The DCSA Series is a loop-powered, linear output current transducer that provides an output that is directly proportional to the RMS AC current passing through the LCSC10T12 sensor. The DCSA provides either an analog current or voltage: 4 - 20 mA, 1 to 5VDC, or 2 to 10VDC. Each unit is factory calibrated for monitoring (with the LCSC10T12 connected) in one of four ranges; 0 - 5, 0 - 10, 0 - 20, or 0 - 50A. Zero and span adjustments allow field calibration if needed. The DCSA mounts on both DIN 1 and DIN 3 rails.

For more information see:
Appendix B, page 166, Figure 22 for dimensional drawing.
Appendix C, page 169, Figure 21 for connection diagram.

**Features:**
- Mounts on DIN 1 or DIN 3 rail
- 0 - 50A in 4 ranges using LCSC10T12 sensor
- Loop powered from 10 to 30VDC
- Linear output from 4 - 20mA, 1 - 10V
- Zero & span adjustments
- Separate sensor & control unit

**Auxiliary Products:**
- Current sensor: P/N: LCSC10T12

**Available Models:**
DCSA50
LCSC10T12
If desired part number is not listed, please call us to see if it is technically possible to build.

**Order Table:**

<table>
<thead>
<tr>
<th>Current Range with LCSC10T12</th>
<th>DCSA Input Range (F to E)</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5A</td>
<td>0-5mA AC</td>
<td>DCSA5</td>
</tr>
<tr>
<td>0-10A</td>
<td>0-10mA AC</td>
<td>DCSA10</td>
</tr>
<tr>
<td>0-20A</td>
<td>0-20mA AC</td>
<td>DCSA20</td>
</tr>
<tr>
<td>0-50A</td>
<td>0-50mA AC</td>
<td>DCSA50</td>
</tr>
</tbody>
</table>

**Specifications**

**Input**
- Ranges (without LCSC10T12 connected)
  - 4 factory calibrated ranges in mA AC: 0 - 5mA, 0 - 10mA, 0 - 20mA, or 0 - 50mA AC

**Output**
- Type: Analog
- Range: 4 - 20mA, or 1 to 5VDC or 2 to 10VDC
- Supply Voltage: 10 to 30VDC
- Momentary Voltage: 40VDC for 1ms
- Zero Adjust: ±3.75 - 4.25mA
- Span Adjust: ±3mA - ±22mA
- Adjustment: Mini-screw, multi-turn potentiometer
- Protection: Dielectric Breakdown: ≥ 2500V RMS terminals to mounting surface
- Polarity: Units are reverse polarity protected

**Mechanical**
- Mounting: Wire clamp
- Termination: For 22 - 14AWG (.336 mm² - .25 mm²)
- Environment:
  - Operating / Storage Temperature: -30° to 60°C / -40° to 85°C
  - Humidity: 95% relative, non-condensing
  - Weight: ± 1.6 oz (45.4 g)

**Accessories - LCSC10T12 Toroidal Sensor**
- Number of Turns: 1000
- Nominal Output Current Full Range: 4 mA
- Maximum Allowable Current: Steady 50A Turns
- Burden: ≤ ±0.5 VA
- Frequency: 0 - 20A / 20/100 Hz / 20/100 Hz
- Sensor Hole: 0.36 in. (9.14 mm) for up #4 AWG (21.1 mm²) THHN wire
- Weight: ± 1 oz (28.3 g)

*Minimum loop-power supply voltage equals the minimum sensor voltage 10VDC plus the voltage drop developed across all the other loop devices at 20mA.