Power Paragon’s Degaussing Control Equipment (DCE) provides controlled current to independent degaussing coils installed in the hull of a ship.

The DCE provides the precise current required to generate a composite magnetic field that counteracts the effects of the ship on the earth’s magnetic field. These generated fields are produced by passing direct current through each degaussing coil. The polarity and intensity of each field is determined by the polarity and magnitude of current in its coil.

The DCE consists of a degaussing switchboard, a remote control unit and coil power supplies.

The Degaussing Switchboard receives the ship’s gyro signal from the Data Multiplex System (DMS) and produces a control signal for each coil power supply.

The remote control unit allows remote monitoring of the power supplies, and remote capability for the two automatic channel coils, through signal interface with the switchboard.

The coil power supplies provide precise current to the ship’s degaussing coils. The power and control circuits are functionally identical within the power supplies, with component selection and wiring being the primary distinguishing characteristic.

Available power ratings for the coil power supplies are 5 kW, 8 kW, 12 kW, 16 kW, and 20 kW.

**Features**
- Precise current control
- Automatic control
- Remote manual control and monitoring
- Air cooling
- Redundant fans
- Input and output EMI filtrations

**Applications**
- Shipboard degaussing

**Support Services**
- Installation
- Field Service
- Training
- Documentation and provisioning
**Power Paragon**

**DEGAUSSING CONTROL EQUIPMENT (DCE)**

**DEGAUSSING SWITCHBOARD**
- Power input type I, 440 ±22 VAC, 3-ph, 60 ±3 Hz
- Gyro reference input type I, 115 ±5 VAC 1-ph, 60 ±3 Hz
- Control type synchro-gyro
- Duty continuous
- Accuracy of control signals to coil power supply ±0.15 V

**ENVIRONMENTAL CHARACTERISTICS**
- Ambient temperature 0°C to 50°C
- Ambient humidity 0 to 95%
- Shock Classification Grade A, Class I, Type A per MIL-S-901C
- Vibration Type I per MIL-S-167-1

**PHYSICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Dimensions (in/mm)</th>
<th>Weight (lbs/kg)</th>
<th>Mounting</th>
<th>Cooling</th>
<th>Enclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degaussing Switchboard</td>
<td>74.75/1899 x 24.0/610 x 25.1/638</td>
<td>856/389</td>
<td>Deck</td>
<td>Convection</td>
<td>Dripproof</td>
</tr>
<tr>
<td>Remote Control Unit</td>
<td>13.0/330 x 15.5/394 x 8.0/203</td>
<td>38/17</td>
<td>Bulkhead</td>
<td>Convection</td>
<td>Dripproof</td>
</tr>
<tr>
<td>5 kW Coil Power Supply</td>
<td>74.75/1899 x 24.0/610 x 25.1/638</td>
<td>1100/500</td>
<td>Deck</td>
<td>Forced Air</td>
<td>Dripproof</td>
</tr>
<tr>
<td>8, 12, 16 kW Coil Power Supply</td>
<td>74.75/1899 x 30.0/762 x 25.1/638</td>
<td>1300/591</td>
<td>Deck</td>
<td>Forced Air</td>
<td>Dripproof</td>
</tr>
<tr>
<td>26 kW Coil Power Supply</td>
<td>74.75/1899 x 36.0/914 x 25.1/638</td>
<td>1500/682</td>
<td>Deck</td>
<td>Forced Air</td>
<td>Dripproof</td>
</tr>
</tbody>
</table>

**COIL POWER SUPPLY**
- Power input type I, 440 ±22 VAC, 3-ph, 60 ±3 Hz
- Speed of response all outputs remain within specified accuracy limits to a rate-of-change of heading of at least 5 degrees per sec.
- Duty continuous
- Apparent power factor 0.65 to 0.95
- Rated output
  - 220 VDC at 23 ADC (5 kW)
  - 220 VDC at 36 ADC (8 kW)
  - 220 VDC at 55 ADC (12 kW)
  - 220 VDC at 73 ADC (16 kW)
  - 220 VDC at 118 ADC (26 kW)
- Accuracy of output 3% of rated manual control

**REMOTE CONTROL UNIT**
- Duty continuous

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*Appropriate for public release as defined under ITAR 120.10(5). DFOISR 99-S-1681*