

**SPECIFICATIONS** CircuitSolver®

Thermostatic Balance Valve

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

SECTION 22 11 19

Domestic Water Piping Specialties

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

# Unit shall be a CircuitSolver® Thermostatic Balance Valve Models CS, CSU, CSUA, CSUAS, or CSUTD-D as manufactured by ThermOmegaTech.

# Furnish Thermostatic Balance Valve with capabilities as indicated in the plans.

**1.02 RELATED SECTIONS**

1. Section 22 11 00 – Facility Water Distribution
2. Section 22 11 16 – Domestic Water Piping

**1.03 REFERENCES**

1. ANSI - American National Standards Institute
2. ISO - International Standards Organization
3. NSF – National Science Foundation

**1.04 SUBMITTALS**

1. CS, CSU, CSUA, CSUAS, & CSUTD-D submittals
2. Technical Brochure
3. Dimensional prints
4. Sales Brochure

**1.05 QUALITY ASSURANCE**

1. The valve manufacturer shall be fully certified by the International Standards Organization per ISO 9001:2015.
2. The valve shall be NSF61 certified.
3. The valve shall carry a 3 year warranty.

**1.06 MAINTENANCE MATERIAL SUBMITTALS**

1. Installation & maintenance instruction manual

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

# Subject to compliance with these specifications, the following manufacturers shall be acceptable:

1. Thermostatic Balance Valve
2. ThermOmegaTech Inc. CircuitSolver® Models CS, CSU, CSUA, CSUAS, CSUTD-D as well as associated accessories such as Model CSA and CSUATD-D and models with optional thermometer, PEX ends or ProPress ends.
	1. Pre-approved equal.

**2.02 COMPONENTS**

1. Thermostatic Balance Valve
2. The valve shall be certified lead free according to NSF/ANSI 61 standards.
3. The valve body shall be constructed out of stainless steel.
4. The valve shall be rated for 200 PSIG working pressure and 250°F max. temperature.
5. The valve shall have a fixed, non-adjustable (tamper proof) temperature setpoint; temperature setpoints range from 80°F (27°C) to 170°F (27°C) in 5°F (2.8°C) increments.
6. The valve shall have a temperature accuracy of ±3.0°F (±1.7°C).
7. The valve shall have a wax thermostatic element.
8. The valve shall come in 6 sizes: 1/2”; 3/4”; 1”; 1 1/4”; 1 1/2”; 2”.

**2.02 ACCESSORIES**

1. Thermostatic Balance Valve Accessories
2. Model CS and CSU with optional thermometer, PEX ends or ProPress ends.
3. Model CSU, CSUA, CSUAS, CSUTD-D with integrated check valve.
4. Model CSUA and CSUAS with shutoff valves and optional thermometer, PEX ends or ProPress ends.

**PART 3 EXECUTION**

* 1. **INSTALLATION**
1. Install Thermostatic Balance Valve in accordance with manufacturer’s instructions.
2. Unit shall be a ThermOmegaTech CircuitSolver® thermostatic balancing valve Models CS, CSU, CSUA, CSUAS, CSUTD-D and associated assemblies CSA and CSUATD-D manufactured by ThermOmegaTech®, Warminster, PA.

###### END OF SECTION