DIN Rail Temperature/Process Controllers

Universal Inputs, Up to 8 PID Loops, Modbus® Communications

The Series SCD DIN Rail Temperature/Process Controllers offer multiple PID loops in a compact size. Each SCD-1000 master controller can be combined with up to seven SCD-2000 slave controllers without any wires. Each controller has one universal input, one relay output and one user selected output.

**Features/Benefits**
- Expandable from 1 to 8 process control loops
- Universal transmitter or temperature sensor inputs
- RS-485 Modbus® communication
- Dual loop or single loop/alarm output control

**Applications**
- Environmental chambers
- Packaging equipment
- Hot plates/melt pots
- Oven, boiler, or chiller control

**Applications**
- Oven, boiler, or chiller control
- Hot plates/melt pots
- Packaging equipment
- Environmental chambers
- Medical equipment
- Food service equipment

**Series SCD**

**Universal Inputs, Up to 8 PID Loops, Modbus® Communications**

**Model Chart**

<table>
<thead>
<tr>
<th>Model</th>
<th>Controller</th>
<th>Output 1</th>
<th>Output 2</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCD-1023</td>
<td>Master</td>
<td>Voltage pulse</td>
<td>Relay</td>
<td>$92.00</td>
</tr>
<tr>
<td>SCD-1033</td>
<td>Master</td>
<td>Relay</td>
<td>Blue</td>
<td>$92.00</td>
</tr>
<tr>
<td>SCD-1053</td>
<td>Master</td>
<td>Current</td>
<td>Relay</td>
<td>$92.00</td>
</tr>
<tr>
<td>SCD-1063</td>
<td>Master</td>
<td>Linear voltage</td>
<td>Relay</td>
<td>$92.00</td>
</tr>
<tr>
<td>SCD-2023</td>
<td>Slave</td>
<td>Voltage pulse</td>
<td>Relay</td>
<td>$81.50</td>
</tr>
<tr>
<td>SCD-2033</td>
<td>Slave</td>
<td>Relay</td>
<td>Blue</td>
<td>$81.50</td>
</tr>
<tr>
<td>SCD-2053</td>
<td>Slave</td>
<td>Current</td>
<td>Relay</td>
<td>$81.50</td>
</tr>
<tr>
<td>SCD-2063</td>
<td>Slave</td>
<td>Linear voltage</td>
<td>Relay</td>
<td>$81.50</td>
</tr>
</tbody>
</table>

*DC current input requires 250 Ω precision resistor.

**Series TSDIN**

**DIN Rail Mount Temperature Switch**

HACCP Alarm Logging, Intelligent Defrost

The Series TSDIN DIN Rail Mount Temperature Switch is ideally designed to control compressor, defrost, and fan cycles in refrigeration applications. The digital input can be used to remotely trigger a defrost cycle, monitor cooler door status, or act as an external alarm. Three other probe inputs measure cabinet, defrost, and product temperature. Programming performed on the 6 button keypad or with the Model TS2-K configuration key.

**Features/Benefits**
- 3 temperature probe inputs
- Real-time clock used for HACCP logging of temperature limit alarms or loss of power
- Intelligent Defrost parameters manage defrost cycle in order to save energy cost

**Applications**
- Refrigerated cabinets
- Walk in coolers
- Applications requiring defrost cycles

**Model Chart**

<table>
<thead>
<tr>
<th>Model</th>
<th>Supply Power</th>
<th># of Outputs</th>
<th>Display Color</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSDIN-013</td>
<td>115 VAC</td>
<td>1, 2, 3, 4, 5</td>
<td>Red</td>
<td>$108.00</td>
</tr>
<tr>
<td>TSDIN-015</td>
<td>115 VAC</td>
<td>1, 2, 3</td>
<td>Red</td>
<td>115.00</td>
</tr>
<tr>
<td>TSDIN-023</td>
<td>230 VAC</td>
<td>1, 2, 3</td>
<td>Red</td>
<td>108.00</td>
</tr>
<tr>
<td>TSDIN-025</td>
<td>230 VAC</td>
<td>1, 2, 3, 4, 5</td>
<td>Red</td>
<td>118.00</td>
</tr>
<tr>
<td>TSDIN-033</td>
<td>12 VAC/VDC</td>
<td>1, 2, 3</td>
<td>Red</td>
<td>108.00</td>
</tr>
<tr>
<td>TSDIN-043</td>
<td>24 VAC/VDC</td>
<td>1, 2, 3</td>
<td>Red</td>
<td>108.00</td>
</tr>
<tr>
<td>TSDIN-213</td>
<td>115 VAC</td>
<td>1, 2, 3</td>
<td>Blue</td>
<td>108.00</td>
</tr>
<tr>
<td>TSDIN-215</td>
<td>115 VAC</td>
<td>1, 2, 3, 4, 5</td>
<td>Blue</td>
<td>118.00</td>
</tr>
<tr>
<td>TSDIN-223</td>
<td>230 VAC</td>
<td>1, 2, 3</td>
<td>Blue</td>
<td>108.00</td>
</tr>
<tr>
<td>TSDIN-225</td>
<td>230 VAC</td>
<td>1, 2, 3, 4, 5</td>
<td>Blue</td>
<td>118.00</td>
</tr>
<tr>
<td>TSDIN-233</td>
<td>12 VAC/VDC</td>
<td>1, 2, 3</td>
<td>Blue</td>
<td>108.00</td>
</tr>
<tr>
<td>TSDIN-243</td>
<td>24 VAC/VDC</td>
<td>1, 2, 3</td>
<td>Blue</td>
<td>108.00</td>
</tr>
</tbody>
</table>

**Specifications**

- **Inputs:** Thermocouple, RTD, DC linear voltage, and DC currents.*
- **Supply Voltage:** 24 VDC.
- **Power Consumption:** 3 W.
- **Operating Temperature:** 32 to 122°F (0 to 50°C).
- **Memory Backup:** Non-volatile.

**Control Output Ratings**

- Relay: 3 A @ 250 VAC resistive; Voltage pulse: 12 VDC, max. output current: 40 mA; Current: 4-20 mA output; Linear voltage: 0-10 VDC.
- Weight: 2.7 oz (76.5 g).
- Agency Approvals: CE, cULus.

**Accessories**

See page reference below.

---

*Modbus® is a registered trademark of Schneider Automation, Inc.*

---

**Series SCD**

**Universal Inputs, Up to 8 PID Loops, Modbus® Communications**

**Specifications**

- **Inputs:** Thermocouple, RTD, DC linear voltage, and DC currents.*
- **Supply Voltage:** 24 VDC.
- **Power Consumption:** 3 W.
- **Operating Temperature:** 32 to 122°F (0 to 50°C).
- **Memory Backup:** Non-volatile.

**Control Output Ratings**

- Relay: 3 A @ 250 VAC resistive; Voltage pulse: 12 VDC, max. output current: 40 mA; Current: 4-20 mA output; Linear voltage: 0-10 VDC.
- Weight: 2.7 oz (76.5 g).
- Agency Approvals: CE, cULus.

**Accessories**

See page reference below.

---

*Modbus® is a registered trademark of Schneider Automation, Inc.*

---

**Series TSDIN**

**DIN Rail Mount Temperature Switch**

HACCP Alarm Logging, Intelligent Defrost

**Specifications**

- **Probe Range:** PTC: -58 to 302°F (-50 to 150°C); NTC: -58 to 230°F (-50 to 110°C).
- **Input:** PTC/NTC.
- **Output:** Output 1: SPST relay rated 16A @ 240 VAC resistive, 10 FLA, 60 LRA, 1HP @ 240 VAC inductive; Output 2: SPDT relay rated 8A @ 240 VAC resistive, Output 3: SPST relay rated 8A @ 240 VAC resistive, Output 4: SPDT relay rated 8A @ 240 VAC resistive, Output 5: SPDT relay rated 16A @ 240 VAC resistive, 10 FLA, 60 LRA, 1HP @ 240 VAC inductive.
- **Control Type:** On/off.
- **Power Requirement:** 115 VAC, 230 VAC, 12 VAC/VDC, 24 VAC/VDC (±10% depending on model).
- **Power Consumption:** 6 VA.
- **Accuracy:** Better than 1% of full-scale.
- **Display:** 3-digits plus sign.
- **Resolution:** 0.1°.
- **Memory Backup:** Non-volatile memory.
- **Temperature Limits:** Operating: 32 to 131°F (0 to 55°C); Storage: -4 to 176°F (-20 to 80°C).
- **Weight:** 10.8 oz (306 g).
- **Agency Approvals:** CE, ULus.

**Accessories**

See page reference below.

---

*Digital Temperature Switch Probes and Accessories: See page 131 (Series TS-Probes)*

---