C-DQ Series

Temperature Controls

Dual Set-Point, Precise Control

- Large (.56” high) easy to read LED display
- Large switching capacities from 20 to 125 amps for up to 600 volts
- ±.25% full span, single digit accuracy
- Single or Three phase

Adjustable temperature range from -40°F(-40°C) to 999°F(538°C)

cULus

C-DQ SERIES, DIGITAL COMBINATION CONTROLS

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>VOLTS</th>
<th>MAX. AMPS</th>
<th>REPL. RELAY P/N</th>
<th>REPL. TRANS. P/N</th>
<th>REPL. SENSOR P/N</th>
<th>SHIP WT.</th>
<th>Lbs./(kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-DQ202</td>
<td>240</td>
<td>20</td>
<td>AHD-20-1</td>
<td>HDD50 2/1</td>
<td>RTD1000</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>C-DQ204</td>
<td>480</td>
<td>20</td>
<td>AHD-20-1</td>
<td>HDD50 4/1</td>
<td>RTD1000</td>
<td>(7.3)</td>
<td></td>
</tr>
<tr>
<td>C-DQ402</td>
<td>240</td>
<td>40</td>
<td>AHD-40-1</td>
<td>HDD50 2/1</td>
<td>RTD1000</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>C-DQ404</td>
<td>480</td>
<td>40</td>
<td>AHD-40-1</td>
<td>HDD50 4/1</td>
<td>RTD1000</td>
<td>(7.7)</td>
<td></td>
</tr>
<tr>
<td>C-DQ802</td>
<td>240</td>
<td>80</td>
<td>AHD-80-1</td>
<td>HDD100 2/1</td>
<td>RTD1000</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>C-DQ804</td>
<td>480</td>
<td>80</td>
<td>AHD-80-1</td>
<td>HDD100 4/1</td>
<td>RTD1000</td>
<td>(11.3)</td>
<td></td>
</tr>
<tr>
<td>C-DQ1252</td>
<td>240</td>
<td>125</td>
<td>AHD-125-1</td>
<td>HDD300 2/1</td>
<td>RTD1000</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>C-DQ1254</td>
<td>480</td>
<td>125</td>
<td>AHD-125-1</td>
<td>HDD300 4/1</td>
<td>RTD1000</td>
<td>(15)</td>
<td></td>
</tr>
</tbody>
</table>
**Features & Values**

- Large (.56" high), easy to read LED display. Provides precise control for consistent plating and etch rates in most aqueous processes.
- Fluoropolymer (FEP) covered 10-foot (3m), 1000-ohm platinum RTD sensor included standard with the control. Provides extended service in corrosive liquids and can be lengthened with ordinary copper wire.
- NEMA 1, IP21, flame retardant and gasketed plastic enclosure with stainless steel hardware
- Large switching capacities from 20 to 125 amps for up to 600 volts.
- 20°F(-7°C) to 140°F(60°C) ambient temperature range
- ±.25% full span, single digit accuracy
- 20°F(-7°C) to 140°F(60°C) ambient temperature range
- Control transformer included.

**Specifications**

**Temperature Range**

Adjustable temperature range from -40°F(-40°C) to 999°F(538°C)

**Options**

- Scalable voltage and current inputs
- 4-20 mA outputs for process recording
- Three wire 100-ohm RTD sensors
- Special sensors required for temperatures above 500°F(260°C)
- 25-foot (7.6m) and 50-foot (15.2m) sensors
- P2, P3 or P8 thermal protection systems
- Integrated liquid level control components
- Front panel mounted digital timers
- Ground fault protection of equipment (GFPE) circuitry.
- NEMA 4/4X enclosure (with internal heater for outdoor use)

**Safety Features**

- Pre-wired P1 terminal blocks
- Non-volatile memory
- Programmable high alarm shutdown
- Sensor short and break protection
- Programmable high set point limit
- Security code restricted menu

**Certifications**
cULus

**Dimensions**

- 20°F(-7°C) to 140°F(60°C) ambient temperature range
- ±.25% full span, single digit accuracy
- Large switching capacities from 20 to 125 amps for up to 600 volts.

**Model Number Breakdown**

<table>
<thead>
<tr>
<th>C</th>
<th>DQ</th>
<th>20</th>
<th>8</th>
<th>E</th>
<th>-L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Type</td>
<td>Series</td>
<td>Ampere</td>
<td>Voltage</td>
<td>Control Option</td>
<td>Standard Options</td>
</tr>
<tr>
<td>C - Combo</td>
<td>DQ</td>
<td>20 - 40</td>
<td>80 - 125</td>
<td>E = Easyplug</td>
<td>M = Milliamp output</td>
</tr>
</tbody>
</table>

**Options**

- P2, P3 or P8 thermal protection systems
- Integrated liquid level control components
- Front panel mounted digital timers
- Ground fault protection of equipment (GFPE) circuitry.
- NEMA 4/4X enclosure (with internal heater for outdoor use)

**Certifications**
cULus

**Dimensions**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>20-40 Amps</th>
<th>80 Amps</th>
<th>125 Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>14.375&quot; (365mm)</td>
<td>18&quot; (457mm)</td>
<td>20.25&quot; (514mm)</td>
</tr>
<tr>
<td>B</td>
<td>9.63&quot; (245mm)</td>
<td>13.75&quot; (349mm)</td>
<td>15.75&quot; (400mm)</td>
</tr>
<tr>
<td>C</td>
<td>6.25&quot; (159mm)</td>
<td>7.625&quot; (194mm)</td>
<td>8.375&quot; (213mm)</td>
</tr>
<tr>
<td>D</td>
<td>13.625&quot; (346mm)</td>
<td>17&quot; (432mm)</td>
<td>19.25&quot; (489mm)</td>
</tr>
<tr>
<td>E</td>
<td>6&quot; (152mm)</td>
<td>10&quot; (254mm)</td>
<td>12&quot; (305mm)</td>
</tr>
<tr>
<td>F</td>
<td>7.03&quot; (175mm)</td>
<td>8.4&quot; (213mm)</td>
<td>9.15&quot; (232mm)</td>
</tr>
</tbody>
</table>

*Box dimensions may vary with options*