The Series TSW Digital Temperature Switch combines the trusted, reliable TS family of temperature controls and an installation friendly weatherproof enclosure. By using the same programming parameters as our TS12 and Series TS2, set up can be quickly completed using the front keypad or by using the TS2-K configuration key. In order to prevent tampering from unauthorized users, a parameter lock physical jumper and software passcode security are standard in the unit. The bright, easy-to-read LED display shows the current output status and the temperature measurement.

The multiple conduit knockouts on the Series TSW give flexibility to the installer to determine the best location for the conduit entry. Another installation friendly feature of the Series TSW is the ability to quickly jumper the line voltage to the common of the output relay using fast tabs. In order to reduce time in selecting models, the Series TSW has universal high and low power supply models and field selectable engineering units. The Series TSW includes one TS-1 PTC thermistor probe.

### Series TSWB Digital Temperature Switch

NEMA 4X Housing, Single or Dual Stage, 20A Contact Rating

**SPECIFICATIONS**

- **Probe Range:**
  - PTC: -58 to 302°F (-50 to 150°C); NTC: -58 to 230°F (-50 to 110°C).
  - Input: PTC (1000Ω @ 25°C); NTC (10KΩ @ 25°C).
  - Output: R1 SPDT relay resistive load: 20A @ 240 VAC; R2 SPDT relay resistive load: 8A @ 240 VAC; Inductive load: 3A @ 240 VAC.
  - Horsepower Rating: R1 2HP @ 240 VAC.
- **Control Type:** On/off.
- **Power Requirements:** 90 to 255 VAC or 12 to 24 VAC/VDC (±10%) depending on model.
- **Power Consumption:** 3.6VA.
- **Accuracy:** ±1% FS.
- **Display:** 3 digits plus sign.
- **Resolution:** 0.1°F < 100°F; 1° ≥ 100°F.
- **Memory Backup:** Non-volatile memory.
- **Ambient Temperature:** 32 to 104°F (0 to 40°C).
- **Weight:** 1.2 lbs (544 g).
- **Enclosure Rating:** NEMA 4X (IP66).
- **Agency Approvals:** CE, cUL, UL.

**Model** | **Description** | **Supply Power** | **Price**
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TSW-150 | Single Stage | 90 to 255 VAC | $69.00
TSW-160 | Single Stage | 12 to 24 VAC/VDC | $69.00
TSW-250 | Dual Stage | 90 to 255 VAC | $85.00
TSW-260 | Dual Stage | 12 to 24 VAC/VDC | $85.00

**ACCESSORIES**

- CC1-N, Averaging Temperature Sensor Clip, Natural
- CC1-B, Averaging Temperature Sensor Clip, Beige
- CC1-GY, Averaging Temperature Sensor Clip, Grey

*Items are net priced and are not subject to any discount.*

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The Series TSWB Digital Temperature Switch has a high and a low set point for controlling the water temperature. The low set point can either be manually or automatically reset. This control also has a conductivity probe input. This input supplies 12 VAC to the conductivity probe to check for low water condition. There are three relay outputs which can be assigned in the field to the high temperature set point, low water level input. The Model TS2-K configuration key can make configuring multiple controls quick and easy.

**SPECIFICATIONS**

- **Probe Range:**
  - Conductivity probe: Max voltage 12 VAC, Sensitivity established from factory at 100KΩ.
  - Probe Temperature Input: Selectable by parameter PTC1000 probes (25°C-1000 ohm) / NTC.
- **Probe Level Input:**
  - Conductivity probe: Max voltage 12 VAC, Sensitivity established from factory at 100KΩ.
- **Output:**
  - R1 SPST NO relay resistive load 5A @ 250 VAC; R2 SPST NC relay resistive load 5A @ 250 VAC; R3 SPDT relay resistive load 16A @ 240 VAC.
- **Horsepower Rating:** 1HP -- 10FLA, 60LRA 250 VAC.
- **Control Type:** On/off.
- **Power Requirement:** 115 VAC ± 10%, 230 VAC ± 10%, 24 VAC/DC ± 10%, 12 VAC/DC ± 10%.
- **Power Consumption:** 4VA (230V/115V), 1.5VA (24V/12V).
- **Accuracy:** Better than 1% of full-scale.
- **Display:** 3-digit, red 1/2˝ digits.
- **Resolution:** 1° (3 digits).
- **Memory Backup:** Non-volatile memory.
- **Ambient Operating Temperature:** 32 to 158°F (-30 to 70°C).
- **Storage Temperature:** -4 to 176°F (-30 to 80°C).
- **Weight:** 3.5 oz.
- **Front Protection:** IP64.
- **Agency Approvals:** CE, cUL, UL.

**Model** | **Supply Voltage** | **Unit** | **Price**
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TSWB-010 | 115 VAC | °F | $110.00
TSWB-011 | 115 VAC | °C | $110.00