

### **Sterlco®** TC 100 SERIES

Temperature Control Units



**Trusted Reliability** 

**Customizable Units** 

**Advanced Controls with Connectivity** 

#### The standard in temperature control

functionality and design with operating ranges from  $32^{\circ}F$  to  $250^{\circ}F$  and pump offerings of 3/4 to 71/2 HP on compact models and 3/4 to 10 HP on upright models.

www.sterlco.com

# **TC110**

**Increased Availability** 

Exceptional Value

Ease of Service



# **TC120**

Historical Reliability

**Increased Customization** 

**Durable Design** 



# **TC130**

Pressure Adaptive Technology

**Predictive Maintenance** 

Increased Longevity & Reliability



### Sterlco® TC 100 SERIES

# Superior reliability with Sterlco® TC 100 Series Temperature Control Units

## Improving upon the standard in Temperature Control Units.

The Sterlco TC 100 Series features a family of temperature control units ranging in features and capabilities to meet the needs of any project. The family of TCUs gives users multiple options for full customization, offering a solution for every application. From the small and economical TC110, to the state-of-the-art TC130, the Sterlco TC 100 Series of Temperature Control Units continues to build upon the historical legacy of Sterling.

As the leading supplier of TCUs, Sterling is the brand you can rely on. The Sterloo name has been trusted for generations to provide the absolute best temperature control in the industry.



TC130 Series Compact Temperature Control Unit (TCU)

#### **Industry Leading Support Available**

#### **Full System Provider**

Sterling can provide the full system set up including pump tanks, remote condensers, chillers, cooling towers, hybrid adiabatic systems, winter coolers, heat exchangers, filtration equipment, and temperature control units.

#### **Technical Support & Training**

Sterling provides expert technical support and training, allowing customers to get the most out of their production environment.

#### **On-Site Service**

Service and support is available to provide regular maintenance and emergency service at your facility.

#### **Parts Support**

Thousands of parts in stock, ready for same day shipment including specific wear parts. Parts customer service representatives are ready to assist, ensuring you get the part you need - when you need it.

#### **Applications**

The TC 100 Series TCUs can be utilized in any application that requires accurate temperature control. Typical applications include, but are not limited to, the following:

- Injection molding
- Blow molding
- Extrusion
- Thermoforming
- Food & Beverage
- Pharmaceutical

- Packaging
- Medical
- Die Casting
- Lasers
- Rubber Processing
- Converting

### Sterlco® TC 100 SERIES The same TCU you have come to trust, nov

#### Sterlco® TC110 Series | Value • Availability • Serviceability

The TC110 Series is the most affordable and economical TCU from Sterling. The TC110 is known for ease of service, featuring an open design with removable side panels. With a standard Eurotherm controller and simplified design, the TC110 is the perfect choice to meet basic application needs.



#### Sterlco® TC120 Series | Historical Reliability • Customizable • Durable

The Sterlco® TC120 Series is the industry standard. The TC120 is the TCU thousands of people have come to expect and depend on from the leader in temperature controls for more than 60 years. Featuring a robust design (under NEMA 12 standards), increased cooling accuracy, and larger, more durable casters, the TC120 Series is more reliable and durable than ever. Available options include an advanced controller, up to 24kW heaters, modulating valves, and customization to your unique specifications.



#### Sterlco® TC130 Series | Intelligent • Predictive • Reliable

The Sterlco® TC130 Series is the most advanced TCU from Sterling. This latest innovation features increased options for maximum flexibility, along with state-of-the-art controls and a 3.5" HMI color screen. These advanced controls provide predictive maintenance features as well as intelligent capabilities like Pressure Adaptive Technology utilizing digital pressure transducers. Troubleshooting is made easy via USB data logging and remote monitoring. All of this comes with the longevity and reliability you've come to expect from Sterling TCUs.



#### **Smart Controls for a Smarter Facility**

#### Pressure Adaptive Technology

- Ability to temporarily reduce temperature if water pressure drops, preventing nuisance shutdowns
- Only requires necessary water pressure for temperature set point

#### **Contactor Cycle Life Indication**

 Monitors contactor cycling and notifies near end of life

#### Connectivity

• 4-20mA, RS-485 MODBUS, RS-485 SPI, RS-232 MODBUS, Ethernet

#### Cascade Control

 More precise temperature control by incorporating the ability to control off of process temperature, not TCU set point



# Sterlco® TC 100 SERIES

Service & Performance Category	TC110	TC120	TC130 / TC131
Heating Capacity	Up to 12kW	Up to 24 kW	Up to 48 kW
Pumps	Up to 7 1/2 HP	Up to 7 1/2 HP	Up to 10 HP
Valve Sizes	1/4" - 3/4: Solenoid	1/4" - 1 1/2" Solenoid 1/2" - 1 1/4" Modulating	1/4" - 1 1/2" Solenoid 1/2" - 1 1/4" Modulating
Voltages	230 - 460 V, 60 Hz	208 - 575 V, 60 Hz 380 - 415 V, 50 Hz	208 - 575 V, 60 Hz 380 - 415 V. 50 Hz
Controller	Eurotherm	Eurotherm or M2C	M5
Warranty*	1 Year Parts	1 year parts (Eurotherm) 2 year parts (M2C)	2 year parts, optional add on 3 year parts
Available Features		ya pi ay	, and a specific section of the sect
High Temperature Safety Thermostat	•	•	•
Low Supply Pressure Sensing	•	•	•
Manual bypass	•	•	•
Pressure regulator/relief Valve	•	•	•
Mold purge	•	•	•
Quick Cool Switch	•	•	•
Programmable Auto-vent	•	•	•
Tune	•	•	•
Audio/visual alarm		•	•
4-20mA		•	•
RS-485 MODBUS		•	•
RS-485 SPI		•	•
RS-232 MODBUS		•	•
Ethernet		•	•
Half/Full Heat		•	•
Cascade Control / Remote Probe		•	•
Flow Meters		•	•
Remote Monitoring			•
3.5" Color Screen HMI			•
USB Data Logging			•
Pressure Transducers			•
Adaptive Pressure Technology			•
Multi-Zone Units			•
Remote Controller Enclosure			•
Flow Switch			•
Welded contact shutoff			•
Closed Loop Heat Exchanger Option			•

TC110



TC120



TC130

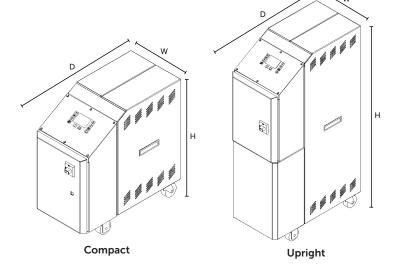


<sup>\*</sup> Controllers have a 3 year parts warranty as standard.

### Specifications

Model	Dimensions in Inches (cm)			Shipping Wt.
	Height	Width	Depth	Lbs (Kg)*
TC110	26.3 (66.7)	12.0 (30.5)	26.8 (67.9)	210 (95)
TC120	28.8 (73.0)	14.0 (35.6)	28.0 (71.1)	210 (95)
TC130	28.8 (73.0)	14.0 (35.6)	28.0 (71.1)	210 (95)
TC131	51 (129.5)	14.0 (35.6)	28.0 (71.1)	240 (109)

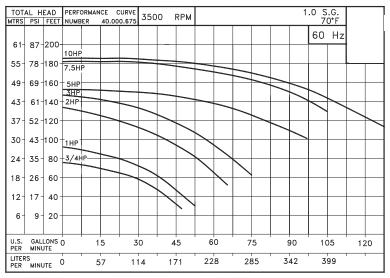
<sup>\*</sup> Shipping weight does not include packaging materials, such as pallets, cardboard, etc.

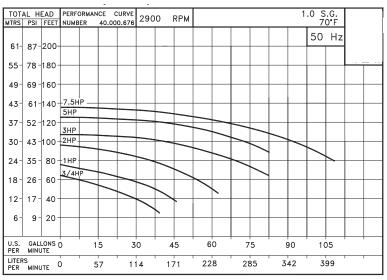


### Pump Curves

Charts show flows and pressures that are available for the standard pump options.
Custom pumps available upon request.

Pump HP (kW)	Flow GPM (LPM)	Pressure PSIG (kPa)
0.75 (.56)	30 (114)	25 (172)
1.0 (0.75)	35 (133)	30 (207)
2.0 (1.5)	50 (189)	30 (207)
3.0 (2.24)	60 (227)	40 (276)
5.0 (3.76)	75 (284)	54 (372)
7.5 (5.6)	90 (341)	63 (434)
10 (7.5)	120 (454)	55 (379)







### Get More From Your Production Floor

Count on Sterling to bring you all the technologies you need to advance uptime, energy efficiency and performance in your operation. Turn to our technical support team to evaluate your expected system loads and load characteristics, energy and climate-related issues as well as incorporating new equipment with plastics industry equipment you already own.

### Sterling History

Sterling has been an innovator in the industry for over 100 years. Mold temperature control units continue to be called "Sterlcos" because when you bring such an important product to market, the name sticks. Sterling brings a reputation of quality and unmatched reliability. As the industry leader, Sterling provides the largest line of process heating and cooling TCU's, chillers, and cooling systems. Sterling supplies innovative solutions to a wide range of process industries, and has grown to be a leader in blending, drying, conveying, and size reduction equipment.

### Aftermarket Service & Support

Sterling has a service network across the United States and in several key international locations. We are focused on having the right people and products in the right places to keep our customers running efficiently. Whether you need On-Site Service, Technical Support & Training, Parts Support or even Product Repair & Refurbishment, we have you covered. Contact our team today for all of your aftermarket needs at 262-641-8600 or service@acscorporate.com.

### **About ACS Group**

The ACS Group designs, manufactures, markets and supports one of the most comprehensive lines of auxiliary products for the plastics processing industry. Over the years, ACS Group has grown both organically through technical innovation and through acquisition. ACS Group offers an expansive product line, which includes size reduction equipment (granulators and shredders), material conveying equipment, metering and blending devices, heat exchangers (mold temperature controls units and chillers), drying systems, and hydraulic presses.

