DC power conversion. Our line of transformer rectifier units provide affordable, efficient, light weight and reliable conversion while meeting today’s new stringent power quality requirements.

As one of the world’s leading supplier of Battery Chargers, Transformer Rectifier Units (TRUs) and Auto Transformer Rectifier Units (ATRUs) for commercial aircraft, ELDEC offers you field-proven, exceptionally reliable solutions. We have thousands of units in the field for a wide variety of aircraft programs. Options for free, forced or fan cooling, Long-life field-proven fan, and clean output power, ensuring compatibility with avionics loads.

Our companies are known for their technical strength, proven product reliability, innovative solutions and overall value. Each company is ISO9001/AS9100 certified and committed to Operational Excellence and world-class processes. From application engineering, through design and manufacturing, Crane Aerospace & Electronics offers a comprehensive approach to product specification, design certification and service.

Crane Aerospace & Electronics offers a complete line of power conversion products. Not sure about which type of power conversion is best for your application? Please give us a call or email – our engineers have a great deal of experience in many types of power conversion methods and will help select the right one for you. Also, be sure to check out our web site at www.craneae.com for more detailed information.
8-930 BATTERY CHARGER/CONTROLLER

**INPUT**
- Input Voltage: 115/200 V ac, 3 phase 4 wire
- Input Frequency: 400 Hz nominal
- Power Factor: <0.90
- Efficiency: >89%
- Input Current THD: <18%

**OUTPUT**
- Output Voltage: 27.75 Vdc temperature compensated
- Output Current: 65 Amps
- Output Ripple: ≤ 2.0 Vp-p

**INTERFACE**
- Dimensions: (modified ARINC 600-6MCU)
  - Length: 14.59 inches (370.58 mm)
  - Width: 7.64 inches (194.05 mm)
  - Height: 7.64 inches (194.05 mm)
  - Weight: 19 lbs (8.62 kg)
  - Cooling: 1.25 lb/min. expected: self protected for loss of cooling air
- Connector:
  - Input: BACC45FN14-12P
- Terminal Block:
  - Positive: 3/8-24 UNF-2A Stud
  - Negative: 5/16-24 UNF-2A Stud
- Fault Indications:
  (via front panel LED):
  - Battery Overtemperature
  - Battery Disconnect
  - Open/Short Temperature Sensor
  - Charger Failure
  - LRU Fault Isolation

**ENVIRONMENTAL**
- Operating Temperature: RTCA/DO-160, Category F2
- Ground Temperature: RTCA/DO-160, Category F2
- Temperature Variation: RTCA/DO-160, Category A
- Altitude: RTCA/DO-160, Category A1
- Decompression Altitude: 45,000 feet
- Humidity: RTCA/DO-160, Category B
- Operational Shock & Crash Safety: RTCA/DO-160, Paragraph 7.3
- Vibration: D6-81926, Zone 4, Category C
- Explosion Proofness: MIL-STD-810, Procedure 1. Surface temperature <450°F
- Sand and Dust: RTCA/DO-160, Paragraph 12, Category D
- Fungus Resistance: RTCA/DO-160, Paragraph 13, Category F
- Charge Mode: Constant Current/Constant Voltage
- Mode Control: Charge Mode/TRU Mode
- Charge Method: Proportional Timed Overcharge
- Acceleration: 6.0g upward, 12.0g downward, 9.0g forward, aft or sideways in either direction
- MTBf: >30,000 flight hours

**Crane Aerospace & Electronics Power Solutions**

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