### SERIES TST
#### DIGITAL TEMPERATURE SWITCH
**Heating and Cooling Control, 16 Amp Rating**

The Series TST Digital Temperature Switch is designed with many heating and cooling applications in mind. This low cost switch is simple to set up with one probe input and SPDT switch output. Programming performed using either the front keypad or through a TS2-K programming key.

#### FEATURES/BENEFITS
- Buzzer indicates probe/memory error or high/low temperature alarm conditions
- Capacitive buttons offer clean panel face design
- Modbus® communication protocol through TTL serial connection

#### APPLICATIONS
- Refrigeration
- Holding ovens
- Brewing systems
- Boilers

#### MODEL CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Supply Power</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST-011</td>
<td>115 V AC</td>
<td>1</td>
</tr>
<tr>
<td>TST-021</td>
<td>230 V AC</td>
<td>1</td>
</tr>
<tr>
<td>TST-031</td>
<td>12 V AC/VDC</td>
<td>1</td>
</tr>
<tr>
<td>TST-041</td>
<td>24 V AC/VDC</td>
<td>1</td>
</tr>
</tbody>
</table>

**ACCESSORIES**
See page reference below.

### SERIES TSXT
#### DIGITAL TEMPERATURE SWITCH
**Refrigeration Control, Up To 3 Probe Inputs and 3 Relay Outputs**

The Series TSXT Digital Temperature Switch is designed for refrigeration control. It accepts PTC or NTC temperature probe types and can control the compressor, defrost, fan, alarm, and light in a refrigeration system. Master/slave configurations allow synchronization of defrost cycles between different units. Programming is performed through the front keypad, or by using the TS2-K programming key.

#### FEATURES/BENEFITS
- Models available with 1, 2, or 3 relay outputs
- 3 temperature inputs and one digital input for complete refrigeration control
- Capacitive buttons offer clean panel face design
- Modbus® communication protocol through TTL serial connection

#### APPLICATIONS
- Refrigerated cabinets
- Walk in coolers
- Applications requiring defrost cycles

#### MODEL CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Supply Power</th>
<th>Outputs</th>
<th>Model</th>
<th>Supply Power</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSXT-211</td>
<td>115 V AC</td>
<td>1</td>
<td>TSXT-232</td>
<td>12 V AC/VDC</td>
<td>2</td>
</tr>
<tr>
<td>TSXT-221</td>
<td>230 V AC</td>
<td>1</td>
<td>TSXT-242</td>
<td>24 V AC/VDC</td>
<td>2</td>
</tr>
<tr>
<td>TSXT-231</td>
<td>12 V AC/VDC</td>
<td>1</td>
<td>TSXT-243</td>
<td>115 V AC</td>
<td>3</td>
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<tr>
<td>TSXT-241</td>
<td>24 V AC/VDC</td>
<td>1</td>
<td>TSXT-231</td>
<td>12 V AC/VDC</td>
<td>3</td>
</tr>
<tr>
<td>TSXT-212</td>
<td>115 V AC</td>
<td>2</td>
<td>TSXT-223</td>
<td>230 V AC</td>
<td>3</td>
</tr>
<tr>
<td>TSXT-222</td>
<td>230 V AC</td>
<td>2</td>
<td>TSXT-233</td>
<td>12 V AC/VDC</td>
<td>3</td>
</tr>
</tbody>
</table>

**ACCESSORIES**
See page reference below.

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**SPECIFICATIONS**

**Probe Range:** PTC: -58 to 320°F (-50 to 150°C), NTC: -58 to 320°F (-50 to 110°C).

**Input:** PTC (1000 Ω @ 25°C) or NTC (10 KΩ @ 25°C) thermistor.

**Output:** SPDT relay rated 16 A @ 240 VAC resistive, 10 FLA, 60 LRA.

**Control Type:** On/Off.

**Memory Backup:** Nonvolatile memory.

**Ambient Operating Temperature:** 32 to 131°F (0 to 55°C).

**Storage Temperature:** -4 to 176°F (-20 to 80°C).

**Weight:** 115 and 230 V models: 7.2 oz (204 g); 12 and 24 V models: 4.8 oz (136 g).

**Front Panel Rating:** IP65.

**Agency Approvals:** CE, cURus.

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**SPECIFICATIONS**

**Probe Range:** PTC: -58 to 320°F (-50 to 150°C), NTC: -58 to 230°F (-50 to 110°C).

**Input:** PTC (1000 Ω @ 25°C) or NTC (10 KΩ @ 25°C) thermistor.

**Output:** Relay 1: SPST relay rated 16 A @ 240 VAC resistive, 10 FLA, 60 LRA;

**Relay 2:** SPST relay rated 5 A @ 240 VAC resistive;

**Relay 3:** SPST relay rated 3 A @ 240 VAC resistive.

**Horsepower Rating (HP):** 1 HP (Relay 1), 0.5 HP (Relay 2), 0.25 HP (Relay 3).

**Power Consumption:** 4 VA @ 115/230 VAC; 1.5 VA @ 12/24 VAC/VDC.

**Accuracy:** ±1% FS.

**Display:** 3-digit, plus sign.

**Resolution:** 0.1°F.

**Memory Backup:** Nonvolatile memory.

**Ambient Operating Temperature:** 32 to 131°F (0 to 55°C).

**Storage Temperature:** -4 to 176°F (-20 to 80°C).

**Weight:** 115 and 230 V models: 7.2 oz (204 g); 12 and 24 V models: 4.8 oz (136 g).

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